California High-Speed Rail Authority

Los Angeles to Anaheim Project Section

Biological and Aquatic Resources Technical Report

October 2025



CALIFORNIA High-Speed Rail Authority

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being or have been carried out by the State of California pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated July 22, 2024, and executed by the Federal Railroad Administration and the State of California.

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ACRONYMS AND ABBREVIATIONS

Term	Definition
Amtrak	National Railroad Passenger Corporation
ARTIC	Anaheim Regional Transportation Intermodal Center
Authority	California High-Speed Rail Authority
BMP	best management practice
BNSF	BNSF Railway
BRMP	Biological Resources Management Plan
CFR	Code of Federal Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
CWA	Clean Water Act
DDT	dichlorodiphenyltrichloroethane
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
FAC	facultative
FACU	facultative upland
FACW	facultative wetland
FESA	federal Endangered Species Act
FRA	Federal Railroad Administration
HSR	High-Speed Rail
HUC-8	Hydrologic Unit Code–8
I-	Interstate
IAMF	impact avoidance and minimization feature
LATC	Los Angeles Trailer and Container Intermodal Facility
LAUS	Los Angeles Union Station
LMF	light maintenance facility
MBTA	Migratory Bird Treaty Act
NEPA	National Environmental Policy Act
NOAA Fisheries	National Oceanic and Atmospheric Administration Fisheries
O&M	operations and maintenance
OBL	obligate wetland

Term	Definition
OCS	overhead contact system
Porter-Cologne	Porter-Cologne Water Quality Control Act
project section	Los Angeles to Anaheim Project Section
PS	photo station
quad	quadrangle
RSA	resource study area
RWQCB	Regional Water Quality Control Board
SP	sample point
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TPSS	traction power substation
U.S.C.	U.S. Code
UPL	upland
UPRR	Union Pacific Railroad
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WEAP	Worker Environmental Awareness Program

EXECUTIVE SUMMARY

This Biological and Aquatic Resources Technical Report was prepared on behalf of the California High-Speed Rail Authority (Authority) for the Los Angeles to Anaheim Project Section (project section) of the California High-Speed Rail (HSR) System. This report provides an evaluation of the biological and aquatic resources potentially affected by the Shared Passenger Track Alternatives. This report has been prepared to support documentation for compliance with the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), the federal Endangered Species Act (FESA), the California Endangered Species Act (CESA), and other regulations that pertain to biological and aquatic resources.

The project section would extend approximately 30 miles and travel through the cities of Los Angeles, Vernon, Bell, Commerce, Montebello, Pico Rivera, Santa Fe Springs, Norwalk, La Mirada, Buena Park, Fullerton, and Anaheim. The Shared Passenger Track Alternatives' alignment would share the existing Los Angeles – San Diego – San Luis Obispo Rail Corridor with existing rail operations, including National Railroad Passenger Corporation (Amtrak) passenger trains, Metrolink commuter trains, and BNSF Railway (BNSF) freight trains. In addition to new tracks for HSR, the project section would include an HSR station in Anaheim, the Anaheim Regional Transportation Intermodal Center (ARTIC), as well as a maintenance of infrastructure siding, a light maintenance facility (LMF) with alternatives at 26th Street or 15th Street, and electric power utility improvements. HSR station options for one additional HSR station to be in either Norwalk/Santa Fe Springs or Fullerton are included in the project section.

There are two build alternatives for the project section: Shared Passenger Track Alternative A, consisting of an alternative with the LMF at 26th Street, and Shared Passenger Track Alternative B, an alternative with the LMF at 15th Street.

Shared Passenger Track Alternative A:

- Proposes to introduce HSR service into the Los Angeles – San Diego – San Luis Obispo Rail Corridor from LAUS to ARTIC
- Would primarily be within the existing railroad right-of-way and include both a northbound and southbound electrified track for HSR
- Would include HSR stations in Los Angeles and Anaheim
- Proposes an LMF between 26th Street and a BNSF spur on the south side of the BNSF Hobart Yard, also used by Amtrak, along the west bank of the Los Angeles River
- One HSR station at ARTIC and one additional HSR station option is proposed and could include one but not both HSR station options; these HSR station options are:
  - Norwalk/Santa Fe Springs Station
  - Fullerton Station

Shared Passenger Track Alternative B:

- Would follow the same alignment and share most of the same features and operational assumptions as Shared Passenger Track Alternative A
- Would differ from Shared Passenger Track Alternative A in that it would include the 15th Street LMF rather than the 26th Street LMF (of Shared Passenger Track Alternative A). The 15th Street LMF has a northern boundary at approximately Seventh Street and continues adjacent to and west of the existing Amtrak Eighth Street Yard to Washington Boulevard in the south.

This technical report focuses on analysis carried out for the Shared Passenger Track Alternatives exclusively in the project section between Los Angeles and Anaheim.

The Authority uses resource study areas (RSA) throughout the HSR system to define areas of potential effects on environmental resources. In this document there are four RSAs:[1]

- **Botanical RSA:** The Shared Passenger Track Alternatives footprint plus a 100-foot buffer to evaluate effects on sensitive plant resources
- **Aquatic RSA:** The Shared Passenger Track Alternatives footprint plus a 250-foot buffer to evaluate effects on aquatic resources
- **Wildlife RSA:** The Shared Passenger Track Alternatives footprint plus a 1,000-foot buffer to evaluate effects on special-status wildlife species
- **Supplemental RSA:** The area that extends up to 3 miles from the Shared Passenger Track Alternatives footprint depending on the target species and is used to evaluate known biological data. Effects on wildlife movement corridors were evaluated within this RSA.

Fifty special-status plant species were identified during the literature review, which included both a database and literature search (CDFW 2023, 2024a, 2024b; CNPS 2024; USFWS 2023), as having potential to occur within the Botanical RSA. No federally or state-listed plant species are known or expected to occur within the Botanical RSA. Through a further desktop analysis, which included review of aerial photography (Google Earth Pro 2016, 2017, 2023; ESRI World Imagery 2024) and best professional judgment based on the likelihood of occurrence for wildlife and plant species, only two of these special-status plant species were determined to have potential to occur in the Botanical RSA: lucky morning-glory (*Calystegia felix*; CRPR 1B.1) and southern tarplant (*Centromadia parryi* ssp. *australis*; CRPR 1B). One location that was mapped as suitable for southern tarplant and lucky morning-glory could not be visited because of access restrictions. This location was a 1.37-acre temporary construction easement within the Botanical RSA on the north side of Coyote Creek. Because a habitat assessment was not conducted at this site, the presence of southern tarplant and lucky morning-glory has been assumed at this site. Impact avoidance and minimization features (IAMF) have been identified and will be incorporated to minimize, reduce, or avoid effects on special-status plant species; however, the impact on these special-status species remains substantial.

Although no special-status natural communities tracked through the California Natural Diversity Database were identified within the Botanical RSA, one special-status natural community was identified within the Supplemental RSA based on the California Department of Fish and Wildlife's (CDFW) mapping program: Southern California arroyo chub (*Gila orcuttii*)/Santa Ana sucker (*Catostomus santaanae*), at the eastern edge of the Supplemental RSA in the Santa Ana River (CDFW 2024a). Special-status natural communities also include California Sensitive Natural Communities (CDFW 2023) and two were identified within the Botanical RSA during site visits and through the evaluation of satellite/aerial imagery: Goodding's willow (*Salix gooddingii*) - red willow (*Salix laevigata*) riparian woodland and forest and hardstem (*Schoenoplectus acutus*), and California bulrush marsh (*Schoenoplectus californicus*) herbaceous alliance. Permanent and temporary direct impacts are anticipated on hardstem and California bulrush marsh herbaceous alliance, which is both a riparian community and a special-status natural community. IAMFs have been identified and will be incorporated to minimize, reduce, or avoid effects on this Sensitive Natural Community and riparian habitat; however, the impact on this community remains substantial.

Codes or ordinances for Los Angeles County and several of the cities along the alignment include requirements for avoiding injuring or removing trees, generally within public rights-of-way, or requiring a permit for such activities. In addition, plant communities within the Botanical RSA that

[1] The overall size of the resource study areas is based on the project footprint dated August 2024 and includes both Shared Passenger Track Alternatives A and B. Specifically, the resource study areas include both LMF options (26th Street LMF and 15th Street LMF) and both station options (Norwalk/Santa Fe Springs Station and Fullerton Station).

are listed as important in the *Los Angeles County General Plan* (County of Los Angeles 2025a) include riparian communities.

Based on the initial literature review, 60 special-status wildlife species were evaluated for their potential to occur within the Wildlife RSA. Of these 60 species, all but 20 were excluded during the further desktop review and habitat assessment analysis because of local or regional extirpations, lack of suitable habitat, or a species' known geographic range. Five species with potential to occur are federally and state-listed as endangered or candidate species, fourteen species are CDFW species of special concern, and one is a state fully protected species. Table ES-1 includes these 20 species, their federal and state status, and their potential to occur within the Wildlife RSA.

Table ES-1 Special-Status Wildlife with Potential to Occur in the Wildlife Resource Study Area

Common Name	Scientific Name	Federal Status[1]	State Status[2]	Potential to Occur
Federally and State-Listed Species				
Birds				
Burrowing Owl	*Athene cunicularia hypugaea*	—	CAN	Moderate
Bald Eagle	*Haliaeetus leucocephalus*	BGEPA	SE, FP	Low
California Least Tern	*Sternula antillarum browni*	FE	SE, FP	Low
Least Bell's Vireo	*Vireo bellii pusillus*	FE, CH	SE	Low
Mammals				
Mountain lion	*Puma concolor*	—	CAN	Low
Nonlisted Species				
Birds				
Loggerhead Shrike	*Lanius ludovicianus*	—	SSC	Moderate
Long-Eared Owl	*Asio otus*	—	SSC	Low
Mountain Plover	*Charadrius montanus*	—	SSC	Low (wintering)
White-Tailed Kite	*Elanus leucurus*	—	FP	Moderate
Yellow Warbler	*Setophaga petechia*	—	SSC	Moderate
Reptiles and Amphibians				
Coast horned lizard	*Phrynosoma blainvillii*	—	SSC	Low
Mammals				
Big-free tailed bat	*Nyctinomops macrotis*	—	SSC	Low
Mexican long-tongued bat	*Choeronycteris mexicana*	—	SSC	Low
Pallid Bat	*Antrozous pallidus*	—	SSC	Low
Pocketed free-tailed bat	*Nyctinomops femorosaccus*	—	SSC	Moderate
Townsend's big-eared bat	*Corynorhinus townsendii*	—	SSC	Low
Western mastiff bat	*Eumops perotis californicus*	—	SSC	Low

Common Name	Scientific Name	Federal Status[1]	State Status[2]	Potential to Occur
Western red bat	*Lasiurus frantzii*	—	SSC	Low
Western yellow bat	*Lasiurus xanthinus*	—	SSC	Moderate

Sources: USFWS 2021b, 2023; CDFW 2024a, 2025
[1] Federal Status: FE = endangered, CH = critical habitat designated by the U.S. Fish and Wildlife Service; BGEPA = protected under the Bald and Golden Eagle Protection Act (USFWS 2021b)
[2] State Status: SE = endangered; CAN = candidate; SSC = California species of special concern designated by the California Department of Fish and Wildlife; FP = fully protected species designated by the California Department of Fish and Wildlife

Within the Wildlife RSA, suitable habitat was identified for several hundred nesting bird species protected by the Migratory Bird Treaty Act and the California Fish and Game Code. Nesting habitat for common species often associated with urban areas and special-status avian species was identified. IAMFs have been identified and will be incorporated to minimize, reduce, or avoid effects on nesting birds; however, the effect remains substantial.

Wildlife movement is constrained within the watercourses/rivers in the Supplemental RSA. Habitat quality within these watercourses varies from low (concrete-lined channels) to moderate (soft-bottom channels with shrub and annual vegetative cover). Species using the wildlife corridors have been documented to include special-status species such as Burrowing Owl (*Athene cunicularia hypugaea*; state candidate for listing) and California Least Tern (*Sternula antillarum browni*; federally listed as endangered, state-listed as endangered). Wildlife corridors in constrained areas are important for the "rare" movements of species. The lack of evidence that a wildlife corridor is robust or displays high levels of wildlife movement cannot be interpreted as a lack of need for a wildlife corridor because it takes a large effort to detect rare movements, and rare movements can be critical for population survival (Beier 1993; McKenzie 1995). The cumulative effect of not considering constrained corridors as potential wildlife corridors can be substantial. The ongoing urban development can either discount potential wildlife corridor importance and viability, leading to degradation, or can consider future projects that will increase wildlife corridor functions and values.

The existing wildlife corridors in the Supplemental RSA include the Los Angeles River, the Rio Hondo and spreading grounds, the San Gabriel River, and the Santa Ana River (Spencer et al. 2010). These rivers are artificially constrained and narrowed from their original flowpaths (250 to 1,200 feet wide) with ongoing flood control activities. Corridors should be a minimum of 1,000 feet wide to function effectively (Bond 2003). Flood control activities associated with the rivers include the removal of vegetation and debris (e.g., Los Angeles River); mowing or grading of earthen berms, with removal of weedy vegetation (e.g., Santa Ana River); and annual soil tilling (e.g., spreading grounds such as the Rio Hondo). Regional and local plans and policies include plans for biological improvements in these aquatic corridors, including the Los Angeles River Ecosystem Restoration Project (USACE and City of Los Angeles 2015) and the Los Angeles River Master Plan (County of Los Angeles and Los Angeles County Public Works 2022).

U.S. Fish and Wildlife Service–designated critical habitat (USFWS 2024a) for the Coastal California Gnatcatcher (*Polioptila californica*, federally listed as threatened, CDFW species of special concern) is present within the Supplemental RSA; however, no suitable habitat for this species occurs within the Wildlife RSA and no impacts, direct or indirect, on this species' critical habitat are anticipated.

Aquatic resources referenced in this report consist of those features falling within the Aquatic RSA that were preliminarily determined to be regulated as:

- U.S. Army Corps of Engineers (USACE) wetland and nonwetland waters of the U.S. under Section 404 of the Clean Water Act (CWA) (defined in Section 4.2.2.1, Clean Water Act Section 404 Wetland and Nonwetland Waters of the U.S.)
- State Water Resources Control Board (SWRCB) waters of the U.S. under Section 401 of the CWA (Section 4.2.2.2, Clean Water Act Section 401 Wetland and Nonwetland Waters of the

U.S.) and waters of the state under the Porter-Cologne Water Quality Control Act (Section 4.2.2.3, Porter-Cologne Water Quality Control Act Waters of the State)

- CDFW lakes, streambeds, and associated riparian vegetation under Section 1600 of the California Fish and Game Code (Section 4.2.2.4, California Department of Fish and Wildlife: Lakes, Streambeds, and Associated Riparian Vegetation)

Aquatic features within the Aquatic RSA were reviewed to determine if they met the definition of CWA Section 404 and 401 waters of the U.S. pursuant to the Preliminary Jurisdictional Delineation methodology (USACE 2016), *U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook* (USACE and USEPA 2007) and revised guidance (USACE and USEPA 2008), the *Revised Definition of "Waters of the United States"; Conforming* (USACE and USEPA 2023), and the preamble to the USACE Regulatory program operating regulations (USACE 1986) (Section 4.2.2.1).

The California Water Boards, consisting of the SWRCB and the Regional Water Quality Control Boards, regulate waters of the state under the Porter-Cologne Water Quality Control Act (Cal. Water Code Section 13050(e)). Waters of the state are broadly defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" (Cal. Water Code Section 13050(e)). In April 2019, SWRCB adopted a definition for state wetlands under the Porter-Cologne Water Quality Control Act (Sections 4.2.2.2 and 4.2.2.3), which became effective in May 2020. For purposes of this report, this wetland definition is used to identify state wetlands and wetlands regulated under CWA Section 401. Neither SWRCB nor the Los Angeles and Santa Ana Regional Water Quality Control Boards, which both have jurisdiction over the drainage basins that the Shared Passenger Track Alternatives could affect, have adopted a methodology for defining nonwetland waters. Therefore, this report uses the definition for nonwetland waters of the U.S. set forth under Section 404 of the CWA, 33 Code of Federal Regulations Part 328, and the USACE technical criteria for nonwetland waters of the U.S.

In summary, based on the Authority's findings, CWA Section 401 jurisdiction over wetland and nonwetland waters of the U.S. and Porter-Cologne Water Quality Control Act jurisdiction over wetland and nonwetland waters of the state are consistent with the jurisdictional boundaries identified under CWA Section 404, administered by USACE. For the purposes of this report, CDFW Section 1600 jurisdiction is identified as CDFW lakes, streambeds, and associated riparian vegetation or collectively identified as areas subject to California Fish and Game Code Section 1600 et seq. (Section 4.2.2.4).

A total of 99.04 acres of potential USACE or SWRCB waters of the U.S. and SWRCB waters of the state were identified within the Aquatic RSA, consisting of 97.15 acres of nonwetland waters and 1.89 acres of wetlands.[2] Waters of the U.S. and waters of the state resource types consist predominantly of concrete-lined riverine features. Additional features also identified include, to a lesser extent, freshwater emergent wetland, freshwater forested/shrub wetland, basins, and built watercourses at select locations. No Section 9 or Section 10 navigable waters of the U.S. were identified in the RSA (33 U.S. Code 401 and 403). A total of 153.86 acres of areas potentially subject to California Fish and Game Code Section 1600 et seq. were identified in the Aquatic RSA. This acreage consists of 151.96 acres of predominantly unvegetated lakes and streambeds in the form of basins (including Lakeside Residential Community pond), built watercourses, and riverine features, and 1.90 acres of associated riparian vegetation.

Construction of the Shared Passenger Track Alternatives would result in temporary direct effects on a total of 1.52 acres of aquatic resources considered USACE or SWRCB wetland and

[2] Aquatic resource acreages are based on the project footprint dated August 2024 and include both Shared Passenger Track Alternatives A and B. Specifically, the RSAs include both LMF options (26th Street LMF and 15th Street LMF) and both station options (Norwalk/Santa Fe Springs Station and Fullerton Station). In summary, there is no difference in the location or extent of aquatic resource acreages or aquatic resource impacts between Shared Passenger Track Alternatives A and B.

nonwetland, consisting of 0.29 acre of freshwater emergent wetland, 1.21 acres of riverine, and 0.02 acre of built watercourse. Construction of the Shared Passenger Track Alternatives would also result in temporary direct effects on a total of 2.31 acres of areas considered subject to California Fish and Game Code Section 1600 et seq.[3] consisting of 0.29 acre of freshwater emergent wetland, regulated as associated riparian vegetation; 1.99 acres of riverine, regulated as streambed; and 0.03 acre of built watercourse, also regulated as streambed.

Project activities that would result in permanent direct effects on aquatic resources considered subject to USACE, SWRCB, or CDFW jurisdiction during and following the construction phase include construction or modification of watercourse and waterbody (i.e., basin) crossings, stormwater drainage facilities, and access roads. Construction of the Shared Passenger Track Alternatives would permanently affect a total of 0.10 acre of aquatic resources considered USACE or SWRCB wetland and nonwetland, consisting of 0.01 acre of freshwater emergent wetland and 0.09 acre of riverine. Construction of the Shared Passenger Track Alternatives would also permanently affect a total of 0.21 acre of areas considered subject to California Fish and Game Code Section 1600 et seq., consisting of 0.01 acre of freshwater emergent wetland, regulated as associated riparian vegetation; and 0.20 acre of riverine, regulated as streambed.

This report considers aquatic resources described in Chapter 6, Survey Findings and Results, and mapped in Appendix F, *Los Angeles to Anaheim Project Section Aquatic Resources Delineation Report* (Authority 2025b), and Appendix H, California Fish and Wildlife Lakes, Streambeds, and Associated Riparian Vegetation Results and Map, to be jurisdictional under CWA Sections 404 and 401, the Porter-Cologne Water Quality Control Act, and California Fish and Game Code Section 1600, respectively. This report has been prepared to support the regulatory permitting processes for USACE, SWRCB, and CDFW, pursuant to these statutes.

[3] Aquatic resources potentially subject to California Fish and Game Code Section 1600 et seq. identified in the Aquatic RSA are generally inclusive of aquatic resources considered subject to USACE or SWRCB jurisdiction (i.e., overlapping).

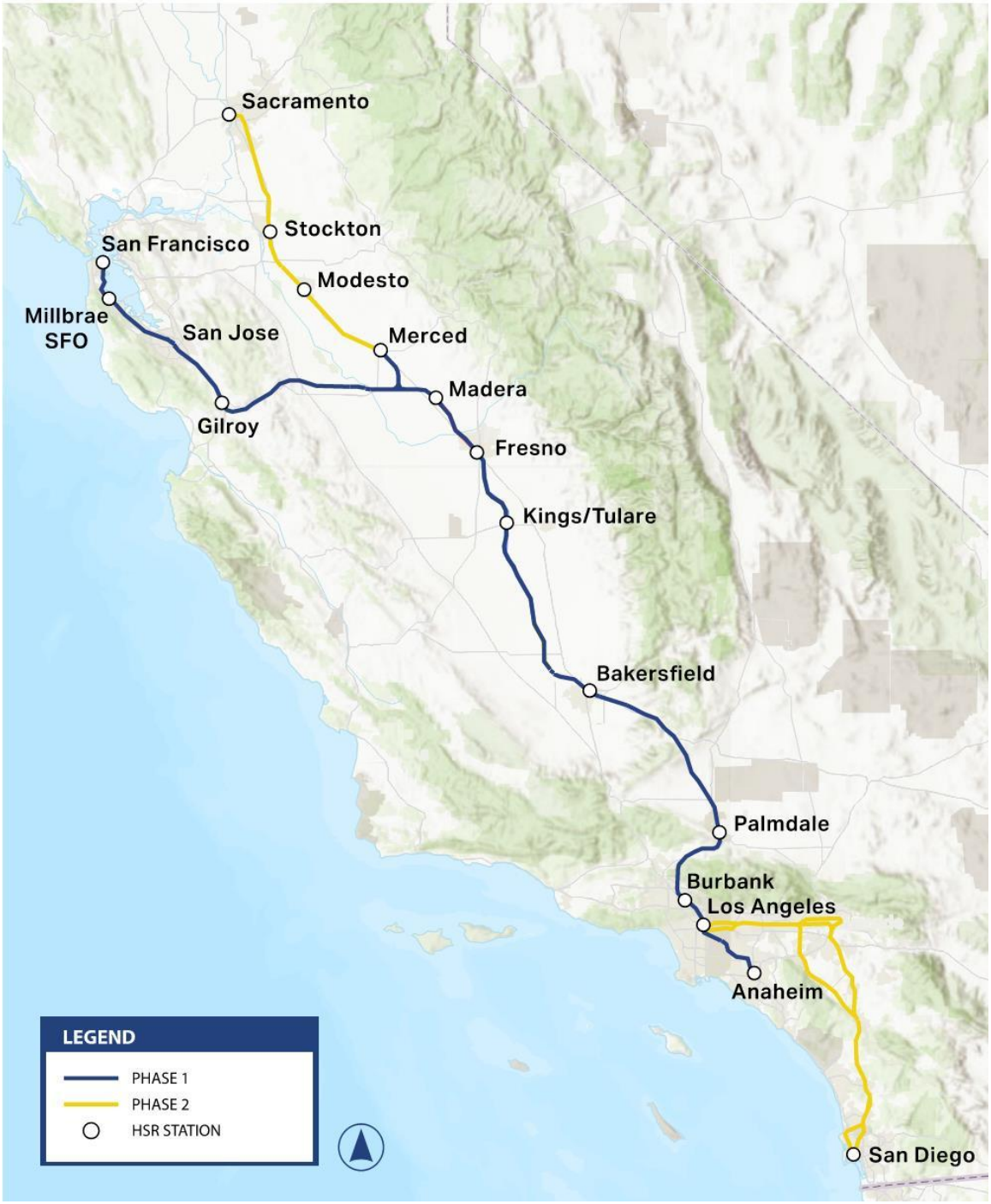
1 INTRODUCTION

1.1 California High-Speed Rail System Background

The California High-Speed Rail Authority (Authority), a state governing board formed in 1996, is responsible for planning, designing, building, and operating the California High-Speed Rail (HSR) System. Its statutory mandate is to develop an HSR system that coordinates with the state's existing transportation network, which includes intercity rail and bus lines, regional commuter rail lines, urban rail and bus transit lines, highways, and airports. The California HSR System will provide intercity, high-speed service on more than 800 miles of tracks throughout California, connecting the major population centers of Sacramento, the San Francisco Bay Area, the southern Central Valley, Los Angeles, the Inland Empire, Orange County, and San Diego, as depicted on Figure 1-1.[4] It will use state-of-the-art, electrically powered, high-speed, steel-wheel-on-steel-rail technology, including contemporary safety, signaling, and automated train control systems, with trains capable of operating up to 220 miles per hour.

The California HSR System is planned to be implemented in two phases. Phase 1 would connect San Francisco to Los Angeles and Anaheim via the Pacheco Pass and the Central Valley. Phase 2 would extend the HSR system from the Central Valley (starting at the Merced Station) to the state's capital in Sacramento and from Los Angeles to San Diego.

[4] The alignments depicted on Figure 1-1 reflect the Authority/Federal Railroad Administration decisions made in the 2005, 2008, and 2012 Programmatic Environmental Impact Report/Environmental Impact Statement documents.



Source: Authority 2023a

Figure 1-1 California High-Speed Rail System

1.2 Los Angeles to Anaheim Project Section Background

The Los Angeles to Anaheim Project Section (project section) of the HSR system would extend approximately 30 miles between Los Angeles Union Station (LAUS) in Los Angeles and Anaheim Regional Transportation Intermodal Center (ARTIC) in Anaheim. This narrow, existing railroad corridor is constrained by the surrounding urban environment and other existing rail operators in

the area, including trains operated by the National Railroad Passenger Corporation (Amtrak), Metrolink (governed by the Southern California Regional Rail Authority), the Union Pacific Railroad (UPRR), and BNSF Railway (BNSF).

The Authority, in cooperation with the Federal Railroad Administration (FRA), completed the *Final Program Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the Proposed California High-Speed Train System* in November 2005 (Authority and FRA 2005). For the Los Angeles to Anaheim Project Section, the Authority and FRA selected the existing Los Angeles – San Diego – San Luis Obispo Rail Corridor, with the intent of sharing the existing right-of-way as the alignment.

In 2007, the Authority and FRA released the Notice of Preparation/Notice of Intent to inform the public of the beginning of the preparation of a Draft EIR/EIS for the project section.[5] The Authority and FRA engaged in project scoping, completed a Preliminary Alternatives Analysis Report in 2009, and completed Supplemental Alternatives Analysis Reports in 2010 and 2016. The 2016 Supplemental Alternatives Analysis considered two alternatives: Alternative 1 (formerly called the Dedicated High-Speed Track Alternative) and Alternative 2 (formerly called the Consolidated Shared-Track Alternative), and advanced Alternative 2 (HSR Project Alternative) for analysis in the project Draft EIR/EIS.

In 2017 and 2018, BNSF conducted operational modeling that indicated a need for additional capacity during construction and operation of this project section. Consequently, the Authority added BNSF staging tracks in Lenwood (Lenwood Component) and a Colton Intermodal Facility (Colton Component) in San Bernardino County to the project. In 2020, the Authority initiated revised scoping to include the Lenwood and Colton Components in the project section. Stakeholder feedback received during scoping included substantial opposition to the BNSF Components far outside the project corridor.

In response, the Authority prepared a Supplemental Alternatives Analysis (Authority 2023b) to evaluate a new alternative that would eliminate the need for a BNSF Intermodal Facility in San Bernardino County. The 2023 Supplemental Alternatives Analysis examined three new build alternatives that did not include an Intermodal Facility and proposed advancing the Shared Passenger Track Alternative for further consideration in the EIR/EIS, which closely resembled the 2018 HSR Project Alternative without the Lenwood and Colton Components. Operationally, the Shared Passenger Track Alternative would reduce the peak service level for HSR trains to two trains per hour per direction, and up to 10 freight trains per day could operate on the passenger tracks, eliminating the need for the BNSF Intermodal Facility.

Additional design refinements and outreach occurred, and in May 2024, a Preliminary Impacts Assessment Report further defined elements of the Shared Passenger Track Alternative, such as HSR station options, light maintenance facility (LMF) sites, and grade crossings. The Preliminary Impacts Assessment Report recommended the Shared Passenger Track Alternative be split into two build alternatives, Shared Passenger Track Alternative A and Shared Passenger Track Alternative B, which are similar in all aspects, except for the LMF size and location. Shared Passenger Track Alternative A proposes an LMF at 26th Street in Vernon, and Shared Passenger Track Alternative B proposes an LMF at 15th Street in Los Angeles. In May 2024, the Board identified Shared Passenger Track Alternative A as the Preferred Alternative.

1.3 Project Description Purpose

This project description provides a condensed version of the technical information discussed in Chapter 2, Alternatives, of the Draft EIR/EIS and includes references to other documents for additional details and discussion. The basis of this project description is the Draft Los Angeles to Anaheim Preliminary Engineering for Project Definition document. Chapter 2 of the Draft EIR/EIS

[5] The Notice of Intent was issued in the *Federal Register* on March 15, 2007 (72 Fed. Reg. 12,250).

includes additional details beyond the content discussed herein, including information on the proposed operating plans and scenarios, construction plans, and capital and operating costs.

1.4 Report Purpose

This Biological and Aquatic Resources Technical Report for the project section provides an evaluation of the biological and aquatic resources potentially affected by the project. This report has been prepared to support documentation for compliance with the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), the federal Endangered Species Act (FESA), and the California Endangered Species Act (CESA), as well as to support the regulatory permitting processes for the U.S. Army Corps of Engineers (USACE) (Clean Water Act [CWA] Section 404), State Water Resources Control Board (SWRCB) (CWA Section 401, Porter-Cologne Water Quality Control Act [Porter-Cologne]), and California Department of Fish and Wildlife (CDFW) (California Fish and Game Code Section 1600).

2 PROJECT DESCRIPTION

The project section is approximately 30 miles long and travels through the cities of Los Angeles, Vernon, Commerce, Bell, Montebello, Pico Rivera, Santa Fe Springs, Norwalk, La Mirada, Buena Park, Fullerton, and Anaheim. The project's alignment would share a portion of the existing Los Angeles – San Diego – San Luis Obispo Rail Corridor with existing rail operators. The Authority adopted a strategy of sharing the existing corridor and blending HSR with existing rail systems on shared infrastructure (referred to as "blended operations"[6]) to accelerate and broaden benefits, improve efficiency, minimize community impacts, and reduce construction costs.

This section describes the No Project Alternative and Shared Passenger Track Alternatives A and B.

2.1 No Project Alternative

Under the No Project Alternative, the project section would not be built. The No Project Alternative represents the condition of the project section as it currently exists in the base year, and as it would exist without the California HSR System at the planning horizon year of 2040.

In assessing future conditions, it was assumed that all currently known, programmed, and funded improvements to the statewide transportation system (highway, rail, and transit) and reasonably foreseeable local land development projects would be implemented by the year 2040. The No Project Alternative is based on a review of and consultation with several documents and data sources, including, but not limited to, transportation plans such as the 2020 Southern California Association of Governments' Regional Transportation Plan[7]; the Governor's Office of Land Use and Climate Innovation CEQAnet Database; the Federal Aviation Administration's Air Carrier Activity Information System and Airport Improvement Plan grant data; the California State Transportation Commission's State Transportation Improvement Program; airport master plans and interviews with airport officials; intercity passenger rail plans; and city and county general plans and planning officials.

2.2 High-Speed Rail Build Alternatives

The project proposes two build alternatives: Shared Passenger Track Alternative A and Shared Passenger Track Alternative B. Shared Passenger Track Alternative A proposes an LMF at 26th Street, whereas Shared Passenger Track Alternative B proposes an LMF at 15th Street. Both alternatives include an HSR station option in either Norwalk/Santa Fe Springs or Fullerton. The main elements of the build alternatives are summarized in Table 2-1 and depicted on Figure 2-1.

Table 2-1 Summary of Design Features of Shared Passenger Track Alternative A and Shared Passenger Track Alternative B

Feature	Total
Total length (linear miles)	29.7
At-grade profile (linear miles)	23.8
Elevated profile (linear miles)	5
Below-grade/braced trench profile (linear miles)	0.9

[6] California High-Speed Rail Business Plans (California High-Speed Rail 2022 Business Plan) suggest blended railroad systems and operations. These terms refer to integrating the HSR system with existing intercity, and commuter and regional rail systems through coordinated infrastructure (blended systems) and scheduling, ticketing, and other means (blended operations).

[7] The No Project Alternative uses the 2020 Southern California Association of Governments Regional Transportation Plan as the basis for analysis, with the exception of the transportation analysis, which uses the 2016 Regional Transportation Plan as the baseline. This is because of the date and availability of traffic counts collected for the project.

Feature	Total
Number of straddle bents[1]	16
Number of at-grade railroad crossings[2]	8
Number of major water crossings[3]	9
Number of roadway overcrossings and undercrossings	57

[1] A straddle bent is a pier structure that spans (or "straddles") the functional/operational limit of a roadway, highway, or railway.
[2] Railroad crossing means a railroad crossing another railroad.
[3] Features considered major water crossings are Los Angeles River, Rio Hondo (and basins), San Gabriel River, North Fork Coyote Creek, La Mirada Creek, Coyote Creek, Brea Creek, Fullerton Creek, and Carbon Creek.



Source: Authority 2025a

Figure 2-1 Los Angeles to Anaheim Project Section Alignment

Currently, two to three mainline tracks occur throughout the corridor, with a variable number of freight siding tracks. The HSR project seeks to maintain existing operations in the corridor while minimizing impacts outside of the existing right-of-way. To accomplish this, the HSR project would add one new mainline track from LAUS to Fullerton Junction and would use existing tracks, where possible, to ensure that, overall, the project section includes two electrified tracks along the corridor for HSR, which would be shared with other passenger rail operators. These two electrified tracks are referred to herein as *shared tracks*. The specific details of Shared Passenger Track Alternative A and Shared Passenger Track Alternative B are discussed further below.

2.2.1 Shared Passenger Track Alternative A

2.2.1.1 Alignment

Table 2-2 summarizes the alignment of Shared Passenger Track Alternative A through the corridor cities. Figure 2-2 depicts the northern project section limit and its relationship with Los Angeles County Metropolitan Transportation Authority's proposed Link Union Station Project. Figure 2-3 through Figure 2-8, as referenced therein, provide cross-sections of various points along the project alignment discussed in Table 2-2. Where applicable, Table 2-2 also provides references to later sections of this project description that provide further details of other project components including, but not limited to, ancillary facilities, HSR and passenger rail stations, and the LMFs.

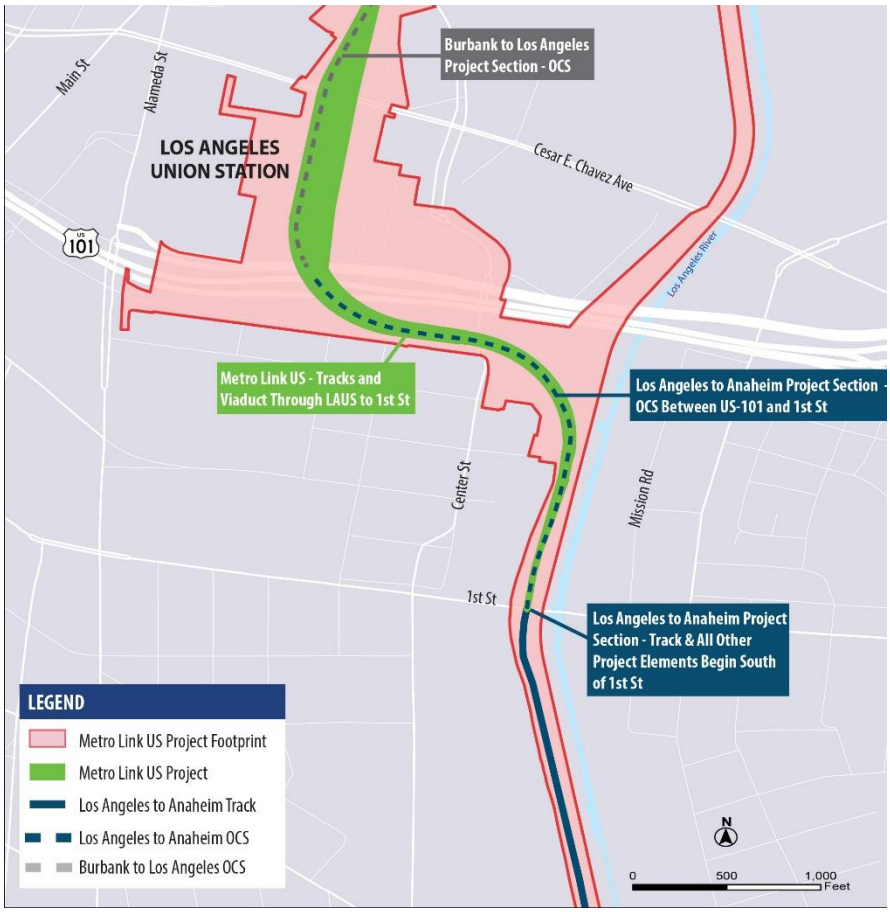
Table 2-2 Shared Passenger Track Alternative A Alignment

Project Section Segment	Segment Alignment Description
Los Angeles and Vernon	▪ The project section would begin immediately south of LAUS, at the northern edge of US 101, where a viaduct built as part of the Link US Project would begin. The installation of the OCS north of US 101 was previously approved as part of the Burbank to Los Angeles Project Section in January 2022. From US 101 to 1st St, the Authority would build the OCS for HSR. At 1st St, Shared Passenger Track Alternative A would include the HSR project tracks and all other project infrastructure south to ARTIC. ▪ Starting at the LAUS platforms, HSR trains would run on tracks built as part of Link US, cross over US 101, Commercial St, and Ducommun St on a viaduct, and come down to grade just before 1st St, joining the existing railroad right-of-way. From this tie-in point south, the HSR trains would use the existing tracks, which would be upgraded with an OCS. Refer to Figure 2-3 for a cross section of the track between 1st St and 4th St. ▪ Between 7th St and I-10, two HSR layover tracks would be added west of the shared tracks; refer to Section 2.2.1.2, Ancillary Facilities, for more information. The shared tracks would cross under the Olympic Blvd roadway overcrossing and rise onto an existing railroad bridge to cross over Washington Blvd and the Los Angeles River. The shared tracks would return to at grade east of Soto St and enter Vernon. ▪ The BNSF and shared tracks would pass by the BNSF Los Angeles Intermodal Facility (referred to as Hobart Yard). The proposed 26th St LMF would be south of Hobart Yard and is described in more detail in Section 2.2.1.4, Light Maintenance Facility.
Commerce, Bell, Montebello, and Pico Rivera	▪ East of Hobart Yard, the tracks would cross at grade under I-710 and enter Commerce. Starting from west of Eastern Ave, the shared tracks would rise onto a new elevated structure, referred to as the *Commerce Flyover*; refer to Section 2.2.1.5, Freight or Passenger Railroad Modifications, and Figure 2-4 for more information on the Commerce Flyover, which is designed to pass by the BNSF Commerce Intermodal Facility (referred to as *Commerce Yard*). ▪ The Commerce Flyover would cross over Eastern Ave and pass by the existing Commerce Metrolink Station. The elevated shared tracks would not connect with the Commerce Metrolink Station's existing location, which would be relocated. Refer to Section 2.2.1.5 for more information on the Commerce Metrolink Station's relocation. The elevated tracks would return to grade before I-5 and would remain so throughout Montebello and Pico Rivera.

Project Section Segment	Segment Alignment Description
Santa Fe Springs and Norwalk	▪ The tracks would continue east into Santa Fe Springs and cross over Pioneer Blvd, Norwalk Blvd, and Los Nietos Rd. All of these would be new grade separations, with the roadway lowered and tracks crossing over on new railroad bridges; refer to Section 2.2.1.6, State Highway or Local Roadway Modifications. ▪ From Slauson Ave to Telegraph Ave, the track configuration would remain at grade with four tracks, as depicted on Figure 2-5. ▪ South of Telegraph Rd, the shared tracks would diverge outside of the existing railroad right-of-way and rise onto retained fill to cross over Florence Ave on a new bridge, while three BNSF mainline tracks would cross Florence Ave on the existing railroad bridge. The shared tracks would transition from retained fill onto an elevated structure that crosses over Lakeland Rd, while the BNSF tracks would remain at grade in their current configuration throughout this segment. The elevated structure would continue south and transition from the west side of the corridor over to the east side. Figure 2-6 depicts the track configuration south of Lakeland Rd. ▪ The elevated structure would veer east out of the existing railroad corridor and cross over Imperial Hwy, necessitating modifications to the existing Norwalk/Santa Fe Springs Metrolink Station, described in Section 2.2.1.3, High-Speed Rail Station Facilities, in more detail. Under Shared Passenger Track Alternative A, HSR trains would not stop at the Norwalk/Santa Fe Springs Metrolink Station. ▪ South of the station, the elevated structure would rejoin the existing railroad corridor and transition back down to at grade just west of Carmenita Rd.
La Mirada and Buena Park	▪ The tracks would continue at grade through La Mirada and Buena Park. In Buena Park, the track design would conflict with the location of the existing Buena Park Metrolink Station platform, necessitating the station's relocation (refer to Section 2.2.1.5 for more information).
Fullerton	▪ East of Dale St, the tracks would enter Fullerton. The Fullerton Municipal Airport is south of the railroad corridor, and the shared tracks would require lowering as they pass by the airport to prevent the HSR project, including the OCS, trains, and all other project components, from conflicting with the airport runway protection zone. The shared tracks on the north side of the corridor would also need to transition to the south side in order to serve the existing Fullerton Metrolink/Amtrak Station farther south. ▪ The shared tracks would transition underneath the BNSF tracks via a short below-grade section, in a braced trench. The trench would start approximately 850 feet east of Dale St and, approaching the eastern end of the Fullerton Airport, would cross under the BNSF tracks to the south side of the corridor, continuing adjacent to the existing BNSF tracks (which would remain at grade). Refer to Figure 2-7 for a cross section of the shared tracks in the trench after they transition to the south side of the corridor. ▪ The shared tracks would return to grade just before Gilbert St. Continuing east, a fourth track would be added to the south side of the corridor at the Fullerton Metrolink/Amtrak Station, which would require modifications, described in more detail in Section 2.2.1.3. Under Shared Passenger Track Alternative A, HSR trains would not stop at the Fullerton Metrolink/Amtrak Station. ▪ East of the station at Fullerton Junction, the three tracks along the north side of the corridor would be dedicated to BNSF trains and would continue east through Fullerton Junction. The tracks along the south side of the corridor would be dedicated to passenger trains and travel south to ARTIC.

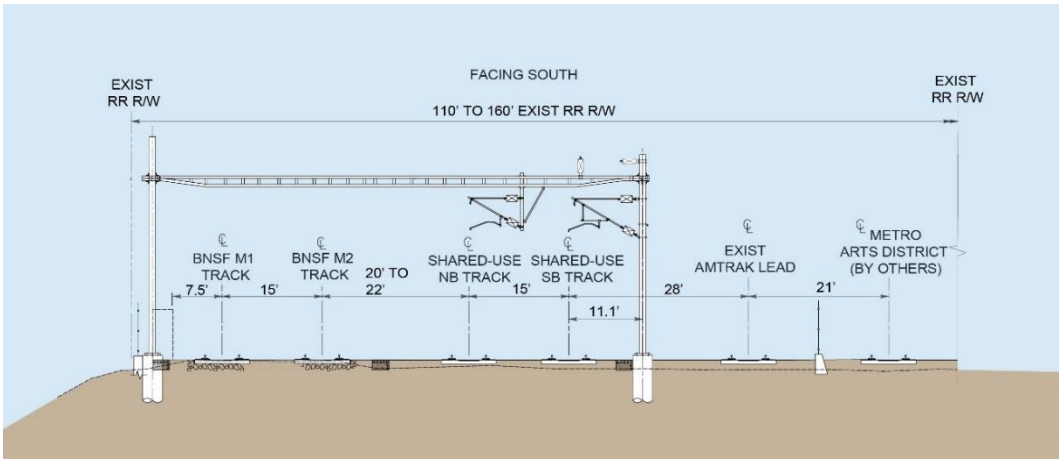
Project Section Segment	Segment Alignment Description
Anaheim	▪ South of Fullerton Junction, the tracks would enter Anaheim. From Fullerton Junction to ARTIC, the two existing tracks would be electrified to allow for shared operations with Metrolink. Several freight trains per day currently run on the existing tracks and would retain operation rights in the future. The two shared tracks would remain at grade through the rest of Anaheim. ▪ The existing at-grade crossings at Orangethorpe Ave, La Palma Ave, Sycamore St, Broadway St, Santa Ana St, South St, Vermont Ave, and Ball Rd would be maintained. Refer to Figure 2-8 for the cross section that is representative of the two-track configuration throughout this segment. ▪ From south of Ball Rd to south of Cerritos Ave, two HSR layover tracks would be added along the west side of the corridor. Cerritos Avenue and State College Blvd would be grade separated, with the roadways lowered and the tracks crossing over the road on new railroad bridges. ▪ The tracks would end at ARTIC, where HSR platforms and station facilities would be added to the existing station, described in more detail in Section 2.2.1.3.

ARTIC = Anaheim Regional Transportation Intermodal Center; Authority = California High-Speed Rail Authority; BNSF = BNSF Railway; HSR = high-speed rail; I = interstate; LAUS = Los Angeles Union Station; Link US = Link Union Station; OCS = overhead contact system; project section = Los Angeles to Anaheim Project Section; US 101 = U.S. Highway 101



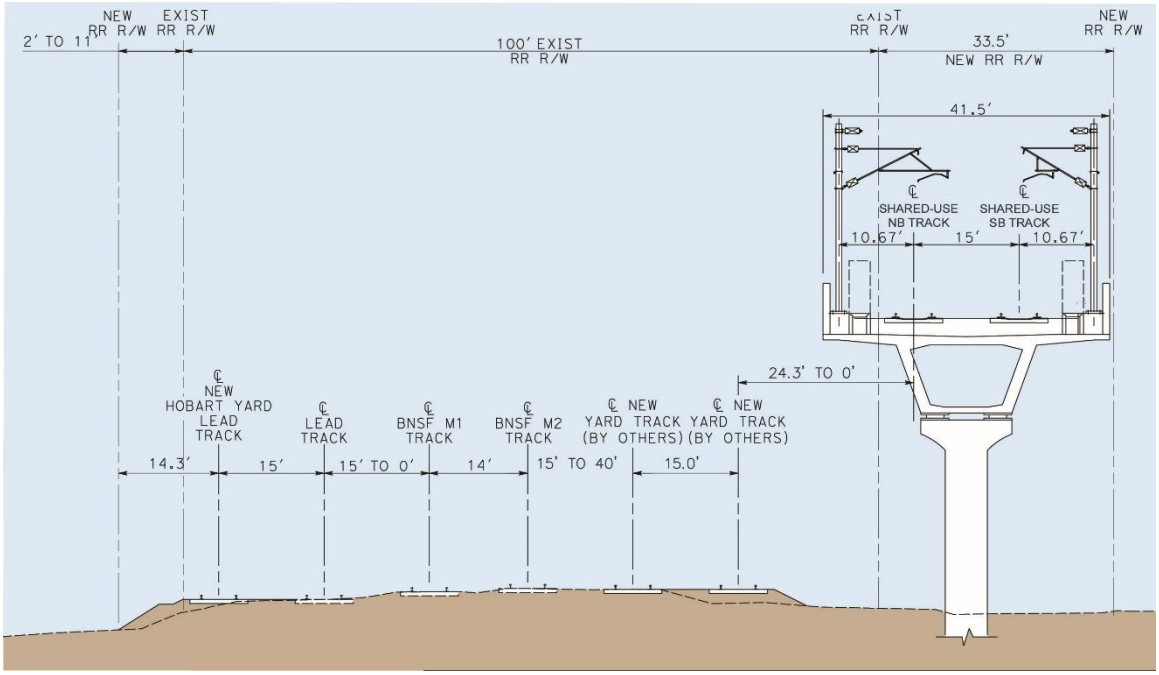
Source: Authority 2025a
Link US = Link Union Station; Metro = Los Angeles County Metropolitan Transportation Authority; OCS = overhead contact system

Figure 2-2 High-Speed Rail and Link Union Station Project



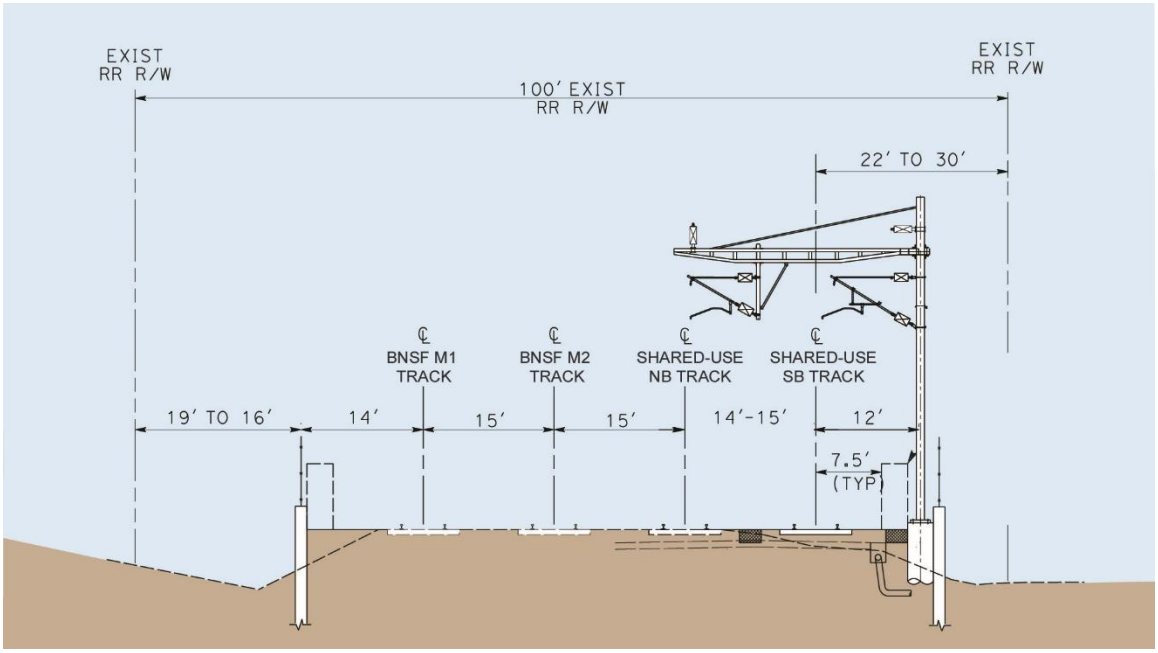
Source: Authority 2025a
M = main track; RR = railroad; R/W = right-of-way; NB = northbound; SB = southbound

Figure 2-3 At-Grade Cross Section between 1st Street and 4th Street



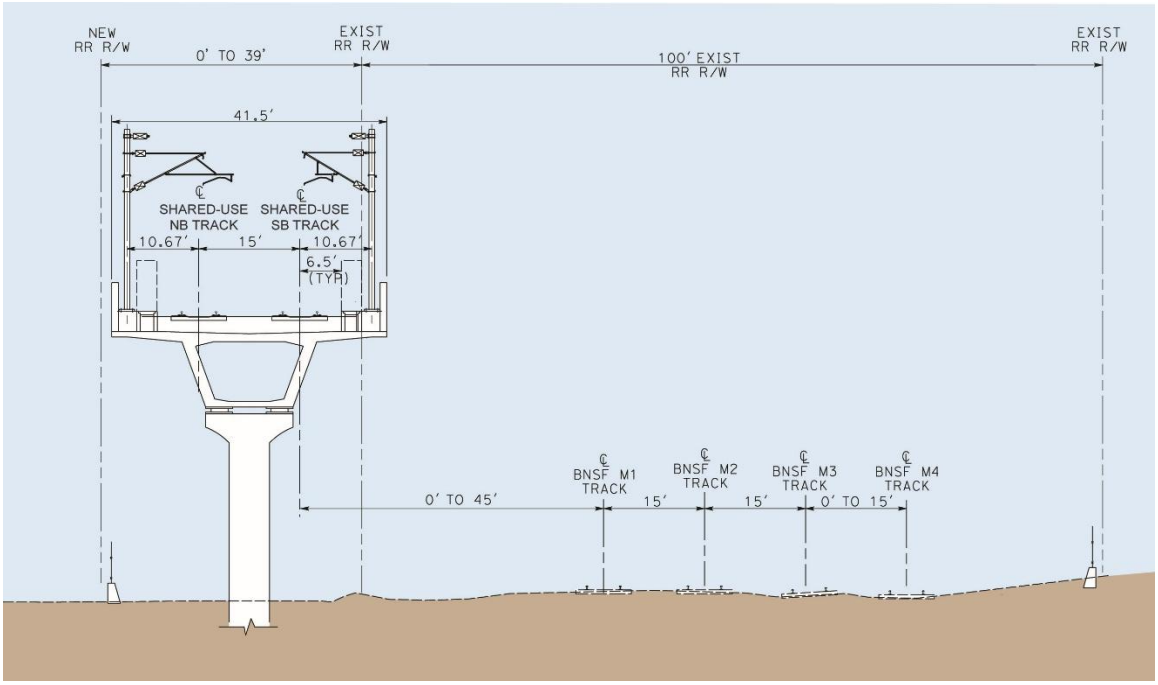
Source: Authority 2025a
M = main track; RR = railroad; R/W = right-of-way; NB = northbound; SB = southbound

Figure 2-4 Elevated Cross Section between Atlantic Boulevard and Eastern Avenue (Commerce Flyover)



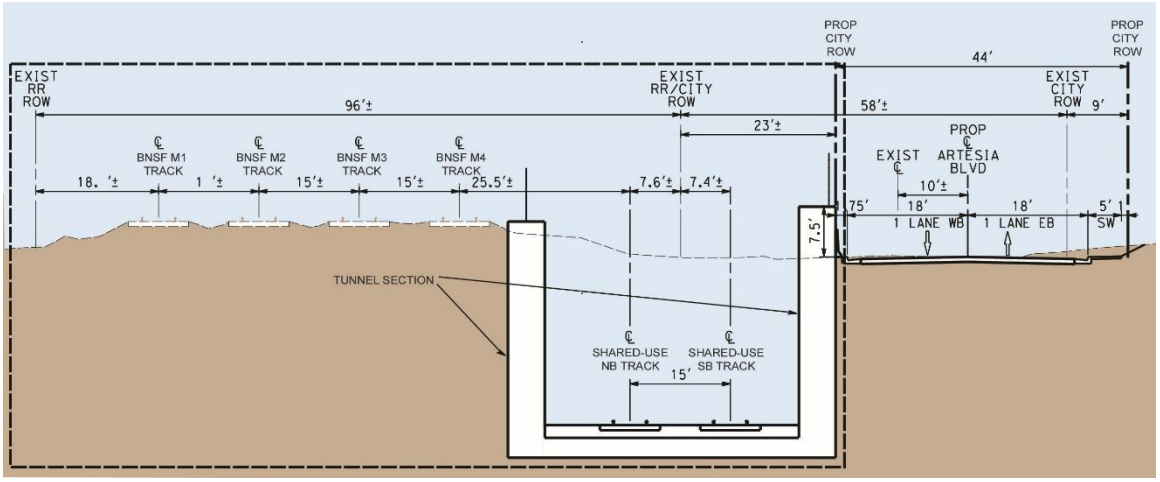
Source: Authority 2025a
M = main track; RR = railroad; R/W = right-of-way; NB = northbound; SB = southbound

Figure 2-5 At-Grade Cross Section from Slauson Avenue to Telegraph Road



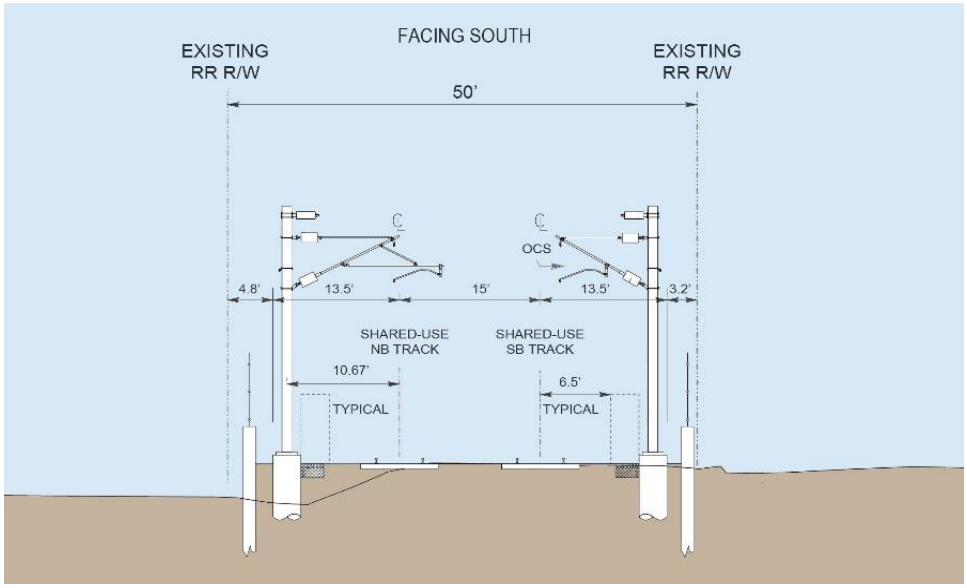
Source: Authority 2025a
M = main track; RR = railroad; R/W = right-of-way; NB = northbound; SB = southbound

Figure 2-6 Elevated Cross Section South of Lakeland Road



Source: Authority 2025a
Figure not to scale
M = main track; OCS = overhead contact system; RR R/W = railroad right-of-way

Figure 2-7 Braced Trench Cross Section East of Fullerton Airport



Source: Authority 2025a
OCS = overhead contact system; RR = railroad; R/W = right-of-way; NB = northbound; SB = southbound

Figure 2-8 At-Grade Cross Section between La Palma Avenue and Ball Road

2.2.1.2 Ancillary Facilities

Systems Facilities

HSR trains would draw power from California's existing electricity grid, with power distributed to the trains via the overhead contact system (OCS). The project would not include construction of a separate power source; rather, the existing grid would supply power to the OCS through the extension of underground or overhead transmission lines to a series of power substations positioned along the railroad corridor. The transformation and distribution of electricity would occur through the following three types of stations:

- Traction power substations (TPSS), which would transform high-voltage electricity supplied by public utilities to the train operating voltage. The project section would include two TPSS sites (Los Angeles and Anaheim), which would both be adjacent to existing utility transmission lines and outside of the existing right-of-way. The TPSS sites would be spaced apart by approximately 30 miles along the project alignment and each include an approximately 450-square-foot control room and two 115/50-kilovolt or 230/50-kilovolt, single-phase transformers that would both be rated at 60 megavolt-amperes. The foregoing components would be installed within an approximately 32,000-square-foot area, and screening of each TPSS would be provided by a wall or fence.
- A switching station to connect and balance the electrical load between tracks and switch OCS power on or off in the event of a power outage or emergency. A switching station would be installed in Santa Fe Springs, generally midway between the two TPSS sites, approximately 15 miles from the nearest TPSS and 0.1 mile northeast of the project alignment. Installation of the station's equipment would require approximately 9,600 square feet.
- Paralleling stations, or autotransformer stations, to provide voltage stabilization and equalize current flow. Two paralleling stations would be installed along the project alignment, with one each along the segments between the Santa Fe Springs switching station and the Los Angeles and Anaheim TPSS sites. Each paralleling station would be adjacent to the HSR right-of-way, include an approximately 450-square-foot control room, and require approximately 8,000 square feet.

Table 2-3 provides the locations of the proposed TPSSs, switching station, and paralleling stations.

Table 2-3 Traction Power, Paralleling, and Switching Station Locations

Traction Power Station Type	Location
Traction power substation (two sites)	**City of Los Angeles:** South of Washington Blvd, and west of Soto St, adjacent to the existing railroad viaduct **City of Anaheim:** On the northeast corner of Lewis St and Cerritos Ave, southwest of the HSR tracks
Paralleling station (two sites)	**City of Montebello:** Southwest corner of Maple Ave and Sycamore St, south of the HSR tracks (co-located with the relocated Commerce Metrolink Station) **City of Fullerton:** Northwest corner of Dale St and Artesia Ave, south of the HSR tracks
Switching station	**City of Santa Fe Springs:** Northeast corner of Los Nietos Rd and Santa Fe Springs Rd, north of BNSF Railway tracks

Source: Authority 2025a
HSR = high-speed rail

Signaling and Train-Control Elements

The National Transportation Safety Board, FRA, and other agencies mandate Positive Train Control, a train safety system designed to automatically implement safety protocols and provide communication with other trains to reduce the risk of a potential collision. Because of the lower operating speed of HSR trains in this project section compared to other HSR project sections, this project section would operate using conventional Positive Train Control signaling rather than a specialized HSR signaling system. This project section would use a radio-based communications network, including a fiber optic backbone and communications towers approximately every 2 to 3 miles, depending on the terrain and selected radio frequency. The towers would be in the HSR corridor in a fenced area of approximately 20 feet by 15 feet, including a 10- by 8-foot communications shelter and a 6- to 8-foot diameter, 100-foot-tall communications pole. These

communications facilities could be co-located within the TPSSs. Where communications towers cannot be located with TPSSs or other HSR facilities, they would be within or near the HSR corridor in an approximately 20- by 15-foot fenced area.

Layover Tracks

Layover tracks are used to store and restock trains during the day, in between service runs, and to store trains at night at terminus stations when they are not in service. Layover tracks are required where high-speed trains would end their runs, near LAUS and ARTIC, to support layover functions such as overnight storage, draining of waste tanks, filling of potable water tanks, and cleaning of windows, among others, as well as daily scheduled interior cleaning of passenger areas that would occur prior to the train entering revenue service. The Los Angeles layover tracks would be between Seventh Street and Interstate (I-) 10, and could be accessed for cleaning activities through the Amtrak Eighth Street Yard. The Anaheim layover tracks would be from south of Ball Road to south of Cerritos Avenue, and would have a layover support facility at the northeast corner of Lewis Street and Cerritos Avenue.

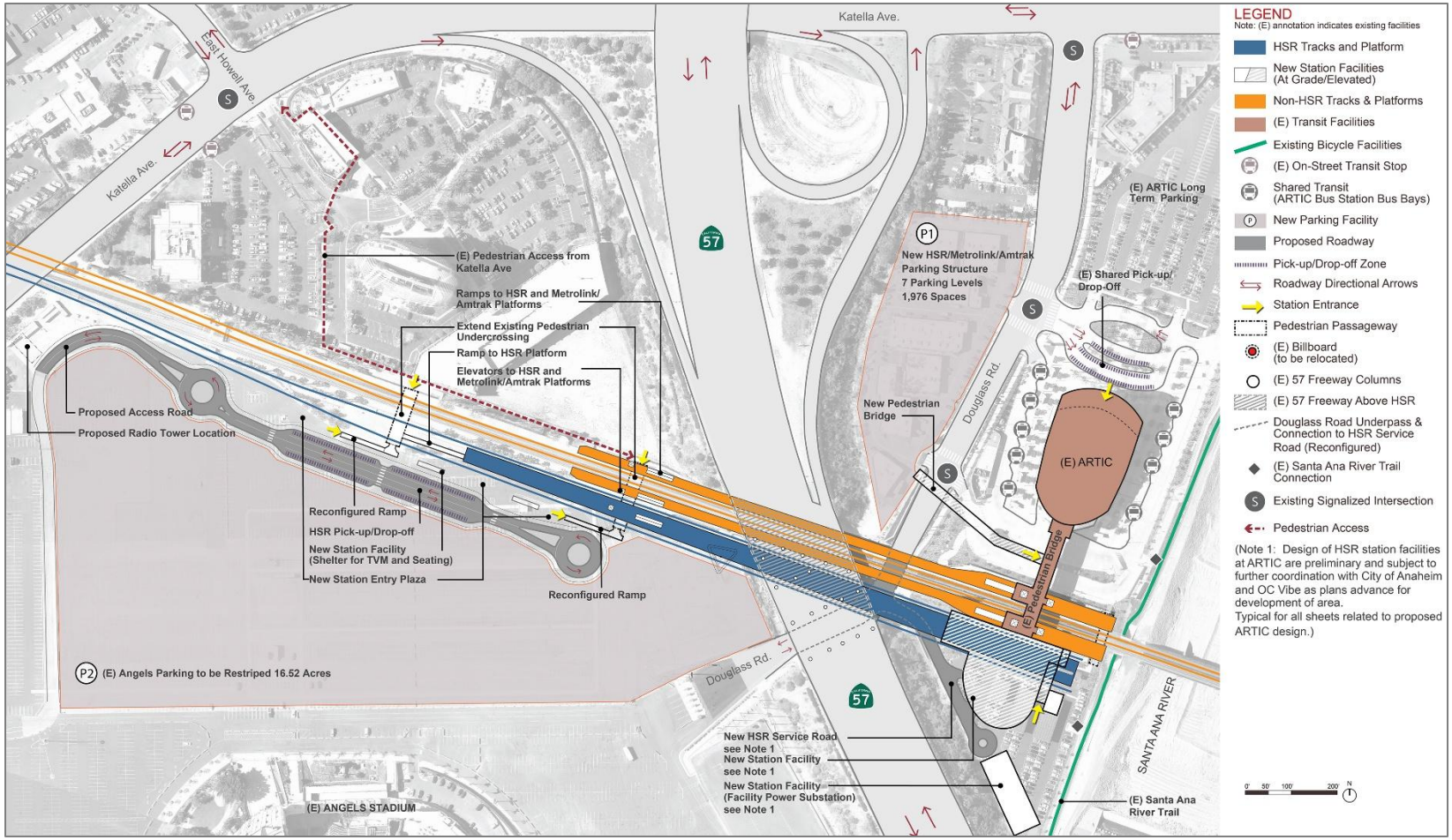
2.2.1.3 High-Speed Rail Station Facilities

Because the project section is within an existing corridor with passenger rail service, Shared Passenger Track Alternative A does not propose new HSR stations but rather modifies existing passenger rail stations to allow for shared operations with HSR. Shared Passenger Track Alternative A would include an HSR station platform and facilities at ARTIC, described below.

ARTIC High-Speed Rail Platform and Station Facilities

The proposed HSR platform and station facilities at the existing ARTIC station would be at grade, with two new HSR tracks and a single 1,410-foot center platform for HSR, south of and parallel to the existing Metrolink/Amtrak tracks and platforms. The HSR platform would be accessed through an extension of ARTIC's existing pedestrian bridge from the northeast and through an extension of two existing pedestrian tunnels on the western end of the existing ARTIC platforms. The Authority would work with the City of Anaheim, as the ARTIC passenger terminal owner, to share the passenger amenities inside ARTIC in the near term. Once ridership increases enough that combined HSR and local-provider passenger volumes exceed the design capacity of the ARTIC passenger terminal building, the Authority would build a separate HSR passenger terminal. This new HSR station building, included within the project footprint and depicted on Figure 2-9, would be at the southern end of the pedestrian bridge, along with a facility power substation to provide electricity to the building. The existing Metrolink/Amtrak parking lot north of Angel Stadium would be reconfigured into a pick-up/drop-off area and connected to the existing access road from Katella Avenue. The project would maintain the two existing access points between the Santa Ana River Trail and ARTIC. Radio towers would be built adjacent to the access road at Katella Avenue.

This project would include a new parking structure adjacent to State Route 57 and Katella Avenue, providing 1,350 HSR parking spaces and 626 replacement parking spaces to account for existing parking spaces at ARTIC that would be displaced by the HSR tracks and platform, for a total of 1,976 parking spaces. Figure 2-9 provides an illustration of the HSR platform and station facilities at ARTIC.



Source: Authority 2025a

Figure 2-9 High-Speed Rail Platform and Facilities at ARTIC

2.2.1.4 Light Maintenance Facility

HSR operations in Southern California would require a Level III[8] LMF for fleet storage, cleaning, repair, overnight layover accommodations, and servicing facilities, including the necessary water cistern and power facilities. The 26th Street LMF is designed to follow the Authority's *Requirements for High-Speed Trainset Fleet and Infrastructure Maintenance Facilities Technical Memorandum* (Authority 2024).

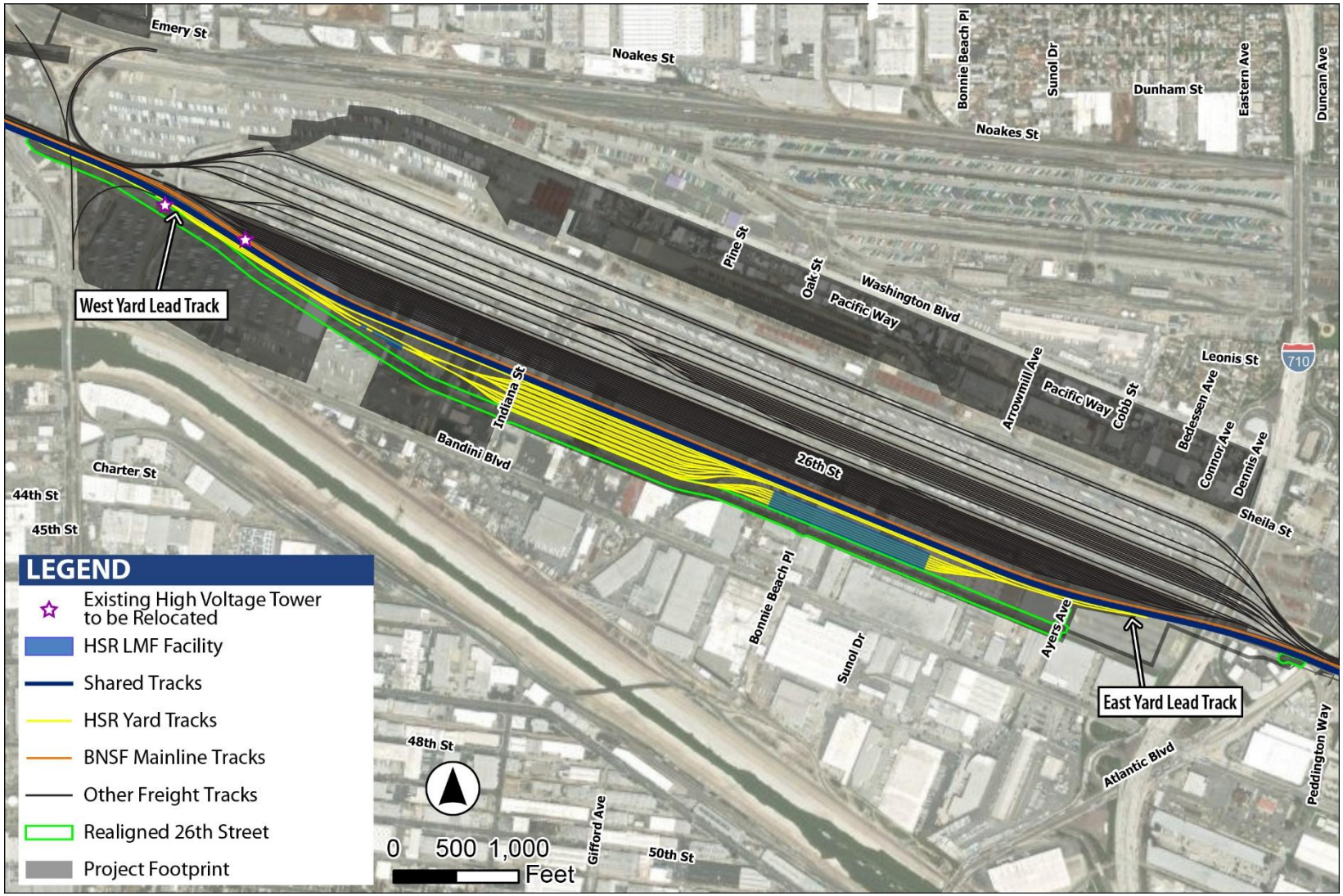
Refer to Figure 2-10 for an overview of the 26th Street LMF, which would have an overall size of 50 acres and be roughly bounded by the realigned mainline tracks on the north, a relocated 26th Street on the south, Downey Road on the west, and I-710 on the east. The changes on the south side of Hobart Yard would require 26th Street to be realigned, which would provide access to the LMF. Two high-voltage utility towers would be relocated to accommodate the 26th Street realignment. Refer to Section 2.2.1.5 for more details on changes adjacent to Hobart Yard.

The LMF would be double-ended, with all tracks having access from the mainline on both the eastern and western sides. HSR trains would access the LMF from the east and west on two new yard lead tracks, which would be south of the mainline tracks. Within the 26th Street LMF, there would be an outdoor train yard with 12 yard tracks to allow for the storage of 24 single trainsets, along with a 1,345-foot-long, six-track shop building, which could accommodate 12 trainsets. The internal LMF access roads would be wide enough to accommodate service vehicles, consolidate commissary functions, and provide more clearance from the OCS poles to the yard tracks.

2.2.1.5 Freight or Passenger Railroad Modifications

Shared Passenger Track Alternative A would modify the existing rail corridor to create a corridor that is primarily four mainline tracks (two electrified and shared with other passenger rail operators) from Los Angeles to Fullerton, and two mainline tracks (electrified and shared with both passenger rail and freight operators) from Fullerton to Anaheim. Freight rail would operate primarily on the nonelectrified tracks, although the electrified tracks could accommodate freight traffic if necessary (up to 10 BNSF freight trains per day would be able to use the two passenger rail tracks), while maintaining service and operation levels for all operators within the corridor. The following sections describe the freight and passenger railroad modifications in more detail, which include modifications to BNSF storage and intermodal facilities as well as modifications to and relocations of existing passenger rail stations.

[8] The Authority defines three levels of maintenance to be conducted at an LMF.



Source: Authority 2025a

Figure 2-10 Shared Passenger Track Alternative A: 26th Street Light Maintenance Facility

BNSF Railway Storage and Intermodal Facilities

Adding and electrifying tracks in the existing right-of-way would require the Authority to remove or modify track and right-of-way that is currently used or planned for future use by BNSF for train storage and intermodal operations. This requires modifications to BNSF's plans for expansion at its yards in Vernon and Commerce. In several locations, Shared Passenger Track Alternative A would require removal/relocation of existing BNSF infrastructure. Thus, Shared Passenger Track Alternative A would replace the affected BNSF infrastructure, primarily adjacent to Hobart Yard, to maintain BNSF capacity and avoid disruptions to operations.

Table 2-4 lists the BNSF storage capacity that would be removed from the corridor and relocated to the new consolidated storage yard adjacent to Hobart Yard; refer to Figure 2-11 for an overview of the relocated infrastructure. The new storage yard would provide 101,094 track feet of storage, including 5,850 track feet for a new runaround track,[9] which is slightly more than the amount removed from the corridor (90,940 track feet). This is a result of the layout and overall length of the new consolidated yard. The tracks need to be operational while fitting within the new yard space and maintaining the removed storage capacity, and therefore some replacement tracks would be longer than the ones that are being removed from the corridor. In addition to the relocations described in Table 2-4, some BNSF yard lead and storage tracks throughout the corridor would be relocated and replaced within the same area, with the same level of storage capacity and operational functionality maintained. This includes the Pico Rivera Yard north and south lead tracks, La Mirada Yard lead track and storage track, and Fullerton storage track on the southern side between Commonwealth Avenue and Highland Avenue.

Table 2-4 BNSF Railway Facility or Track to Be Removed or Modified

HSR Project Element Affecting BNSF Infrastructure	BNSF Facility/Track to Be Removed/Relocated/Modified	Length of Removed/ Relocated Tracks (TF)
HSR mainline and layover tracks	BNSF 8th St Yard (BNSF storage tracks between 1st St and I-10 along West Bank)	35,000
Relocated Commerce Metrolink Station	South Vail Support Track (between Vail St and Minson Wy)	3,800
4th mainline track	Pico Rivera Storage Tracks	4,000
4th mainline track	Norwalk Support Track (between Telegraph Rd and Florence Ave)	4,400
4th mainline track	Santa Fe Springs Staging Track (through existing Norwalk/Santa Fe Springs Metrolink Station area)	14,600
Fullerton braced trench	Buena Park/Fullerton Storage Tracks (on north side between Dale St and Gilbert St)	15,840
4th mainline track	Fullerton support track (north of Fullerton Amtrak/Metrolink Station)	4,500
4th mainline track	Fullerton storage track (on north side between Commonwealth Ave and Highland Ave)	8,800
Total		**90,940**

Source: STV 2025

[9] Runaround tracks allow a locomotive to move around the train and attach to the opposite end, enabling the train to be switched or moved in the desired direction. The runaround track must be as long as the longest set of cars that would be pulled. A runaround track is generally recommended for all modern rail yards to reduce overall freight congestion.

BNSF = BNSF Railway; HSR = high-speed rail; I = interstate; TF = track feet



Source: STV 2025

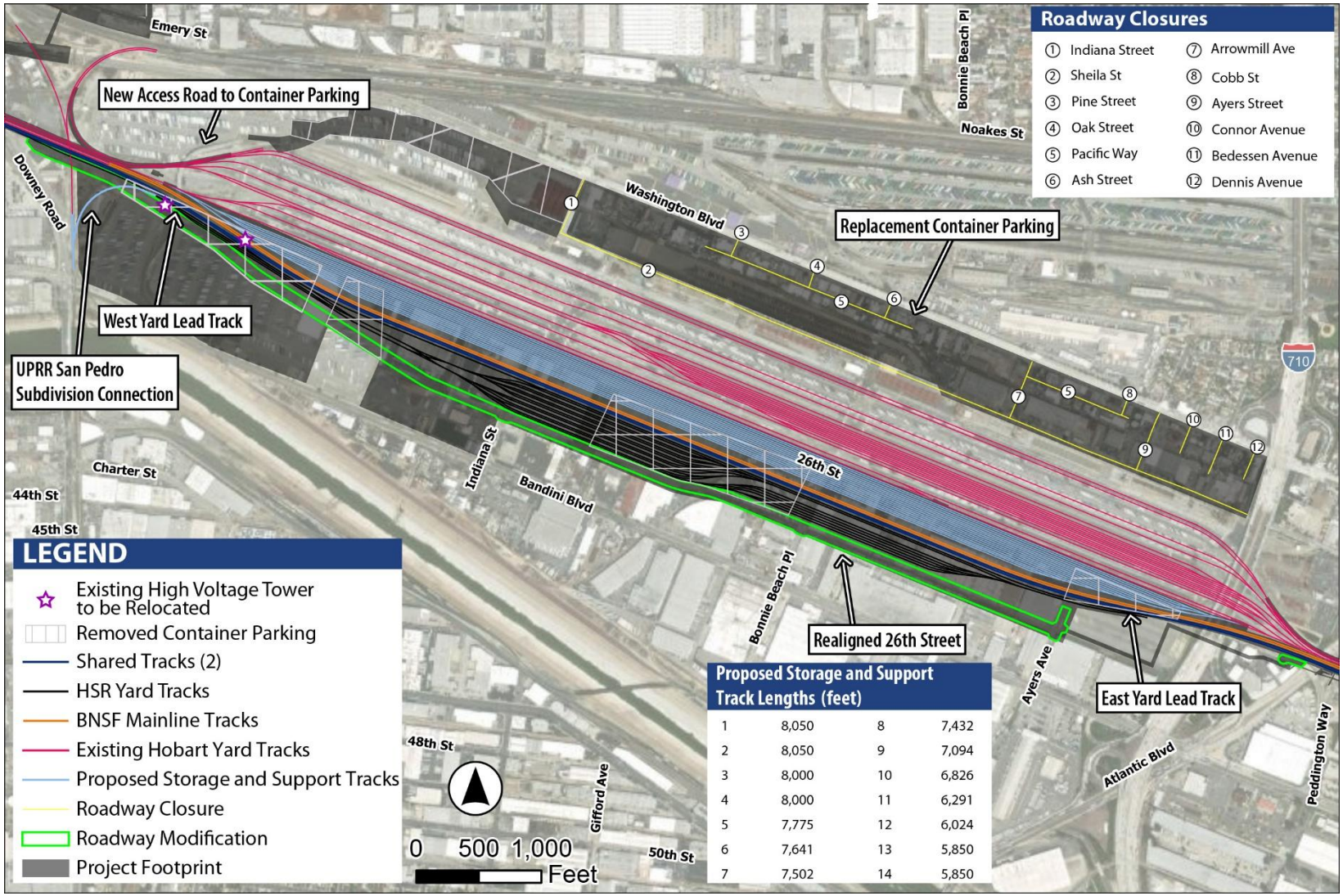
Figure 2-11 BNSF Railway Infrastructure Affected by the Los Angeles to Anaheim Project Section

BNSF Railway Los Angeles Intermodal Facility (Hobart Yard)

Figure 2-12 depicts the proposed changes at Hobart Yard. The consolidated storage yard, BNSF mainline tracks, shared tracks, and new connection to the UPRR San Pedro Subdivision would be up to 250 feet south of the current southern limit at Hobart Yard and into properties south of 26th Street. New second lead tracks into Hobart Yard from the west and east would also be added. These additional lead tracks would allow freight trains to move off the mainline tracks at speed and avoid delays and backups in an already heavily congested corridor. These track changes would require the vacation and realignment of the 26th Street right-of-way from Downey Road to Atlantic Boulevard.

The changes described above, along with LMF yard lead tracks, would displace some existing BNSF container parking south of the railroad corridor. This container parking would be replaced by acquiring properties north of Hobart Yard along the south side of Washington Boulevard, which would require a new access road north of Hobart Yard and the closure of several roads between Washington Boulevard and Sheila Street (refer to Section 2.2.1.6, State Highway or Local Roadway Modifications, for more details on roadway changes related to Hobart Yard). The new access road would also displace some existing container parking that would be replaced in the new container parking area.

Additionally, two high-voltage utility towers would be relocated to accommodate the 26th Street realignment.



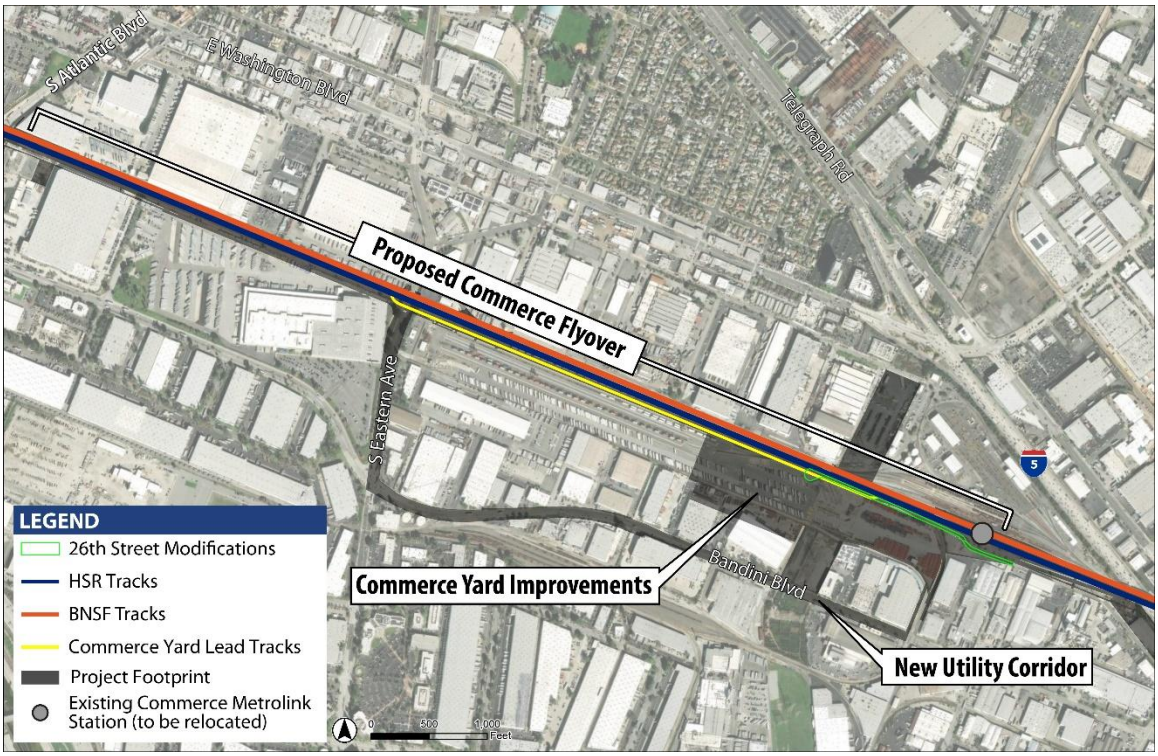
Sources: Authority 2025a; ESRI 2020

Figure 2-12 Hobart Yard Modifications (Shared Passenger Track Alternative A)

BNSF Railway Commerce Intermodal Facility (Commerce Yard)

Adjacent to Commerce Yard, the Commerce Flyover would separate passenger trains on an elevated structure from the freight trains running at grade. Figure 2-13 depicts the modifications required throughout the Commerce Yard area to maintain operations. Two new BNSF yard tracks would be added, converging into a new BNSF stub lead track west of I-5, with additional connector tracks. Improvements would include reconstructing several of the lead tracks, relocating the truck entrance gates and internal access road, and adding truck storage parking and a switching tail track. These yard improvements would require a portion of 26th Street to be closed; 26th Street currently provides access to the yard from the east, but the new entrance to the yard would require approximately 1,300 feet of the road to be closed.

Existing utilities along the south side of the railroad corridor would be relocated to the south in a new utility corridor, within Bandini Boulevard. Additionally, the high-voltage power lines currently running south of and parallel to the railroad corridor must be raised to provide the required clearance from the Commerce Flyover structure.



Sources: Authority 2025a; ESRI 2020

Figure 2-13 Commerce Flyover and Commerce Yard Modifications

Modified Metrolink Stations

Norwalk/Santa Fe Springs Metrolink Station Modifications

HSR trains would not stop at the Norwalk/Santa Fe Springs Metrolink Station, but modifications would be required for HSR operations, as depicted on Figure 2-14. The existing platforms at Norwalk/Santa Fe Springs Metrolink Station are in an area that would not be able to accommodate an additional mainline track and shared operations between HSR and Metrolink. Adding the additional mainline track would require shifting the existing platforms to an area with a straight section of track. Therefore, the Metrolink platforms would be moved to be served by the shared tracks on the new elevated structure, approximately 350 feet east of the existing alignment (at their farthest points). The modified station would be elevated, with two 680-foot side

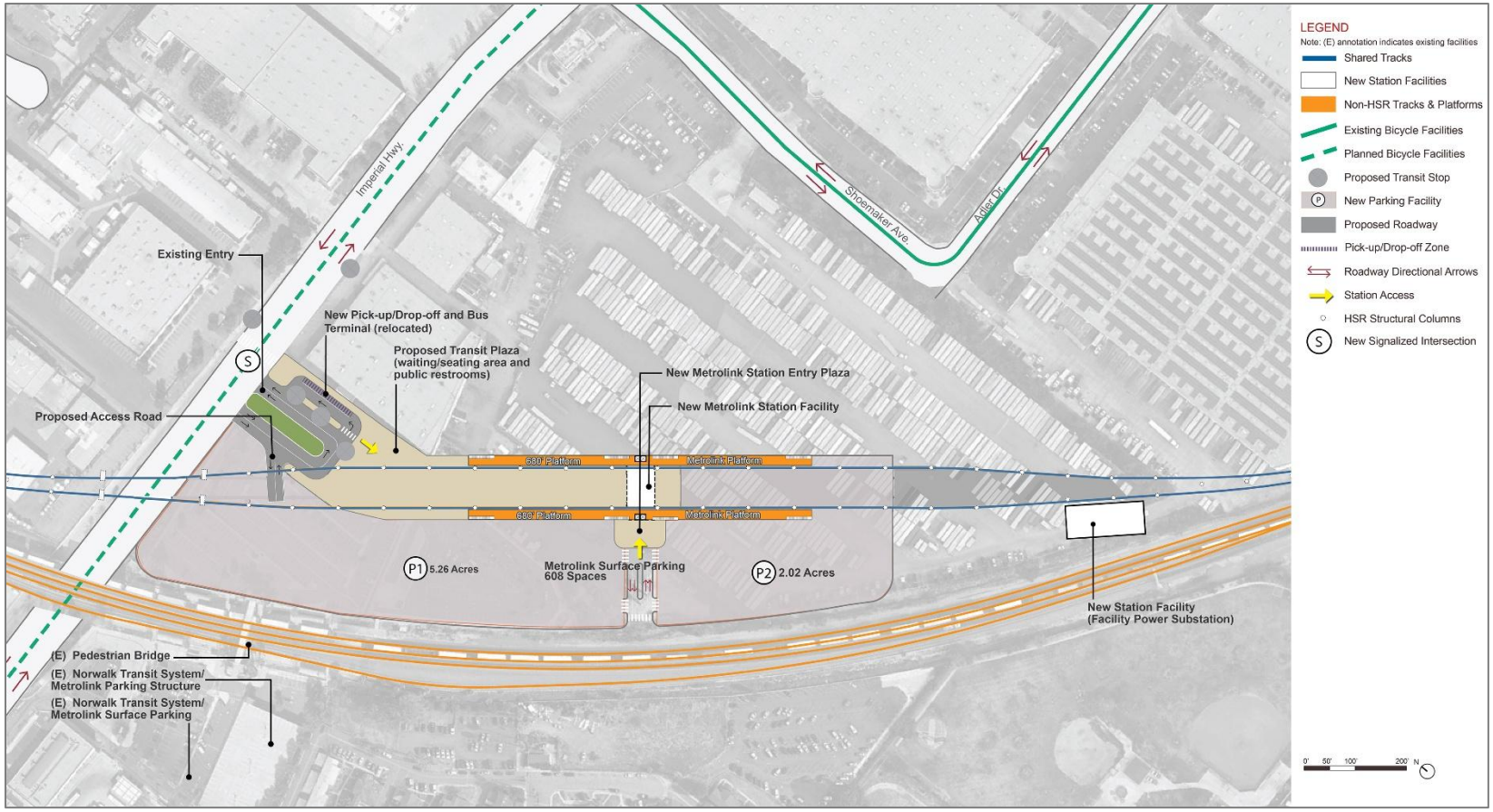
platforms, capable of future extension to 1,000 feet; the space for the future extension is included within the project footprint.

The existing Metrolink parking and bus drop-off west of the railroad corridor would be relocated to the east of the elevated structure to provide better access to the modified Metrolink platforms. Station entry points would be on Imperial Highway to the north and at Shoemaker Avenue and Adler Drive to the east and would require new access roadways. On Imperial Highway, the signalization leading into the parking garage would require modifications, as required by the City of Norwalk. The project would provide 608 surface parking spaces west of the modified platforms to replace the parking spaces at the existing Norwalk/Santa Fe Springs Metrolink Station displaced by the HSR modifications. Parking and pick-up/drop-off for Metrolink passengers would be within surface parking lots.

Fullerton Metrolink/Amtrak Station Modifications

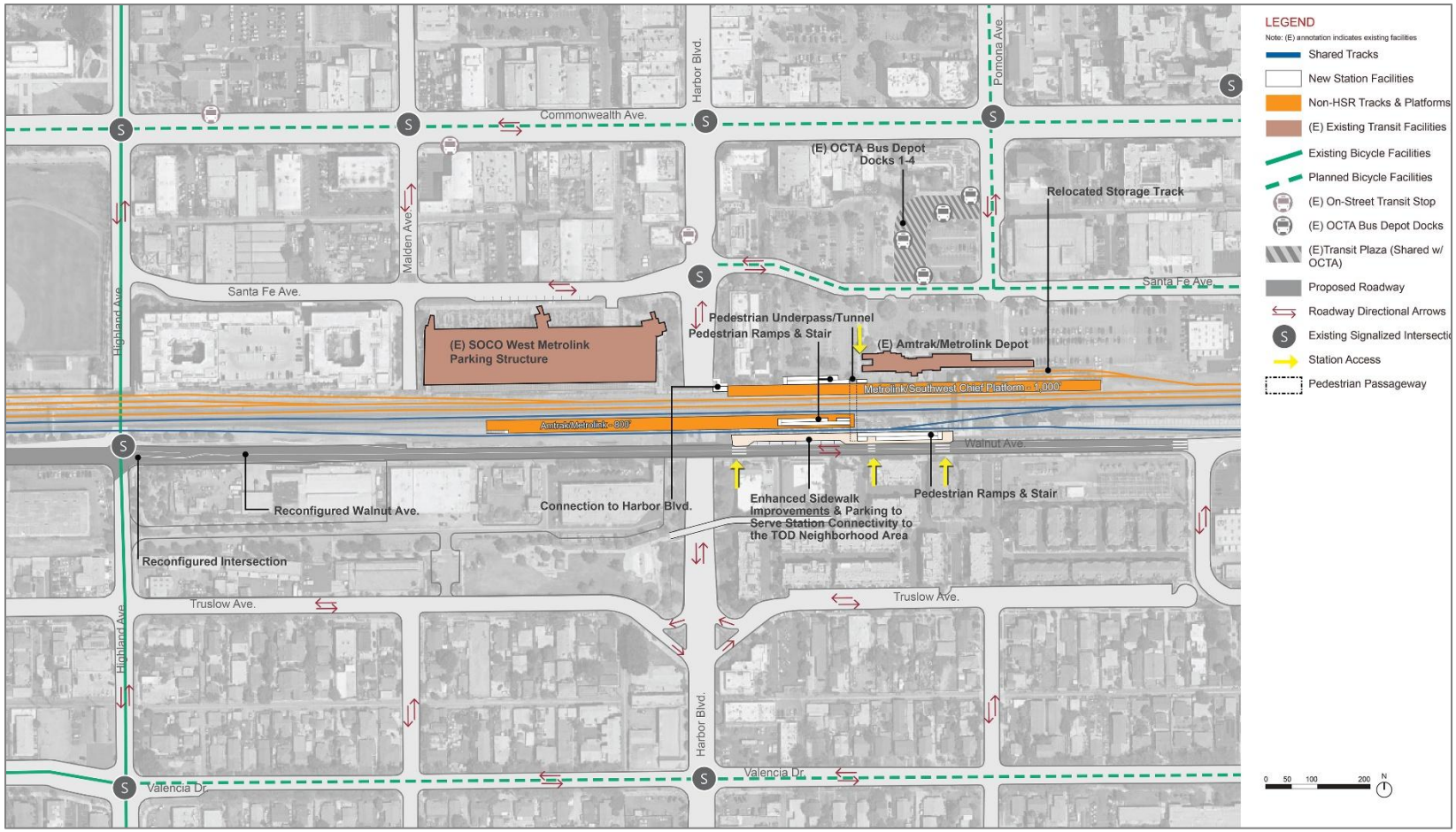
HSR trains would not stop at the Fullerton Metrolink/Amtrak Station, but modifications would be required for HSR operations, as depicted on Figure 2-15. At the Fullerton Metrolink/Amtrak Station, a fourth mainline track would need to be added on the southern side of the corridor, outside of the existing railroad right-of-way, to allow HSR trains to pass through the station. A new railroad bridge would be built over Highland Avenue to accommodate the new shared track, which requires Walnut Avenue to be slightly realigned to the south, and the intersection of Walnut Avenue and Highland Avenue would need to be redesigned.

Several modifications would occur for the Metrolink/Amtrak station platforms. The two existing platforms on the southern side would be removed, and a new 800-foot center platform would be added over Harbor Boulevard. The existing pedestrian bridge east of Harbor Boulevard that connects the two side platforms would be removed and replaced by a new pedestrian underpass that connects the existing northern platform, new center platform, and Walnut Avenue to the south, with ramps and stairs providing access. South of the new Metrolink/Amtrak center platform, Walnut Avenue would be slightly narrowed, and sidewalk improvements and crosswalks would be added east of Harbor Boulevard to improve station connectivity to the neighborhood.



Source: Authority 2025a

Figure 2-14 Modified Norwalk/Santa Fe Springs Metrolink Station Site Plan



Source: Authority 2025a

Figure 2-15 Modified Fullerton Metrolink/Amtrak Station Site Plan

Relocated Metrolink Stations

Commerce Metrolink Station Relocation

As stated in Section 2.2.1.1, the Commerce Flyover would require the Commerce Metrolink Station to be relocated to an area northeast of the intersection of Telegraph Road and Maple Avenue, which is approximately 0.75 mile to the east of its current location. The relocated Commerce Metrolink Station would be for Metrolink trains only; no HSR trains would stop at this station. An HSR paralleling station would be co-located at the relocated station site. Most of the relocated station would be within Montebello, including the replacement surface parking, plaza, and internal access roads; the platform and nonpublic station facilities north of the railroad corridor would be within Commerce.

The relocated station would have a center platform along the southern side of the rail corridor, accessible from the north via Sycamore Street via a new pedestrian underpass, and from the south via Maple Avenue. The intersection of Sycamore Street and Supply Avenue would be modified with pedestrian crosswalks, and the intersection of Telegraph Road and Maple Avenue would have a new signal and crosswalks to provide safe access to the new station location. All the existing station facilities, such as a transit plaza for buses, bicycle parking, vehicle parking (140 spaces), and a pick-up/drop-off area for motorists, would be replaced south of the corridor, to be accessed via Maple Avenue.

Buena Park Metrolink Station Relocation

As stated in Section 2.2.1.1, the HSR project would add and realign tracks through the existing Buena Park Metrolink Station, necessitating the relocation of the station. The Buena Park Metrolink Station would be relocated to between South Coyote Creek and Beach Boulevard, approximately 0.75 mile northwest of its current location within Buena Park. The proposed relocated Buena Park Metrolink Station would be for Metrolink trains only; no HSR trains would stop at this station.

The relocated station would have a center platform provided along the northern side of the existing rail corridor, accessible from the north via Stage Road and from the east via Beach Boulevard. A new signalized intersection is proposed at the intersection of Coyote Creek and Stage Road. All existing station facilities would be replaced, including a transit plaza for buses, bicycle parking, vehicle parking (313 spaces), and a pick-up/drop-off area for motorists.

2.2.1.6 State Highway or Local Roadway Modifications

Modifications at Roadway Crossings

Shared Passenger Track Alternative A would cross 57 federal, state, and locally controlled roadways, most of which are currently grade separated. A portion of the foregoing roadway crossings would require, in general, one of the following three types of roadway modifications:

- **New grade separations:** There are six roadway crossings where new railroad grade separations (railroad bridge crossings) would be needed. Five of the existing at-grade roadways would be fully grade separated and lowered to cross under the proposed railroad bridges. One roadway (Lakeland Road) would be partially grade separated and would not require vertical realignment, because the shared tracks would cross over the roadway on a new bridge.
- **Modified existing grade separations (roadway vertical realignment):** The alignment would use existing railroad bridges throughout the corridor, most of which would need to be widened or new bridges would need to be added adjacent to the existing bridges to accommodate new tracks. At nine of these existing grade separations, the roadways would require vertical realignments (i.e., be lowered) to provide the required clearances between the road and the railroad bridge.

- **Modified existing grade separations (new piers and abutments):** Thirteen existing grade separations would require modified piers or abutments to accommodate new or widened railroad bridges. No vertical realignment of the roadway would be required.

Eight at-grade crossings at Orangethorpe Avenue, La Palma Avenue, Sycamore Street, Broadway, Santa Ana Street, Sixth Street, Vermont Avenue, Ball Road, and Lewis Street would remain at grade and would be modified only to add OCS to the existing tracks.

Additionally, all existing roadway overcrossings that would span over the shared tracks would be modified to have protective barriers on the top to prevent people or objects from entering the HSR right-of-way from the bridge. Detailed plans of barrier type and installation details will be determined during the Preliminary Engineering for Procurement design phase and coordination with the corridor stakeholders.

Table 2-5 lists all the crossings and any modifications that would be required along the Shared Passenger Track Alternative A alignment.

Table 2-5 Modifications to Roadway Crossings (from northwest to southeast)

Roadway	City	Current Crossing Configuration	Proposed Modification
1st St	Los Angeles	Overcrossing	None
4th St	Los Angeles	Overcrossing	None
6th St/Whittier Blvd	Los Angeles	Overcrossing	None
7th St	Los Angeles	Overcrossing	None
I-10 (Santa Monica freeway)	Los Angeles	Overcrossing	None
Olympic Blvd	Los Angeles	Overcrossing	None
Washington Blvd	Los Angeles	Undercrossing	None
Soto St	Los Angeles	Undercrossing	None
Downey Rd	Vernon	Undercrossing	New pier and abutments within roadway
Private access road	Vernon	Overcrossing	None
I-710 (Long Beach freeway)	Vernon	Overcrossing	None
Atlantic Blvd	Commerce	Undercrossing	New piers and abutments within roadway
Eastern Ave	Commerce	Undercrossing	New piers and abutments within roadway
I-5 (Santa Ana freeway)	Commerce	Undercrossing	None
Telegraph Rd	Commerce	Undercrossing	None
Garfield Ave	Commerce	Undercrossing	None
Greenwood Ave	Montebello	Undercrossing	None
Paramount Blvd	Pico Rivera	Undercrossing	None
SR 19 (Rosemead Blvd)	Pico Rivera	Undercrossing	Road vertical realignment, new abutments within roadway
Passons Blvd	Pico Rivera	Undercrossing	New pier and abutments within roadway
Slauson Ave	Santa Fe Springs	Overcrossing	Pier modifications

Roadway	City	Current Crossing Configuration	Proposed Modification
I-605 (San Gabriel freeway)	Santa Fe Springs	Overcrossing	None
Pioneer Blvd	Santa Fe Springs	At grade	New grade separation; roadway lowered to cross under tracks on a new railroad bridge
Norwalk Blvd	Santa Fe Springs	At grade	New grade separation; roadway lowered to cross under tracks on a new railroad bridge
Los Nietos Rd	Santa Fe Springs	At grade	New grade separation; roadway lowered to cross under tracks on a new railroad bridge
Santa Fe Springs Rd	Santa Fe Springs	Undercrossing	New piers and abutments within roadway
Telegraph Rd	Santa Fe Springs	Undercrossing	New pier and abutments within roadway
Florence Ave	Santa Fe Springs	Undercrossing	New pier and abutments within roadway
Lakeland Rd	Santa Fe Springs	At grade	New grade separation (for HSR only); roadway remains at grade and shared tracks on elevated structure
Imperial Hwy	Santa Fe Springs, Norwalk	Undercrossing	None
Carmenita Rd	Santa Fe Springs	Undercrossing	Roadway vertical realignment, new piers and abutments within roadway
Rosecrans Ave/Marquardt Ave	Santa Fe Springs	Overcrossing	None
Valley View Ave	Santa Fe Springs, La Mirada	Undercrossing	New piers and abutments within roadway
Alondra Blvd	La Mirada	Overcrossing	Bridge replacement, roadway vertical realignment
SR 39 (Beach Blvd)	Buena Park	Undercrossing	New piers and abutments within roadway
Dale St	Buena Park	Undercrossing	Roadway vertical realignment, new piers and abutments within roadway
Gilbert St	Fullerton	Undercrossing	Roadway vertical realignment, new pier and abutments within roadway
Commonwealth Ave	Fullerton	Undercrossing	Roadway vertical realignment, new piers and abutments within roadway
Euclid St	Fullerton	Undercrossing	New pier and abutments within roadway
Highland Ave	Fullerton	Undercrossing	New abutments within roadway
Harbor Blvd	Fullerton	Undercrossing	New piers and abutments within roadway
Lemon St	Fullerton	Undercrossing	None

Roadway	City	Current Crossing Configuration	Proposed Modification
Orangethorpe Ave	Anaheim	At grade	None
SR 91 (Riverside freeway)	Anaheim	Overcrossing	None
La Palma Ave	Anaheim	At grade	None
Sycamore St	Anaheim	At grade	None
Lincoln Ave	Anaheim	Undercrossing	None
Broadway	Anaheim	At grade	None
Santa Ana St	Anaheim	At grade	None
South St	Anaheim	At grade	None
Vermont Ave	Anaheim	At grade	None
Ball Rd	Anaheim	At grade	None
Lewis St	Anaheim	Undercrossing	Roadway vertical realignment, new piers and abutments within roadway
Cerritos Ave	Anaheim	At grade	New grade separation; roadway lowered to cross under tracks on a new railroad bridge
State College Blvd	Anaheim	At grade	New grade separation; roadway lowered to cross under tracks on a new railroad bridge
Katella Ave	Anaheim	Undercrossing	Roadway vertical realignment, roadway widening, new piers and abutments within roadway
SR 57 (Orange freeway)	Anaheim	Overcrossing	None
Douglass Rd	Anaheim	Undercrossing	Roadway vertical realignment, new piers and abutments within roadway

Source: Authority 2025a
Authority = California High-Speed Rail Authority; HSR = high-speed rail; I = interstate; overcrossing = road over train tracks; SR = State Route; undercrossing = road under train tracks

New Grade Separations

As indicated in Table 2-5, five existing at-grade roadways would be grade separated for passenger rail and freight, with the roadway lowered to cross under new railroad bridges. These new grade separations are described in detail in Table 2-6, which includes references to the temporary and permanent footprints depicted on Figure 2-16 through Figure 2-19. The temporary project footprint includes areas such as utility easements and construction staging areas while the permanent project footprint includes areas that would be needed permanently for operation of HSR or areas that would permanently lose access from changes in roadway elevation. These grade separations are early action projects, which are described further in Section 2.3.1, Grade Separations.

Lakeland Avenue would be grade separated for HSR and passenger rail on a new elevated structure, but the freight tracks would remain at grade, with a minimal area of temporary and permanent impacts. Therefore, it is not included in Table 2-6.

Table 2-6 New Grade Separations with Roadway Vertical Realignments

Roadway	Grade Separation Description
Pioneer Boulevard (Figure 2-16)	▪ The existing roadway configuration at the Pioneer Blvd crossing in Santa Fe Springs consists of two northbound and two southbound traffic lanes and left-turn lanes to Rivera Rd (which is immediately adjacent and to the north of the railroad corridor) in both directions, with sidewalks on both sides of the road. ▪ The at-grade crossing would be grade separated as a roadway undercrossing, with the railroad tracks on a bridge structure. Approximately 1,275 feet of Pioneer Blvd would be lowered, with the roadway approximately 20 feet below its current elevation at the lowest point of the undercrossing. Additional excavation depths would be required for bridge footings, utilities, pump station, and roadway subbase. ▪ Direct access to Rivera Rd would be removed and a new roadway that loops west and south just north of the crossing would provide access from Pioneer Blvd to Rivera Rd.
Norwalk Boulevard (Figure 2-17)	▪ The existing roadway configuration at the Norwalk Blvd crossing in Santa Fe Springs consists of two northbound and two southbound traffic lanes and a southbound left-turn lane to eastbound Los Nietos Rd (which is immediately south of the crossing), with sidewalks on both sides of the roadway. ▪ The at-grade crossing would be grade separated as a roadway undercrossing, with the railroad tracks on a bridge structure. Approximately 1,325 feet of Norwalk Blvd would be lowered by approximately 20 feet below its current elevation at the lowest point. Roadway clearance from bottom of bridge to top of pavement would be approximately 15 to 16.5 feet. Additional excavation depths would be required for bridge footings, utilities, pump station, and roadway subbase. ▪ The intersection of Norwalk Blvd and Los Nietos Rd would also be lowered, as also described below.
Los Nietos Road (Figure 2-17)	▪ The existing roadway configuration at the Los Nietos Rd crossing in Santa Fe Springs consists of two westbound and two eastbound traffic lanes and a westbound left-turn lane to Norwalk Blvd (which is immediately west of the crossing), with sidewalks on both sides of the roadway. ▪ The at-grade crossing would be grade separated as a roadway undercrossing, with the railroad tracks on a bridge structure. Approximately 1,700 feet of Los Nietos Rd would be lowered, with the roadway elevation approximately 25 feet below its current elevation at the lowest point. Roadway clearance from bottom of bridge to top of pavement would be approximately 15 to 16.5 feet. Additional excavation depths would be required for bridge footings, utilities, pump station, and roadway subbase. ▪ The intersection of Norwalk Blvd and Los Nietos Road would also be lowered as part of this and the Norwalk Blvd grade separation.
Cerritos Avenue (Figure 2-18)	▪ The existing roadway configuration at the Cerritos Ave crossing in Anaheim consists of two westbound and two eastbound traffic lanes with sidewalks on both sides of the roadway. ▪ The at-grade crossing would be grade separated as a roadway undercrossing, with the railroad tracks on a bridge structure. Approximately 1,850 feet of Cerritos Ave would be lowered by 25 feet below its current elevation at the lowest point. Roadway clearance from bottom of bridge to top of pavement would be approximately 15 to 16.5 feet. Additional excavation depths would be required for bridge footings, utilities, pump station, and roadway subbase. ▪ In order to maintain its intersection with Cerritos Ave, Vernon St would need to be lowered about 5 feet below its existing elevation. Similarly, Lewis St would need to be lowered to maintain the intersection with Cerritos Ave.

Roadway	Grade Separation Description
State College Boulevard (Figure 2-19)	▪ The existing roadway configuration at the State College Blvd crossing in Anaheim consists of three northbound and three southbound traffic lanes with sidewalks on both sides of the roadway. ▪ The at-grade crossing would be grade separated as a roadway undercrossing, with the railroad tracks on a bridge structure. Approximately 1,660 feet of State College Blvd would be lowered below its current elevation, up to 25 feet at the lowest point. Roadway clearance from bottom of bridge to top of pavement would be approximately 17.5 feet. Additional excavation depths would be required for bridge footings, utilities, pump station, and roadway subbase. ▪ In order to maintain its intersections with State College Blvd, Howell Ave and Wright Circle would also need to be lowered below its existing elevation, along with multiple driveways and access roads along State College Blvd.



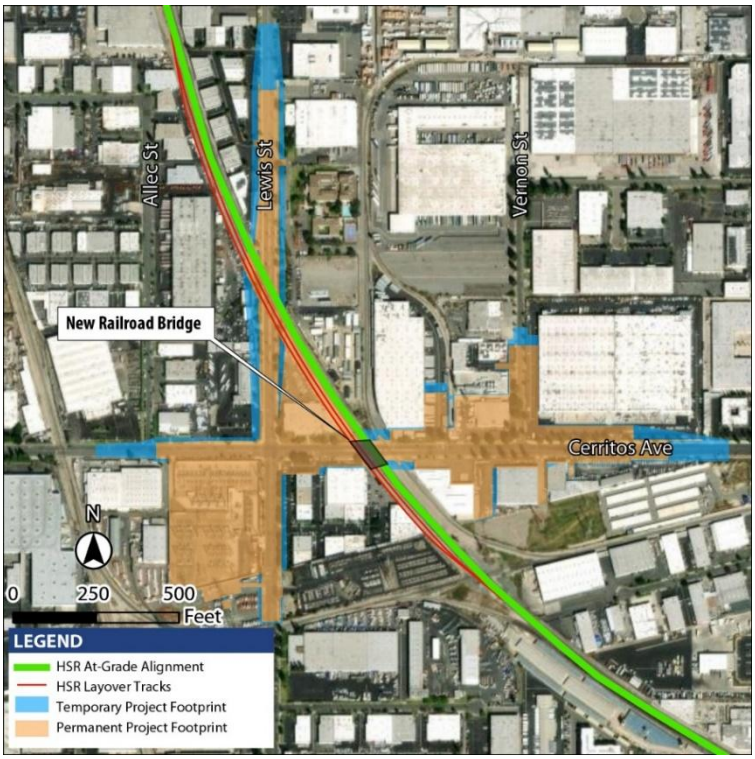
Sources: Authority 2025a; ESRI 2020

Figure 2-16 Pioneer Boulevard Grade Separation



Sources: Authority 2025a; ESRI 2020

Figure 2-17 Norwalk Boulevard and Los Nietos Road Grade Separations



Sources: Authority 2025a; ESRI 2020

Figure 2-18 Cerritos Avenue Grade Separation



Sources: Authority 2025a; ESRI 2020

Figure 2-19 State College Boulevard Grade Separation

Modifications to Other Roadways

In addition to modifications to roadway crossings described above for the railway alignment, several other roadways along the alignment would require modifications as a result of other project elements.

Roadway Modifications by Hobart Yard

The addition of new storage tracks and realignment of existing tracks throughout the Hobart Yard area would require 26th Street to be realigned. The roadway currently forms the southern boundary of Hobart Yard. At the eastern end of the yard, at Atlantic Boulevard, 26th Street connects to Pennington Way. From the UPRR San Pedro Subdivision track to Atlantic Boulevard, 26th Street would be realigned about 500 feet south from its existing location, at the farthest point. The realigned 26th Street would provide access to the 26th Street LMF, just north of the street. Currently, 26th Street intersects with Indiana Avenue, Bonnie Beach Place, and Ayers Avenue. Indiana Avenue and Bonnie Beach Place would connect with the realigned 26th Street, and the segments north of the realigned 26th Street would be closed. The realigned 26th Street would not connect to Pennington Way; it would end at Ayers Avenue, and Pennington Way would end in a cul-de-sac west of Atlantic Boulevard, accessible only from Bandini Boulevard. The existing segment of 26th Street between Ayers Avenue and Pennington Way would be closed.

Several roads between Sheila Street and Washington Boulevard are proposed to be closed because of the relocated BNSF truck parking. These roadway closures include the following, and are depicted on Figure 2-12 in yellow:

- Indiana Street
- S Pine Street
- Pacific Way
- Oak Street

- Ash Street
- Arrowmill Avenue
- Ayers Avenue
- Bedessen Avenue
- Connor Avenue
- Dennis Avenue

Roadway Modifications by Commerce Yard

Access is provided by 26th Street to BNSF's Commerce Yard from the east, but the yard improvements would require the entrance to the yard to be relocated approximately 1,300 feet to the east. This segment of 26th Street, within BNSF property, would be closed, and a new cul-de-sac would be provided at the end of the road.

Roadway Modifications by the Fullerton Braced Trench

The braced trench in Fullerton would be located partially outside the existing railroad right-of-way along the south side of the corridor, within the existing Artesia Boulevard right-of-way. Artesia Boulevard would be realigned slightly south, from approximately Pritchard Avenue to Gilbert Street. The intersection of Artesia Avenue and Gilbert Street would be reconfigured.

Roadway Modifications by Fullerton Metrolink/Amtrak Station

The changes at the Fullerton Metrolink/Amtrak Station would require Walnut Avenue to be realigned. Walnut Avenue currently runs east to west from Richman Avenue to Lawrence Avenue, south of and adjacent to the existing railroad corridor. With the addition of a fourth mainline track, Walnut Street would be slightly realigned south, from Richman Avenue to Lemon Street. All existing lanes and sidewalks would be maintained. At Highland Avenue, Walnut Street would be lowered slightly to meet the new, lowered grade of Highland Avenue, and the intersection would be reconfigured.

2.2.2 Shared Passenger Track Alternative B

Shared Passenger Track Alternative B would follow the same alignment and share the same project features and operational assumptions as Shared Passenger Track Alternative A, except for the location of the LMF as discussed below.

2.2.2.1 Alignment

The BNSF mainline and shared tracks for Shared Passenger Track Alternative B would be the same as those discussed for Shared Passenger Track Alternative A, as described in Section 2.2.1.1, because the LMF location would not affect the BNSF mainline and shared tracks.

2.2.2.2 Ancillary Facilities

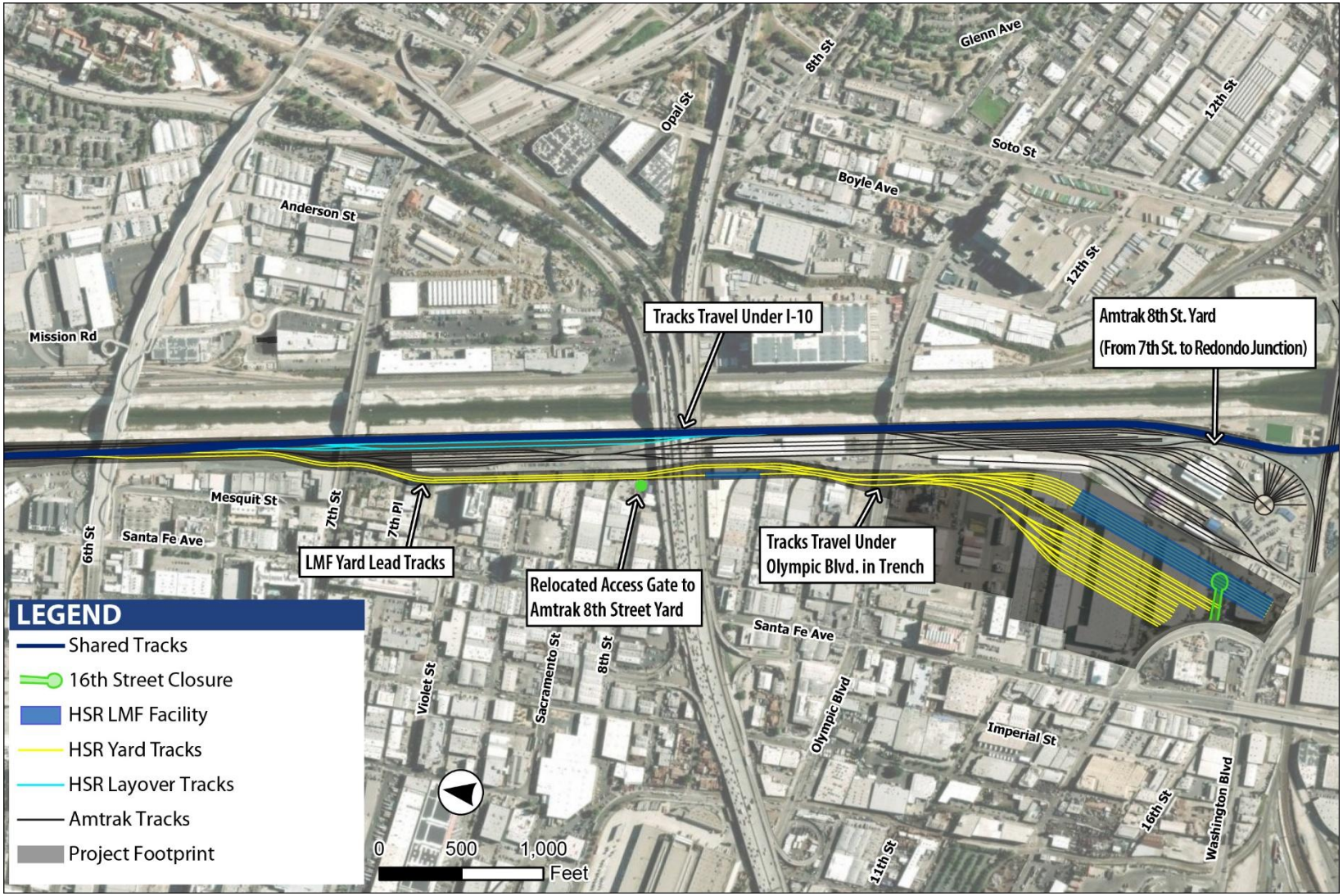
The proposed ancillary facilities for Shared Passenger Track Alternative B would be the same as those discussed for Shared Passenger Track Alternative A. Refer to Section 2.2.1.2 for more information on proposed ancillary facilities.

2.2.2.3 High-Speed Rail Station Facilities

Under Shared Passenger Track Alternative B, the proposed HSR station facilities at ARTIC would be the same as for Shared Passenger Track Alternative A. Refer to Section 2.2.1.3 for more information on proposed station sites.

2.2.2.4 Light Maintenance Facility

Shared Passenger Track Alternative B proposes an LMF between Olympic Boulevard and 15th Street, immediately adjacent to the existing Amtrak Eighth Street Yard. The 15th Street LMF would include the same maintenance operation facilities as the 26th Street LMF under Shared Passenger Track Alternative A, described in Section 2.2.1.4. Refer to Figure 2-20 for an overview of the 15th Street LMF.



Source: Authority 2025a

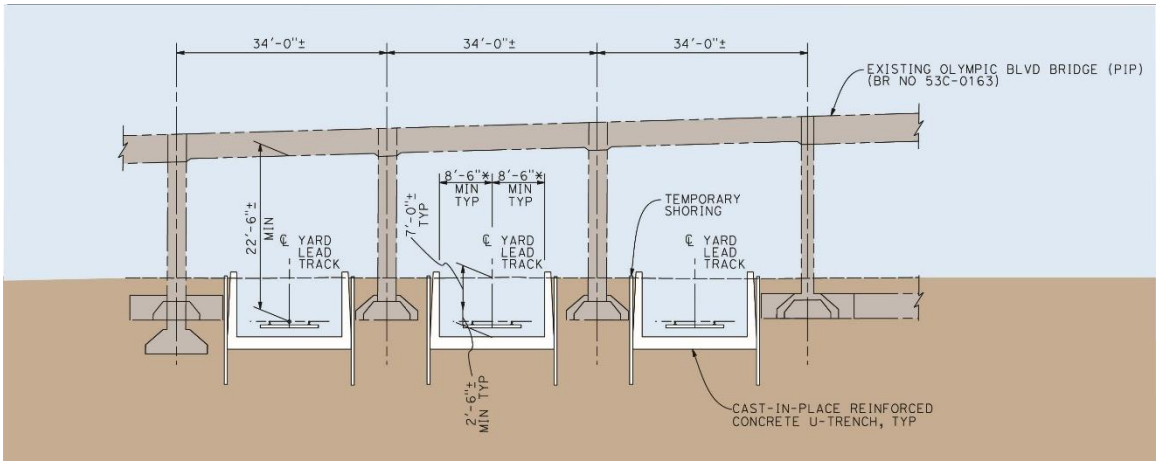
Figure 2-20 Shared Passenger Track Alternative B: 15th Street Light Maintenance Facility

The 15th Street LMF would have an overall size of 52 acres and would include a six-track shop building able to accommodate 12 trainsets, along with an outdoor train yard with a storage capacity of 20 HSR trainsets. The 15th Street LMF would be a single-ended yard, with access to and from the mainline tracks provided only from one side, at the northern end.

Primary roadway access to the 15th Street LMF would be from Washington Boulevard and 15th Street. HSR trains would access the yard via new yard lead tracks, which would start north of Seventh Street; the HSR project has been designed in coordination with the Los Angeles County Metropolitan Transportation Authority so that it would not conflict with the planned Metro Arts District Station, proposed north of Seventh Street. Two yard lead tracks would diverge from the mainline tracks out of the existing railroad right-of-way, cross under Seventh Street, and then branch into three tracks. Continuing south, the tracks would cross through part of Amtrak's existing primary access road to its Eighth Street Yard, which is currently gated at Eighth Street; these gates would need to be relocated to the west, but Amtrak would still be able to use the road to access its Eighth Street Yard. The three 15th Street LMF yard lead tracks would continue south to cross under I-10.

Approaching Olympic Boulevard, the tracks would descend to provide the minimum required 24-foot clearance between the OCS and the historic Olympic Boulevard overpass. Only one track would fit between each of the Olympic Boulevard overpass' four piers. As depicted on Figure 2-21, each track would pass through the piers within a separate trench at a finished depth of 7 feet. The Olympic Boulevard piers would not be altered during construction and would remain in place during HSR operations.

South of Olympic Boulevard, the 15th Street LMF yard lead tracks would connect to the yard on a curve, which requires special trackwork (turnout tracks). To make this connection, the LMF site would be lowered to meet the yard lead tracks. This is because the yard lead tracks would still be below grade as they come out of the Olympic Boulevard trenches, and there would not be enough room to transition the tracks back up to the existing elevation of the LMF site. Additionally, the special trackwork to connect the yard leads to the LMF tracks needs to be located on flat sections of track, not on a slope. Therefore, to make the connection between the below-grade yard lead tracks and the yard tracks, the northern portion of the LMF site (approximately 25 acres) would be excavated up to an approximate depth of 8 feet and regraded at a finished depth of approximately 5 feet to match the grade of the yard lead tracks.



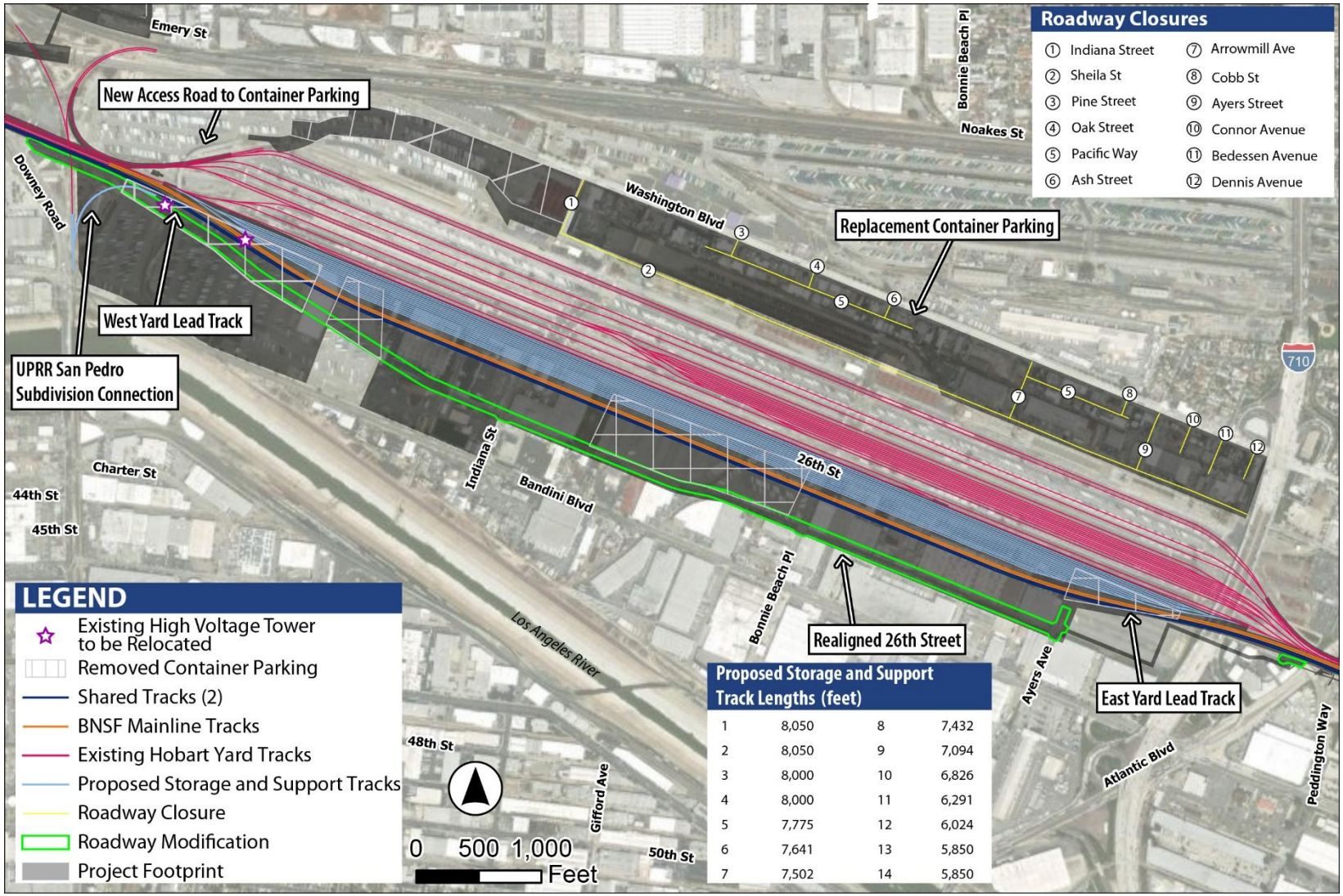
Source: Authority 2025a

Figure 2-21 Trenches for 15th Street Light Maintenance Facility Yard Lead Tracks Under Olympic Boulevard

2.2.2.5 Freight or Passenger Railroad Modifications

Freight and passenger railroad modifications for Shared Passenger Track Alternative B would be the same as for Shared Passenger Track Alternative A, except for one difference at Hobart Yard. Figure 2-22 illustrates Hobart Yard without the 26th Street LMF. Because there would not be LMF lead tracks or yard tracks running through BNSF's existing container parking areas, Shared Passenger Track Alternative B would displace slightly less container parking compared to Shared Passenger Track Alternative A.

The two passenger rail station modifications (Norwalk/Santa Fe Springs and Fullerton) and two Metrolink station relocations (Buena Park and Commerce) would be the same for Shared Passenger Track Alternative B as described for Shared Passenger Track Alternative A.



Sources: Authority 2025a; ESRI 2020

Figure 2-22 Shared Passenger Track Alternative B: Hobart Yard

2.2.2.6 State Highway or Local Roadway Modifications

The proposed modifications to roadways for Shared Passenger Track Alternative B would be the same as for Shared Passenger Track Alternative A, described in Section 2.2.1.6, except for the area around the 15th Street LMF site. Note that although the 26th Street LMF would not be included under Shared Passenger Track Alternative B, the realignment of 26th Street would still occur.

At the 15th Street LMF, Shared Passenger Track Alternative B would cross through part of Amtrak's access road to its Eighth Street Yard and through its existing access gate at Eighth Street. The access gate would be shifted to the west, and Amtrak would still be able to use its access road, but it would have to cross the three HSR yard lead tracks at grade to reach the road. The 15th Street LMF would also require the closure of a small portion of 16th Street, and the intersection of 15th Street and 16th Street would be reconfigured as a T-intersection. This portion of 16th Street, which is an existing cul-de-sac, serves the properties that would be acquired for construction of the 15th Street LMF. Refer to Figure 2-20, which depicts the portion of 16th Street that would be closed in green.

2.3 Early Action Projects

As described in the 2023 Project Update Report, the Authority has committed to investing in regionally important early action projects to provide early benefits to transit riders and local communities in Southern California, while laying a solid foundation for implementation of the HSR system. These early investments would be made by the Authority in collaboration with local and regional agencies. The types of projects include grade separations, track enhancements, and improvements at passenger rail stations, which would increase capacity, improve safety and air quality, and provide immediate mobility and reliability benefits for existing freight and passenger rail operations. The potential temporary construction and permanent operational environmental effects associated with these early action projects are included in the total evaluation of the Shared Passenger Track Alternatives. These early action projects may be implemented as standalone projects by other local agencies relying on the environmental analyses and conclusions of the Los Angeles to Anaheim Project Section in advance of the HSR system. The early action projects described below would be the same for both Shared Passenger Track Alternatives.

2.3.1 Grade Separations

The following five new railroad/roadway grade separations would be built as part of buildout of the project section and are identified as early action projects:

- Pioneer Boulevard
- Norwalk Boulevard and Los Nietos Road (considered a single early action project because of the adjacency of the two crossings)
- Cerritos Avenue
- State College Boulevard

The potential temporary construction and permanent operational environmental effects associated with these early action projects are analyzed in site-specific detail and included in the total evaluation of the project. Refer to Section 2.2.1.6 for more information.

2.3.2 Metrolink Station Relocations

Passenger rail currently operates within the Los Angeles – San Diego – San Luis Obispo Rail Corridor and would continue to do so with the introduction of HSR service. The relocations of the existing Commerce and Buena Park Metrolink Stations are necessary for implementation of either of the Shared Passenger Track Alternatives for reasons described in more detail in Section 2.2.1.5.

Existing transit service to the current Metrolink station locations would need to be modified to serve the relocated Metrolink station locations. Future coordination with Metrolink, Amtrak, and transit service providers would be necessary to determine bus routes and schedules for the

relocated Metrolink station locations and to inform final design of bus facilities at and near the station. Access roads, curb space, and passenger and operations facilities for buses have been included in the footprint in anticipation of this reconfigured service.

2.3.3 Fullerton Metrolink/Amtrak Modifications (Fullerton Interlocker)

The Shared Passenger Track Alternatives would modify the tracks and platforms throughout the Fullerton Metrolink/Amtrak Station, as well as the tracks east to Fullerton Junction, as described in Section 2.2.1.1. However, some of these proposed HSR modifications could be completed as an early action project to support the Metrolink Fullerton Interlocker Project, which is being planned by BNSF in coordination with Metrolink and the Authority. This project is critical to Metrolink's Southern California Optimized Rail Expansion Program and will allow for more frequent and regular service in Southern California. The Authority has incorporated the Fullerton Interlocker Project design as part of HSR's Fullerton/Metrolink Amtrak modifications, based on coordination with BNSF and Metrolink and on the anticipated timelines of the two projects.

If the Fullerton Interlocker Project occurs prior to HSR implementation, the early action project would consist of the same modifications described in Section 2.2.1.3 to the Fullerton Metrolink/Amtrak Station, with one exception. The fourth mainline track on the southern side of the corridor would only extend from east of Highland Avenue to Fullerton Junction because, in the absence of HSR, a fourth mainline track would not be added throughout the entire segment between LAUS and Fullerton Junction. All other modifications would be included: the removal of the southern side platforms, addition of a new center platform over Harbor Boulevard, new pedestrian underpass, and realignment and modifications to Walnut Avenue. If the HSR project is implemented later, the southern track would be extended west past Highland Avenue to connect to the fourth mainline track of the HSR alternatives.

2.3.4 Reconfiguration of Freight Rail Facilities

As discussed in Section 2.2.1.5, the project requires new or modified BNSF facilities to add and electrify tracks in the existing BNSF right-of-way between Los Angeles and Fullerton. The Hobart Yard modifications and Commerce Yard modifications (including the Commerce Flyover) could be implemented as early action projects to allow for improvements to existing Amtrak and Metrolink service in the Los Angeles – San Diego – San Luis Obispo Rail Corridor.

2.4 Optional High-Speed Rail Station

HSR trains would not stop at the Norwalk/Santa Fe Springs Metrolink Station or Fullerton Metrolink/Amtrak Station under either Shared Passenger Track Alternative A or Shared Passenger Track Alternative B. However, an option for a full-stop HSR station is considered, at either Norwalk/Santa Fe Springs or Fullerton. The inclusion of the HSR station option would require additional elements to support full-stop HSR service, in addition to the modifications described in Section 2.2.1.5. These HSR station elements are described in detail below.

2.4.1 High-Speed Rail Station Option: Norwalk/Santa Fe Springs

If the Norwalk/Santa Fe Springs Metrolink Station HSR Station Option is included, several additional elements would be included along with the station modifications described above for Shared Passenger Track Alternative A. An overview of the HSR station option elements is depicted on Figure 2-23, with the additional HSR station elements highlighted in green. The other elements depicted on Figure 2-23 would be completed as part of Shared Passenger Track Alternative A.

The Norwalk/Santa Fe Springs HSR Station Option would add two more electrified passenger rail tracks, for a total of four tracks through the station. The two tracks described under Section 2.2.1.1, Alignment, would serve the modified Metrolink side platforms; the two tracks added as part of the HSR station option would serve an HSR center platform in between the modified Metrolink side platforms. The HSR platform would be 1,000 feet long and capable of future extension to 1,410 feet.

The HSR station option would also require more parking to be added to serve HSR passengers. Parking and pick-up/drop-off for HSR and Norwalk/Santa Fe Springs Metrolink passengers would be combined within new surface parking lots. The HSR station option at Norwalk/Santa Fe Springs would provide 640 more parking spaces compared to what Shared Passenger Track Alternative A would otherwise provide, for a total of 1,248 parking spaces. A new access road would be provided from Imperial Highway, along the east side of the site, to the Shoemaker Avenue/Adler Drive intersection, with new signalized intersections.

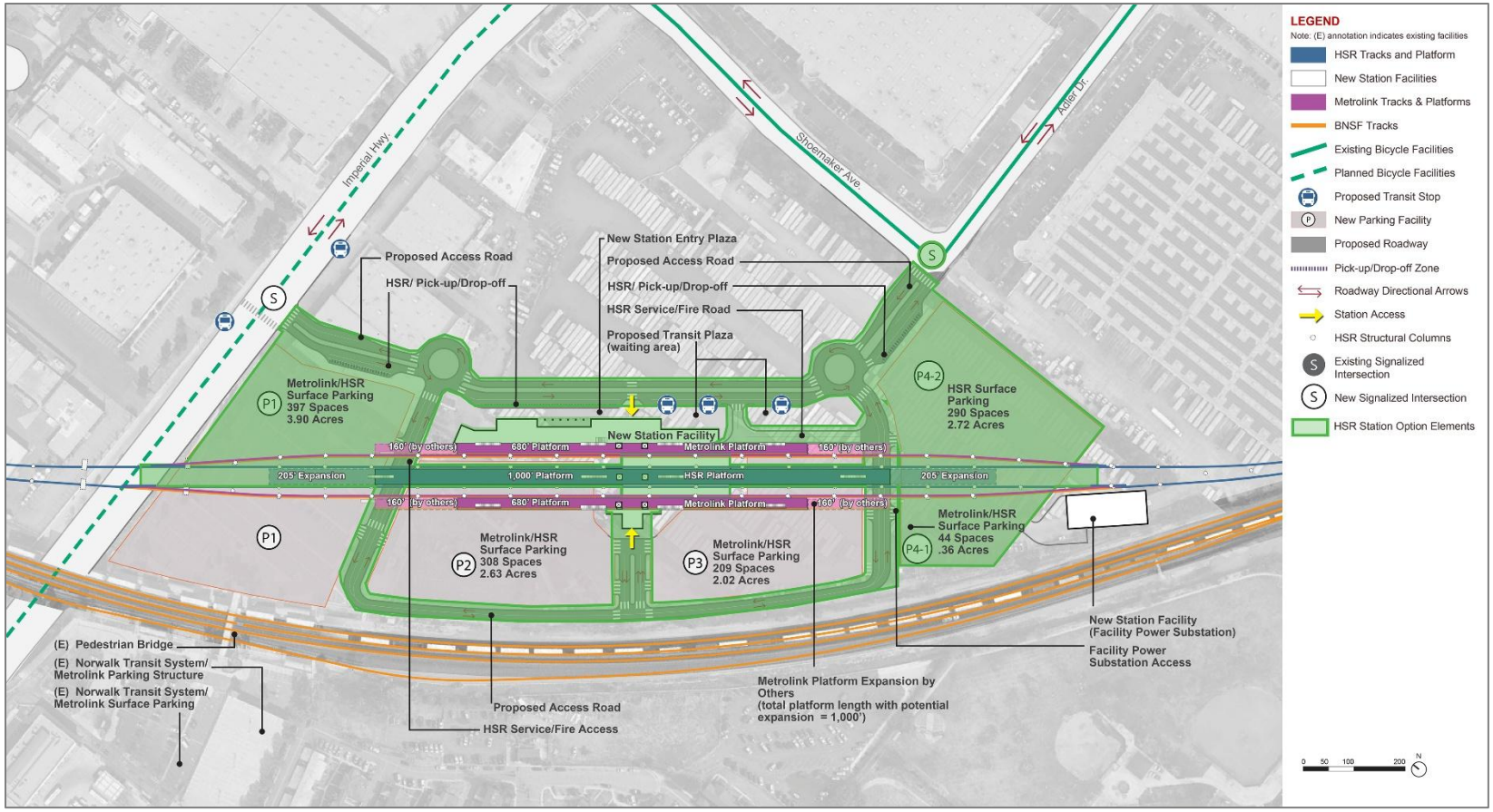
2.4.2 High-Speed Rail Station Option: Fullerton

If the Fullerton HSR Station Option is included, several additional elements would be included along with the station modifications described above for Shared Passenger Track Alternative A. An overview of the HSR station option elements is depicted on Figure 2-24, with the additional HSR station elements highlighted in green. The other elements depicted on Figure 2-24 would be completed as part of Shared Passenger Track Alternative A.

The overall track configuration would be the same as described in Section 2.2.1.1, but the southernmost shared track would be shifted south to accommodate a 1,000-foot HSR platform extending over Highland Avenue. The platform would be 48 inches above the rail on retained fill, at 10 feet at the highest point. A pedestrian ramp would connect the HSR platform to the Metrolink/Amtrak platform.

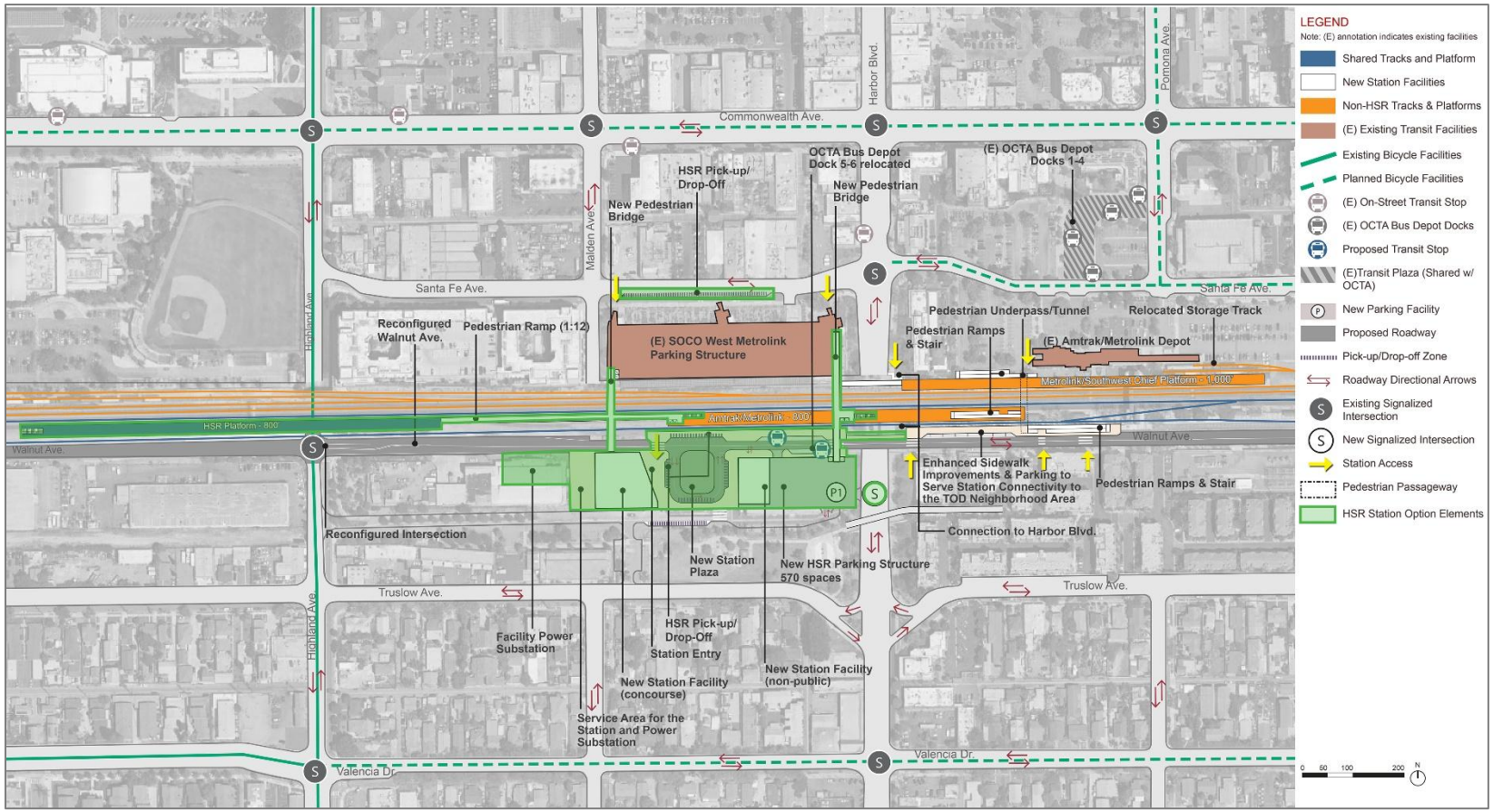
South of Walnut Avenue, the HSR station option would add HSR station buildings, a facility power substation, and a new multilevel parking structure that would provide a total of 570 new HSR parking spaces. The intersection of Highland Avenue and Walnut Avenue would be reconfigured to accommodate the new track and the Highland Avenue railroad bridge, along with improvements for transit stops and pedestrian crossings.

The HSR station option would add two pedestrian bridges: one west of Harbor Boulevard to connect the existing Metrolink parking structure to the HSR parking structure, and another east of Malden Avenue to connect the existing Metrolink parking structure to the HSR station building. A new signalized intersection on Harbor Boulevard would also be required to provide access to the HSR parking garage.



Source: Authority 2025a
Future platform extension not included in project definition for the environmental impact report/environmental impact statement.

Figure 2-23 Norwalk/Santa Fe Springs High-Speed Rail Station Option



Source: Authority 2025a

Figure 2-24 Fullerton High-Speed Rail Station Option

2.5 Project Construction

For the Los Angeles to Anaheim Project Section of the California HSR System, specific construction elements would include surface and elevated track; track work; grade-separated roadway crossings; and installation of a Positive Train Control system, as summarized in Table 2-7. Construction would take approximately 7.5 to 8 years.

Surface track sections would be built using conventional railroad construction techniques. A typical construction sequence includes clearing, grubbing, grading, and compacting the railbed; applying crushed rock ballast; laying track; and installing electrical and communications systems.

Elevated track sections would use the precast, segmented construction method. In this construction method, large concrete bridge segments are mass-produced at an on-site, temporary casting yard. Precast segments are then elevated atop the already completed portions of the elevated viaduct or embankment, and installed using a special gantry crane positioned on the aerial structure. Although the precast segmental method is the favored technique for aerial structure construction, other methods may be used, including cast-in-place, box girder, or precast, span-by-span techniques.

Preconstruction activities would occur during final design and would include geotechnical investigations, identification of staging areas, initiation of site preparation and demolition, relocation of utilities, and implementation of temporary, long-term, and permanent road closures. Additional studies and investigations to develop construction requirements and worksite traffic control plans would occur as needed.

Major construction activities for the project section would include earthwork and excavation support, systems construction, bridge and aerial structure construction, and railway systems construction (including trackwork, traction electrification, signaling, and communications).

During peak construction periods, work would be under way at several locations along the route simultaneously, with overlapping construction of various project elements. Working hours and the number of workers present at any time would vary depending on the activities being performed.

Table 2-7 Los Angeles to Anaheim Project Section Construction Schedule

Activity	Tasks	Schedule[10]
Right-of-way acquisition	Commencement of right-of-way acquisitions once State Legislature appropriates funds in annual budget, environmental due diligence	Prior to construction
Survey and preconstruction	Location of utilities, establishment of right-of-way and project control points and centerlines, establishment/relocation of survey monuments	Prior to construction
Mobilization	Safety devices and special construction equipment mobilization	Prior to construction
Site preparation	Utilities relocation; clearing/grubbing right-of-way; establishment of detours and haul routes; preparation of construction equipment yards, stockpile materials, and precast concrete segment casting yard	January 2031–January 2034
Earth moving	Excavation and earth support structures	April 2031–October 2036

[10] Schedule as of September 2023.

Activity	Tasks	Schedule[10]
Construction of road crossings	Surface street modifications, grade separations	July 2031–July 2037
Construction of aerial structures	Aerial structure and bridge foundations, substructure, and superstructure	July 2032–July 2036
Construction of underground structures	Straddle bent trench	October 2032–April 2036
Track laying	Includes backfilling operations and drainage facilities	July 2033–December 2037
Systems	Train control systems, OCS, communication system, signaling equipment	October 2035–October 2037
Demobilization	Includes site cleanup	At completion of construction
HSR stations and station relocations	Demolition, site preparation, foundations, structural frame, electrical and mechanical systems, finishes	Commerce Metrolink Station relocation: January 2031–January 2032
		Buena Park Metrolink Station Relocation: January 2034–March 2035
		Norwalk/Santa Fe Springs HSR/Metrolink Station: July 2033–July 2036[1]
		Fullerton HSR/Metrolink Station: January 2033–June 2035[1]
		Anaheim HSR platform and facilities: November October 2034–September 2037

Source: Authority 2024
[1] Construction schedule for Norwalk/Santa Fe Springs and Fullerton Station dependent on station selection.
OCS = overhead contact system; HSR = high-speed rail

2.6 Independent Utility of the Los Angeles to Anaheim Project Section

The Authority and FRA divided the HSR system they established with Tier 1 process into individual project sections for Tier 2 planning, environmental review, and decision making. The FRA, consistent with regulations issued by the Federal Highway Administration, considers three criteria when determining the scope of a project to be considered in an EIS: (1) whether it connects "logical termini" and has "sufficient length to address environmental matters on a broad scope"; (2) whether it has "independent utility or independent significance," meaning that it will "be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made"; and (3) whether it will "restrict consideration of alternatives for other reasonably foreseeable transportation improvements" (23 Code of Federal Regulations Part 771.111(f)). *Logical termini* is defined by the Federal Highway Administration as the rational starting and ending points for a transportation improvement project and for review of the environmental impacts of the project (FHWA 1993).[11] The project section connects logical termini

[11] The Federal Highway Administration criteria for determining project scope, as established in 23 Code of Federal Regulations Part 771.11(f), do not specifically address the scope of individual projects considered in the second tier of a tiered National Environmental Policy Act process. With the tiered National Environmental Policy Act process, the same general principles apply, but they are applied in the context of the decisions made in Tier 1—in this case, the decision to build the HSR system as a whole. Therefore, in determining the scope of individual project sections for Tier 2 studies, the Authority and FRA focused primarily on determining whether each project section could serve a useful transportation

at planned passenger stations where HSR service would be provided, at LAUS to the north and at ARTIC to the south. If other sections of the HSR system are not completed, the infrastructure could be used by regional and intercity services to improve their capacity, reliability, and performance (Authority 2009).

2.7 Operation of the Los Angeles to Anaheim Project Section

The conceptual HSR service plan for Phase 1 begins with service between Los Angeles/Anaheim running through the Central Valley from Bakersfield to Merced, and traveling northwest into the Bay Area. Subsequent sections in Phase 2 of the HSR system include a southern extension from Los Angeles to San Diego and an extension from Merced to Sacramento, which do not have an anticipated implementation date.

The Shared Passenger Track Alternatives would be within an active passenger and freight rail corridor, which would require a change in operational patterns and frequency for users. Because the project proposes new and realigned tracks throughout the corridor shared by other passenger rail and freight operators, implementation would change the tracks on which the various users operate. Currently, the Metrolink Orange County line and 91 line, Amtrak Pacific Surfliner, BNSF, and UPRR freight trains operate within the project section. The introduction of HSR service between Los Angeles and Anaheim would not conflict with the California State Rail Plan (Caltrans 2023).

Under the Shared Passenger Track Alternatives, there would be up to two HSR passenger trains per hour (peak) in each direction. Up to 10 freight trains per day could operate on the passenger tracks. The Shared Passenger Track Alternatives would maintain current and projected freight train volume within the corridor.

purpose on its own, and ensuring that a decision in one project section does not limit consideration of reasonable alternatives for completing the HSR system in an adjacent section for which the National Environmental Policy Act process has not yet been completed.

3 REGULATORY SETTING

This section presents a summary of the various federal and state government regulatory requirements that provide protection of biological resources and aquatic resources (including wetlands) within the project section. Also included is a summary of regional and local planning provisions that relate to the project section. Because this is a federal and state project, it is not subject to local agency regulation; however, this information is provided so that inconsistencies with local requirements can be identified as required by NEPA and CEQA.

3.1 Federal Regulations

3.1.1 Federal Railroad Administration, Procedures for Considering Environmental Impacts (64 Federal Register 28545)

On May 26, 1999, the FRA released Procedures for Considering Environmental Impacts (FRA 1999). These FRA procedures describe the FRA's process for assessing the environmental impacts of actions and legislation proposed by the agency and for the preparation of associated documents (42 U.S. Code [U.S.C.] 4321 et seq.).

3.1.2 Federal Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.)

The FESA of 1973 and subsequent amendments provide guidance for conserving federally listed species and the ecosystems on which they depend. The applicable sections of the FESA are further discussed below:

- **Section 7** requires federal agencies to consult with the U.S. Fish and Wildlife Service (USFWS) or the National Oceanic and Atmospheric Administration Fisheries (NOAA Fisheries), as appropriate, to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of threatened or endangered fish, wildlife, or plant species or result in the destruction or adverse modification of designated critical habitat for such species. As part of the consultation, USFWS and NOAA Fisheries issue a biological opinion and an incidental take statement for fish and wildlife species to exempt specified actions from the Section 9 take prohibition.
- **Section 9** and its implementing regulations prohibit the take of any fish or wildlife species listed under the FESA as endangered or threatened, unless otherwise authorized by federal regulations. The term *take* means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Take includes the modification of a listed fish or wildlife species' habitat when the modification is substantial and results in actual injury. Section 9 and the implementing regulations prohibit a number of specified activities with respect to threatened and endangered plants.
- **Section 10** provides a process by which nonfederal entities may obtain an Incidental Take Permit from USFWS or NOAA Fisheries for otherwise lawful activities that might incidentally result in take of endangered or threatened animal species, subject to specific conditions. The project section is a federal agency project and therefore would not use Section 10.

3.1.3 Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.)

The amended Magnuson-Stevens Fishery Conservation and Management Act, also known as the Sustainable Fisheries Act (Public Law 104-297), requires that all federal agencies consult with NOAA Fisheries on activities or proposed activities authorized, funded, or undertaken by that agency that may adversely affect essential fish habitat of commercially managed marine and anadromous fish species.

3.1.4 Clean Water Act (33 U.S.C. 1251 et seq.)

The federal CWA serves as the primary federal law protecting the quality of the nation's surface waters, including wetlands. The applicable sections of the CWA are discussed below.

3.1.4.1 Section 401 of the Clean Water Act (33 U.S.C. 1341)

Under CWA Section 401, a federal agency may not issue a permit or license to conduct any activity that may result in any discharge into waters of the U.S. unless a state where the discharge would originate issues a Section 401 water quality certification verifying compliance with existing water quality requirements or waives the certification requirement.

The Regional Water Quality Control Boards (RWQCB) with jurisdiction over the Aquatic resource study area (RSA) consist of the Los Angeles and Santa Ana RWQCBs. In circumstances where a proposed project crosses multiple RWQCB jurisdictional boundaries, SWRCB will generally assume regulatory responsibilities pursuant to CWA Section 401 and Porter-Cologne (Cal. Water Code Section 13000 et seq.). The Authority has confirmed that the Section 401 certification process and Section 401 compliance for the Shared Passenger Track Alternatives will be managed by SWRCB.

3.1.4.2 Section 402 of the Clean Water Act (33 U.S.C. 1342)

Under Section 402, all point-source discharges including, but not limited to, construction-related stormwater discharges to surface waters are regulated through the National Pollutant Discharge Elimination System program. Project sponsors must obtain a National Pollutant Discharge Elimination System permit from SWRCB.

3.1.4.3 Section 404 of the Clean Water Act (33 U.S.C. 1344)

Under CWA Section 404, USACE and the U.S. Environmental Protection Agency (USEPA) regulate the discharge of dredged and fill materials into the waters of the U.S. Project sponsors must obtain a permit from USACE authorizing such discharges.

Based on the Authority's analysis of permanent impacts on waters of the U.S. and coordination with USACE, it is anticipated the Shared Passenger Track Alternatives will qualify for coverage under the Nationwide Permit program, specifically Nationwide Permit 14, Linear Transportation Projects.[12] Refer to the *Los Angeles to Anaheim Project Section Draft Aquatic Resources Impacts Memorandum* (Authority 2025c) for additional detail.

3.1.5 Rivers and Harbors Act of 1899 (33 U.S.C. Section 401 et seq.)/General Bridge Act of 1946 (33 U.S.C. Section 525 et seq.)

The Rivers and Harbors Act is a primary federal law regulating activities that may affect navigation on the nation's waterways, including:

- Section 9 of the Rivers and Harbors Act and Section 9 of the General Bridge Act require a permit for the construction of bridges and causeways over certain navigable waters of the U.S. to ensure marine traffic is not adversely affected. Navigable waters are defined as those waterbodies subject to the ebb and flow of the tide and that are utilized currently, potentially, or historically in their natural condition, or by reasonable improvements, as means to transport interstate or foreign commerce. Section 9 bridge permits are only required for waters that are currently or potentially navigable for commerce; general recreational boating

[12] Nationwide Permit 14 covers activities required for the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, taxiways) in waters of the U.S. For linear transportation projects in nontidal waters, the discharge cannot cause the loss of greater than 0.5 acre of waters of the U.S. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to build or protect the linear transportation project; such modifications must be in the immediate vicinity of the project (described below). This Nationwide Permit also authorizes temporary structures, fills, and work necessary to build the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to preconstruction elevations. The areas affected by temporary fills must be revegetated, as appropriate (USACE 2021).

is typically not sufficient to establish jurisdiction. Section 9 bridge permits are issued by the U.S. Coast Guard.

- Section 10 of the Rivers and Harbors Act (33 U.S.C. 403) requires authorization from USACE for the construction of a structure in or over navigable waters of the U.S.
- Section 14 of the Rivers and Harbors Act (codified in 33 U.S.C. 408 [Section 408]) requires permission from USACE for the use, including modifications or alterations, of any flood control facility work built by the U.S. to ensure that the usefulness of the federal facility is not impaired. This requires a determination that the requested alteration is "not injurious to the public interest" and "will not affect the USACE project's ability to meet its authorized purpose." This means that USACE has the authority to review, evaluate, and approve all alterations to federally authorized civil works projects to make sure they are not harmful to the public and still meet the project's intended purposes mandated by congressional authorization. USACE issues these authorizations through the Section 408 permitting process.

3.1.6 U.S. Fish and Wildlife Coordination Act (16 U.S.C. 661–666c)

The USFWS Coordination Act applies to a federal project where a body of water is impounded, diverted, deepened, or otherwise modified. Project proponents are required to consult with USFWS and the appropriate state wildlife agency.

3.1.7 Migratory Bird Treaty Act (16 U.S.C. 703–712)

The Migratory Bird Treaty Act (MBTA) of 1918 prohibits the take of the nest, eggs, birds, or any parts thereof (listed at 50 CFR Part 10.13 as modified by *Federal Register*, volume 75, page 9281).

3.1.8 Migratory Bird Treaty Reform Act (16 U.S.C. 703 et seq.; Public Law 108-447)

The Migratory Bird Treaty Reform Act amends the MBTA of 1918 to exclude nonnative birds or birds that have been introduced by humans to the U.S. or its territories from protection under the act. The statute defines a native migratory bird as a species present in the U.S. and its territories as a result of natural biological or ecological processes.

3.1.9 Bald and Golden Eagle Protection Act (16 U.S.C. 668–668(d); 50 CFR Part 22)

The Bald and Golden Eagle Protection Act prohibits anyone from taking, possessing, or transporting Bald Eagle (*Haliaeetus leucocephalus*) or Golden Eagle (*Aquila chrysaetos*) or the parts, nests, or eggs of such birds without prior authorization. The Bald and Golden Eagle Protection Act regulations authorize issuance of incidental take permits of Bald and Golden Eagles under limited circumstances.

Take includes disturbance, which means to agitate or bother a Bald or Golden Eagle to a degree that causes or is likely to cause injury to the eagle; decrease in its productivity by interfering with normal breeding, feeding, or sheltering behavior; or nest abandonment by interfering with normal breeding, feeding, and sheltering behavior.

3.1.10 Protection of Wetlands (U.S. Presidential Executive Order 11990)

U.S. Presidential Executive Order 11990 aims to avoid direct or indirect effects on wetlands from federal or federally approved projects when a practicable alternative is available. If wetland effects cannot be avoided, all practicable measures to minimize harm must be included.

3.1.11 Protection of Migratory Bird Populations (U.S. Presidential Executive Order 13186)

U.S. Presidential Executive Order 13186 directs each federal agency taking actions that have or may have adverse effects on migratory bird populations to work with USFWS to develop a

memorandum of understanding that would promote the conservation of migratory bird populations. This includes avoiding and minimizing adverse effects on migratory birds when conducting agency actions, restoring and enhancing migratory bird habitats, and preventing or abating the pollution or detrimental alteration of the environment for the benefit of migratory birds.

3.1.12 Invasive Species (U.S. Presidential Executive Order 13112)

U.S. Presidential Executive Order 13112 requires federal agencies to work cooperatively to prevent and control the introduction and spread of invasive plants and animals.

3.2 State Regulations

3.2.1 California Endangered Species Act (California Fish and Game Code, Sections 2050–2085)

The CESA prohibits the *take* of fish, wildlife, or plant species listed as endangered or threatened, or designated as candidates for listing, under CESA. *Take* refers to mortality or injury of the listed species itself and not the modification of a listed species habitat. Comparable to the FESA process, the CESA contains a procedure for CDFW to issue a Section 2081 incidental take permit authorizing the take of listed and candidate species incidental to an otherwise lawful activity, subject to specified conditions, including that the effects of the *take* are fully mitigated.

3.2.2 California Fish and Game Code

3.2.2.1 Sections 3511, 4700, 5050, and 5515 (Fully Protected Species)

The California Fish and Game Code designates 37 fully protected species and prohibits the take, or possession, at any time of such species with certain limited exceptions. Because of the adoption of Senate Bill 147 in July 2023, Peregrine Falcon and Brown Pelican will be removed from the fully protected species list, as will the now-extinct thick-tailed chub, bringing the list of fully protected species to 34 rather than 37. Senate Bill 147 includes the ability for certain projects to take fully protected species. Projects must be related to State Water Projects undertaken by the Department of Water Resources; water projects conducted by a regional or local agency; a transportation project undertaken by a state, regional, or local agency that does not increase highway or street capacity for automobile or truck travel; a wind project; or a solar project.

3.2.2.2 Sections 3503, 3503.5, and 3513 (Bird Protections)

California Fish and Game Code 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 regulation made pursuant thereto. Section 3503.5 prohibits the take, possession, or needless destruction of 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 required that project-related disturbance at active nesting territories be reduced or eliminated during the nesting cycle.

3.2.2.3 Section 4008 (Mountain Lion Protection)

Mountain lion (genus *Puma*) is a specially protected mammal under the California Fish and Game Code. It is unlawful to take, injure, possess, transport, import, or sell a mountain lion or a product of a mountain lion except as specifically stated in related sections of the California Fish and Game Code (CDFW 2021).

3.2.2.4 Section 1600 et seq. (Lake and Streambed Alteration)

California Fish and Game Code Section 1600 et seq. requires notifying CDFW prior to a project activity that might (1) substantially divert or obstruct the natural flow of a river, stream or lake; (2) substantially change or use material from the bed, channel, or bank of, a river, stream, or lake; (3) use materials from a river, stream, or lake; or (4) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into a river, stream,

or lake. Although not specifically defined in Section 1600 et seq., jurisdiction in some instances may include adjacent riparian vegetation.

If, after notification, CDFW determines that the activity may adversely affect fish and wildlife resources, a Lake or Streambed Alteration Agreement would need to be obtained.

3.2.3 Natural Community Conservation Planning Act (California Fish and Game Code, Sections 2800–2835)

The Natural Community 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 may be implemented, which identify measures necessary to conserve and manage natural biological diversity in the planning area while allowing compatible and appropriate economic development, growth, and other human uses. To be approved by CDFW, a Natural Community Conservation Plan must provide for the conservation of species and protection and management of natural communities in perpetuity in the planning area.

3.2.4 California Native Plant Protection Act (California Fish and Game Code, Sections 1900–1913)

The California Native Plant Protection Act requires state agencies to use their authority to carry out programs to conserve endangered and rare native plants. The act gives CDFW the authority to designate native plants as endangered or rare and prohibits the take of such plants, with certain exceptions.

3.2.5 Porter-Cologne Water Quality Control Act (California Water Code Section 13000 et seq.)

Porter-Cologne provides for implementation of the federal CWA by SWRCB, including issuance of Section 401 Certifications and Section 402 National Pollutant Discharge Elimination System Permits. Issuance of a Section 401 Certification requires documenting compliance with state water quality standards including watershed plans, designated beneficial uses, and the total maximum daily load program.

The act regulates discharges that could affect the quality of waters of the state and requires an authorization of waste discharges to all waters of the state, which includes waters not regulated under the federal jurisdiction of the CWA. Applicants seeking to discharge to waters of the state must apply for Waste Discharge Requirements and receive authorization from SWRCB or a relevant regional board.

3.3 Regional and Local Regulations

The project is an undertaking of the Authority, in its capacity as a state and federal agency, and is not required to be consistent with local plans. However, an understanding of the regional and local plans, ordinances, or guidelines is important to provide a context for this project section.

The county and city laws and regulations pertaining to the protection of biological resources are described in Table K-1 in Appendix K, Summary of Regional and Local Laws and Regulations and Protected Trees Ordinances and Laws. The organization of these policies and regulations begins with the Los Angeles County, immediately followed by cities from north to south within that county to provide an overall framework for the geographic area and ending with the policies and regulations in the southernmost areas.

The agencies with local jurisdiction along the project section include the Counties of Los Angeles and Orange and the Cities of Los Angeles, Bell, Commerce, Montebello, Pico Rivera, Santa Fe Springs, La Mirada, Buena Park, Fullerton, and Anaheim. The proposed Shared Passenger Track Alternatives do not occur within Habitat Conservation Plans or Natural Community Conservation Plans.

4 METHODOLOGIES

This section defines the RSAs used to analyze biological and jurisdictional aquatic resources along the project section and the literature searches and field methods used to establish the baseline conditions within the RSAs.

4.1 Definition of the Study Area

4.1.1 Resource Study Areas

The term *resource study area* (RSA) is used by the Authority throughout the HSR system to define the areas in which potential effects on environmental resources are described and quantified and is defined differently based on the affected resource (i.e., aquatic features, plants, or animals). The RSAs encompass the Shared Passenger Track Alternatives footprint and buffer areas.

The Shared Passenger Track Alternatives footprint refers to the area that would be physically affected by construction, operation, and maintenance activities associated with the Shared Passenger Track Alternatives (including temporary disturbance) and the location of permanent HSR components. The Shared Passenger Track Alternatives footprint is based on the design dated August 2024 and includes both of the Shared Passenger Track Alternatives. The Shared Passenger Track Alternatives footprint includes the limits of cut-and-fill plus access roads and areas required for operating, storing, and refueling construction equipment. Within the Shared Passenger Track Alternatives footprint are the components of the Shared Passenger Track Alternatives needed to build, operate, and maintain permanent HSR features. These include:

- Freight, passenger, or transit railroad grade separations
- Roadway grade separations and adjoining street or intersection changes
- Contiguous access to severed parcels
- New utility features
- Existing utility relocations
- Access to new or relocated utility features
- Drainage facilities
- Other physical changes within the area needed to build and operate HSR
- HSR property rights or licenses to accommodate HSR construction, operation, and maintenance

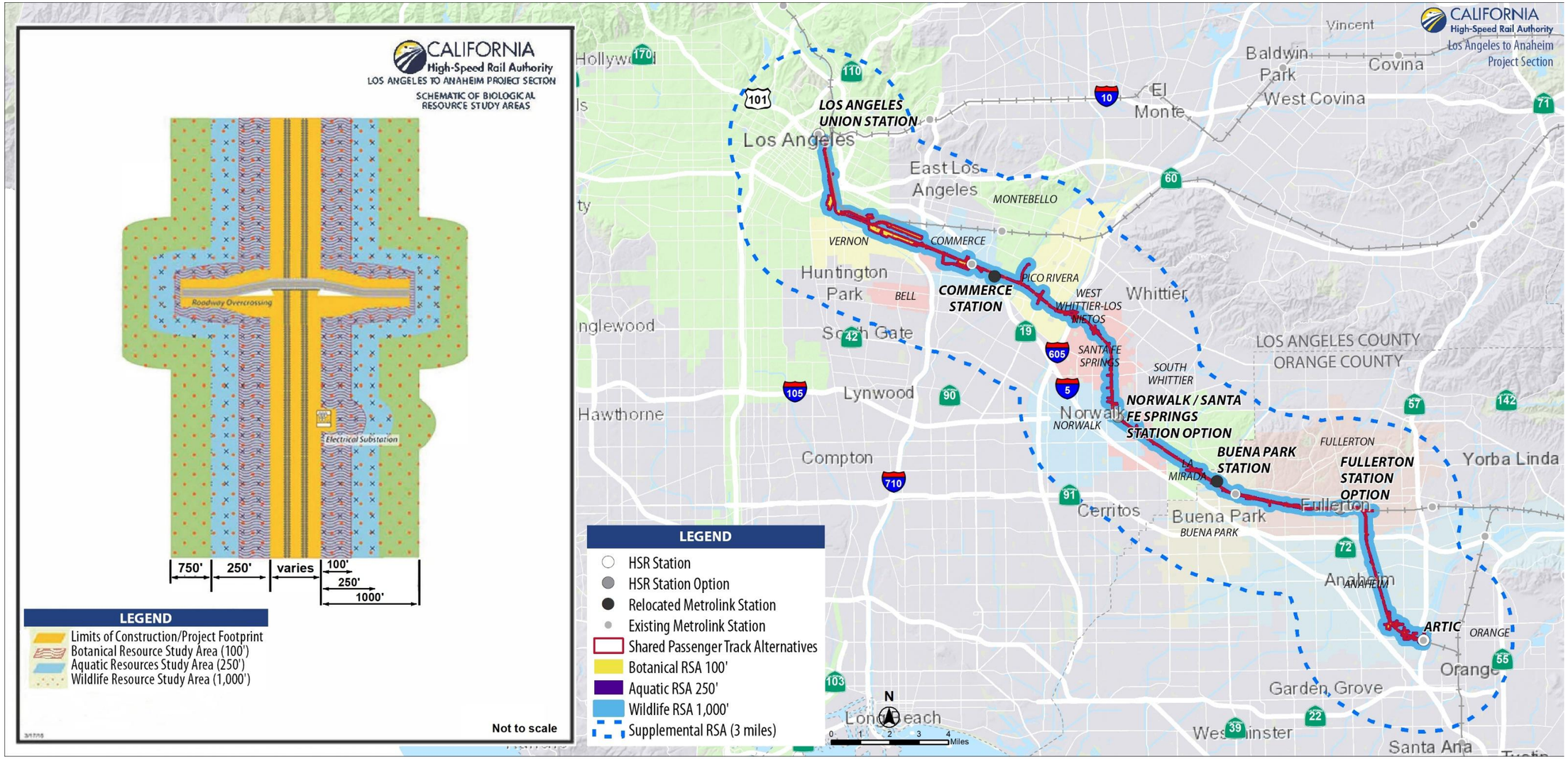
The study area for direct effects for the project section includes the Shared Passenger Track Alternatives footprint. Indirect (secondary) effects on biological and aquatic resources may occur beyond the Shared Passenger Track Alternatives footprint. The study of indirect effects differs based on the resource type and includes distances from the edge of the Shared Passenger Track Alternatives footprint, referred to here as *buffers*. These RSAs are discussed below, are listed in Table 4-1, and are depicted on Figure 4-1.

Table 4-1 Resource Study Area Summary Definitions

Resource Study Area	Area of Effect
Botanical Resource Study Area (Special-Status Plants and Special-Status Plant Communities Observations and Potential to Occur)	
Direct Effects	Project footprint (includes permanent and temporary effects)[1]
Indirect Effects	Extending from the edge of the Shared Passenger Track Alternatives footprint for 100 feet (buffer)

Resource Study Area	Area of Effect
Aquatic Resource Study Area (Aquatic Resources Under the Jurisdiction of USACE, SWRCB, and CDFW)	
Direct Effects	Project footprint (includes permanent and temporary effects)
Indirect Effects	Extending from the edge of the Shared Passenger Track Alternatives footprint for 250 feet (buffer)
Wildlife Resource Study Area (Special-Status Wildlife Species Observations and Potential to Occur)	
Direct Effects	Project footprint (includes permanent and temporary effects)
Indirect Effects	Extending from the edge of the Shared Passenger Track Alternatives footprint for 1,000 feet (buffer)
Supplemental Resource Study Area (Special-Status Plant/Wildlife Species Known Observations and Wildlife Movement Corridors/Habitat Linkage Evaluation)	
Effects on Wildlife Movement	Extending from the edge of the Shared Passenger Track Alternatives footprint for 3 miles (buffer)

[1] The Shared Passenger Track Alternatives footprint includes areas required to build, operate, and maintain permanent high-speed rail facilities, including permanent right-of-way, permanent utility and access easements, and temporary construction easements.
CDFW = California Department of Fish and Wildlife; SWRCB = State Water Resources Control Board; USACE = U.S. Army Corps of Engineers



Sources: Authority 2025a; ESRI World Imagery 2024; ESRI World Streetmap 2024

Figure 4-1 Resource Study Areas

4.1.1.1 Botanical Resource Study Area

The Botanical RSA includes the Shared Passenger Track Alternatives footprint to evaluate direct effects plus a 100-foot buffer (outward from the Shared Passenger Track Alternatives footprint) to evaluate indirect effects on upland sensitive plant resources (including special-status plants and special-status plant communities). To describe the Botanical RSA, vegetation mapping was conducted within the Botanical RSA throughout the Shared Passenger Track Alternatives alignment. Species-specific habitats were identified based on vegetation mapping, soils present (based on an evaluation of mapped soils and field observations), aerial photograph interpretation, documented species occurrences (e.g., California Natural Diversity Database [CNDDB] records and California Native Plant Society [CNPS] records), and field observations of special-status species and their habitats. The Botanical RSA is depicted on Figure 4-1.

4.1.1.2 Aquatic Resource Study Area

The Aquatic RSA includes the limits of disturbance plus a 250-foot buffer (outward from the Shared Passenger Track Alternatives footprint) in order to evaluate potential direct and indirect effects on aquatic resources considered to fall under the jurisdiction of USACE or SWRCB, and areas subject to California Fish and Game Code Section 1600 et seq. Direct effects on aquatic resources are within the limits of disturbance, and indirect effects are within the 250-foot buffer. The analysis conducted within the Aquatic RSA consisted of a jurisdictional delineation of potential aquatic resources. The Aquatic RSA is depicted on Figure 4-1.

4.1.1.3 Wildlife Resource Study Area

The Wildlife RSA includes the Shared Passenger Track Alternatives footprint to evaluate direct effects plus a 1,000-foot buffer (outward from the Shared Passenger Track Alternatives footprint) to evaluate indirect effects on habitats and the special-status wildlife species that use or have the potential to use these habitats. To describe the Wildlife RSA, vegetation mapping was conducted within the 1,000-foot buffer throughout the Shared Passenger Track Alternatives alignment. Species-specific habitats were identified based on vegetation mapping, aerial photograph interpretation, documented species occurrences (e.g., CNDDB records), and field observations of special-status species and their habitats. The Wildlife RSA is depicted on Figure 4-1.

4.1.1.4 Supplemental Resource Study Area

The Supplemental RSA includes the limits of disturbance plus a buffer, which is determined by the target species and existing habitat conditions. In this case, because of the heavily urbanized nature of the project section, a Supplemental RSA of 3 miles outward from the Shared Passenger Track Alternatives footprint was chosen.

The analysis conducted within the Supplemental RSA is two-fold and includes both gathering known biological information and analyzing potential wildlife movement corridors. The biological literature review includes occurrence information for special-status plant and wildlife species (through databases such as CNDDB [CDFW 2024a], CNPS [CNPS 2024], eBird [eBird 2024], USFWS critical habitat [USFWS 2024a], and published research) and a desktop review, which includes the interpretation of aerial photographs to determine if species-specific habitats for special-status species is present within the Supplemental RSA. This analysis is based on the results of this two-fold review, but also includes information gathered based on field observations within the Wildlife RSA. The Supplemental RSA is depicted on Figure 4-1.

The purpose of the analysis within the Supplemental RSA is to document known occurrences of special-status plants and animals within the Supplemental RSA and to interpret aerial photographs to determine if suitable habitat for these special-status species appears to be present in the Supplemental RSA.

The wildlife movement analysis includes a review of habitat and linkage corridor data, including existing reports or information in Endangered Species Recovery Programs or other information from resources agencies and other sources. Wildlife movement corridors consist of areas that allow for the movement or migration of wildlife or that function as habitat linkages that aid in the

dispersal and distribution of wildlife and are therefore crucial to maintaining healthy populations for multiple species. The purpose of the analysis is to evaluate the potential for wildlife movement corridors/habitat linkages based on aerial photographs and available literature.

4.2 Resource Definitions

Key definitions of terms used in this report are provided below.

4.2.1 Special-Status Species

Special-status species are plants and animals that are legally protected under the FESA (16 U.S.C. 1531 et seq.), CESA (Cal. Fish and Game Code Sections 2050–2085), species considered sufficiently rare by the scientific community to qualify for listing, the California Native Plant Protection Act (Cal. Fish and Game Code Sections 1900–1913), the California Fully Protected Species statutes, and other regulations, such as those species that meet the definitions of rare, threatened, or endangered under State CEQA Guidelines Sections 15380 and 15125. As used in this report, the term *special-status species* does not include bird species protected under the MBTA (16 U.S.C. 703–712) or the corresponding California bird protection statutes (Cal. Fish and Game Code Sections 3503 and 3513); however, effects on these species are discussed under special-status wildlife species sections of this document.

Chapter 7, Affected Environment and Effects Analysis, discusses effects on special-status species. For the purposes of this report, species are considered to have special status if they meet at least one of the following criteria:

- Plants or animals listed or proposed for listing as threatened or endangered under the FESA (16 U.S.C. 1531 et seq.) or the CESA (Cal. Fish and Game Code Sections 2050–2085)
- Bald and Golden Eagles protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668—668d, 54 Statute 250)
- Species that meet the definitions of “Rare” or “Endangered” under CEQA (State CEQA Guidelines, Sections 15380 and 15125)
- CDFW species of special concern (CDFW 2024a, 2025)
- CDFW fully protected species (Cal. Fish and Game Code, Sections 3511 [birds], 4700 [mammals], 5050 [amphibians and reptiles], and 5515 [fish]) (CDFW 2025)
- Species listed as a California Rare Plant Rank (CRPR) List 1A (presumed extinct in California and either rare or extinct elsewhere), 1B (rare, threatened, and endangered in California and elsewhere), 2A (presumed extirpated in California but common elsewhere), or 2B (rare, threatened, or endangered in California, but more common elsewhere) (CNPS 2024); CRPR List 1A, 1B, 2A, and 2B species are considered special-status plant species if they fall within any of these categories as defined in the California Native Plant Protection Act (Cal. Fish and Game Code Section 1901) or the CESA (Cal. Fish and Game Code Sections 2050–2085)
- Plants or animals determined to meet the definitions of rare or endangered under Sections 15380 and 15125 of the State CEQA Guidelines

4.2.2 Aquatic Resources

Aquatic resources within the Aquatic RSA are wetlands and nonwetland waters that are potentially jurisdictional under CWA Sections 404 and 401, collectively called waters of the U.S.; waters of the state regulated under Porter-Cologne; and aquatic and other related resources regulated under California Fish and Game Code Section 1600 et seq. USACE regulates waters of the U.S., SWRCB regulates waters of the state, and CDFW regulates the bed, channel, and banks of rivers, streams, and lakes. The Shared Passenger Track Alternatives extent crosses areas under the jurisdiction of the USACE Los Angeles District. USACE verified the extent of waters of the U.S. by virtue of its Preliminary Jurisdictional Determination on July 31, 2018. Confirmation of these resources as jurisdictional by SWRCB and CDFW would be obtained

through the regulatory permitting process. The definitions of the regulatory categories for aquatic resources are presented in this section.

4.2.2.1 Clean Water Act Section 404 Wetland and Nonwetland Waters of the U.S.

The regulations defining waters of the U.S. have been revised a number of times since enactment of the CWA. On January 18, 2023, USACE and USEPA published a final rule with a revised definition of waters of the U.S. in the *Federal Register* (88 Fed. Reg. 3004), effective on March 20, 2023. This rule replaced the pre-2015 definition of waters of the U.S., which was in effect starting on September 2, 2021.

On May 25, 2023, the U.S. Supreme Court decided *Sackett v. Environmental Protection Agency*, which considered the jurisdictional extent of waters of the U.S. On August 29, 2023, USACE and USEPA issued a final rule to conform the definition of "waters of the United States" to the U.S. Supreme Court's decision. This definition established the scope of USACE and USEPA authority under the CWA. The conforming rule, *Revised Definition of "Waters of the United States"; Conforming* (33 CFR Parts 328.3(a)(1)–(5)), became effective September 8, 2023 (USACE and USEPA 2023).

Under the current regulations, Section 404 of the CWA (33 CFR Part 328.3) defines waters of the U.S. as follows:

> *(a) The term waters of the United States means*:
>
> *(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 permanent, standing or continuously flowing bodies of water;*
>
> *(4) Wetlands adjacent[13] to the following waters:*
>
> *i) Waters identified in paragraph (a)(1) of this section; or*
>
> *ii) 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 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.*

Wetlands are a sub-classification of waters of the U.S., as described below. The terms *other waters of the U.S.* or *nonwetland waters* are used to describe waters of the U.S. exclusive of wetlands. According to the methods described in the *Corps of Engineers Wetland Delineation Manual* (USACE 1987) and the *Regional Supplement to the Corps of Engineers Wetland*

[13] The term *adjacent* means having a continuous surface connection, pursuant to 33 CFR Part 328.3(c)(2).

Delineation Manual: Arid West Region (Version 2.0) (USACE 2008b), three criteria must be satisfied to classify an area as a wetland: (1) a predominance of plant life that is adapted to life in wet conditions (hydrophytic vegetation); (2) soils that saturate, flood, or pond long enough during the growing season to develop anaerobic conditions in the upper part (hydric soils); and (3) permanent or periodic inundation or soils saturation, at least seasonally (wetland hydrology).

- **Hydrophytic Vegetation:** Hydrophytic vegetation is present when the plant community is dominated by species that can tolerate prolonged inundation or soil saturation during the growing season (USACE 2008b). The following definitions are used by USACE to define a plant's likelihood of tolerating prolonged inundation or soil saturation during the growing season (Lichvar et al. 2012):
  - Obligate (OBL): Always occur in wetlands
  - Facultative Wetland (FACW): Usually occur in wetlands, but may occur in nonwetlands
  - Facultative (FAC): Occur in wetlands and nonwetlands
  - Facultative Upland (FACU): Usually occur in nonwetlands, but may occur in wetlands
  - Upland (UPL): Almost never occur in wetlands

  The presence of hydrophytic vegetation is determined by either the dominance test or the prevalence test. The dominance test addresses dominant species in the community being sampled and is satisfied at a location if greater than 50 percent of all the dominant species present in the community have a wetland indicator status of OBL, FACW, or FAC (USACE 1987). The prevalence test addresses all species in the community being sampled and is a weighted average wetland indicator status of all species where each indicator status is given a numeric code (OBL = 1, FACW = 2, FAC = 3, FACU = 4, UPL = 5) and weighting is by absolute percent cover. A prevalence index of 3.0 or less indicates that hydrophytic vegetation is present.
- **Hydric Soils:** A hydric soil is a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part. This determination is made based on various field indicators detailed in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region*. Under certain circumstances, morphologic characteristics normally found in hydric soils may not be visible for certain "problematic" categories of hydric soils (e.g., riverwash) because of prevailing environmental conditions (USACE 2008b).
- **Wetland Hydrology:** Wetland hydrology is determined using indicators of inundation or saturation (flooding, ponding, or tidally influenced) detailed in the *Corps of Engineers Wetland Delineation Manual* (USACE 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008b).

The landward limits of nonwetland waters of the U.S. regulated by USACE or SWRCB under CWA Sections 404 and 401 (excluding wetlands and tidal waters) is based on the ordinary high-water mark, defined in CFR Part 328.3(e) 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 areas."

4.2.2.2 Clean Water Act Section 401 Wetland and Nonwetland Waters of the U.S.

On April 2, 2019, SWRCB adopted its proposed *State Wetland Definition and Procedures for Discharges of Dredge or Fill Material to Waters of the State* (SWRCB 2019, revised 2021). The procedures became effective on May 28, 2020, and were revised on April 6, 2021. The procedures include a definition for state wetlands regulated under Porter-Cologne (Section 3.2.5, Porter-Cologne Water Quality Control Act (California Water Code Section 13000 et seq.)).

For purposes of this report, this wetland definition is used to identify state wetlands and wetlands regulated under CWA Section 401. Under this definition, an area is a 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. Similar to USACE, SWRCB uses indicators of wetland hydrology, hydric soils, and wetland vegetation, but also includes features that lack hydrophytic vegetation if hydrology and hydric soils are present. Although the USACE and SWRCB definitions deviate with respect to the vegetation as an indicator, the definitions are otherwise the same, and both use the same USACE technical guidance documents for conducting wetland delineations (USACE 1987, 2008b).

Neither SWRCB nor the Los Angeles and Santa Ana RWQCBs, which both have jurisdiction over the drainage basins that the Shared Passenger Track Alternatives could affect, has adopted a methodology for defining nonwetland waters. Therefore, this report uses the definition for nonwetland waters of the U.S. set forth under Section 404 of the CWA, 33 CFR Part 328, and the USACE technical criteria for nonwetland waters of the U.S.

4.2.2.3 Porter-Cologne Water Quality Control Act Waters of the State

The California Water Boards, consisting of the SWRCB and the RWQCBs, regulate waters of the state pursuant to Porter-Cologne (Cal. Water Code Section 13050(e)). Waters of the state are broadly defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" (Cal. Water Code Section 13050(e)).

This report uses the definition of state wetlands described in the *State Wetland Definition and Procedures for Discharges of Dredge or Fill Material to Waters of the State* (SWRCB 2019, revised 2021) and the definition for nonwetland waters of the U.S. set forth under Section 404 of the CWA to define nonwetland waters of the state. For purposes of this discussion, waters of the state include, but may not be limited to, all waters of the U.S.

4.2.2.4 California Department of Fish and Wildlife: Lakes, Streambeds, and Associated Riparian Vegetation

Under California Fish and Game Code Section 1600 et seq., CDFW has jurisdiction over rivers, streams, and lakes. The state's jurisdiction includes the streambed/lakebed to tops of bank. Although not specifically defined in Section 1600 et seq., the state has asserted jurisdiction in some instances over adjacent riparian vegetation. A stream is defined as a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life (Cal. Code Regs. Title 14, Section 1.72). This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation. A streambed under Section 1600 et seq. includes the channel of a watercourse, which is defined to include the depression between the banks worn by the regular and usual flow of the water. For the purposes of this chapter, CDFW Section 1600 et seq. jurisdiction is identified as lakes, streambeds, and associated riparian vegetation or collectively identified as areas subject to California Fish and Game Code Section 1600 et seq.

4.2.2.5 Nonjurisdictional Aquatic Features

The *Revised Definition of "Waters of the United States"; Conforming* (USACE and USEPA 2023) excludes the following categories of aquatic features from regulation under the CWA (refer to 33 CFR Part 328(b)):

(1) Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the CWA;

(2) 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 USEPA;

(3) Ditches (including roadside ditches) excavated in and draining only dry land and that do not carry a relatively permanent flow of water;

(4) Artificially irrigated areas that would revert to dry land if the irrigation ceased;

(5) Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;

(6) 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;

(7) Waterfilled 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 waters of the U.S.; and

(8) Swales and erosional features (e.g., gullies, small washes) characterized by low volume, infrequent, or short duration flow.

Pursuant to California Fish and Game Code Section 1600 et seq., CDFW Section 1600 jurisdiction includes watercourses and lakes exhibiting discernable bed and banks and supporting fish or wildlife resources. For the purposes of this report, CDFW Section 1600 jurisdiction is identified as CDFW lakes, streambeds, and associated riparian vegetation or collectively identified as areas subject to California Fish and Game Code Section 1600 et seq.

The presence of potentially nonjurisdictional aquatic features within the Aquatic RSA was evaluated through remote assessment and field verification. Connectivity to relatively permanent waters or traditionally navigable waters was assessed through review of Google Earth Pro aerial imagery series, Los Angeles County Flood Control Department Storm Drain System maps (Los Angeles Department of Water and Power 2024), and Orange County Flood Control Department Drainage Facilities maps (Orange County Public Works 2024). Where access was granted or observation from public right-of-way was feasible, field surveys were conducted to verify aerial imagery observations and note the presence/absence of ordinary high-water mark indicators. Based on this information, the following types of aquatic features occurring within the Aquatic RSA were preliminarily determined to be nonjurisdictional under CWA Sections 404 and 401 and Section 1600 of the California Fish and Game Code:

- Ephemeral drainage ditches excavated wholly in and draining only uplands, exhibiting no discernable ordinary high-water mark or riparian vegetation (pursuant to 33 CFR Part 328(b)(3))
- Settling basins excavated wholly in uplands and not connected to relatively permanent waters or traditionally navigable waters (pursuant to 33 CFR Part 328(b)(5))

In summary, all aquatic features within the Aquatic RSA were evaluated to determine if these features met the definitions of USACE or SWRCB wetland or nonwetland waters of the U.S., SWRCB wetland waters of the state, and areas subject to California Fish and Game Code Section 1600 et seq. Reference materials included the relevant statutes; agency policies and guidance; and evaluation of the vegetative, hydrologic, and physical characteristics of aquatic features. Based on this information, these select features are not referenced further in this report or depicted in Appendix H, California Fish and Wildlife Lakes, Streambeds, and Associated Riparian Vegetation Results and Map. Although these features are excluded under the CWA, the Authority recognizes that USACE, SWRCB, USEPA, and CDFW reserve the right on a case-by-case basis to determine the extent of agency jurisdiction.

4.2.3 Essential Fish Habitat

The amended Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.), also known as the Sustainable Fisheries Act (Public Law 104-297), requires that federal agencies consult with NOAA Fisheries on activities or proposed activities authorized, funded, or undertaken by that agency that may adversely affect essential fish habitat of commercially managed marine and anadromous fish species.

Essential fish habitat is defined as marine or anadromous fish habitat that includes those waters and substrates necessary to fish for spawning, breeding, feeding, or growth to maturity. Anadromous fishes are those that migrate up rivers from the sea to spawn. Waters include aquatic areas and associated physical, chemical, and biological properties. Substrates include the sediments underlying the waters. Habitat types needed by a species throughout its life cycle to complete spawning, breeding, feeding, or growth to maturity are considered essential fish habitat for marine or anadromous fish species.

4.2.4 Critical Habitat

Critical habitat includes areas identified under Section 4 of the FESA (15 U.S.C. 1531–1544). Designated critical habitats are described in 50 CFR Parts 17 and 226. Specifically, critical habitat includes areas for federally listed species consisting of the specific areas within the geographic area occupied by the species, at the time it is listed in accordance with the provisions of Section 4 of the FESA. Critical habitat includes those physical or biological features (constituent elements) that are essential to the conservation of the species and that may require special management consideration or protection. Critical habitat also includes areas outside of the geographical area occupied by the species at the time it is listed in accordance with the provisions of Section 4 of the FESA, on a determination by the Secretary of the Department of the Interior that such areas are essential for the conservation of the species.

4.2.5 Wildlife Movement Corridors

Wildlife movement corridors were evaluated within the Supplemental RSA and are areas for species movement that connect at least two substantial habitat areas. Although these areas are referred to as “wildlife” movement corridors, it should be noted that they also function as linkages for plant species. Where habitat fragmentation is a growing concern for the continued viability of populations (and therefore species), habitat connectivity through wildlife movement corridors can become an essential component to the long-term survival of species. Wildlife corridors are generally linear, constrained linkages between larger patches of intact habitat, and these corridors allow for the dispersal of individuals between larger habitat patches. This connectivity allows for both the exchange of genetic information between patches and the potential for recolonization if local populations are extirpated (Bond 2003).

Wildlife corridors link at least two habitat areas and are often identified as a means to moderate the negative ecological effects of habitat fragmentation (Bond 2003). Numerous studies have revealed that species composition and diversity decrease with decreasing patch size. Wildlife corridors are features that can connect habitat areas to reduce or moderate the effects of habitat fragmentation by allowing dispersal between patches of remaining habitat (Bond 2003). Corridors that allow wildlife movement are important to maintain habitat connectivity because they allow animal dispersal and movement (Penrod et al. 2001). Habitat connectivity is important for conserving biodiversity largely because it maintains gene flow (Beier and Noss 1998), maintains ecological processes (Bennett 2003), and reduces species extinction risk (Crooks et al. 2011). In an effort to help guide landscape-level planning to maintain habitat connectivity among natural habitats separated by agricultural and urban land uses, many organizations have identified habitat linkages and wildlife movement corridors.

Wildlife movement corridors provide the following functions for plant and wildlife species (Beier and Loe 1992):

- Travel routes for wide-ranging animals, allowing animals to either migrate or come into contact with mates

- Routes for the propagation of plant species
- Spatial arrangement for genetic exchange between individuals
- Areas where populations can move in response to environmental changes or natural disasters
- Routes by which recolonization can occur where populations have been locally extirpated

4.2.6 Protected Trees

Protected trees are trees or tree communities that have special significance and are provided protection by, and specifically identified in, county and city ordinances, codes, or general plans. The types of trees and specific physical characteristics required to meet the local definitions vary by location. Cities and counties traversed by the project section include Los Angeles and Orange Counties and the cities of Los Angeles, Bell, Commerce, Montebello, Pico Rivera, Santa Fe Springs, La Mirada, Buena Park, Fullerton, Anaheim, and Orange.

4.2.7 Habitats of Concern

Habitats of concern in this report include special-status natural communities and riparian areas.

4.2.7.1 Special-Status Natural Communities

Special-status natural communities are determined to be significant or to represent rare vegetation types (CDFW 2023) or to have limited distribution statewide or in a county or region and include riparian areas that are jurisdictional to CDFW under California Fish and Game Code Section 1600 et seq. These communities are often vulnerable to the environmental effects of projects (CDFW 2023). A list of special-status plant communities in California is maintained by CDFW in the Vegetation Classification and Mapping Program—Natural Communities List (CDFW 2023). CDFW has evaluated natural communities according to NatureServe's Heritage Methodology, and natural communities are assigned ranks. Natural communities with ranks of S1 to S3 are considered Sensitive Natural Communities and are to be addressed during the CEQA process and its equivalents (CDFW 2023).

Special-status natural communities are described based on a vegetation classification system developed from *A Manual of California Vegetation* (Sawyer et al. 2009). However, the Botanical RSA is within a highly urbanized environment and natural communities present may not strictly correspond to the classifications within that system.

4.2.7.2 Riparian Areas

Riparian areas were mapped according to those areas regulated by the California Fish and Game Code as the transitional areas between terrestrial and aquatic ecosystems.

4.3 Background Information Review and Survey Data

Prior to conducting field surveys, existing background information was reviewed to identify potential locations of the following:

- Special-status plant and wildlife species
- Aquatic resources (USACE, SWRCB, and CDFW)
- Special-status natural communities
- Protected trees
- Critical habitat
- Wildlife movement corridors

Photographic data included Google Earth Pro (2024) and ArcGIS (ESRI World Imagery 2024; ESRI World Streetmap 2024). Database searches were conducted (including CNDDB, CNPS, Information for Planning and Consultation, eBird, and published scientific literature, described in more detail below) to gather information regarding the current and historical known locations of special-status species. To assess the wildlife movement corridors, USFWS Endangered Species Recovery Programs and documents and mapping regarding habitat corridors and linkages were

reviewed (e.g., Beier et al. 2006, Spencer et al. 2010). After this initial review of aerial photography and literature, field verifications were conducted within the Wildlife and Botanical RSAs.

The literature review and desktop analysis continued through June 2025. Prior to any field verification, a list of special-status (both listed and nonlisted) plant and wildlife species and natural communities in Southern California with potential to occur was created based on a literature review and desktop analysis. The species that were evaluated are included in Appendix A, Special-Status Species Potentially Occurring in the Resource Study Area. Species on this list were evaluated based on current site conditions to determine whether there was potential for the species to occur within the RSA. This determination was based on a literature review (database and literature search), a desktop analysis consisting of a review of aerial photography and best professional judgment based on the likelihood of occurrence for wildlife and plant species, and field surveys. The assessment of effects on biological resources is quantitative where possible with qualitative descriptions. The effects analysis is based on both desktop analysis and field assessments of site conditions, wherever feasible. The desktop analysis coupled with the field surveys formed the basis for mapping suitable habitat for individual special-status species.

Anticipated permanent and temporary effects on biological resources and potentially jurisdictional aquatic resources are presented both quantitatively (e.g., acreage, linear feet) and qualitatively.

4.3.1 Background Information Review

This review of background information includes vegetation mapping, known observations of special-status plant and animal species, natural communities, aquatic resources (USACE, SWRCB, and CDFW), and habitats of concern in California that have special regulatory or management status and the potential to occur within the respective RSA. This review is referred to as the *literature review*.

- The **CNDDB** (CDFW 2024a) and **CNPS Electronic Inventory** (CNPS 2024) for the U.S. Geological Survey (USGS) 7.5-minute quadrangle (quad) map on which the study area appears (Hollywood, Los Angeles, South Gate, El Monte, Whittier, Los Alamitos, La Habra, Anaheim, and Orange) and within the Supplemental RSA was reviewed.
- The **USFWS Online Wetlands Mapper** (USFWS 2016a, 2024b) was accessed to document the presence or absence of wetlands in the database.
- The **USFWS Online Critical Habitat Portal** (USFWS 2024a) was accessed to document the presence or absence of federally proposed or designated critical habitat within the Supplemental RSA.
- The **CDFW Biogeographic Information and Observation System** was accessed, including the California Essential Habitat Connectivity Viewer (CDFW 2024b).
- **U.S. Department of Agriculture Natural Resources Conservation Service Web Soil Survey** (USDA/NRCS 2011, 2016a, 2016b, 2024a, 2024b) was accessed to support the jurisdictional water and wetlands delineation.
- **eBird**, a real-time, online checklist program launched in 2002 by the Cornell Lab of Ornithology and National Audubon Society that provides a data source for bird abundance and distribution, was accessed to map eBird observations of listed and special-status avian species within the Supplemental RSA (eBird 2024). Note that mapped locations in eBird are generalized and not exact. For instance, if an observer notes that an observation is at a specific location in Anaheim, the observation would likely be mapped at the center of Anaheim rather than at the location of the observation. Many avian observations are also lumped into the same location, regardless of actual observation points. For instance, all birds observed at Anaheim Coves Park would be mapped at the same location.
- **Wildlife and Botanical Surveys**, based on biological scientific studies conducted within the Supplemental RSA (or in important habitat areas adjacent to the Supplemental RSA), were

reviewed to determine habitat use by special-status plants and wildlife within and directly adjacent to the Supplemental RSA.

Additionally, species range maps found during the above literature searches were overlaid on the RSAs, information gained from the biologists' previous experience and knowledge from work conducted in the area were incorporated, and biologists' databases were reviewed.

4.3.1.1 Vegetation Communities and Land Cover Types

Aerial Imagery Mapping Methods for Vegetation Community Mapping

As a part of the desktop analysis, the Wildlife and Botanical RSAs were visually assessed in Google Earth Pro (2016 through 2024) and ArcGIS (ESRI World Imagery 2016 through 2024; ESRI World Streetmap 2016 through 2024) to create a detailed vegetation community and land cover type map that could be field verified.

4.3.1.2 Special-Status Species

Special-Status Plants

The Botanical RSA encompasses 2,104.55 acres and includes the limits of construction and a 100-foot buffer that surrounds the limits of construction. A list of special-status plant species known to occur or potentially occurring in the Botanical RSA was generated based on existing databases during the literature review. Database queries for special-status plant species included reported occurrences within 3 miles of the Shared Passenger Track Alternatives or within nine USGS 7.5-minute quads (Hollywood, Los Angeles, South Gate, El Monte, Whittier, Los Alamitos, La Habra, Anaheim, and Orange) that overlap with the Shared Passenger Track Alternatives and a 3-mile radius from the Shared Passenger Track Alternatives. Appendix A lists those species whose known general range falls within the Botanical RSA and for which suitable habitat conditions exist. Database sources and search criteria consisted of the following and Appendix A was developed using this information:

- USFWS (Information for Planning and Consultation) generated a list of federal candidate, proposed, threatened, and endangered plant species for the Shared Passenger Track Alternatives Supplemental RSA (within 3 miles) on December 18, 2024 (USFWS 2024c), and February 20, 2025 (USFWS 2025). Appendix B, U.S. Fish and Wildlife Service Official Species List, includes the USFWS Official Species Lists generated for the Shared Passenger Track Alternatives (USFWS 2016b, 2017a, 2017b, 2018, 2020, 2021c, 2021d, 2023, 2024c, 2025).
- The CNDDB RareFind 5 database was searched (standard USGS quad search) using the RareFind program (CDFW 2016, 2024a) list of occurrences in the nine USGS quads and within the Supplemental RSA. Appendix C, California Department of Fish and Wildlife RareFind CNDDB Query Summary, provides the list of CNDDB-reported special-status plant species and the CDFW Special-Status Plant List (CDFW 2016, 2024a).
- The CNPS Online Inventory of Rare and Endangered Plants of California was reviewed for special-status plant species occurring in the nine USGS quads (CNPS 2016 through 2024).

Aerial Imagery Habitat Mapping Method for Special-Status Plants

As a part of the desktop analysis, the Botanical RSA was visually assessed in Google Earth Pro (2024) and ArcGIS (ESRI World Imagery 2024; ESRI World Streetmap 2024) to assess where potential habitat could exist for special-status plants. This assessment was used to determine which areas needed field verification to determine if habitat was present or not.

Special-Status Wildlife

The Wildlife RSA encompasses 10,094.55 acres and includes the limits of construction and a 1,000-foot buffer that surrounds the limits of construction. A list of special-status wildlife species known to occur or potentially occurring in the Wildlife RSA was generated based on existing databases (literature review). Database queries included reported occurrences within 3 miles of

the Shared Passenger Track Alternatives or potentially within nine USGS 7.5-minute quads. Appendix A lists those species whose known general range falls within the Wildlife RSA and for which suitable habitat conditions exist. Database sources and search criteria consisted of the following and Appendix A was developed using this information:

- USFWS Carlsbad Field Office website of federal candidate, proposed, threatened, and endangered wildlife species for the Shared Passenger Track Alternatives search area (generated on December 20, 2023) (USFWS 2023). Appendix B provides the list of species identified.
- CNDDB RareFind 5 database (standard USGS quad search) using the RareFind program (CDFW 2024a) and a manual geographic information system mapping process of occurrences in a 3-mile radius of the proposed alignment centerlines. Appendix C provides the list of CNDDB-reported special-status wildlife species.
- eBird data for bird abundance and distribution (eBird 2024).
- Published scientific studies of wildlife surveys within the Supplemental RSA.

Aerial Imagery Habitat Mapping Method for Special-Status Wildlife

As a part of the desktop analysis, the Wildlife RSA was visually assessed in Google Earth Pro (2024) and ArcGIS (ESRI World Imagery 2024; ESRI World Streetmap 2024) to assess where potential habitat would exist for special-status wildlife. This assessment was used to determine which areas were needed to field verify if habitat was present.

4.3.1.3 Aquatic Resources

As a part of the desktop analysis, survey investigations of potentially jurisdictional aquatic resources consisted of reviewing available background information on aquatic features within the Aquatic RSA.

The Aquatic RSA encompasses 3,612.73 acres and includes the limits of construction and a 250-foot buffer that surrounds the limits of construction. The limits of construction include all construction elements (i.e., alternative rights-of-way, HSR station locations, construction staging areas, laydown areas, and borrow sites) associated with the project.

Presurvey Investigations for Aquatic Resources

Delineators reviewed the following publicly available resources prior to and following field investigations to obtain information on potential wetland and nonwetland waters of the U.S. and areas potentially subject to California Fish and Game Code Section 1600 et seq. that occur in the Aquatic RSA:

- USGS 7.5-minute topographic quadrangles occurring within the Aquatic RSA (Los Angeles, South Gate, Whittier, La Habra, Anaheim, and Orange [USGS 2015, 2024a])
- National Wetlands Inventory maps (USFWS 2016a, 2024b)
- National Hydrography Dataset (USGS 2016, 2024b)
- CNDDB Biogeographic Information and Observation System (CDFW 2016, 2024a)
- U.S. Department of Agriculture/Natural Resources Conservation Service Soil Survey Map Units (USDA/NRCS 2011, 2016a, 2016b, 2024a, 2024b)
- Google Earth Pro (2024) aerial photographs and ArcGIS (ESRI World Imagery 2024; ESRI World Streetmap 2024)
- Climate and precipitation data (WRCC 2016a, 2016b, 2024a, 2024b)

Aerial Imagery Mapping Methods for Aquatic Resources

Prior to field investigations, detailed land cover and preliminary wetlands and nonwetlands delineation maps were generated using ArcGIS (ESRI World Imagery 2024; ESRI World

Streetmap 2024) based on interpretation of Google Earth Pro (2024) imagery series and soil survey data. A standard mapping scale of 1 inch = 200 feet (1:2,400) and a minimum standard mapping unit for wetlands of 0.001 acre were used.

Following the preliminary analysis, the Aquatic RSA was visually assessed in Google Earth Pro (2024) and ArcGIS (ESRI World Imagery 2024; ESRI World Streetmap 2024) across the same aerial imagery series to confirm the location and extent of aquatic features identified in the first step, and also identify the presence of additional aquatic features. Once this two-stage remote exercise was completed, the jurisdictional limits for potential wetland and nonwetland waters of the U.S. and state and areas potentially subject to California Fish and Game Code Section 1600 et seq. were mapped in ArcGIS (ESRI World Imagery 2024; ESRI World Streetmap 2024) in preparation for field surveys (refer to Section 4.3.2.2, Delineation of Aquatic Resources).

4.3.1.4 Wildlife Movement Corridors

The evaluation of wildlife movement corridors conducted here was based on the Beier and Loe (1992) “checklist” for evaluating corridors. The checklist includes (1) identifying the habitat areas where the corridor would connect, (2) determining the species that would use the corridor, (3) evaluating the needs of the species that would use the corridor, (4) evaluating how well the area would accommodate the movement of species, and (5) mapping the corridor.

During the desktop analysis, watercourses, canyons, ridgetops, and known pathways for wildlife movement were reviewed to determine if wildlife movement corridors were present and, if so, where those corridors exist. In addition to already present wildlife movement corridors, there are interagency conservation planning efforts to identify and conserve high-priority wildlife corridors (South Coast Wildlands 2008).

The following data sources were used to document the occurrence of wildlife movement corridors within the Supplemental RSA:

- *The South Coast Missing Linkages: A Wildland Network for the South Coast Ecoregion* (South Coast Wildlands 2008)
- *California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California* (Spencer et al. 2010)
- Google Earth Pro aerial photographs (May 1994 to September 2024) (Google Earth 2017, 2024) and ArcGIS (ESRI World Imagery 2024; ESRI World Streetmap 2024)
- CDFW Biogeographic Information and Observation System data from the California Essential Habitat Connectivity project (CDFW 2024b) to identify interstate connections, natural landscape blocks, and essential connectivity areas (from the datasets South Coast Missing Linkages [ds419] [Beier et al. 2006] and the Natural Landscape Blocks – California Essential Habitat Connectivity [ds621] [Spencer et al. 2010])
- Review of published scientific wildlife surveys in the Supplemental RSA (and adjacent areas)

4.3.1.5 Critical Habitat

Federally designated or proposed critical habitat known or having a potential to occur was reviewed (USFWS 2024a) and later mapped in relation to the project section within the Supplemental RSA.

4.3.1.6 Essential Fish Habitat

The Wildlife RSA was evaluated for the presence of habitats essential to the life history of commercially managed fish species (marine and anadromous) (NOAA Fisheries 2023).

4.3.1.7 Protected Trees

Biologists reviewed county and city ordinances and codes to identify the requirements for protected trees, as well as available general plans and Habitat Conservation Plans (included in Table K-2 of Appendix K with a summary of laws relevant to protected trees).

4.3.1.8 Habitats of Concern

Special-Status Natural Communities

The Botanical RSA encompasses 2,104.55 acres and includes the limits of construction and a 100-foot buffer that surrounds the limits of construction. The Supplemental RSA encompasses 138,826.40 acres and includes the limits of construction and a 3-mile buffer that surrounds the limits of construction. Special-status natural communities occurring or with potential to occur within the Botanical RSA and Supplemental RSA were identified based on a review of the following data sources during the literature review:

- Project-specific vegetation mapping and characterization using aerial imagery (Google Earth Pro 2024), aerial photographs, and ArcGIS mapping (May 1994 to July 2016, September 2016 to October 2017, December 2017 to January 2018, April to November 2018, March to September 2020, April 2021 to November 2022, July 2023 to September 2024) (ESRI World Imagery 2024; ESRI World Streetmap 2024).
- CNDDB RareFind 5 query for special-status natural communities (standard quad search) using the RareFind program and within the Supplemental RSA (CDFW 2024a).
- CDFW evaluated natural communities according to NatureServe's Heritage Methodology, and natural communities are assigned ranks. Natural communities with ranks of S1 to S3 are considered Sensitive Natural Communities and are to be addressed during the CEQA process and its equivalents (CDFW 2023). Observed vegetation communities were compared to this list to determine if any Sensitive Natural Communities were present.
- Vegetation within the Botanical RSA was mapped according to *A Manual of California Vegetation* (Sawyer et al. 2009). Vegetation communities with a rank of S1 to S3 are Sensitive Natural Communities and were evaluated as Special-Status Natural Communities.

Riparian Areas

Within the Aquatic RSA, a jurisdictional delineation was completed. Riparian areas were mapped according to those areas regulated by the California Fish and Game Code as the transitional areas between terrestrial and aquatic ecosystems.

4.3.2 Field Surveys and Assessments

This section provides the types of surveys and methods used to complete field surveys. In summary, field surveys for special-status plants, special-status wildlife, special-status natural communities, aquatic resources (USACE, SWRCB, and CDFW), and habitats of concern were completed between May 2007 and April 2017. Subsequent to field surveys in 2017, desktop data were reviewed and updated on a regular basis, including from May 1994 to July 2016, September 2016 to October 2017, December 2017 to January 2018, April to November 2018, March to September 2020, April 2021 to November 2022, and July 2023 to April 2025 with the biological results and analyses being updated each time.

4.3.2.1 Reconnaissance Field Surveys

Reconnaissance-level biological field surveys were conducted from May 2007 through February 2010, in August 2010; in June 2015; in February, August, and December 2016; and in April 2017 (Appendix D, Biological Resources Field Survey Dates). Site reconnaissance surveys were conducted to assess habitat for wildlife and plants from the public right-of-way and where access was granted. Suitable habitat for special-status plants and wildlife was mapped and field verified during reconnaissance field surveys. Wildlife and plant species observed were recorded and reported in Appendix G, Plant and Animal Species Observed List.

Vegetation Communities and Land Cover Type Mapping

The desktop assessment of vegetation communities was field verified from areas where access was granted, and from public right-of-way where access was not feasible. Vegetation mapping was conducted by conducting meandering transects when access was available and viewing the

area from several vantage points that allowed for an expansive view. Vegetation mapping included a presurvey (desktop) assessment of aerial photographs that informed the field surveys that occurred in June 2015, October 2015, February 2016, March 2016, August 2016, December 2016, and April 2017. Vegetation mapping was conducted during all biological surveys, including reconnaissance field surveys, botanical surveys and habitat assessments, and wildlife surveys and habitat assessments.

Vegetation communities were classified according to the vegetation classification system described in *A Manual of California Vegetation* (Sawyer et al. 2009). In cases for which a land cover could not be suitably represented by an alliance name, applicable to urban/disturbed habitats, an appropriate description was created.

Botanical/Special-Status Plant Surveys

The desktop assessment was field verified within the Botanical RSA.

The evaluation regarding the suitability of habitat for special-status plants was based on the species' range, the presence of known occurrences in the vicinity of the Botanical RSA, analysis of aerial photographs, and the presence of potential habitat (including suitable soils) within the Botanical RSA. In June 2015, October 2015, February 2016, March 2016, August 2016, December 2016, and April 2017, biologists evaluated habitat from the public right-of-way to determine potential for special-status plant species (Appendix D).

Wildlife Surveys and Habitat Assessment

The desktop assessment was field verified. Surveys were conducted within the Wildlife RSA where access was available and, where access was limited, by using binoculars.

The wildlife habitat assessment was conducted in June 2015, October 2015, February 2016, March 2016, August and December 2016, and April 2017 by driving and walking along existing public right-of-way (Appendix D). Where suitable habitat was present for special-status wildlife species, the presence of the species was presumed.

Habitat mapping was based on information such as:

- Known habitat requirements for species
- Known species ranges
- Sensitivities to "edge" effects (nearness to unsuitable habitat areas)

This information was used to form the basis of the habitat mapping. Mapped suitable habitat was then used to quantify effects (both permanent and temporary) on individual special-status species.

Bat Habitat Assessment

Bat roost surveys were conducted in accessible areas in 2010 (refer to Appendix E, Bat Roost Surveys for California High-Speed Train Project, August 23, 2010). During this survey, biologists evaluated the accessible undersides of bridges and inside of culverts within the Wildlife RSA for the presence or signs of bats such as guano, urine staining, smell, and piles of insect remains. An Anabat II bat detector was used to acoustically evaluate the presence of bats at the potential roost sites evaluated. Based on aerial photographs (Google Earth Pro 2010 through 2024 and ArcGIS imagery [ESRI 2010 through 2024]) and information gathered during the habitat assessment site visits, the suitability of habitat for special-status bat species was mapped. The specific habitat requirements for each bat species were considered during this mapping process and where potential suitable habitat was present, the presence of special-status bats was assumed. Habitat requirements such as suitable roost sites, including bridges and palms, impact avoidance and minimization features (IAMF) to protect bats during construction and operations are to be incorporated.

No other wildlife surveys (including protocol surveys) were conducted.

Wildlife Movement Corridor Assessment

Field surveys for wildlife movement and migration corridors included assessing the functionality of corridors identified during the desktop analysis within the Supplemental RSA. The assessment of wildlife movement corridors includes the evaluation of habitat quality and signs of wildlife use. Items such as physical barriers to dispersal (including areas devoid of cover), human activities that would preclude/reduce animal movement, areas with ongoing light and noise disturbance, and other factors were included in this assessment.

The assessment for migration corridors was species group dependent and involved literature reviews. For instance, for avian species, a review of literature for the Pacific Flyway was conducted (e.g., Newcombe et al. 2019, DeLuca et al. 2021). For fish species, migration corridors for individual species were reviewed and the migration corridor for steelhead was assessed.

In the field, wildlife movement corridors were evaluated for functionality and habitat quality within the Wildlife RSA. Known wildlife movement studies were reviewed for the Supplemental RSA (Penrod et al. 2003). Google Earth Pro maps (2016 through 2024) and ArcGIS (ESRI 2016 through 2024) were reviewed in this evaluation.

4.3.2.2 Delineation of Aquatic Resources

Field surveys for aquatic resources were conducted within the Aquatic RSA on June 22, 2015; October 8–9, 2015; February 25–26, 2016; March 2, 2016; March 17, 2016; and August 23, 2016. Maps prepared under the remote assessment were field verified from areas where access was granted and from public right-of-way where access was not feasible. Field verification included assessment of wetland, nonwetland, and riparian features and measurements of in-channel dimensions (e.g., ordinary high-water mark, top of bank). Where access was granted, additional field work was conducted to further document the location, nature, and extent of potential USACE, SWRCB, and CDFW jurisdictional aquatic resources. A handheld global positioning system unit with sub-meter accuracy was used to map the extents of observed wetlands, nonwetland, and riparian vegetation. Representative photographs of accessible features (including from public right-of-way) were taken to document physical characteristics. A field verification of delineated features within the Aquatic RSA was conducted with the USACE Los Angeles District on August 16, 2017. On July 31, 2018, USACE issued a Preliminary Jurisdictional Determination for Shared Passenger Track Alternative A stating that, upon review of the mapped aquatic resources, waters of the U.S. may be present in the project section in the locations identified by the Authority. The results of the verification are further discussed in Section 6.4.1, Wetland Aquatic Resources.

Clean Water Act Sections 404/401 Wetland and Nonwetland Field Delineation Methods

Potentially jurisdictional federal wetlands in the Aquatic RSA were delineated using the methods described in the *Corps of Engineers Wetlands Delineation Manual* (USACE 1987), *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008b), National Wetlands Inventory (USFWS 2016a), and *A Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al. 1979).

In addition, wetland plant indicator status was based on the *Arid West 2016 National Wetland Plant List* (Lichvar et al. 2016) and hydric soils indicator status was based on *Field Indicators of Hydric Soils in the United States, A Guide for Identifying and Delineating Hydric Soils, Version 8.2* (USDA/NRCS 2018). Soil chromas were identified in the field according to *Munsell Soil-Color Charts with Genuine Munsell Color Chips* (Munsell Color 2015) and using protocols per the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008b). Under certain circumstances, morphologic characteristics normally found in hydric soils may not be visible for certain “problematic” categories of hydric soils (e.g., riverwash) because of prevailing environmental conditions (USACE 2008b).

Wetland boundaries for accessible properties were determined using paired data points in wetland and adjacent upland areas. Landforms, vegetation, soil characteristics, and hydrology indicators were recorded for each sample point on USACE Wetland Determination Data Forms,

Arid West Region (version 2.0) (USACE 2008a:121–122) (Appendix F, Aquatic Resources Delineation Report). For large complexes of features, or features exhibiting similar characteristics, paired points were recorded at representative features but not at each individual feature. Boundaries of aquatic features that were determined to meet all three USACE wetland criteria (Section 4.2.2.1, Clean Water Act Section 404 Wetland and Nonwetland Waters of the U.S.) were mapped as polygons using a global positioning system unit, aerial imagery interpretation, or a combination thereof. Wetland boundaries were extrapolated by following topographic contours, wetland vegetation boundaries, and clear hydrologic boundaries.

In circumstances where access was not feasible, binoculars were used within public rights-of-way to identify plant species composition and estimate cover for the various applicable vegetation stratum plots (tree, shrub, herb, and vine). Aquatic features exhibiting both wetland hydrology indicators and hydrophytic vegetation were assumed to also contain hydric soils and therefore were determined to be USACE-jurisdictional wetlands. Wetland hydrology was determined based on visual observation (where feasible), aerial photo interpretation, topography, landscape position, and best professional judgment. Boundaries were mapped as polygons using a global positioning system unit, aerial imagery interpretation, or a combination thereof.

Potentially jurisdictional federal nonwetland waters were delineated using the methods described in *A Field Guide to the Identification of the Ordinary High Water Mark in the Arid West Region of the Western United States* (Lichvar and McColley 2008) and *USACE Regulatory Guidance Letter No. 05-05* (USACE 2005), where appropriate. These jurisdictional aquatic resource categories are based on vegetative growth form (e.g., herbaceous, emergent, shrub) and hydrogeomorphic category (e.g., riverine, basin), with the exception of built watercourses. These guidance materials provide an approach for identifying the lateral limits of nonwetland waters based on remote aerial imagery, stream geomorphology, and vegetation communities (Lichvar and McColley 2008). In circumstances where access was not feasible, binoculars were used within public rights-of-way to identify ordinary high-water mark indicators, estimate ordinary high-water mark widths, and identify plant species composition.

Porter-Cologne Water Quality Control Act Wetland and Nonwetland Field Delineation Methods

Potentially jurisdictional state wetlands in the Aquatic RSA were delineated using the methods described in the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (SWRCB 2019), supplemented by the *Corps of Engineers Wetlands Delineation Manual* (USACE 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008b).

Potentially jurisdictional nonwetland waters of the state were delineated based on the definitions for nonwetland waters of the U.S. set forth under Section 404 of the CWA (33 CFR Part 328) and the USACE technical criteria for nonwetland waters of the U.S. (ordinary high-water mark).

Based on review of the resources that meet the definitions provided in Section 4.2.2, Aquatic Resources, the location, nature, and extent of aquatic resources considered wetland and nonwetland waters of the state and aquatic resources considered nonwetland and wetland waters of the U.S. regulated under the CWA are the same within the Aquatic RSA, and therefore are not described separately in Section 6.4, Aquatic Resources, and Section 7.6, Aquatic Resources.

California Fish and Game Code Section 1600 Aquatic Resources Field Delineation Methods

Potentially jurisdictional rivers, lakes, streambeds, and associated riparian vegetation in the Aquatic RSA regulated under California Fish and Game Code Section 1600 et seq. were delineated based on CDFW standard practices and best professional judgment of qualified staff biologists. Areas subject to Section 1600 et seq. jurisdiction were delineated by measuring the outer width and length boundaries of potentially jurisdictional areas, consisting of either the top of bank measurement or the extent of associated riparian vegetation, whichever was greatest.

Because of the heavily urbanized nature of the project section, the margins of channel and basin features were well defined and associated riparian vegetation did not extend beyond the tops of banks. The limits of aquatic resources subject to California Fish and Game Code Section 1600 et seq. notification requirements were clearly distinguished from other areas. In circumstances where access was not feasible, binoculars were used within public rights-of-way to estimate widths and lengths, identify plant species composition, and estimate cover for the various applicable vegetation stratum plots (tree, shrub, herb, and vine). Within the Aquatic RSA, associated riparian vegetation occurs in wetlands (freshwater emergent wetland, freshwater forested/shrub wetland) as well as nonwetland (riverine) conditions. Accordingly, associated riparian vegetation falls within either the “riverine” or the “freshwater emergent marsh” jurisdictional aquatic resource category, depending on the hydrologic, geomorphic, soils, and vegetative conditions. Refer to Section 6.4.1.1, Freshwater Emergent Wetland, and Section 6.4.2.2, Riverine, for additional detail.

4.3.3 Limitations that May Influence Reconnaissance Field Survey Results

The habitat assessment included a field assessment of the public right-of-way and a review of aerial photography. The use of aerial photography is limited by the resolution and age of the photographs. Additional fieldwork may be pursued to confirm information in this report, but access may not occur because access to private or public property cannot be guaranteed. Where access or visual confirmation was not possible, assumptions were based on the following factors:

- Range of species
- Species observations/occurrences
- Assessments of adjacent areas for suitable habitat
- Aerial photographic interpretation
- Consultation with regional experts

The last date of field surveys was April 2017, and no field verification has occurred since this time. Vegetation communities could have changed since this time; these changes could include degradation, enhancement, or type conversion. There are projects for enhancement of watercourses (such as the Los Angeles River Master Plan) that could enhance conditions of biological resources, and these improvements would be unknown.

5 BIOLOGICAL SETTING

The RSA—consisting of the Botanical, Aquatic, Wildlife, and Supplemental RSAs (defined in Section 4.1.1, Resource Study Areas)—are in the South Coast subregion of the California Floristic Province's Southwestern California region. This subregion extends along the Pacific Coast from Point Conception to Mexico. Historically, coastal sage scrub and chaparral vegetation characterized this subregion (Jepson Flora Project 2015). The Supplemental RSA is within the Los Angeles Basin, bounded by the Santa Monica Mountains and Puente Hills to the north, the Santa Ana Mountains and San Joaquin Hills to the east and south, and the Palos Verdes Peninsula along the coast. The project section falls within a heavily urbanized and industrialized portion of the Los Angeles Basin, in the northernmost portion of the Peninsular Ranges Geomorphic Province. Elevation within the Wildlife RSA ranges between approximately 82 and 292 feet above mean sea level.

Currently, over 95 percent of the lands within the RSAs have been developed (USGS 2011). The Wildlife, Botanical, and Aquatic RSAs are highly disturbed by prior development and recurrent flood control maintenance activities and are further constrained by adjacent development. Where riparian habitat is present it is often degraded, fragmented, and constrained by large amounts of nonnative, invasive species. Flood control activities associated with area rivers include the removal of vegetation and shoaling for concrete-lined channels (e.g., Los Angeles River); mowing or grading of earthen berms, with herbicide application and hand-removal of weedy vegetation associated with earthen-bottom channels for aquifer recharge (e.g., Santa Ana River); and annual soil tilling for optimal percolation for sediment-lined areas (e.g., spreading grounds such as the Rio Hondo). Urban encroachment into these river corridors is common and includes uses such as cycling and jogging paths and homeless encampments.

The Wildlife and Botanical RSAs are primarily composed of urban land cover consisting of developed areas including residential, commercial, and industrial developments along with railways, highways, and paved and unpaved roads. Other urban land cover types include disturbed and ruderal habitats that consist of areas composed largely of invasive plant species, such as open fields; ornamental areas consisting of landscaping associated with parks, commercial buildings, and roadsides; and barren areas devoid of vegetation. Within the Wildlife and Botanical RSAs, upland seminatural habitat observed includes eucalyptus (*Eucalyptus* spp.) – tree of heaven (*Ailanthus altissima*) – black locust (*Robinia pseudoacacia*) woodland seminatural alliance, and wild oats (*Avena* spp.) and annual brome (*Bromus* spp.) grasslands seminatural alliance. Aquatic habitats observed include hardstem and California bulrush marsh herbaceous alliance, mulefat (*Baccharis salicifolia*) thickets shrubland alliance, cattail (*Typha* spp.) marshes herbaceous alliance, Goodding's willow – red willow riparian woodland and forest alliance, duckweed (*Lemna* spp., *Spirodela* spp., *Wolffia* spp., *Wolffiella* spp.) blooms and relatives provisional herbaceous alliance, salt grass flats herbaceous alliance, open water, and unvegetated channel. Specifically, aquatic vegetation was identified at the following locations: Los Angeles River (duckweed blooms), Rio Hondo spreading grounds (mulefat thickets), San Gabriel River (hardstem and California bulrush marsh, mulefat thickets, Goodding's willow – red willow riparian woodland and forest, and salt grass flats), La Mirada Creek (cattail marsh, and duckweed blooms), and Brea Creek (duckweed blooms).

The construction of dams, detention/debris basins, groundwater recharge basins, storage reservoirs, and concrete-lined flood control channels has substantially altered the natural habitats and hydrology of the region. The watercourses are routinely maintained for capacity, including vegetation, sediment, and debris removal. Although disturbance is an important component of habitats within and adjacent to watercourses, the anthropogenic effects are greater than the natural disturbance regime and have reduced or eliminated natural and seminatural habitats and associated functions.

The Aquatic RSA lies within the watersheds of the Los Angeles River Basin (531,817 acres), San Gabriel River Basin (579,963 acres), Santa Ana River Basin (1,084,238 acres), and Seal Beach Basin (81,520 acres) (Figure 5-1). These watersheds are assigned the following USGS Hydrologic Unit Code–8 (HUC-8):

- Los Angeles River (HUC-8 18070105)
- San Gabriel River (HUC-8 18070106)
- Santa Ana River (HUC-8 18070203)
- Seal Beach (HUC-8 18070201)

Potentially jurisdictional watercourses in the Aquatic RSA (north to south) consist of the Los Angeles River, the Rio Hondo, the San Gabriel River, North Fork Coyote Creek, La Mirada Creek, Coyote Creek, Brea Creek, Fullerton Creek, Carbon Creek, and the Santa Ana River. Potentially jurisdictional basins in the Aquatic RSA include the eight Rio Hondo spreading grounds, the Lakeside Residential Community pond, and the two Raymond Retarding Basins. Table 5-1 summarizes the major water features within each HUC-8 watershed and total acreage of each HUC-8 watershed occurring within the Aquatic RSA.

Table 5-1 Watersheds in the Aquatic Resource Study Area

Sub-basin (Hydrologic Unit Code–8)	Major Water Features within the Aquatic RSA	Watershed Area (acres)	Watershed within Aquatic RSA (acres)
Los Angeles River (18070105)	Los Angeles River, Rio Hondo, Rio Hondo spreading grounds	531,817	1,508.52
San Gabriel River (18070106)	San Gabriel River, North Fork Coyote Creek, La Mirada Creek, Coyote Creek, Brea Creek, Lakeside Residential Community pond, Fullerton Creek, Carbon Creek, Raymond Retarding Basins	579,963	1,655.21
Santa Ana River (18070203)	Santa Ana River, Collins Creek	1,084,238	63.35
Seal Beach (18070201)	None	81,520	385.65
Total	**--**	**2,277,538**	**3,612.73**

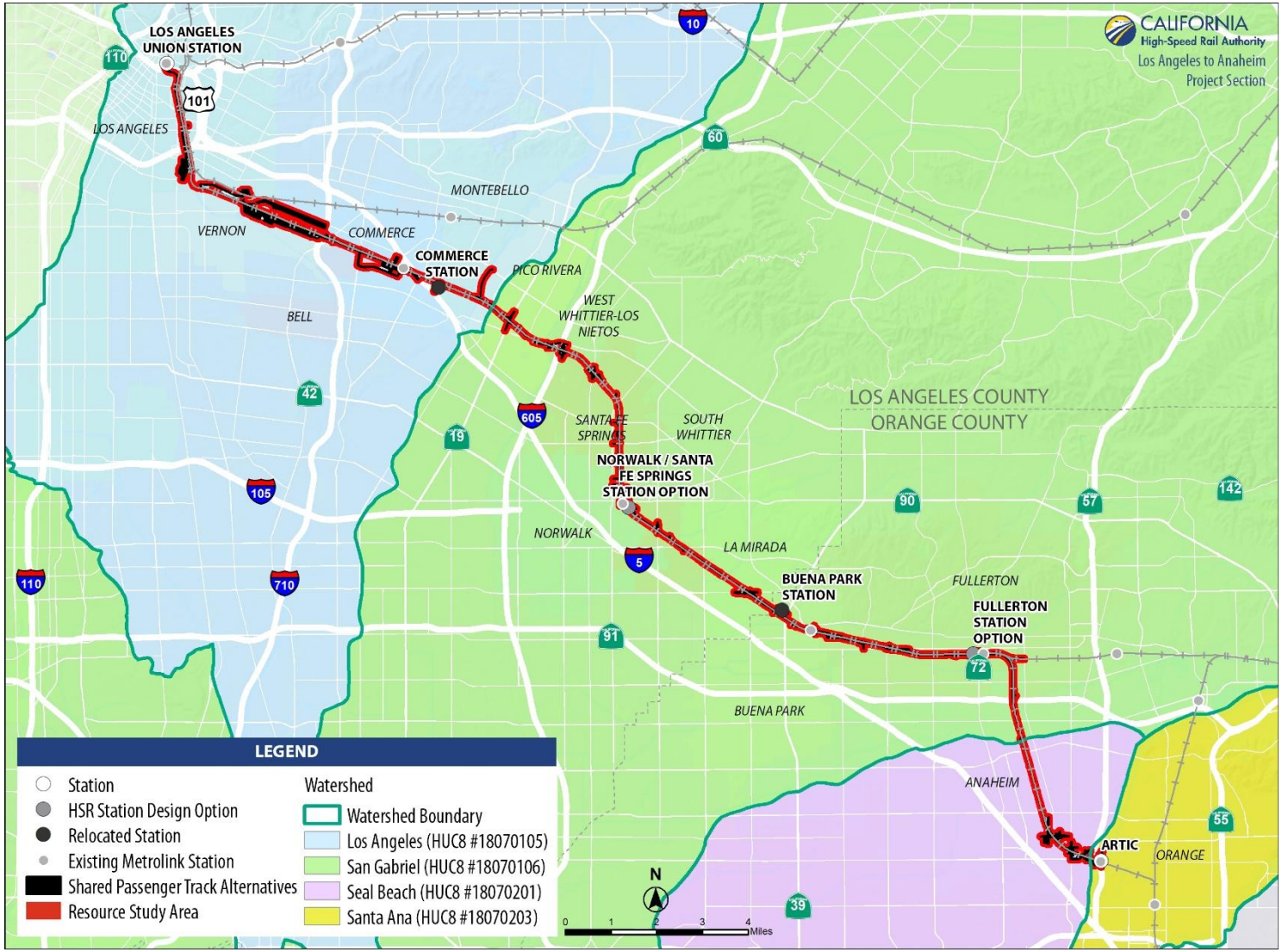
Sources: USGS 2024a, 2024b
RSA = resource study area

Table 5-2 summarizes the hydrologic units identified in the RWQCB Los Angeles Region and Santa Ana Region basin plans that overlap with the Aquatic RSA.

Table 5-2 Watershed/Hydrologic Unit Sub Areas Identified in Regional Water Quality Control Board Basin Plans in the Aquatic Resource Study Area

RWQCB Basin Plan	Watershed/Hydrologic Unit Sub Area within the Aquatic RSA Identified in Basin Plan
Los Angeles Region	Los Angeles River Reach 2 watershed
	Rio Hondo Reach 2 watershed
	San Gabriel River Reach 2 watershed
Santa Ana Region	Anaheim Hydrologic Unit Sub Area Split

Sources: USGS 2024a, 2024b
RSA = resource study area; RWQCB = Regional Water Quality Control Board



Sources: Authority 2025a; USGS 2024a, 2024b; ESRI World Imagery 2024; ESRI World Streetmap 2024

Figure 5-1 Watersheds in the Aquatic Resource Study Area

5.1 Climate and Soils

5.1.1 Climate and Precipitation Data

The climate in the Los Angeles Basin (including the RSAs) is arid to semi-arid. Summer and fall seasons (dry season) are hot and dry, with most of the rain falling during the mid-winter months (wet season). Approximately 80 percent of annual precipitation occurs between November and April. Accordingly, the condition of water resources (e.g., presence of surface water) is seasonally variable between the wet and dry seasons. Rainwater often inundates the watercourses and waterbodies (i.e., basins) within the Aquatic RSA during winter storms, common from November through March, and many are completely dry or contain only nuisance or wastewater low flows during other seasons (NOAA 2015a, 2015b).

Adiabatic cooling (i.e., cooling caused by change in air pressure) causes warm, moisture-laden air masses generated over the Pacific Ocean to condense and cool as they are pushed upward and over the San Gabriel and San Fernando Mountain Ranges, resulting in moderate to heavy precipitation on the southwestern slopes. The resulting snowpack is highly variable, but averages range from 5 to 70 inches as elevation increases from the lower foothills to the mountain peaks. Similar to snowpack, mean annual precipitation for the downtown Los Angeles (University of Southern California Campus) meteorological station is highly variable, ranging from 3.85 inches in 1953 to 34.04 inches in 1983, and averaging approximately 14.77 inches per year (WRCC 2024a). Mean annual temperature records for the same station cite an average high temperature of 74 degrees Fahrenheit and an annual average low temperature of 56 degrees Fahrenheit (WRCC 2024a). Key climatic factors influencing this high variability in intra-seasonal and inter-annual precipitation include the Madden-Julian Oscillation (NOAA 2015b) and the El Nino Southern Oscillation (NOAA 2015a), respectively.

Table 5-3 presents annual precipitation data for four stations in the vicinity of the Aquatic RSA. Average annual precipitation ranges from 12.01 inches at the Brea Dam to 20.24 inches in Pasadena.

Table 5-3 Historical Annual Precipitation

Station	Location Relative to Aquatic RSA	Elevation (msl)	Data Range	Mean Annual Rainfall (inches)
Pasadena (046719)	North	820 feet	1893–2015	20.24
Brea Dam (041057)	East	300 feet	1948–2013	12.01
Los Angeles Downtown USC Campus (045115)	West	175 feet	1877–2015	14.77
Santa Ana Fire Station (047888)	South	110 feet	1906–2015	13.69

Source: WRCC 2024b
msl = mean sea level; RSA = resource study area; USC = University of Southern California

5.1.2 Soils

The Los Angeles Basin of coastal Southern California is an alluviated lowland, situated south of the Santa Monica Mountains and the Elysian, Repetto, and Puente Hills, and west and northwest of the Santa Ana Mountains and San Joaquin Hills (Yerkes et al. 1965). Soils in Los Angeles County are mapped under the U.S. Department of Agriculture Natural Resources Conservation Service Web Soil Survey and the Soil Survey Geographic database (USDA/NRCS 2016a, 2024a), whereas more detailed soil maps are available for Orange County through the Soil Survey Geographic database (USDA/NRCS 2016b, 2024b).

The following two Soil Survey Geographic database map units occur in the Los Angeles County portion of the Aquatic RSA:

- Zamora – Urban Land – Ramona
- Urban Land – Sorrento – Hanford

The following 10 Soil Survey Geographic database mapping units occur in the Orange County portion of the Aquatic RSA:

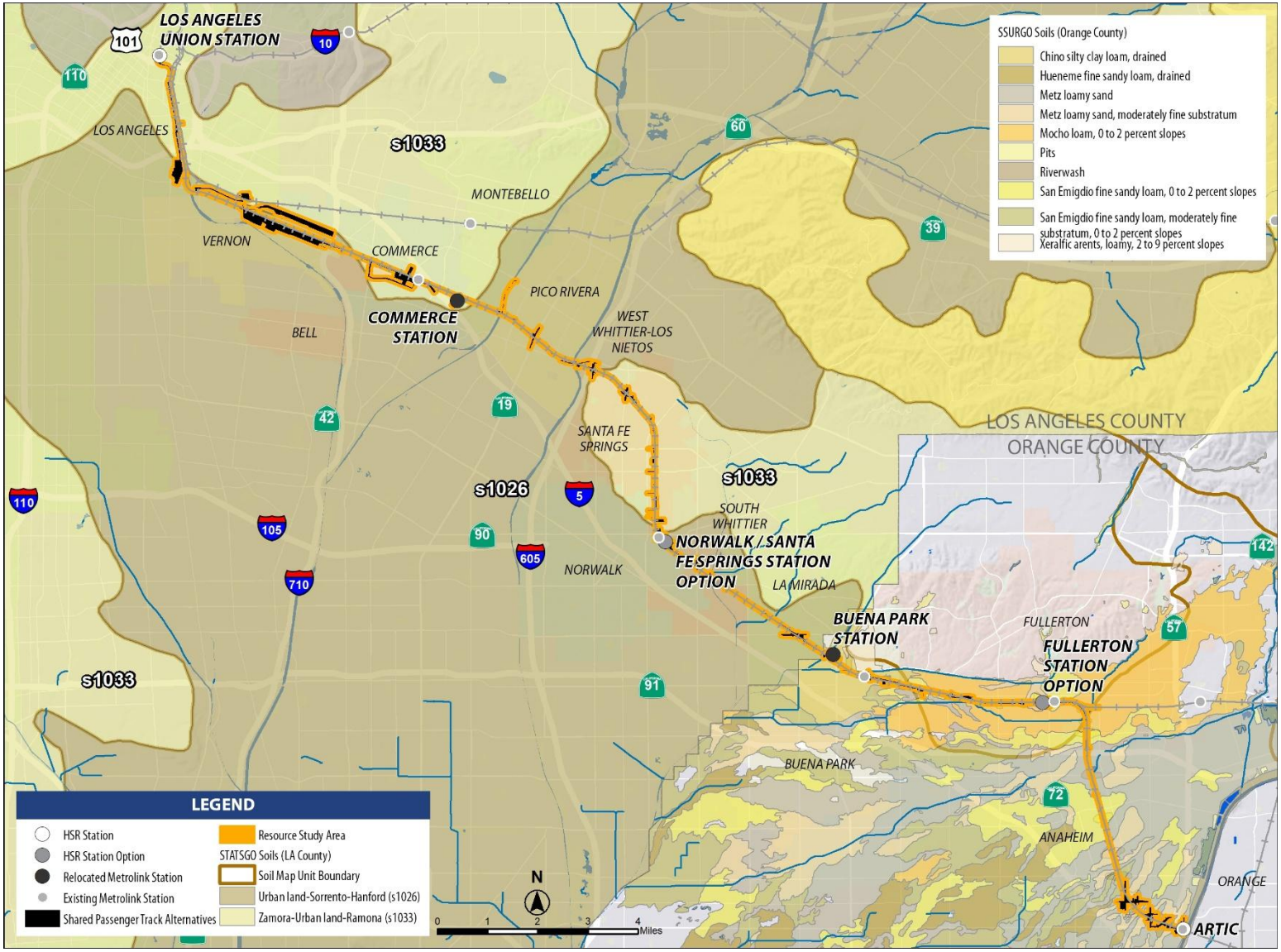
- Chino Silty Clay Loam, Drained
- Hueneme Fine Sandy Loam, Drained
- Metz Loamy Sand
- Metz Loamy Sand, Moderately Fine Substratum
- Mocho Loam, 0 to 2 Percent Slopes
- Pits
- Riverwash
- San Emigdio Fine Sandy Loam, Moderately Fine Substratum, 0 to 2 Percent Slopes
- San Emigdio Fine Sandy Loam, 0 to 2 Percent Slopes
- Xeralfic Arents, 2 to 9 Percent Slopes

Table 5-4 lists the general soil map units that occur in the Aquatic RSA, the geomorphic surfaces upon which they occur, and the Great Group–level taxonomic classification. Figure 5-2 illustrates the extent of the general soil map units within the Aquatic RSA.

Table 5-4 General Soil Map Units in the Aquatic Resource Study Area

General Soil Map Unit (map symbol)	Geomorphic Surface	Primary Soil Classifications
Chino	Floodplains, basins	Aquic Haploxerolls
Hanford	Stream bottoms, floodplains, and alluvial fans	Typic Xerorthents
Hueneme	Alluvial plains and basins	Oxyaquic Xerofluvents
Metz	Floodplains, alluvial fans	Typic Xerofluvents
Mocho	Alluvial fans	Fluventic Haploxerolls
Pits	Not applicable	Not applicable
Ramona	Alluvial fans, floodplains	Typic Haploxeralfs
Riverwash	Rivers and streams, floodplains	Not applicable
San Emigdio	Alluvial fans, floodplains, and narrow valleys	Typic Xerofluvents
Sorrento	Floodplains, alluvial fans	Calcic Haploxerolls
Urban Land	Not applicable	Not applicable
Xeralfic Arents	Terraces	Haploxeralfs and Palexeralfs
Zamora	Sloping fans and terraces	Mollic Haploxeralfs

Sources: USDA/NRCS 2016a, 2016b, 2024a, 2024b



Sources: Authority 2025a; USDA/NRCS 2024a, 2024b; ESRI World Imagery 2024

Figure 5-2 Soil Associations in the Aquatic Resource Study Area

5.2 Riparian Habitat, Vegetation Communities, Land Cover Types, and Special-Status Natural Communities

Most of the lands within the RSAs are developed. Urban areas within the RSAs include (from north to south) Los Angeles, Vernon, Bell, Commerce, Montebello, Pico Rivera, unincorporated Los Angeles County (West Whittier), Santa Fe Springs, Norwalk, La Mirada, Buena Park, Fullerton, Anaheim, and Orange.

Natural and seminatural vegetation communities are uncommon within the RSAs and are most often found in association with aquatic features such as rivers, built watercourses, and basins (e.g., spreading grounds, detention basins) that support aquatic habitats such as hardstem and California bulrush marsh herbaceous alliance, mulefat thickets shrubland alliance, cattail marshes herbaceous alliance, Goodding's willow – red willow riparian woodland and forest, duckweed blooms and relatives provisional herbaceous alliance, salt grass flats herbaceous alliance, and open water. Natural and seminatural vegetation communities within the Wildlife RSA have been heavily modified as a result of urbanization (e.g., concrete-lined channels). In addition, these areas are subject to periodic disturbance for flood control purposes, including eradication and removal of vegetation, removal of accumulated sediment, and tilling of earthen channel bottoms. This routine flood control maintenance prevents establishment of mature vegetative growth forms (e.g., woodlands, forest) and limits the extent and diversity of natural and seminatural vegetative communities.

Vegetation communities and land cover types observed within the Wildlife and Botanical RSAs are illustrated on Figure 5-3, sheets 1 through 24. Vegetation mapping was based on a combination of fieldwork, review of existing geographic information system wetland mapping data, and interpretation of aerial photographs.

Six land cover types and eight vegetation communities were identified within the Wildlife and Botanical RSAs. Vegetation communities included eucalyptus – tree of heaven – black locust woodland seminatural alliance, wild oats and annual brome grasslands seminatural alliance, hardstem and California bulrush marsh herbaceous alliance, mulefat thickets shrubland alliance, cattail marshes herbaceous alliance, Goodding's willow – red willow riparian woodland and forest, duckweed blooms and relatives provisional herbaceous alliance, and salt grass (*Distichlis spicata*) flats herbaceous alliance. Land cover types included open water, unvegetated channel, developed, barren, disturbed/ruderal, and ornamental (Table 5-5).

Plant communities within the Wildlife and Botanical RSAs were mapped according to the vegetation classification system described in *A Manual of California Vegetation* (Sawyer et al. 2009). In cases for which a land cover could not be suitably represented by an alliance name, applicable to urban/disturbed habitats, an appropriate description was created. Corresponding jurisdictional aquatic resources categories, as defined by the *Corps of Engineers Wetland Delineation Manual* (USACE 1987), USFWS National Wetlands Inventory (USFWS 2016a, 2024b), and *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al. 1979), are provided at the end of each subsection where applicable. These jurisdictional aquatic resource categories are based on vegetative growth form (e.g., herbaceous, emergent, shrub) and hydrogeomorphic category (e.g., riverine, basin), except for built watercourses. A comparison of these different classification systems is provided in Table 5-5.

Because of the loss of biological resources and the intense developmental pressures, these habitat fragments are the only remaining plant and wildlife habitat refuges in the region. These fragments contain individual plants and seed banks able to colonize the surrounding habitat. By the nature of these habitat areas, that rivers are connected as linear features, the rivers provide connections to suitable habitat for special-status species.



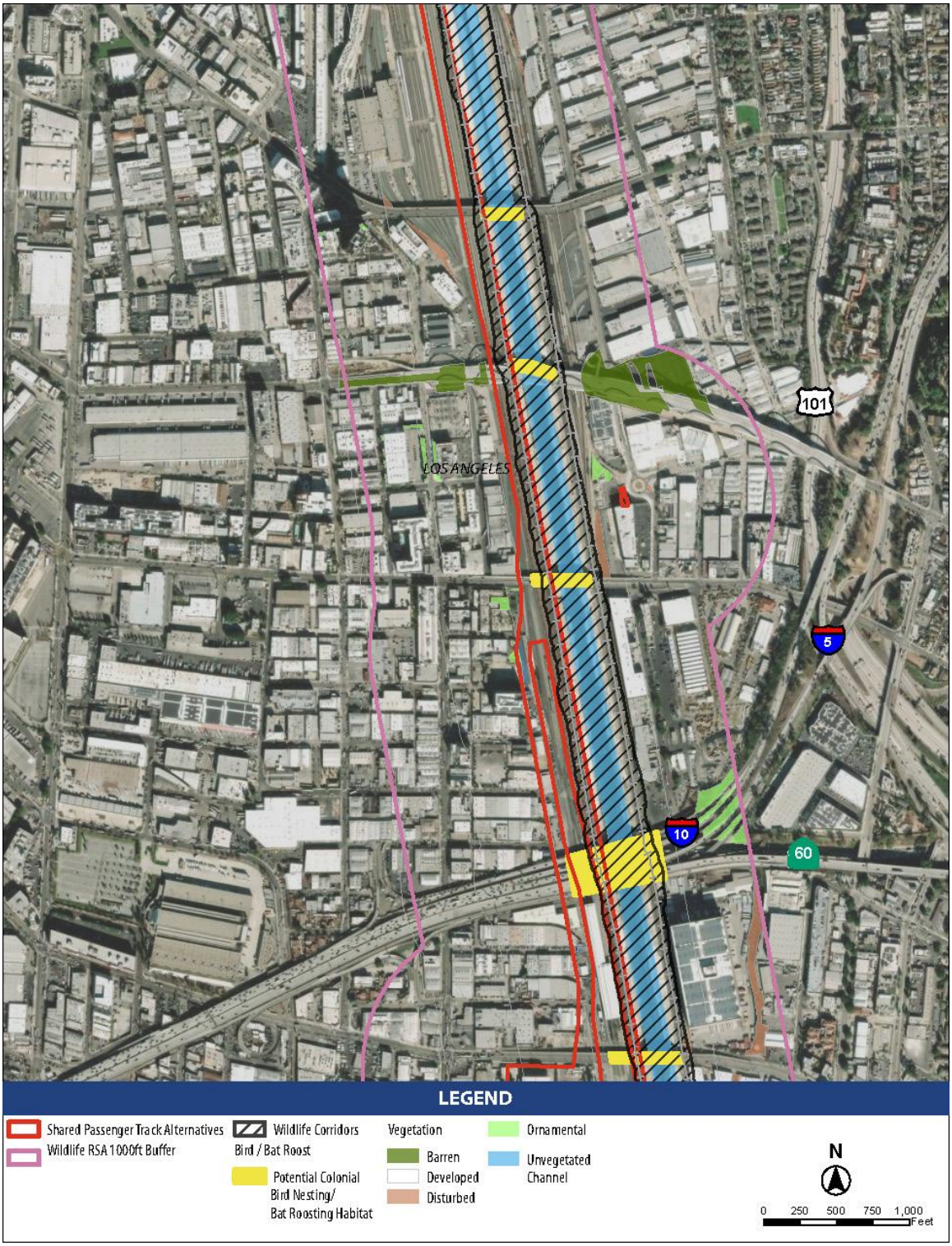
Sources: Authority 2025a; ESRI World Imagery 2024; ESRI World Streetmap 2024

Figure 5-3 Vegetation Communities and Wildlife Resources—Index



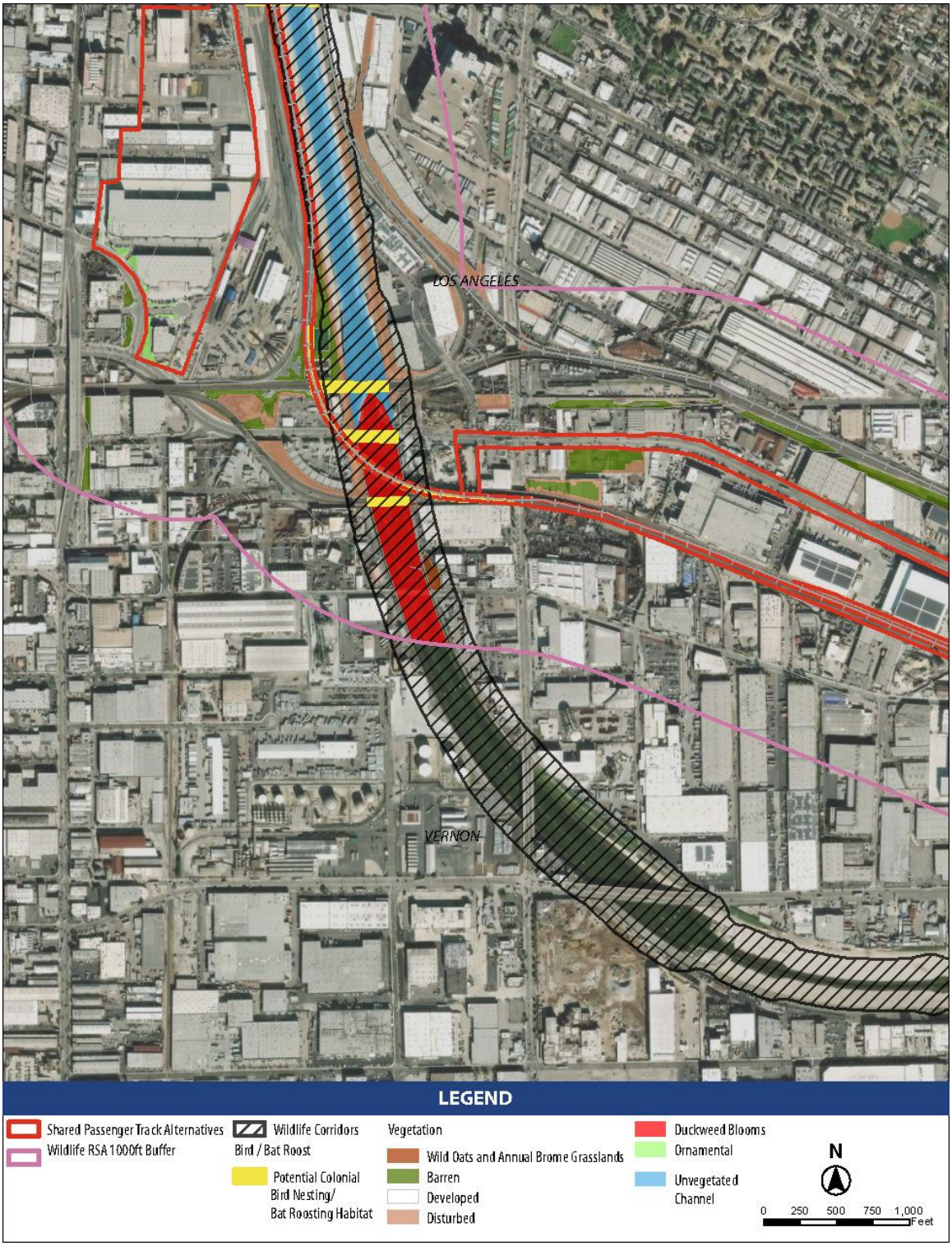
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Figure 5-3 Vegetation Communities and Wildlife Resources, Sheet 1 of 24



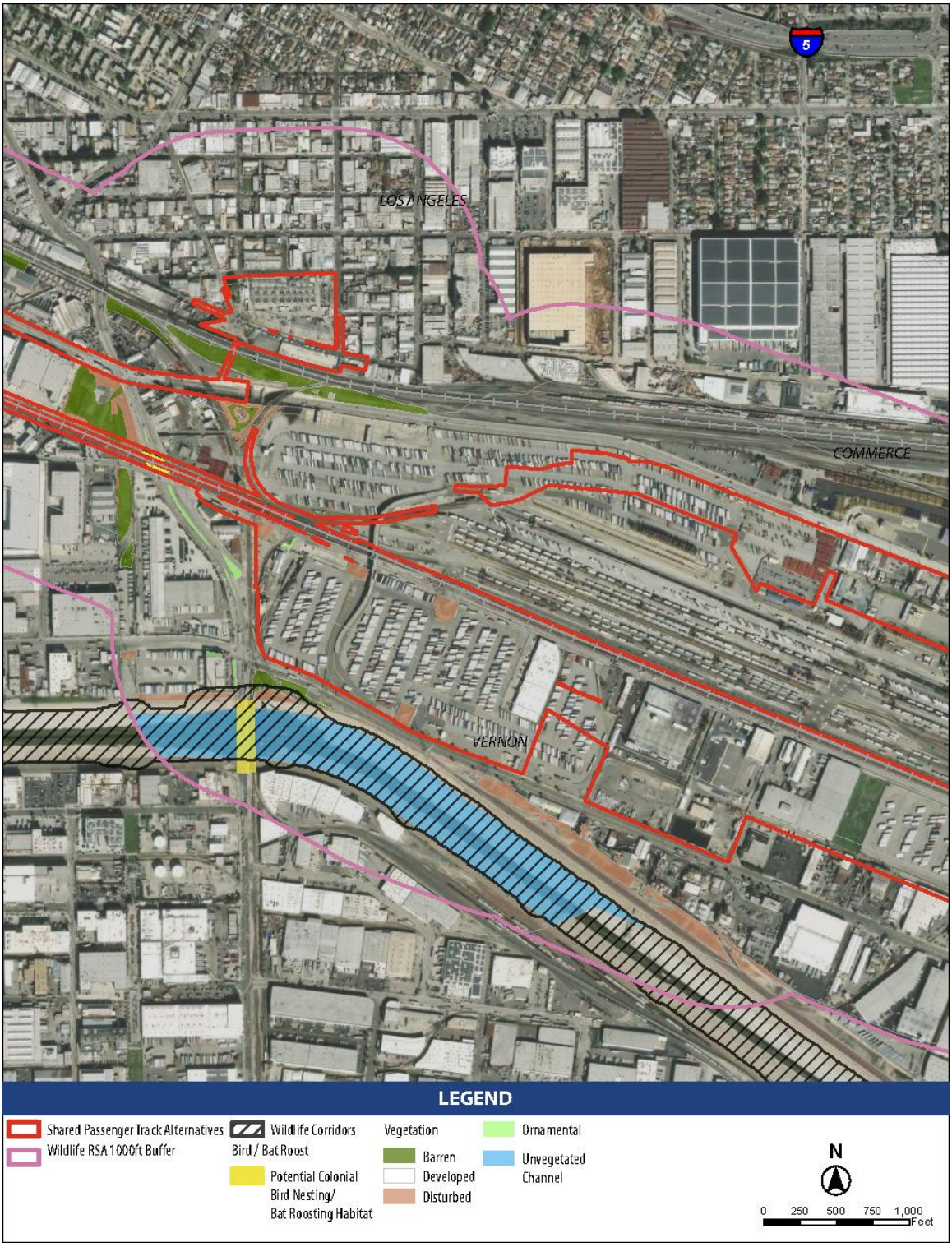
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Figure 5-3 Vegetation Communities and Wildlife Resources, Sheet 2 of 24



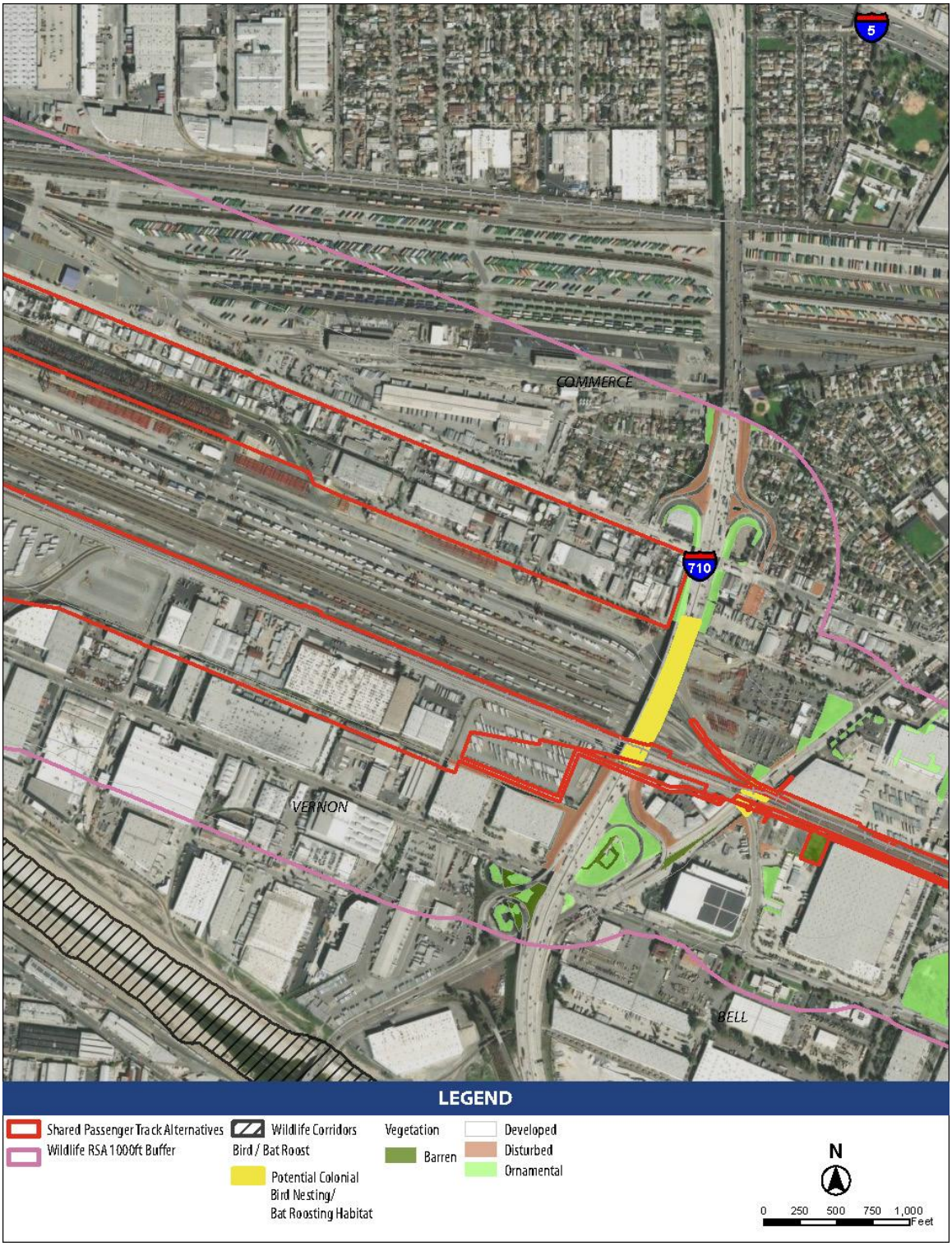
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Figure 5-3 Vegetation Communities and Wildlife Resources, Sheet 3 of 24



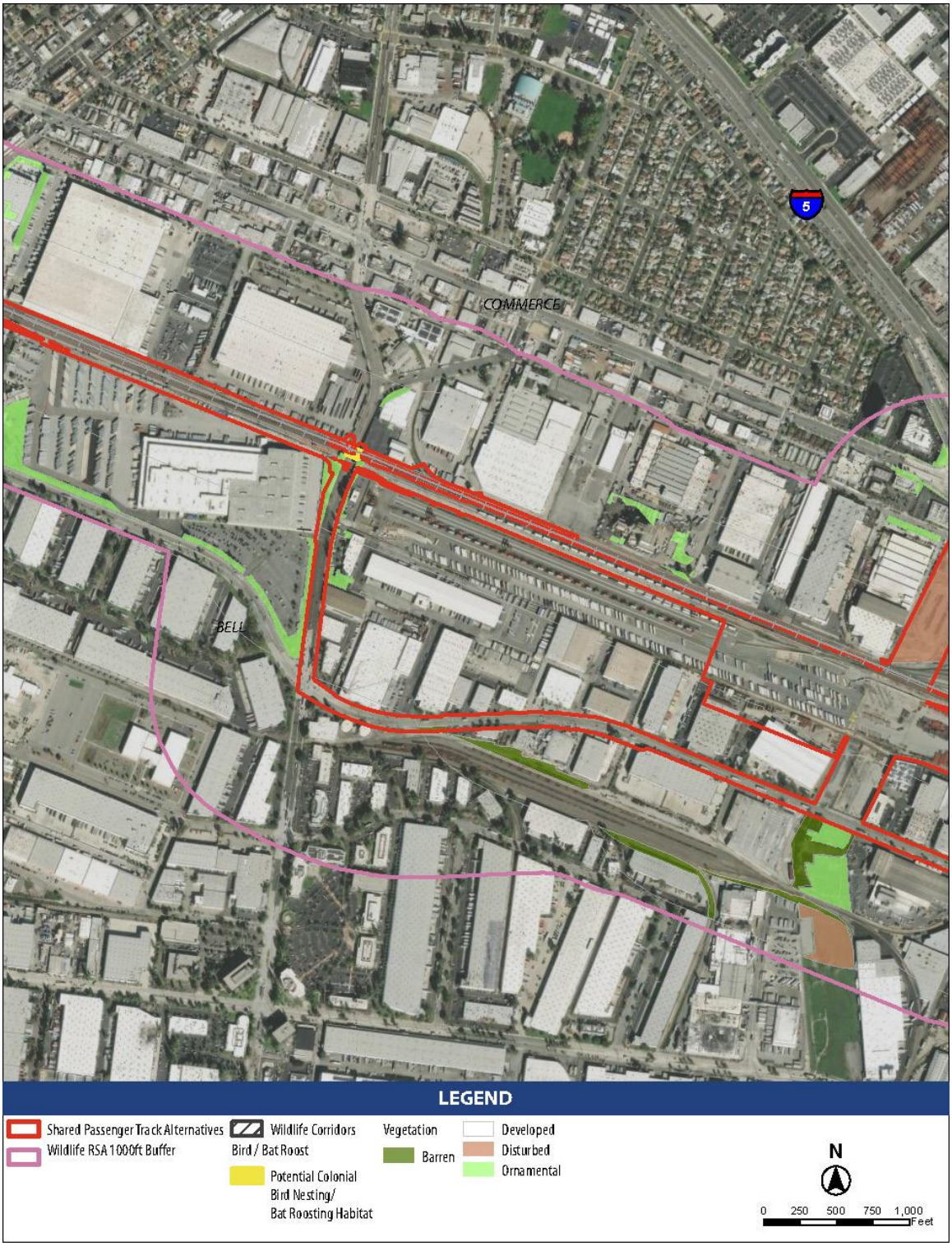
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Figure 5-3 Vegetation Communities and Wildlife Resources, Sheet 4 of 24



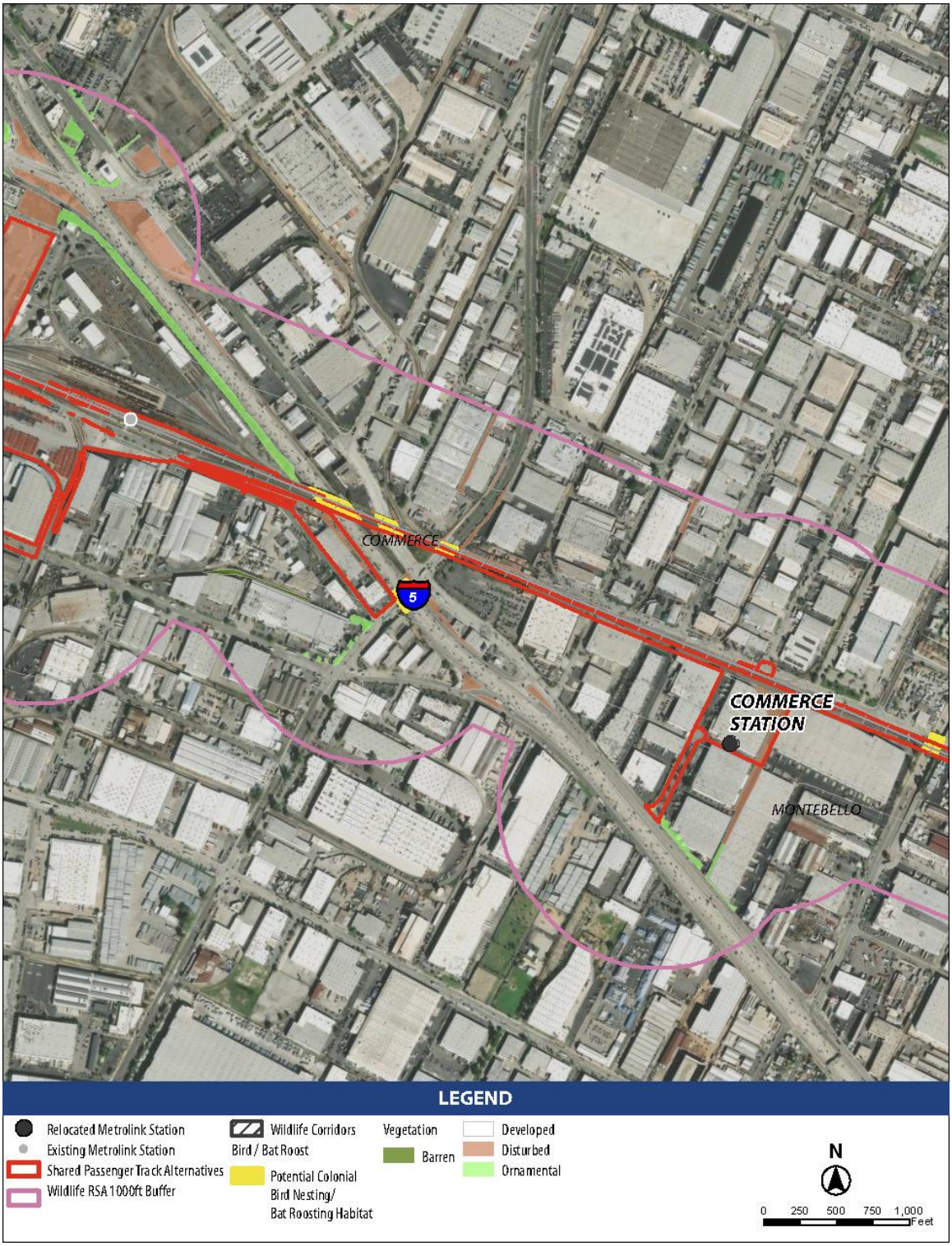
Sources: Authority 2025a; ESRI World Imagery 2024; ESRI World Streetmap 2024

Figure 5-3 Vegetation Communities and Wildlife Resources, Sheet 5 of 24



Sources: Authority 2025a; ESRI World Imagery 2024; ESRI World Streetmap 2024

Figure 5-3 Vegetation Communities and Wildlife Resources, Sheet 6 of 24



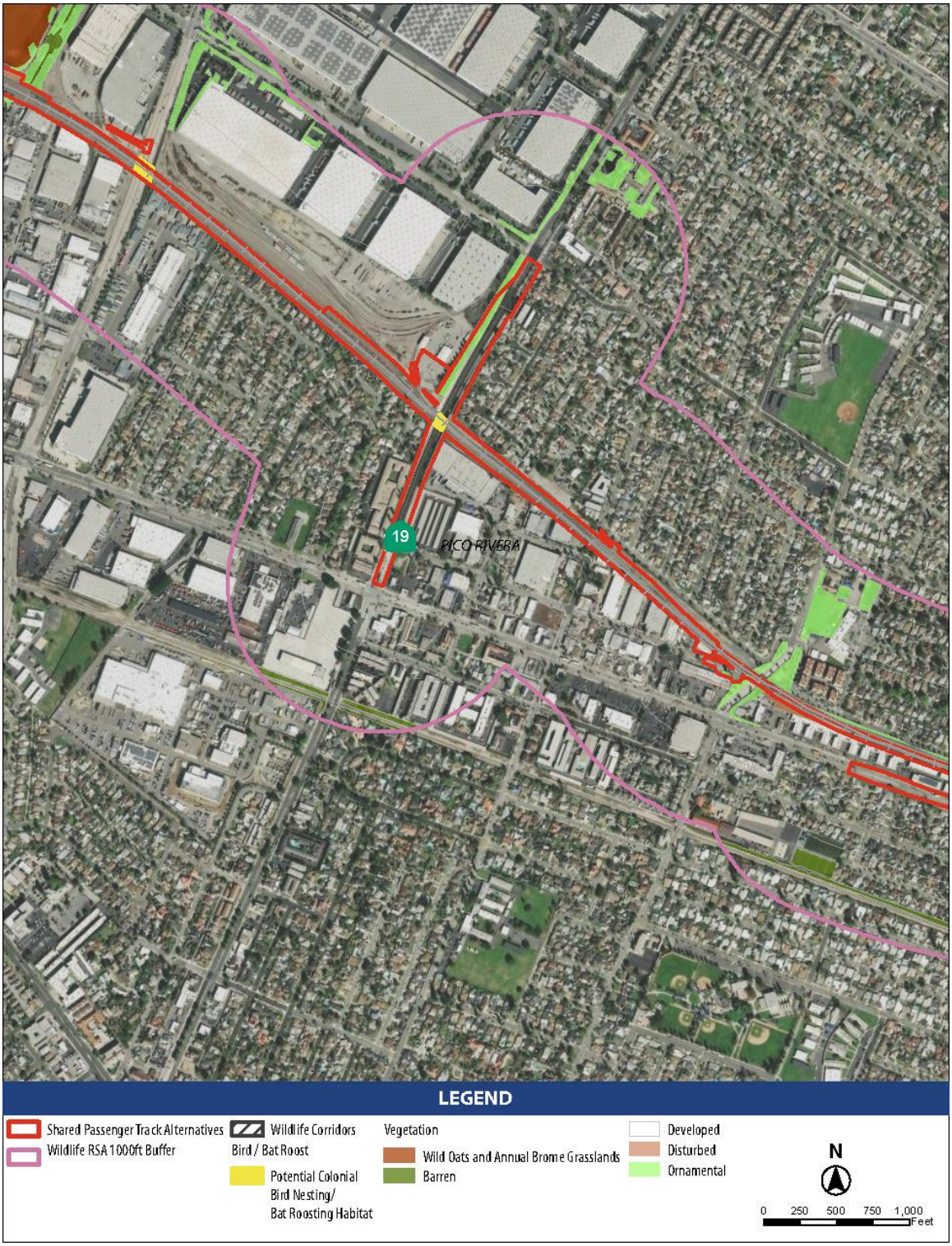
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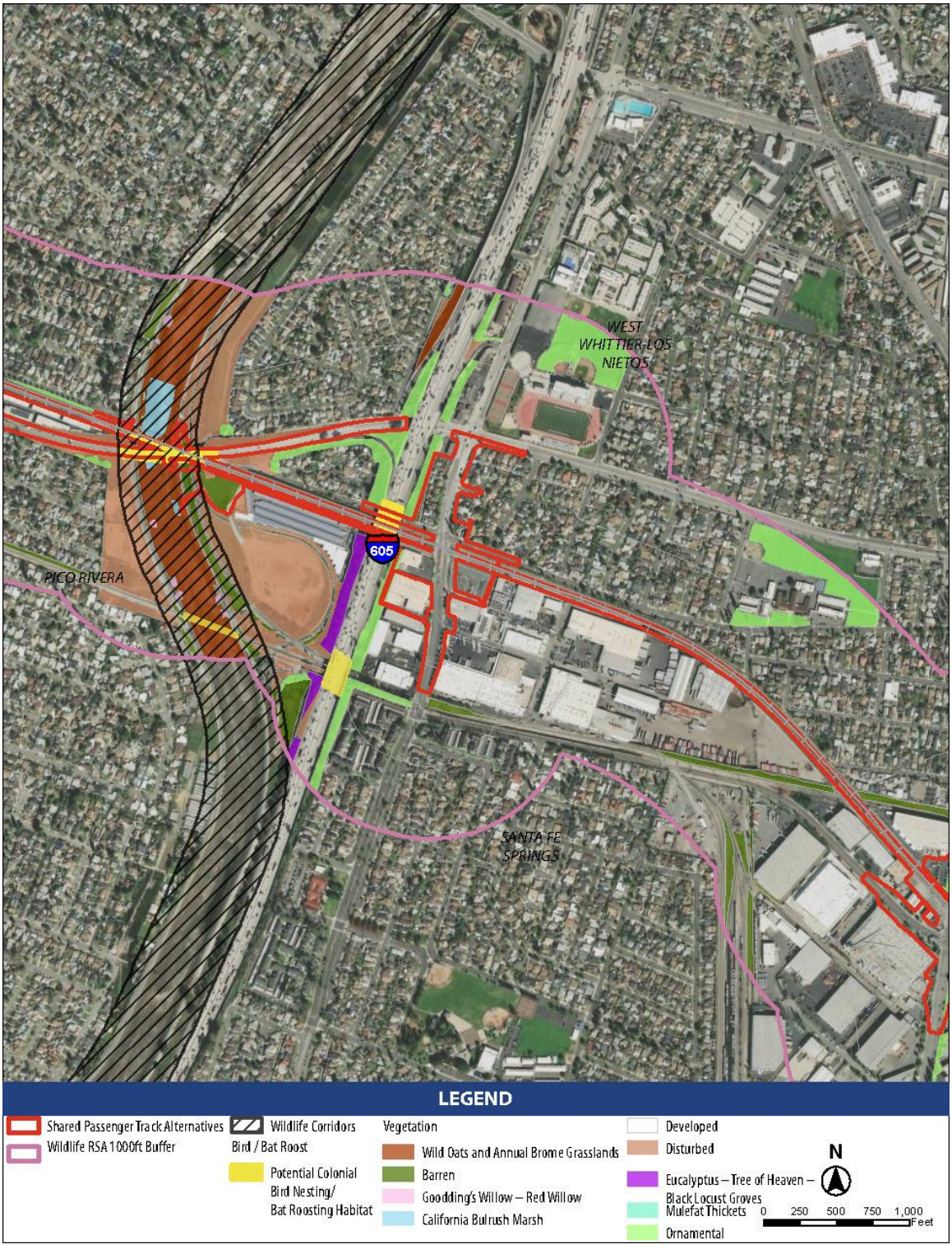
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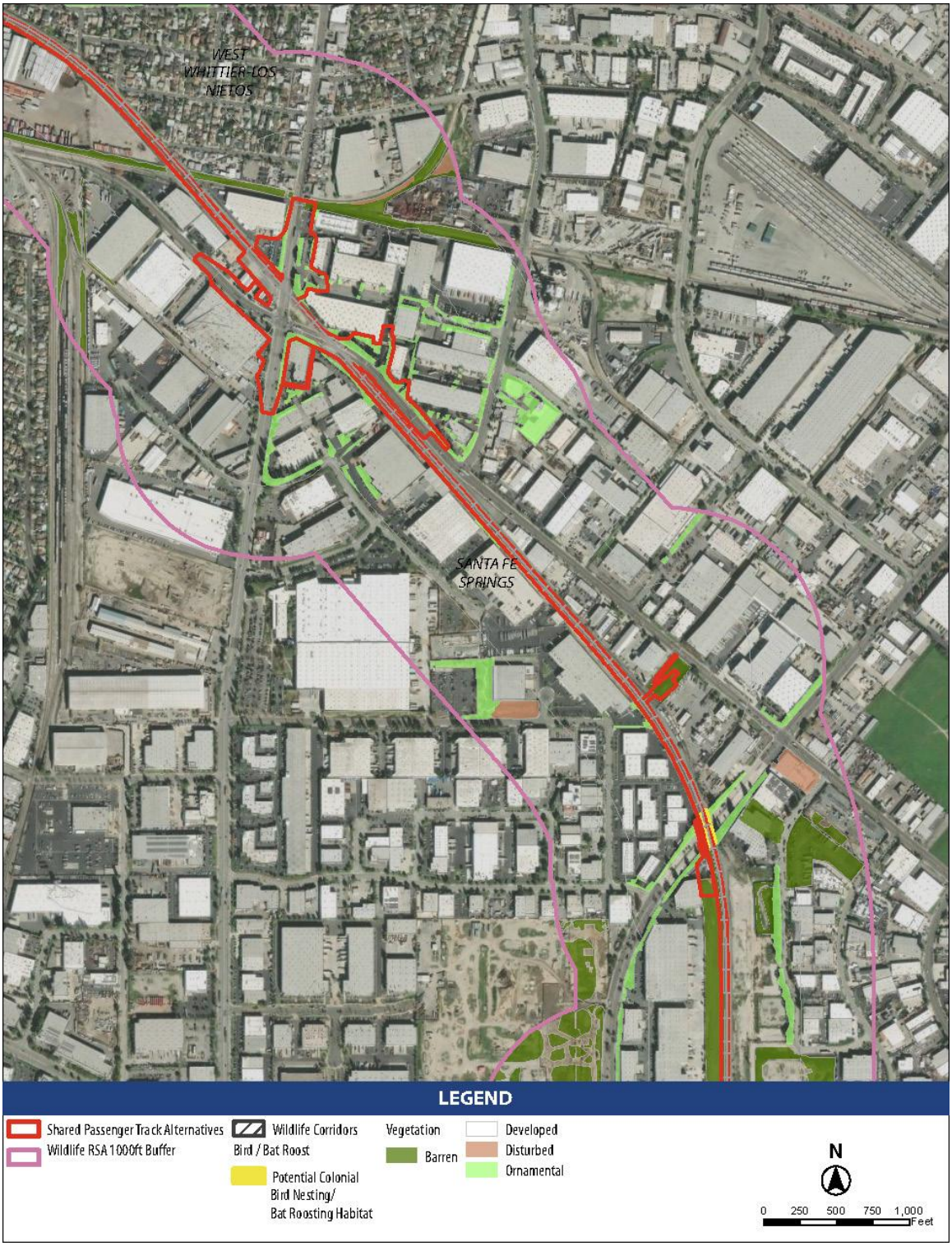
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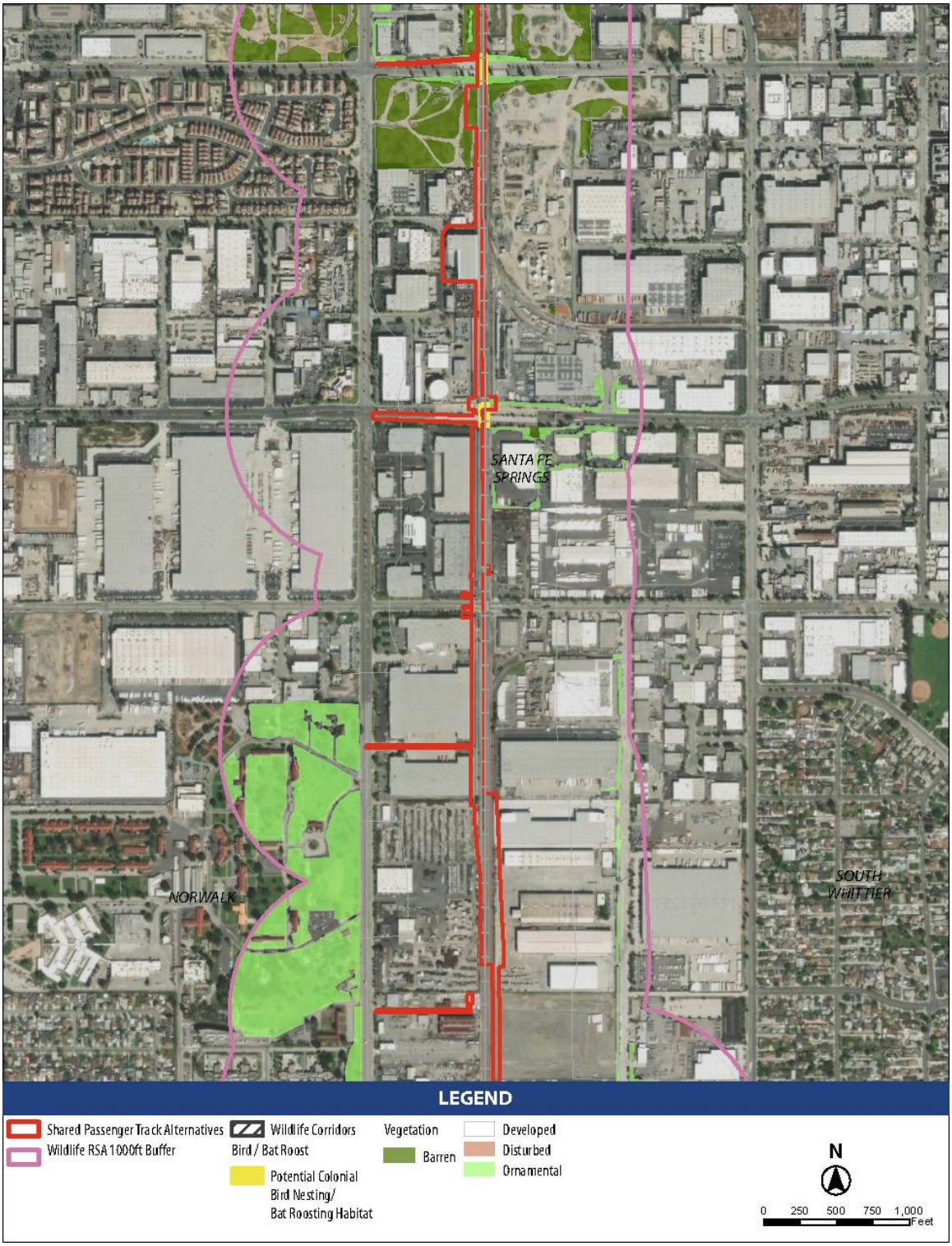
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Figure 5-3 Vegetation Communities and Wildlife Resources, Sheet 10 of 24



Sources: Authority 2025a; ESRI World Imagery 2024; ESRI World Streetmap 2024

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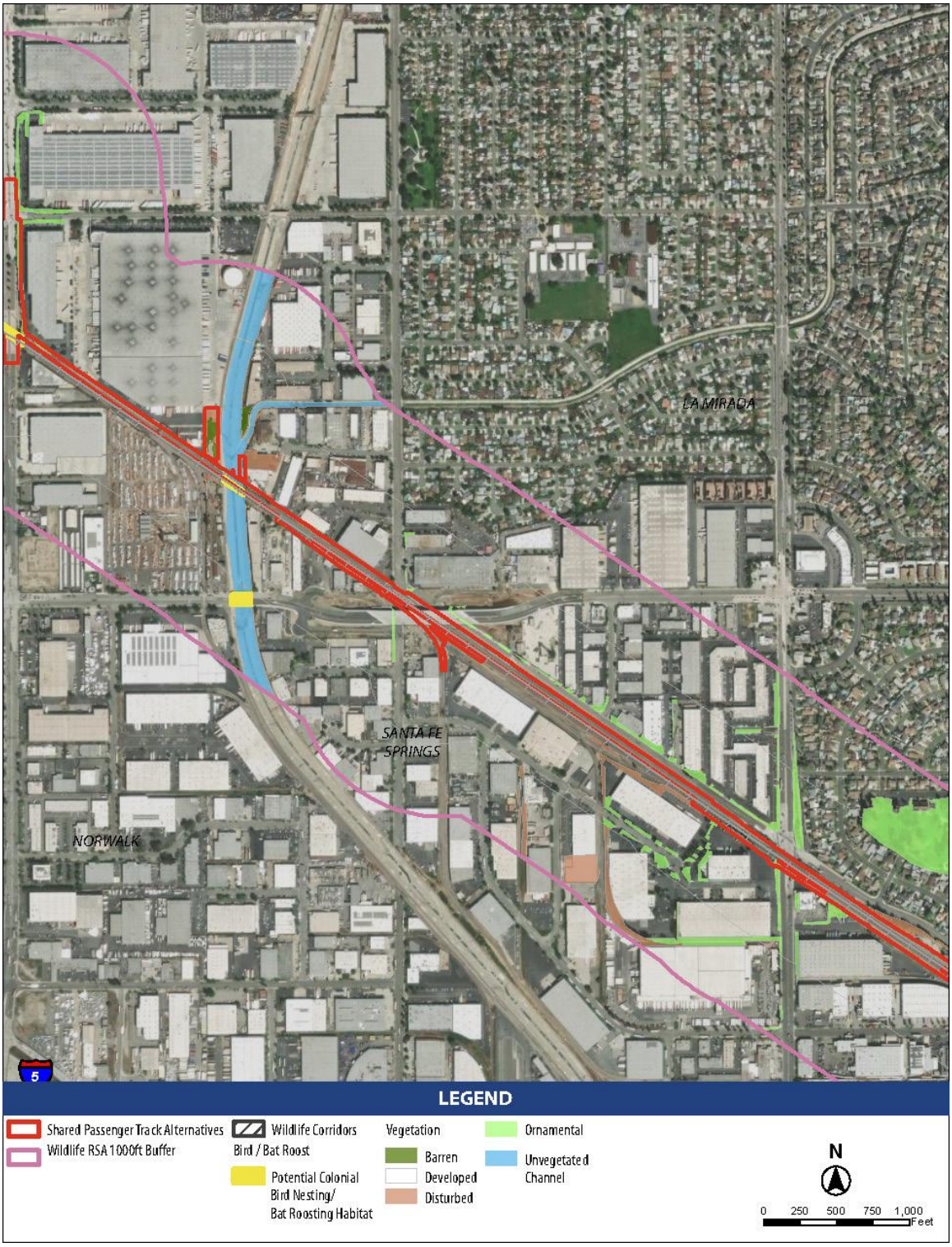
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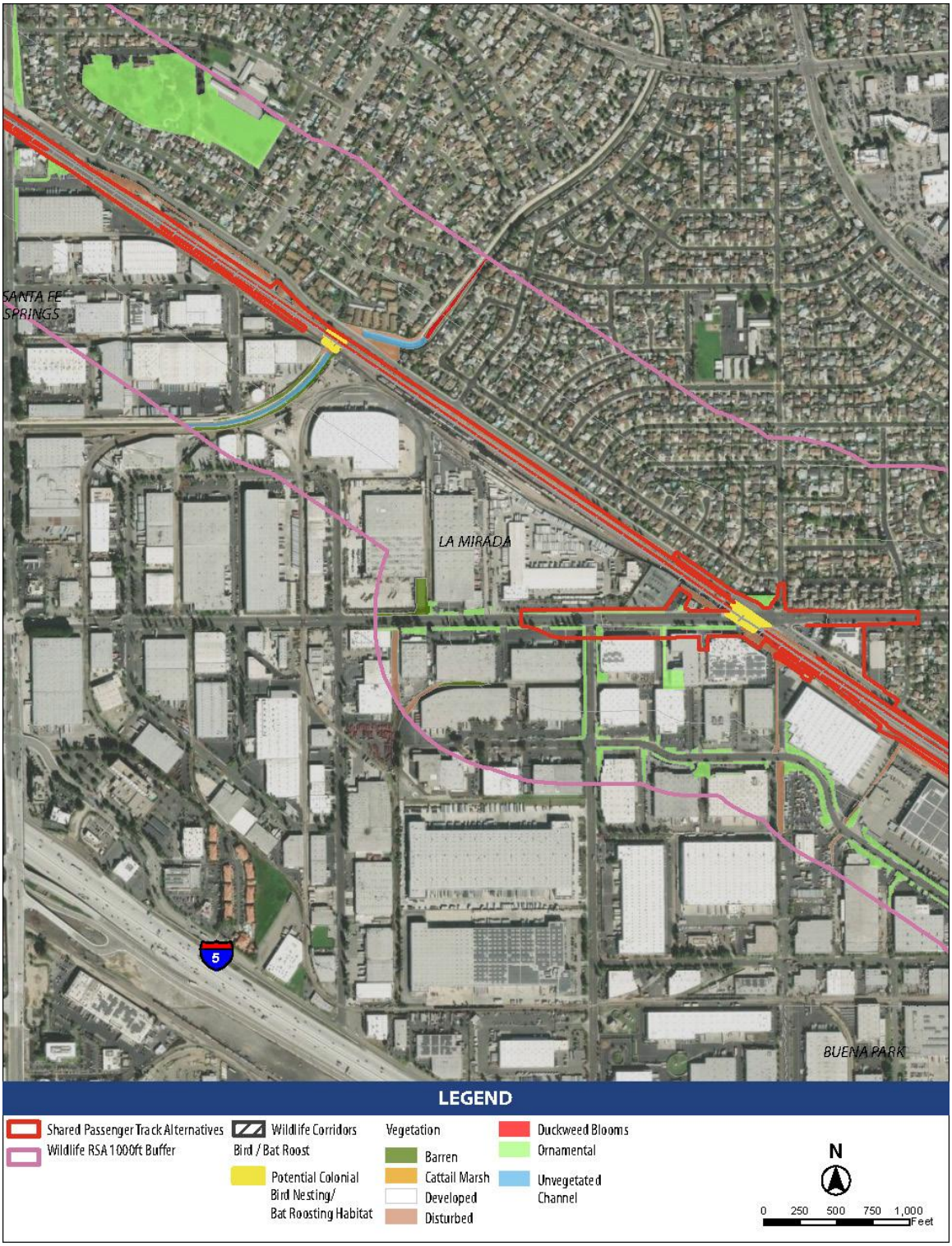
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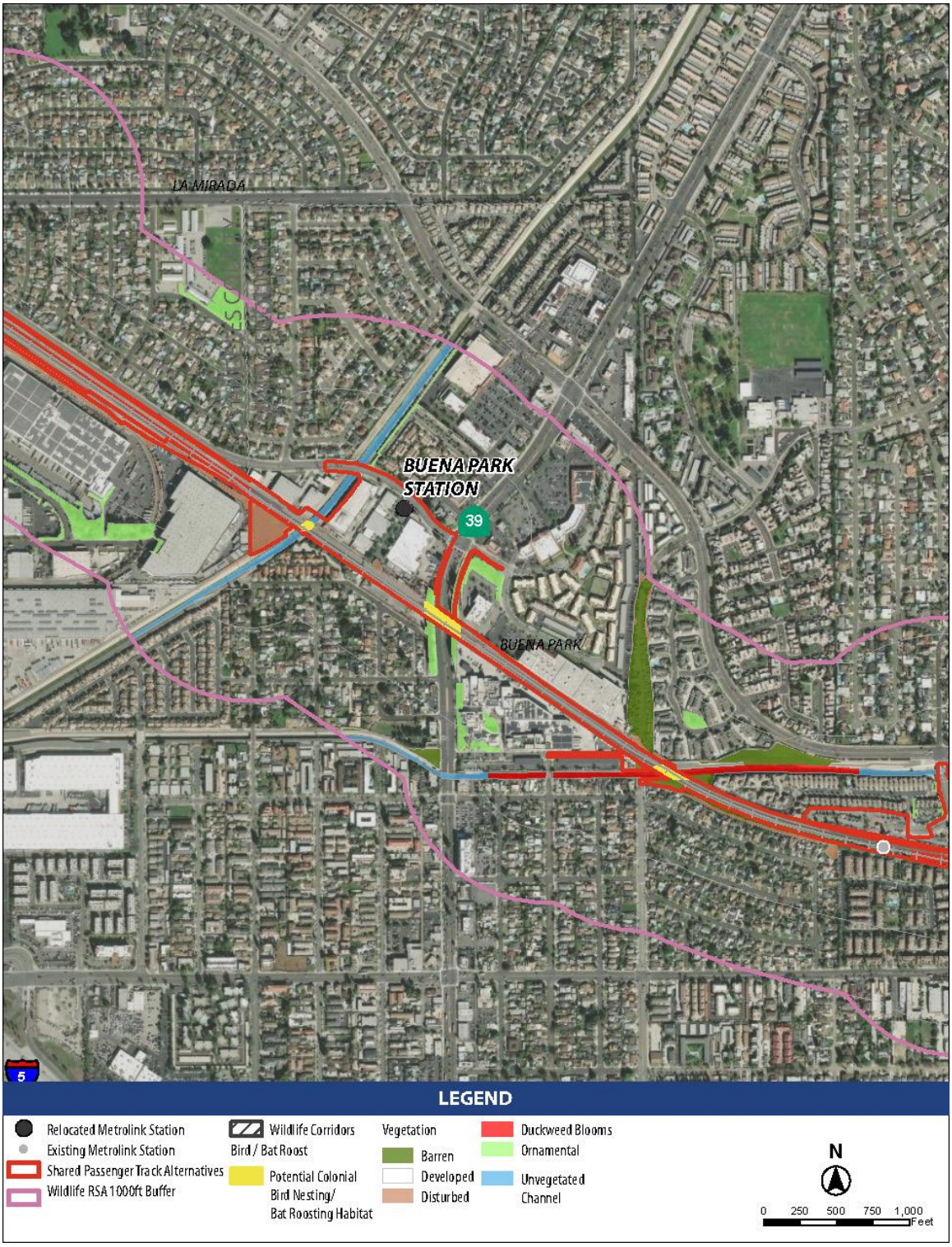
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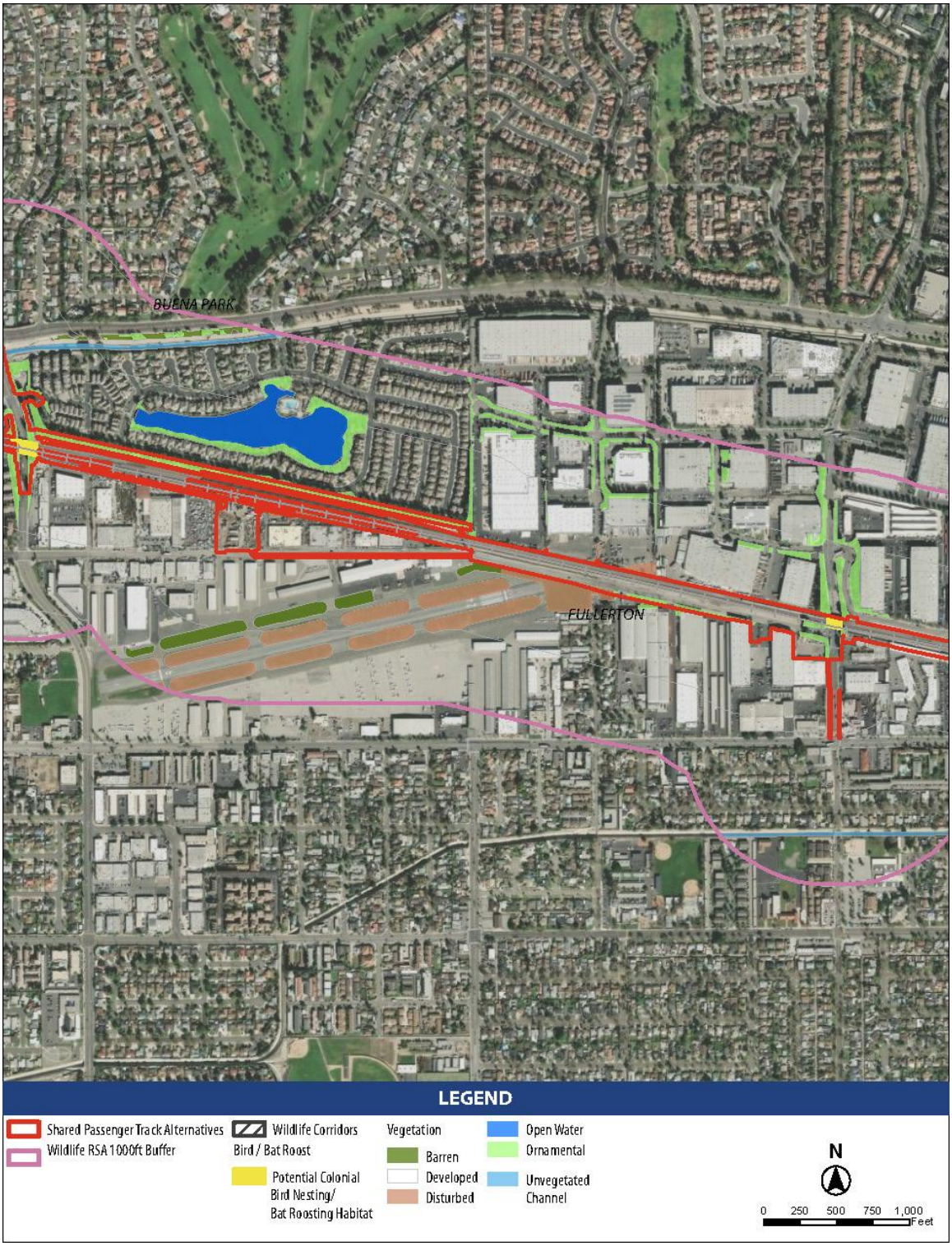
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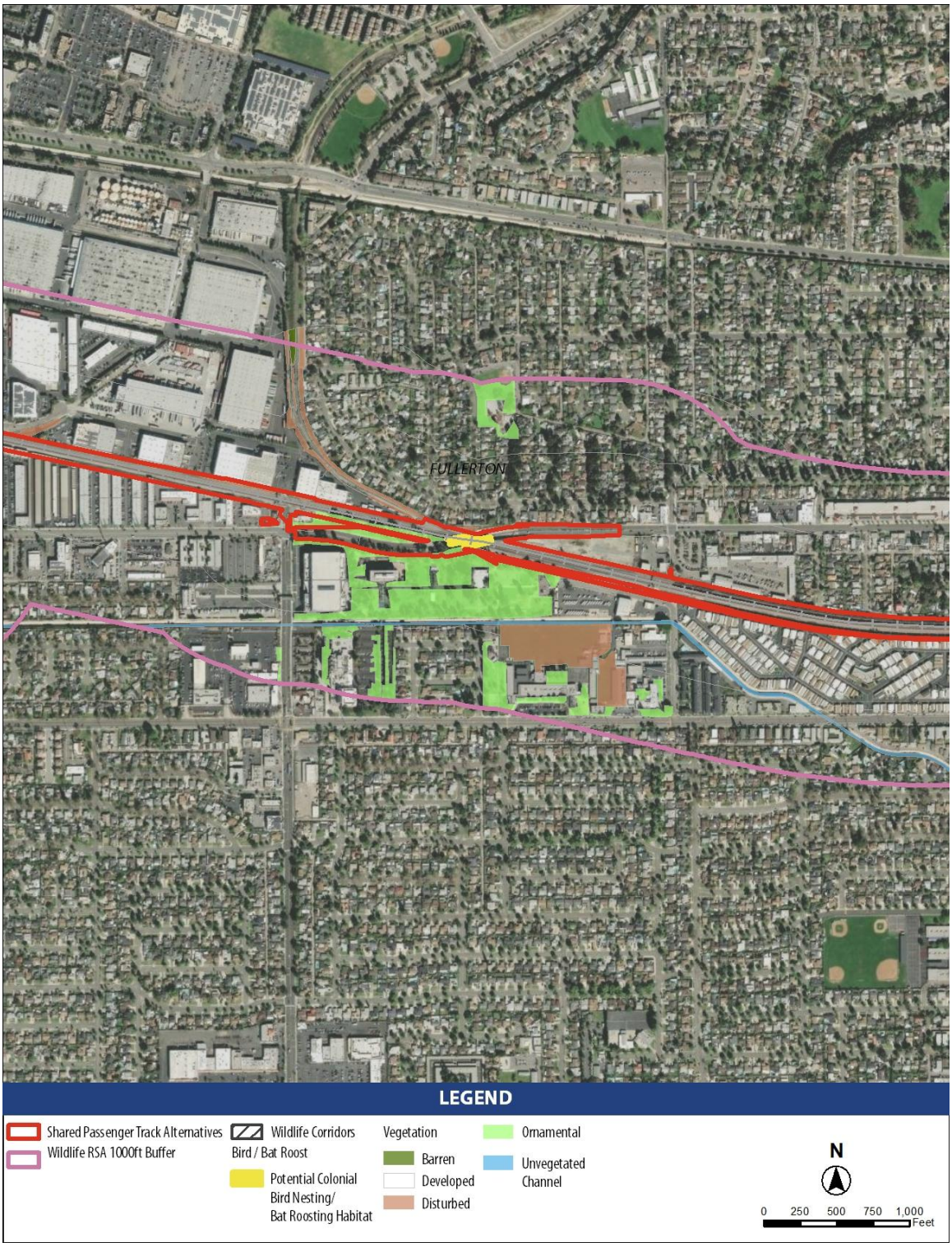
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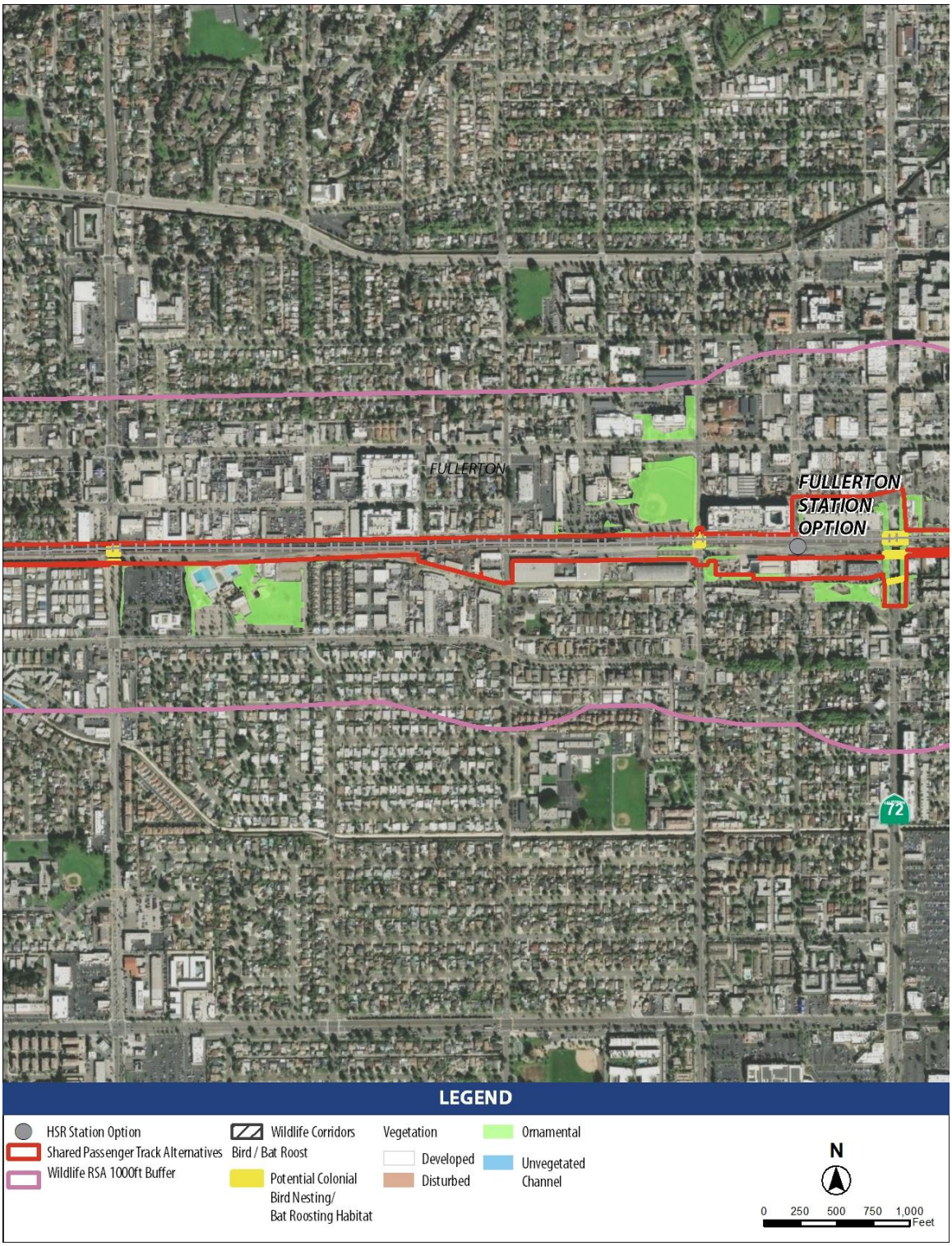
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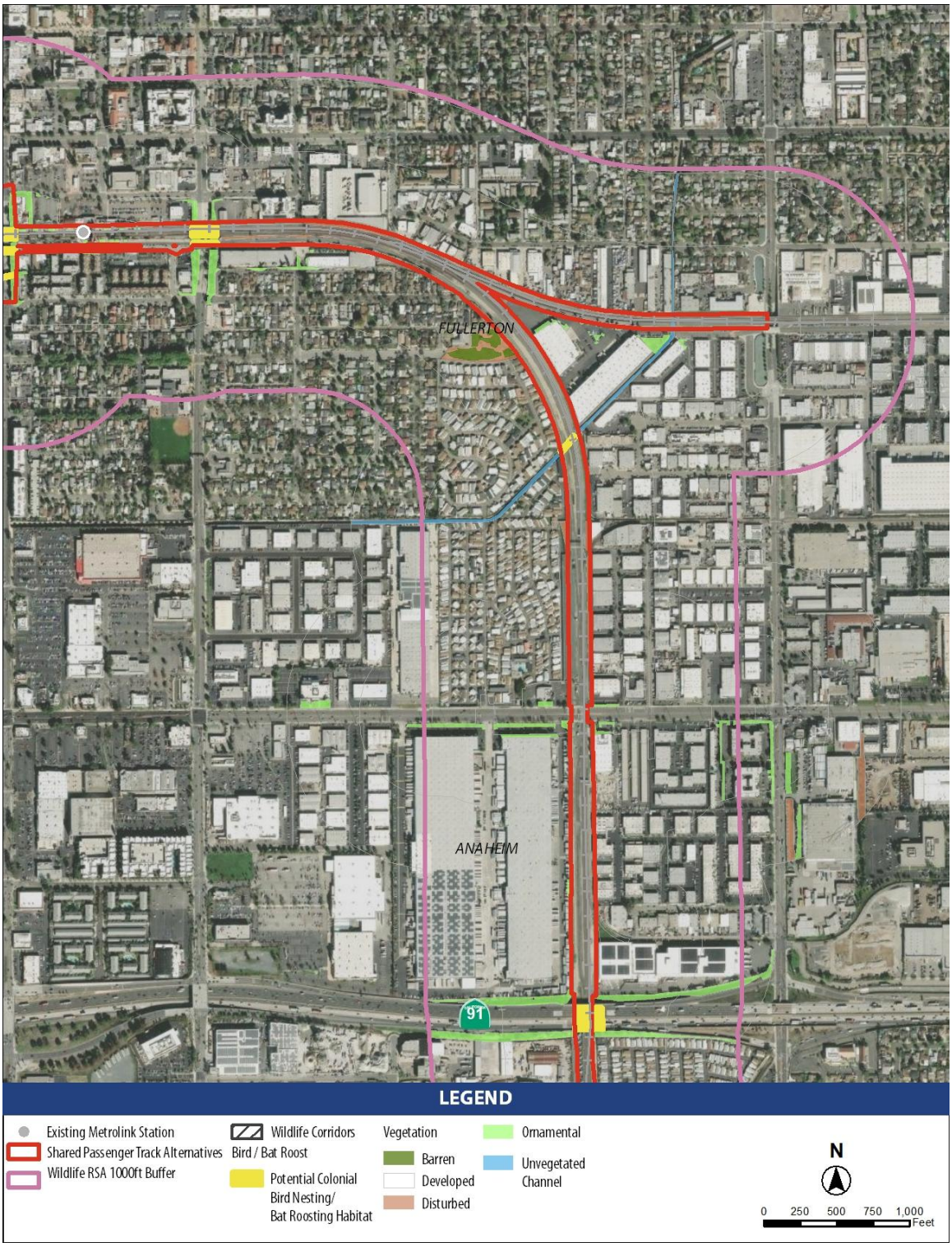
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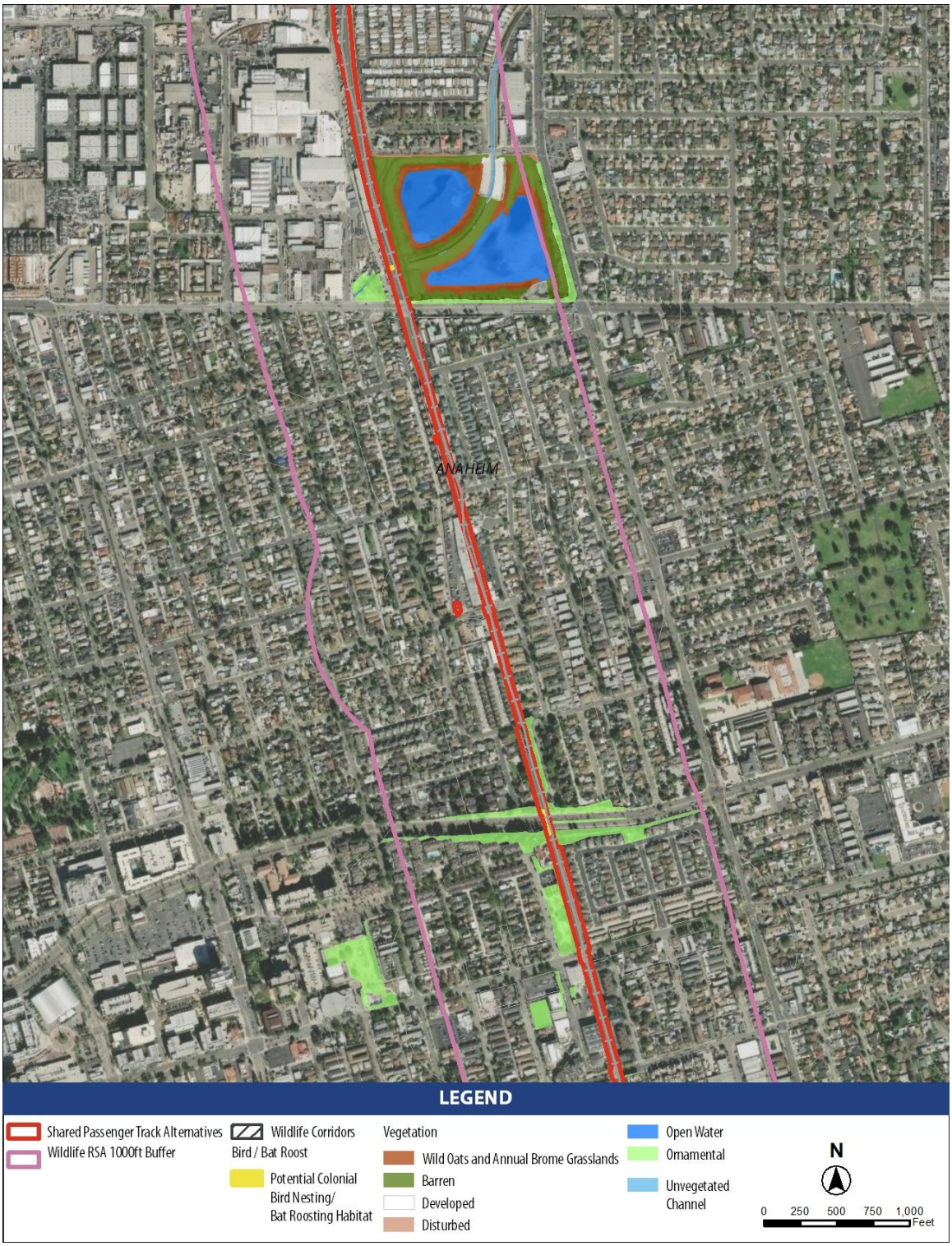
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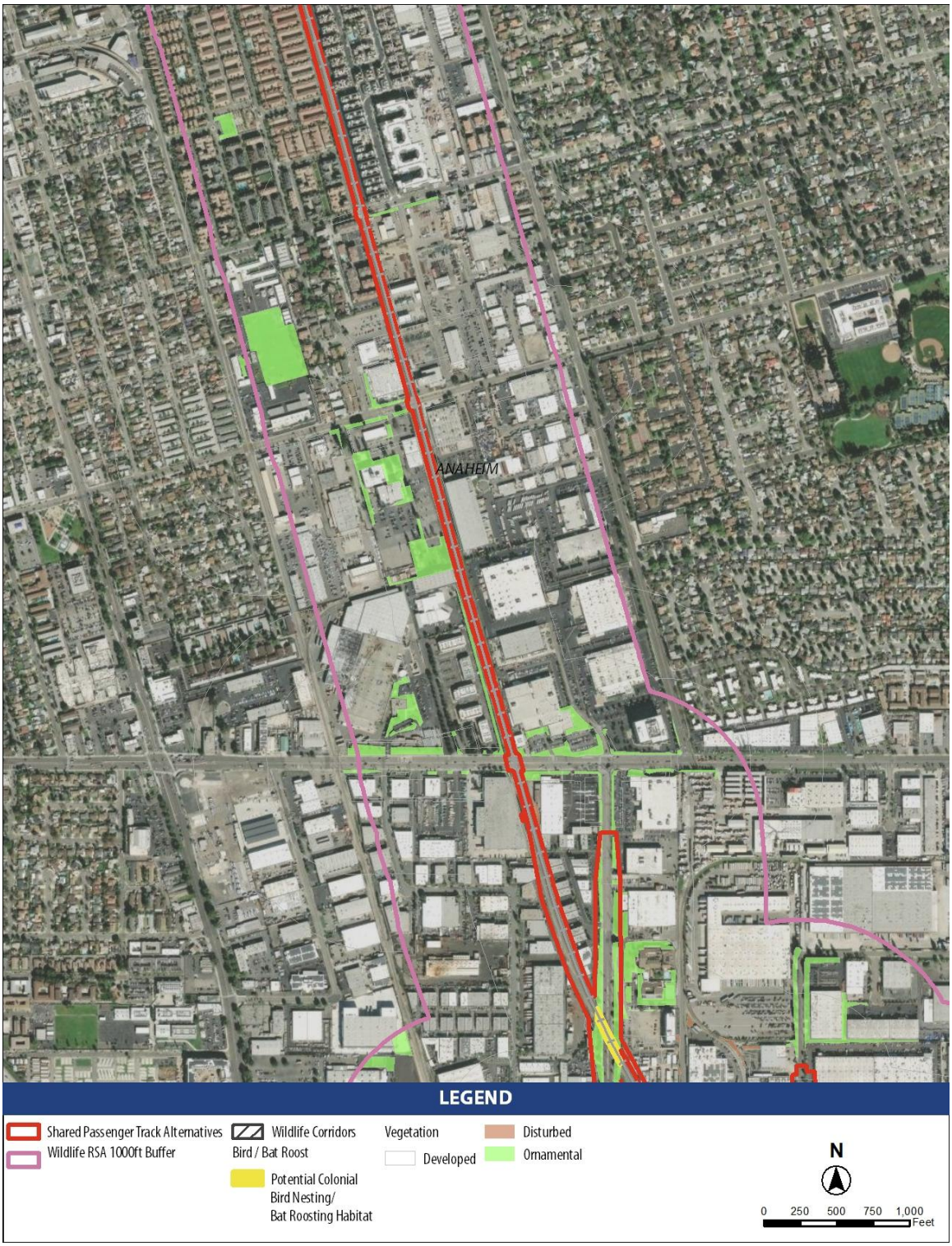
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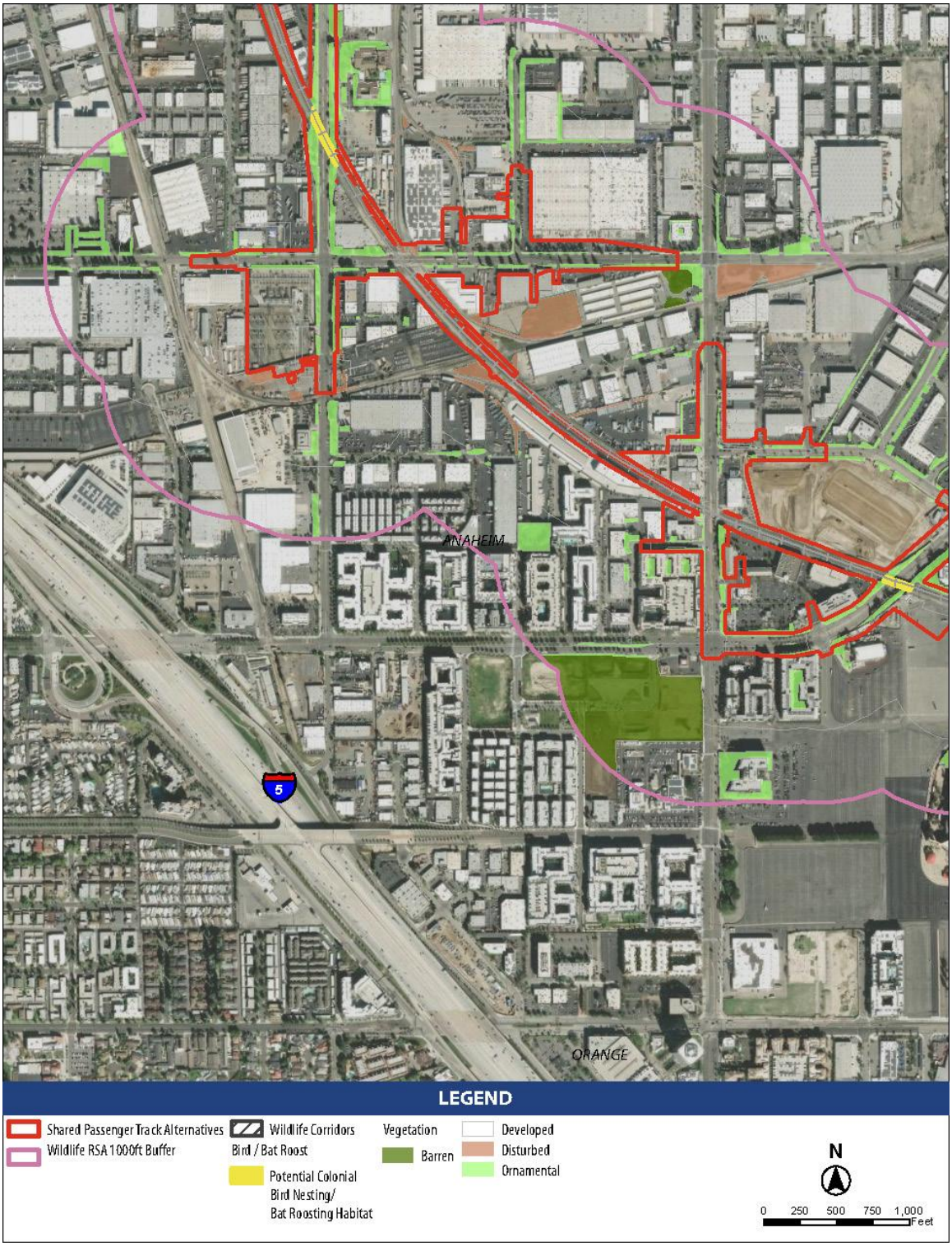
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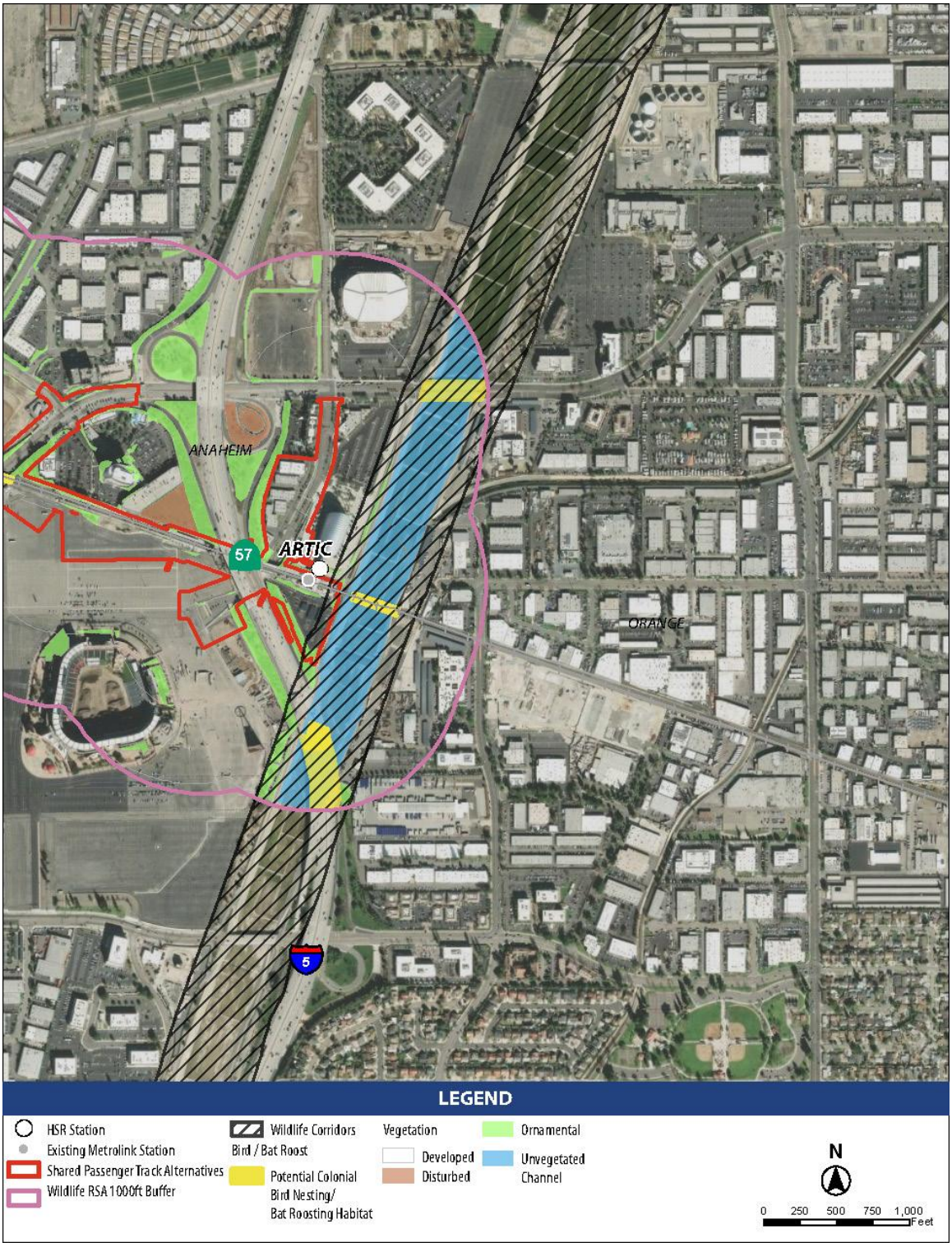
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Sources: Authority 2025a; ESRI World Imagery 2024; ESRI World Streetmap 2024

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Sources: Authority 2025a; ESRI World Imagery 2024; ESRI World Streetmap 2024

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Table 5-5 Vegetation Communities and Land Cover Types in the Wildlife and Botanical Resource Study Areas

Vegetation Classification Alliance[1] or Land Cover Type	Aquatic Resource Classification[2]	Typical Vegetation	California Sensitive Natural Communities Rarity (CDFW 2024b)
Natural and Seminatural Upland Habitats			
Eucalyptus – tree of heaven – black locust woodland seminatural alliance	N/A	*Eucalyptus* spp., tree of heaven, black locust, red brome, Bermuda grass	None
Wild oats and annual brome grasslands seminatural alliance	Basins: Rio Hondo spreading grounds and Raymond Retarding Basins Riverine: San Gabriel River	Brome grasses, wild oats, annual forbs	None
Aquatic Habitats			
Hardstem and California bulrush marsh herbaceous alliance*	Freshwater Emergent Wetland	Hardstem, California bulrush, cattail, American bulrush, saltgrass, rush, common reed	S3S4 – Sensitive
Mulefat thickets shrubland alliance	Riverine[3]/Riparian[4]	Mulefat	S4
Cattail marshes herbaceous alliance	Riverine/Freshwater Emergent Wetland[5]	Cattails, barnyard grass, pale smartweed, bulrush	S5
Goodding's willow – red willow riparian woodland and forest alliance*	Freshwater Forested/Shrub Wetland	Goodding's willow, red willow	S3 – Sensitive
Duckweed blooms and relatives provisional herbaceous alliance	Riverine	Duckweed	S4?
Salt grass flats herbaceous alliance	Riverine	Salt grass	S4
Open water	Basin	Greater than 6.6 feet in depth or beyond the depth of floating rooted plants, concrete lined	N/A
Unvegetated channel	Built Watercourses and Riverine	Unvegetated or concrete lined	N/A
Urban Land Cover Types			
Developed	N/A	Residential, commercial, and industrial buildings; paved/unpaved roads, railroads, and highways	N/A
Barren	N/A	Unvegetated, rock, gravel, soil	N/A

Vegetation Classification Alliance[1] or Land Cover Type	Aquatic Resource Classification[2]	Typical Vegetation	California Sensitive Natural Communities Rarity (CDFW 2024b)
Disturbed/ruderal	N/A	Bare ground with disturbed areas that is dominated by less than 20 percent cover of ruderal nonnative forbs such as Russian thistle	N/A
Ornamental	N/A	Presence of ornamental plantings, generally trees, sometimes shrubs	N/A

Sources: Sawyer et al. 2009; USACE 1987; USFWS 2016a, 2024b; Cowardin et al. 1979
*Defined as a California Sensitive Natural Community (CDFW 2023). Natural Communities with a State Rarity of 1 through 3 are considered Sensitive.
[1] Wherever possible, alliances are taken from Sawyer et al. 2009.
[2] As defined by USACE 1987, USFWS 2016a and 2024b, and Cowardin et al. 1979.
[3] The mulefat thickets habitat identified within the RSA that fall under USACE or SWRCB (CWA Section 404/401) jurisdiction (San Gabriel River) are classified as "riverine." Refer to Section 6.4.2.2, Riverine, for additional detail.
[4] The mulefat thickets habitat identified within the RSA that fall under CDFW Section 1600 jurisdiction (Rio Hondo spreading grounds and San Gabriel River) are classified as "riparian." Refer to Section 6.4.2.1, Basins, and Section 6.4.2.2 for additional detail.
[5] The cattail marsh identified within the RSA is classified as "freshwater emergent marsh" under CDFW Section 1600 jurisdiction and "riverine" under USACE or SWRCB (CWA Section 404/401 and Porter-Cologne Water Quality Control Act) jurisdiction (La Mirada Creek). Refer to Section 6.4.2.1 and Section 6.4.2.2 for additional detail.
CDFW = California Department of Fish and Wildlife; CWA = Clean Water Act; N/A = not applicable; RSA = resource study area; SWRCB = State Water Resources Control Board; USACE = U.S. Army Corps of Engineers; USFWS = U.S. Fish and Wildlife Service

5.2.1 Natural and Seminatural Upland Habitats

5.2.1.1 Eucalyptus – Tree of Heaven – Black Locust Groves Woodland Seminatural Alliance

A Manual of California Vegetation (Sawyer et al. 2009) classifies eucalyptus groves as eucalyptus – tree of heaven – black locust groves woodland seminatural alliances. Relative cover in this membership is greater than 80 percent eucalyptus species (such as *Eucalyptus globulus, E. camaldulensis, E. viminalis,* and *E. citriodora*) or tree of heaven or black locust in the tree layer. This alliance is characterized by dense stands of eucalyptus trees with a sparse to intermittent shrub layer and a sparse to intermittent herbaceous layer.

Within the Wildlife and Botanical RSA, eucalyptus woodlands were initially observed in uplands on the east side of the San Gabriel River; however, during a site visit conducted in April 2017, this grove had been cleared, leaving only remnant patches of eucalyptus in the area. Passerines may nest in eucalyptus and the leafy areas provide roost sites for bats that roost in leafy materials.

For the purposes of this report, there is no corresponding jurisdictional aquatic resource category for this habitat alliance, because the eucalyptus woodlands are an upland habitat type and occur outside of USACE, SWRCB, and CDFW jurisdiction.

5.2.1.2 Wild Oats and Annual Brome Grasslands Seminatural Alliance

Wild oats and annual brome grassland is a seminatural alliance in *A Manual of California Vegetation* (Sawyer et al. 2009) with stiff brome (*Brachypodium distachyon*), ripgut brome (*Bromus diandrus*), and soft chess (*Bromus hordeaceus*) as dominant or co-dominant with nonnative species in the herbaceous layer. Emergent trees and shrubs may be present at low cover, and cover is intermittent to continuous. Wild oats and annual brome grassland is an open grassland composed primarily of annual plant species. Wild oats and annual brome grasslands can have seasonal presence of native plants, many with limited ranges, but the nonnative

grasses attain strong dominance in years of high precipitation (Bartolome et al. 2007), and in those years, native species are often overlooked. Wild oats and annual brome grasslands provide value as wildlife habitat for many species, including nesting habitat for ground-nesting birds such as Burrowing Owl (*Athene cunicularia hypugaea*), a CDFW species of special concern and USFWS bird of conservation concern (USFWS 2021b); and horned lark (*Eremophila alpestris*).

In wild oats and annual brome grasslands, native species adapted to disturbance were observed including fiddleneck (*Amsinckia menziesii*), telegraph weed (*Heterotheca grandiflora*), Jimson weed (*Datura stramonium*), and common horseweed (*Erigeron canadensis*). Nonnative species observed included Bermuda grass (*Cynodon dactylon*), ripgut brome, tocalote (*Centaurea melitensis*), Italian rye grass (*Festuca perennis*), soft chess, wild oat (*Avena fatua*), foxtail brome (*Bromus madritensis* ssp. *rubens*), Mediterranean grass (*Schismus barbatus*), field bindweed (*Convolvulus arvensis*), Lamb's quarters (*Chenopodium album*), tree tobacco (*Nicotiana glauca*), annual meadow grass (*Poa annua*), and filaree (*Erodium cicutarium*). All or most of the plant species observed in the wild oats and annual brome grasslands are adapted to disturbance.

Animal species observed during field surveys in this alliance included Botta's pocket gopher (*Thomomys bottae*), Turkey Vulture (*Cathartes aura*), Northern Mockingbird (*Mimus polyglottos*), California ground squirrel (*Otospermophilus beecheyi*), House Finch (*Haemorhous mexicanus*), American Crow (*Corvus brachyrhynchos*), Eurasian Collared Dove (*Streptopelia decaocto*), and European Starling (*Sturnus vulgaris*).

Wild oats and annual brome grassland in the Wildlife and Botanical RSAs was generally observed either in watercourses (described in Section 5.2.2, Aquatic Habitats) or in areas where natural vegetation had previously been removed by human activities, such as abandoned fields.

The basins in the Rio Hondo spreading grounds support wild oats and annual brome grassland. Plant species observed included ripgut brome, Bermuda grass, dense-flowered sprangletop (*Leptochloa fusca*), willow smartweed (*Persicaria lapathifolium*), rough cocklebur (*Xanthium strumarium*), common horseweed, Russian thistle (*Salsola tragus*), and annual sunflower (*Helianthus annuus*).

The earthen-bottom San Gabriel River supports wild oats and annual brome grassland; plant species observed include ripgut brome, Bermuda grass, annual meadow grass, barnyard grass (*Echinochloa crus-galli*), curly dock (*Rumex crispus*), English plantain (*Plantago lanceolata*), tocalote, castor bean (*Ricinus communis*), and London rocket (*Sisymbrium irio*).

The Raymond Retarding Basins support wild oats and annual brome grassland at the edges of the open water; the upland vegetation observed included common horseweed, Bermuda grass, Russian thistle, annual sunflower, dense-flowered sprangletop, willow smartweed, and rough cocklebur. The Raymond Retarding Basins are regularly maintained to remove vegetation, so vegetation observed is typically fast-growing species adapted to disturbance.

For the purposes of this report, this habitat alliance is both within and outside of USACE, SWRCB, and CDFW jurisdiction. The wild oats and annual brome grasslands found in the Rio Hondo spreading grounds, Raymond Retarding Basins, and San Gabriel River are consistent with the "basin" and "riverine" jurisdictional aquatic resource categories. Refer to Section 6.4.2.1, Basins, and Section 6.4.2.2, Riverine, for additional detail.

5.2.2 Aquatic Habitats

The aquatic habitat types described below are based on Sawyer et al. (2009) whenever possible. Defined habitat types are not available for open water and unvegetated channels. As discussed above, corresponding jurisdictional aquatic resources categories are provided at the end of each subsection where applicable. A comparison of these different classification systems is provided in Table 5-5.

5.2.2.1 Hardstem and California Bulrush Marsh Herbaceous Alliance

The hardstem and California bulrush marsh herbaceous alliance classification is based on *A Manual of California Vegetation* (Sawyer et al. 2009). California bulrush is dominant or co-

dominant in the herbaceous layer for this alliance. Other species often present in this alliance may include dogbane (*Apocynum cannabinum*), cosmopolitan bulrush (*Bolboschoenus maritimus*), water hyacinth (*Eichhornia crassipes*), western goldentop (*Euthamia occidentalis*), floating primrose-willow (*Ludwigia peploides*), dotted smartweed (*Persicaria punctate*), common reed (*Phragmites australis*), bulrush (*Schoenoplectus* spp.), and cattail. Emergent shrubs may be present at low cover, including buttonbush (*Cephalanthus occidentalis*), California wild rose (*Rosa californica*), or willow (*Salix* spp.).

Hardstem and California bulrush marsh is a widespread emergent marsh type and is found in brackish to freshwater marshes and along the shores and channels of river mouth estuaries. The soils are poorly aerated and have a high organic content. Hardstem and California bulrush marsh provides habitat for wildlife because the seeds and stems of California bulrush and related species are important for both food and cover.

Within the Wildlife and Botanical RSA, hardstem and California bulrush marsh is sparse as a result of urbanization and routine flood control activities. This alliance is only found only in the San Gabriel River. At this location, hardstem and California bulrush marsh is characterized by the presence of California bulrushes, willow smartweed, barnyard grass, curly dock, English plantain, African umbrella sedge (*Cyperus involucratus*), and Bermuda grass. With a California Sensitive Natural Communities state rank of S3S4, this alliance is a California Sensitive Natural Community (CDFW 2023).

For the purposes of this report, this habitat alliance is consistent with the “freshwater emergent wetland” jurisdictional aquatic resource category. Refer to Section 6.4.1.1 for additional detail.

5.2.2.2 Mulefat Thickets Shrubland Alliance

The mulefat thicket shrubland alliance is based on *A Manual of California Vegetation* (Sawyer et al. 2009). Mulefat is dominant or co-dominant in the shrub canopy. Other shrub species such as Emory’s baccharis (*Baccharis emoryi*), laurel sumac (*Malosma laurina*), California sagebrush (*Artemisia californica*), tree tobacco, arrowweed (*Pluchea sericea*), blackberry (*Rubus* spp.), elderberry (*Sambucus nigra*), or tamarisk (*Tamarix* spp.) may be present. Emergent trees may be present at low cover, including ghost pine (*Pinus sabiniana*), western sycamore (*Platanus racemosa*), cottonwood (*Populus fremontii*), oaks (*Quercus* spp.), or willows. The herbaceous layer is sparse.

When mulefat forms dense thickets, either alone or in combination with other riparian species such as willow (*Salix* sp.), cottonwoods (*Populus fremontii*), and poison oak (*Toxicodendron diversilobum*), these riparian areas can provide nesting habitat for riparian bird species, including federally and state-listed as threatened, endangered, or candidate species such as Least Bell’s Vireo (*Vireo bellii pusillus*) and Southwestern Willow Flycatcher (*Empidonax traillii extimus*) and other special-status wildlife such as CDFW species of special concern and fully protected species (CDFW 2025).

As a result of urbanization and routine flood control activities, only small, thin stands of mulefat thickets remain within the Wildlife and Botanical RSAs. This alliance is only found in the Rio Hondo spreading grounds and the San Gabriel River. The earthen-bottom San Gabriel River supports scattered, isolated stands of mulefat along the toe of the western bank, and the Rio Hondo spreading grounds supports a single isolated patch of mulefat on the slope of the southwestern basin. This habitat type is adapted to disturbance (adapted to seasonal flooding with larger flood events at 7- to 10-year intervals) with high and episodic recruitment. With a California Sensitive Natural Communities state rank of S4, this alliance is not a California Sensitive Natural Community (CDFW 2024b).

For the purposes of this report, this habitat alliance is consistent with the “riverine” and “basin” jurisdictional aquatic resource categories. Refer to Section 6.4.2.1 and Section 6.4.2.2 for additional detail.

5.2.2.3 Cattail Marshes Herbaceous Alliance

Narrowleaf cattail (*Typha angustifolia*), southern cattail (*Typha domingensis*), or common cattail (*Typha latifolia*) are dominant or co-dominant in the herbaceous layer for cattail marshes herbaceous alliance, which is based on *A Manual of California Vegetation* (Sawyer et al. 2009). Other species often present in this alliance include creeping bentgrass (*Agrostis stolonifera*), tall flatsedge (*Cyperus eragrostis*), saltgrass, barnyard grass, spikerush (*Eleocharis* spp.), rushes (*Juncus* spp.), duckweed, peppergrass (*Lepidium latifolium*), water parsley (*Oenanthe sarmentosa*), willow smartweed, common reed (*Phragmites australis*), California bulrush, hybrid cattail (*Typha* ×*glauca*), and rough cocklebur. Emergent trees, including willows, may be present at low cover.

The alliance is found in semipermanently flooded freshwater or brackish marshes. Soils are clayey or silty. Cattails provide valuable habitat and are a food source for wildlife. They are also useful in removing pollutants. Stands of cattails can invade canals, ditches, ponds, and reservoirs and may be removed by mowing, mechanical removal, or burning (DiTomaso and Healy 2007). When cattail marsh habitat is thick and expansive, this habitat type can provide nesting and foraging habitat for riparian bird species such as Least Terns (*Sternula antillarum browni*), Savannah Sparrows (*Passerculus sandwichensis*), Western Snowy Plovers (*Charadrius alexandrines nivosus*), Least Bitterns (*Ixobrychus exilis*), Sharp-Shinned Hawks (*Accipiter striatus*), Northern Harrier (*Circus cyaneus*), and Black Skimmers (*Rynchops niger*).

The cattail marshes herbaceous alliance observed within the Wildlife RSA was severely limited. This alliance is only present in La Mirada Creek and an unnamed drainage ditch near the Fullerton Airport. Species observed included southern cattail, umbrella plant (*Cyperus involucratus*), willow smartweed, and barnyard grass. With a California Sensitive Natural Communities state rank of S5, this alliance is not a California Sensitive Natural Community (CDFW 2024b).

For the purposes of this report, the cattail marshes herbaceous alliance falls within the “riverine” aquatic resource category for purposes of USACE or SWRCB jurisdiction, and the “freshwater emergent wetland” for purposes of CDFW jurisdiction. Refer to Section 6.4.1.1 and Section 6.4.2.2 for additional detail.

5.2.2.4 Goodding’s Willow – Red Willow Riparian Woodland and Forest Alliance

Goodding’s willow is dominant or co-dominant in the tree canopy for the Goodding’s willow – red willow riparian woodland and forest alliance, which is based on *A Manual of California Vegetation* (Sawyer et al. 2009). Other species present in this alliance may include white alder (*Alnus rhombifolia*), cottonwood, red willow, arroyo willow (*Salix lasiolepis*), Pacific willow (*Salix lasiandra* ssp. *Lasiandra*), elderberry, and California fan palm (*Washingtonia filifera*). Shrubs include mulefat or dogwood (*Cornus sericea*).

Goodding’s willow is a fast-growing, native shrub or tree that often provides cover for wildlife. Goodding’s willows are moderately sized and reach heights of 20 to 60 feet. Goodding’s willow – red willow thickets are found in riparian areas that are typically seasonally inundated, with a shallow water table and fine-grained alluvial soils. Goodding’s willows bloom and fruit in early spring, and seeds germinate best on fine-grained, moist, bare soil, so fire and flood create favorable seedbed conditions. Seeds remain viable for only a few days after dispersal, and seedlings compete poorly with grasses. The timing of seed dispersal and spring flood patterns determine seedling success. Established plants tolerate seasonal inundation, and plants sprout from a root crown in lighted conditions (Reed 1993).

The Goodding’s willow – red willow riparian woodland and forest alliance is severely limited in the Wildlife RSA. In the San Gabriel River, one small stand of Goodding’s willow – red willow riparian woodland and forest alliance was identified within the Botanical RSA, specifically in the San Gabriel River associated with feature 12. One of these stands falls within the Aquatic RSA. An additional six small stands were identified within the Wildlife RSA in the San Gabriel River,

outside of the Aquatic and Botanical RSAs. Vegetation observed associated with the Goodding's willow – red willow thickets in the San Gabriel River included Goodding's willow with an understory of Bermuda grass, saltgrass, and California bulrush. It is likely that flood control activities actively remove these willows and prevent the spread of this habitat.

In the Rio Hondo spreading grounds, two small Goodding's willow – red willow thickets were identified within the Wildlife RSA, outside of the Aquatic and Botanical RSAs. Vegetation observed associated with these Goodding's willow – red willow thickets in the Rio Hondo spreading grounds included Goodding's willow with an understory of Bermuda grass and other nonnative grasses. Flood control activities can actively remove riparian vegetation, preventing the establishment and spread of riparian vegetation; therefore, vegetation in these spreading grounds is anticipated to also be limited.

When Goodding's and red willows forms dense thickets, either alone or in combination with other riparian species including other willow species and species such as mulefat, cottonwoods, and poison oak, these riparian areas can provide nesting habitat for many riparian bird species. However, no dense willow thickets were observed within the Aquatic, Botanical, and Wildlife RSAs. With a California Sensitive Natural Communities state rank of S3, this alliance is a California Sensitive Natural Community (CDFW 2023).

For the purposes of this report, this habitat alliance is consistent with the "freshwater forested/shrub wetland" jurisdictional aquatic resource category. Refer to Section 6.4.1.2, Freshwater Forested/Shrub Wetland, for additional detail.

5.2.2.5 Duckweed Blooms and Relatives Provisional Herbaceous Alliance

Duckweed blooms have duckweed as the dominant herbs (including *Lemna* spp., *Spirodela* spp., *Wolffia* spp., or *Wolffiella* spp.) on the water surface or in the herbaceous layer with water fern (*Azolla filiculoides*), Mexican mosquito fern (*Azolla mexicana*), and Brazilian waterweed (*Egeria densa*) often present. Emergent plants may be present at low cover, including parrot's feather (*Myriophyllum aquaticum*) or sedges (*Scirpus* spp.). This alliance is based on *A Manual of California Vegetation* (Sawyer et al. 2009).

Duckweed blooms are found in freshwater habitats with still water or on ground surfaces where water levels have dropped. All species are important food sources for wildlife, especially waterfowl (DiTomaso and Healy 2007). This alliance is not a California Sensitive Natural Community (CDFW 2023).

Within the Wildlife and Botanical RSAs, duckweed blooms were observed in portions of the Los Angeles River, Brea Creek, and La Mirada Creek. The blooms observed in the Los Angeles River and Brea Creek are within the Aquatic RSA, whereas the blooms observed in La Mirada Creek fall outside of the Aquatic RSA.

The two duckweed blooms within the Aquatic RSA did not meet the three-parameter wetland definition for USACE and SWRCB. Accordingly, this habitat alliance is consistent with the "riverine" jurisdictional aquatic resource category. Refer to Section 6.4.2.2 for additional detail.

5.2.2.6 Salt Grass Flats Herbaceous Alliance

In salt grass flats herbaceous alliance, salt grass is dominant or co-dominant in the herbaceous layer. This alliance is based on *A Manual of California Vegetation* (Sawyer et al. 2009). Other plant species observed may include yerba mansa (*Anemopsis californica*), saltwort (*Batis maritima*), ripgut brome, buttonweed (*Cotula coronopifolia*), spikerush, meadow barley (*Hordeum brachyantherum*), rush, and peppergrass. Emergent shrubs may be present at low cover.

Salt grass flats are found in coastal salt marshes or inland habitats such as playas, swales, and terraces along washes that may be flooded intermittently. Soils are often alkaline or saline. The tough rhizomes of salt grass allow this species to withstand disturbance from disking, erosion, and flooding.

As a result of urbanization and routine flood control activities, salt grass flats in the Wildlife RSA are severely limited. This alliance was only identified in the San Gabriel River in association with other herbaceous species such as curly dock. Salt grass flats were not mapped and were interspersed with wild oats and annual brome grassland in the riverbed. With a California Sensitive Natural Communities state rank of S4, this alliance is not a California Sensitive Natural Community (CDFW 2023).

For the purposes of this report, this habitat alliance is consistent with the “riverine” jurisdictional aquatic resource category. Refer to Section 6.4.2.2 for additional detail.

5.2.2.7 Open Water

Open water habitats include freshwater ponds and lakes, and basins that are dry much of the time but inundated at least occasionally.

Within the Wildlife and Botanical RSAs, open water habitat was observed associated with Lakeside Residential Community pond and the Raymond Retarding Basins. Depending on water levels and the time of year, duckweed blooms, wild oats and annual brome grasslands, and smartweed–cocklebur patches herbaceous alliances may be present in these features.

For the purposes of this report, this habitat alliance is consistent with the “basin” jurisdictional aquatic resource category.

5.2.2.8 Unvegetated Channel

Unvegetated channel includes riverine areas that are either completely devoid of vegetation or contain only sparse vegetation (less than 2 percent cover).

Land cover in most of the concrete-lined rivers and drainages was classified as unvegetated channel. The majority of the Los Angeles River was classified as unvegetated channel, as was the concrete-lined portion of the Rio Hondo, all of North Fork Coyote Creek, portions of La Mirada Creek, all of Coyote Creek, some sections of Brea Creek, all of Fullerton Creek, all of Carbon Creek, and all of the Santa Ana River.

For the purposes of this report, this habitat alliance is consistent with the “riverine” and “built watercourse” jurisdictional aquatic resource categories. Refer to Section 6.4.2.2 and Section 6.4.2.3, Built Watercourses, for additional detail.

5.2.3 Urban Land Cover Types

5.2.3.1 Developed

Developed lands represent the predominant land use in the Wildlife and Botanical RSAs, and land use includes mainly manufacturing, assembly, and industrial services; railroads; high-density, single-family residential; and open storage. Other developed land uses include improved flood waterways and structures; modern strip development; truck terminals; mixed transportation; freeways and major roads; low- and medium-rise major office use; mineral extraction—oil and gas; low-rise apartments, condominiums, and townhouses; maintenance yards; trailer parks and mobile home courts—high density; construction sites; and developed local parks and recreation.

Commercial and industrial areas include urban shops, businesses, warehouses, industrial plants, factories, junkyards, equipment storage yards, airports, and various municipal facilities, as well as their associated parking lots. Urban commercial and industrial areas often have associated landscaped vegetation. Where this vegetation provided potential habitat for wildlife (nesting habitat), it was mapped separately as ornamental (as described in Section 5.2.3.4, Ornamental).

Transportation corridors such as roads and railways are included as a developed land cover type. Roads include portions of I-5, I-710, I-10, and I-605; U.S. Highway 101 and State Routes 39, 91, and 57; and numerous paved urban roads. Existing rail operators in the area include Amtrak, the Southern California Regional Rail Authority, UPRR, and BNSF.

5.2.3.2 Barren

Barren areas are open plots of rock, gravel, or soil that are either completely devoid of vegetation or contain only sparse (less than 2 percent cover), widely scattered, weedy herbaceous plants. Barren areas provide low-quality habitat for wildlife species, although some species of birds, such as Killdeer (*Charadrius vociferous*) and Horned Lark, have adapted to nesting on barren areas.

Within the Wildlife and Botanical RSAs, barren areas were often associated with equipment yards' various storage or delivery features.

5.2.3.3 Disturbed/Ruderal

Disturbed/ruderal habitats within the Wildlife and Botanical RSAs include areas with less than 20 percent vegetation cover, widely scattered, and consisting of nonnative or invasive plant species. Species commonly observed in the Wildlife and Botanical RSAs include Russian thistle, telegraph weed, dense-flowered sprangletop, common horseweed, Bermuda grass, annual sunflower, Mexican fan palm (*Washingtonia robusta*), tree tobacco, shortpod mustard (*Hirschfeldia incana*), fountain grass (*Pennisetum setaceum*), castor bean, ripgut brome, red brome (*Bromus madritensis*), wild oats, common sow-thistle (*Sonchus oleraceus*), tocalote, castor bean, and London rocket. Tree species associated with this habitat type vary and can include species such as eucalyptus, carrotwood (*Cupania anacardioides*), tree of heaven (*Ailanthus altissima*), fig trees (*Ficus* spp.), jacaranda (*Jacaranda* spp.), and Mexican fan palm.

Disturbed/ruderal habitat areas in the Wildlife and Botanical RSAs are associated with open fields, margins of barren areas, roadsides, and upland areas adjacent to rivers. Wildlife diversity and abundance is low in disturbed/ruderal habitat; however, these areas do provide habitat for species adapted to disturbance such as coyote (*Canis latrans*), western fence lizard (*Sceloporus occidentalis*), and deer mice (*Peromyscus maniculatus*), and exotic species such as house mouse (*Mus musculus*). Disturbed/ruderal land cover can provide habitat for biological resources such as nesting bird habitat and some nonlisted special-status species such as Burrowing Owl and Loggerhead Shrike (*Lanius ludovicianus;* CDFW species of special concern, USFWS birds of conservation concern) (CDFW 2025; USFWS 2020, 2023) can be found in disturbed/ruderal habitat.

5.2.3.4 Ornamental

Ornamental land cover within the Wildlife and Botanical RSAs include areas consisting of mixed ornamental plantings, which sometimes consist of native species. Trees used in landscaping can be varied and may include western sycamore, eucalyptus, jacaranda (*Jacaranda* spp.), Mexican fan palm, magnolias (*Magnolia* spp.), myrtle (*Myrica* spp.), juniper (*Juniperus* spp.), and pine (*Pinus* spp.).

Ornamental land cover can provide a habitat refuge for wildlife species. Trees in this land cover type can provide perching and nesting habitat for avian species. Yellow Warbler, a special-status bird, is known to nest in this land cover type. A special-status bat species, Mexican long-tongued bats are known to both forage and roost in ornamental land cover. Ornamental areas provide live-in and movement areas for wildlife adapted to disturbance and human activity.

Within the Wildlife and Botanical RSAs, ornamental land cover areas were common and were associated with landscaping of commercial buildings and recreational areas, roadside landscaping, and city parks and open space areas. Ornamental land cover was observed in many areas, but some areas of note include Independence Park (Fullerton), Amerige Park (Fullerton), Fullerton Pooch Park, Adlena Park (Fullerton), Neff Historical Park (La Mirada), and John Zimmerman Park (Norwalk).

6 SURVEY FINDINGS AND RESULTS

6.1 Introduction

This chapter presents the findings and results of the background information review and field survey observations for special-status plant species, special-status wildlife species, special-status natural communities, aquatic resources, and habitats of concern. This section is intended to present a comprehensive summary of existing conditions within each respective RSA. Vegetation communities and land cover type results are included in Chapter 5, Biological Setting.

6.2 Special-Status Plant Species

During the site visits, it was determined that because of the lack of remaining native soils in the few remaining areas with small amounts of intact habitat, there was no potential for rare plants to occur in surveyed areas. In limited areas access was not possible and, based on aerial information, the potential for special-status plant species could not be ruled out. In these rare cases, special-status plant species were presumed present. Based on the background review (refer to Section 4.3.1.2, Special-Status Species), 50 special-status plant species were initially evaluated for their potential to occur in the Botanical RSA. The initial list of potential plant species was based on the results of the CNDDB (CDFW 2024a) and CNPS (CNPS 2024) searches for plant occurrences. Among these special-status plant species there were 9 federally and state-listed species and 41 other special-status species, with 12 of these species being CRPR 4. Appendix A presents the evaluation of the potential for these special-status plant species to occur in the Botanical RSA.

No federally or state-listed plant species are known or expected to occur within the Botanical RSA. It was determined that no habitat is present in the Botanical RSA for 47 of the 50 species; therefore, these species are presumed to be absent and would not be affected by the Shared Passenger Track Alternatives. These special-status plant species in Table 6-1 are CNDDB element occurrences that have been mapped through the CNDDB program within the Supplemental RSA. The CNDDB geographic information system dataset provided by the State of California has restrictions on the data that can be displayed on maps that are publicly available in order to prevent harm to species or habitat (CDFG 2011). For this reason, no CNDDB element occurrences have been mapped within the Supplemental RSA and instead the element occurrences are included in Table 6-1.

There are three special-status plant species that were determined to potentially occur within the Botanical RSA: Lewis' evening-primrose (CRPR 3), lucky morning-glory (CRPR 1B.1), and southern tarplant (CRPR 1B). Each of these species has a low potential to occur. An analysis of CRPR 3 plant species is included in Appendix A of this document. Only plants with CRPR 1A, 1B, 2A, and 2B are discussed further in the body of the document; therefore, only lucky morning-glory and southern tarplant are discussed below. The proposed IAMFs discussed in Chapter 8, Recommended Impact Avoidance and Minimization Features, are intended to minimize, reduce, or avoid potential unintentional effects on biological resources. Where specific IAMFs are intended to minimize, reduce, or avoid effects on specific species, those are identified below.

Table 6-1 California Natural Diversity Database Special-Status Plant Element Occurrences within the Supplemental Resource Study Area

Common Name	Scientific Name	Federal Status[1]	State Status[2]
Salt marsh bird's-beak	*Chloropyron maritimum* ssp. *maritimum*	E	E, 1B.2
Coulter's goldfields	*Lasthenia glabrata* spp. *coulteri*	—	1B.1
Parish's brittlescale	*Atriplex parishii*	—	1B.1

Common Name	Scientific Name	Federal Status[1]	State Status[2]
Prostrate vernal pool navarretia	*Navarretia prostrata*	—	1B.1
Southern tarplant	*Centromadia parryi* ssp. *australis*	—	1B.1
Davidson's saltscale	*Atriplex serenana* var. *davidsonii*	—	1B.2
Many-stemmed dudleya	*Dudleya multicaulis*	—	1B.2
Greata's aster	*Symphyotrichum greatae*	—	1B.3
Salt spring checkerbloom	*Sidalcea neomexicana*	—	2B.2
Lucky morning-glory	*Calystegia felix*	—	1B.1

Sources: CDFW 2024a; CNPS 2024
[1] E: Endangered
[2] California Rare Plant Ranking (CRPR): 1A: presumed extirpated in California and either rare or extinct elsewhere; 1B: rare, threatened, and endangered in California and elsewhere; 2B: rare, threatened and endangered in California, but more common elsewhere; 3: plants about which more information is needed; 4: limited distribution, watch list
Threat ranks: 0.1: seriously threatened in California; 0.2: moderately threatened in California; 0.3: not very threatened in California

6.2.1 Southern Tarplant (*Centromadia parryi* spp. *australis*)

Southern tarplant has no federal or state listing status but has a CRPR of 1B.1 (rare, threatened, and endangered in California and elsewhere; and seriously threatened in California) (CNPS 2024). This annual herb is found at the margins of marshes and swamps, freshwater wetlands, valley and foothill grasslands, and vernal pools (CNPS 2024). Habitat for this species includes coastal grassland and salt (or alkaline) marshes and is described as being found near the coast in seasonally flooded grasslands (Hickman 1993).

Wild oats and annual brome grassland, hardstem and California bulrush marsh, mulefat thickets, cattail marshes, and Goodding's willow – red willow riparian woodland and forest are present in the Botanical RSA and would provide suitable habitat for southern tarplant. This species is known to be adapted to (and to rely on) disturbance, such as seasonal flooding, and may be extant in the highly disturbed Botanical RSA. There is a historical CNDDB record (1931) near the intersection of Garfield Avenue and Telegraph Road within the Shared Passenger Track Alternatives footprint. This species is also known upstream associated with the Rio Hondo in Whittier Narrows Recreational Area. Southern tarplant has been observed in Orange Park Acres along Santiago Creek in 2003, in disturbed clay soil on the stream terrace, 5 miles east of ARTIC (CDFW 2024a).

Although this species is adapted to disturbance and is found at the margins of marshes and grasslands, the ongoing disturbance in these areas within the Botanical RSA has removed the native soils, so the potential for this species to occur in the Botanical RSA is low. During surveys in December 2016, it was determined that the disturbance regime in areas that could be visited had removed native soils, so southern tarplant was not expected in these areas. Although southern tarplant is present upstream associated with the Rio Hondo, native soils were not present in the Rio Hondo spreading grounds, and southern tarplant is not expected to be present. In addition to the Rio Hondo spreading grounds, nine other potential habitat sites, including the San Gabriel River, were excluded based on the lack of native soils or because the sites had been developed.

Within the Botanical RSA, a small parcel (approximately 1.37 acres) north of Coyote Creek at the Los Angeles/Orange County border was not accessible for surveys and the potential for southern tarplant at this location could not be ruled out. Without access to this parcel, presence of southern tarplant must be assumed. This assumption is based on interpretation of aerial photographs; the parcel is in the historical floodplain of Coyote Creek. Based on the aerials, the habitat was

mapped as disturbed but could also be wild oats and annual brome grassland. A habitat assessment to determine habitat present and whether native soils are still present would be required to determine if this site contains suitable habitat for southern tarplant. The potential for southern tarplant being present at this parcel is low.

6.2.2 Lucky Morning-Glory (*Calystegia felix*)

Lucky morning-glory was historically associated with wetland and marshy habitat, such as meadows and seeps, alluvial riparian scrub, and irrigated landscapes, but it is also found in drier situations (CNPS 2024). In December 2017, this species' CRPR ranking was changed from 3.1 to 1B.1 (CNPS 2024).

Lucky morning-glory was observed in 2011 after no observations of the species for 94 years (where a historical collection had misidentified the species as *Calystegia sepium*). This new species is described in the Los Angeles, San Gabriel, and Santa Ana River Basins (Provance and Sanders 2013). Current observations have been in Chino and known extant observations were associated with well-watered landscaping in industrial, commercial, and residential developments. This species was historically known from south Los Angeles and Pico Rivera in Los Angeles County (Provance and Sanders 2013).

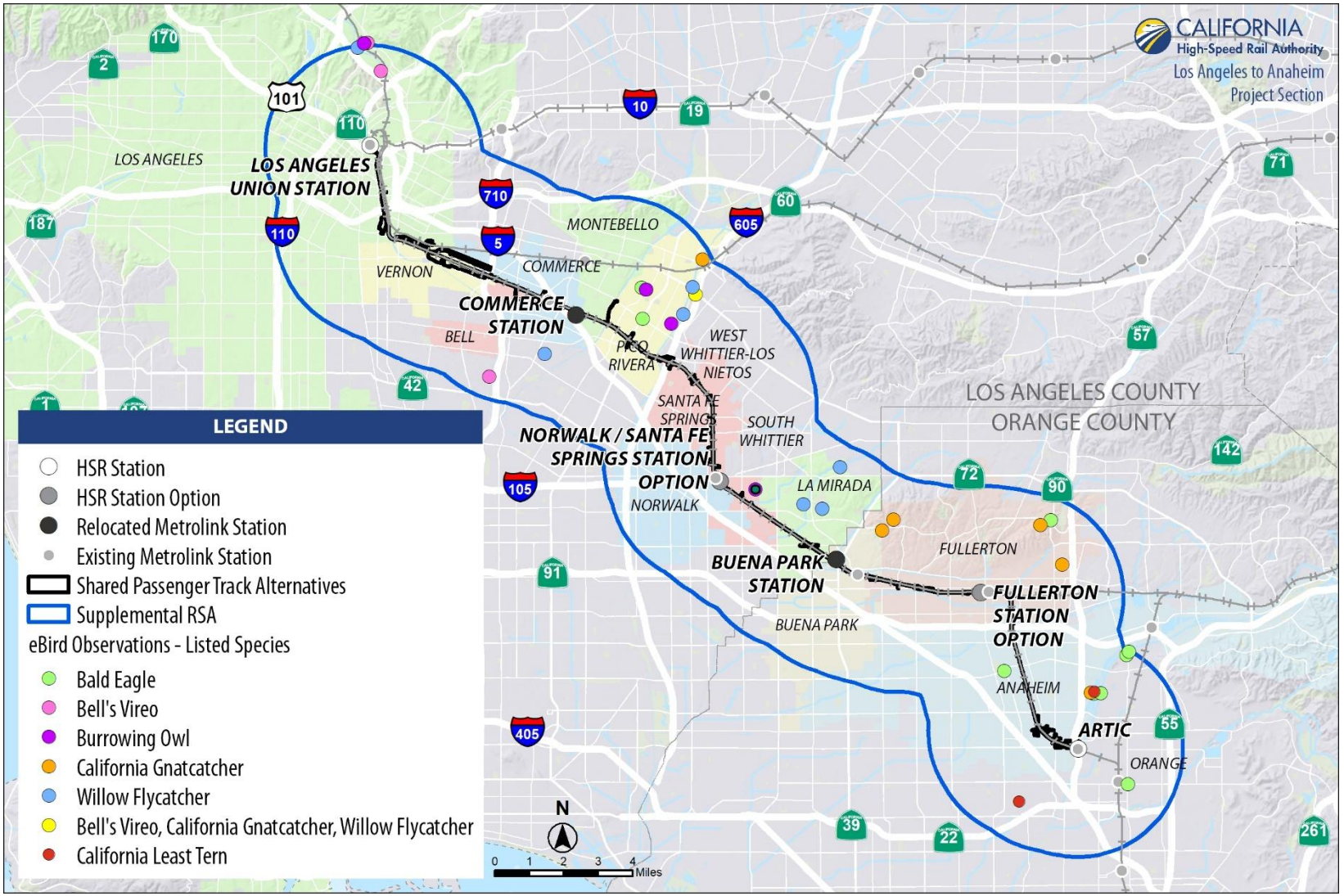
Within the Botanical RSA, a small parcel (approximately 1.37 acres) north of Coyote Creek at the Los Angeles/Orange County border was not accessible for survey, and the potential for suitable lucky morning-glory habitat could not be ruled out. Without access to this parcel, presence of lucky morning-glory must be assumed. The habitat was mapped as disturbed but could also be wild oats and annual brome grassland. A habitat assessment to determine habitat present and whether native soils are still present would be required to determine if this site contains suitable habitat for lucky morning-glory. The potential for lucky morning-glory being present at this parcel is low.

6.3 Special-Status Wildlife Species

Based on the background literature review, biologists identified 60 special-status wildlife species as having the potential to occur in the region. The list of these 60 species and the rationale for inclusion or elimination are included in Appendix A. Twenty of these were determined to have a potential to occur in the Wildlife RSA and these species are included in Table 6-2.

Special-status avian species recorded in eBird within the Supplemental RSA are presented on Figure 6-1 and wildlife species recorded in CNDDB are presented in Table 6-2. The CNDDB geographic information system dataset provided by the State of California has restrictions on the data that can be displayed on maps that are publicly available in order to prevent harm to species or habitat (CDFG 2011). For this reason, no CNDDB element occurrences have been mapped within the Supplemental RSA. The element date in this table is the date of the observation in CNDDB. eBird observations are included in Appendix L, eBird Sightings within the Supplemental Resource Study Area, and are discussed in Appendix A.

Monarch butterfly (*Danaus plexippus* pop. 1; overwintering population) and mountain lion (*Puma concolor*) have not been recorded in CNDDB; iNaturalist.com was used as a source of information for these species. The results for these two species are included in Appendices M-1 (Monarch Butterfly Map) and M-2 (Mountain Lion Map).



Sources: Authority 2025a; eBird 2024; ESRI World Imagery 2024; ESRI World Streetmap 2024

Figure 6-1 eBird Observations of Special-Status Avian Species

Table 6-2 California Natural Diversity Database Special-Status Wildlife Element Occurrences within the Supplemental Resource Study Area

Common Name	Scientific Name	Federal Status[1]	State Status[2]	Element Date(s)[3]
Federally and State-Listed Species				
Birds				
Burrowing Owl (burrow sites and some wintering sites)	*Athene cunicularia hypugaea*	—	CAN	1921,1983, 2010
Southwestern Willow Flycatcher (nesting)	*Empidonax traillii extimus*	E, CH	E	1894
California Black Rail	*Laterallus jamaicensis coturniculus*	—	T, FP	1986
Coastal California Gnatcatcher	*Polioptila californica*	T, CH	SSC	2013, 2015, 2016, 2017, 2019, 2020, 2021
California Least Tern (nesting colony)	*Sternula antillarum browni*	E	E, FP	2016, 2018
Least Bell's Vireo (nesting)	*Vireo bellii pusillus*	E, CH	E	1895, 1897, 1899, 1900, 1913, 2011, 2013
Invertebrates				
Crotch's bumble bee	*Bombus crotchii*	—	CE	1940, 1942, 2017
Fish				
Steelhead – Southern California Distinct Population Segment	*Oncorhynchus mykiss irideus* pop. 10	E	CE	2018
Reptiles and Amphibians				
Southwestern pond turtle	*Actinemys pallida*	PT	SSC	1980s (exact date unknown), 1989 (introduced), 2013
Western spadefoot	*Spea hammondii*	PT	SSC	1998, 2005
South coast gartersnake	*Thamnophis sirtalis* pop. 1	—	SSC	1907, 1911, 1937
Other Special-Status Wildlife Species				
Reptiles and Amphibians				
Southern California legless lizard	*Anniella stebbinsi*	—	SSC	1908, 1916, 1939, 1964
Coast horned lizard	*Phrynosoma blainvillii*	—	SSC	Unknown, 1922, 1960, 1974
Birds				
Coastal Cactus Wren (San Diego and Orange Counties only)	*Campylorhynchus brunneicapillus sandiegensis*	—	SSC	1998, 2002
Yellow-Breasted Chat (nesting)	*Icteria virens*	—	SSC	2001

Common Name	Scientific Name	Federal Status[1]	State Status[2]	Element Date(s)[3]
Mammals				
Western mastiff bat	*Eumops perotis californicus*	—	SSC	1949, 1989, 1990
American badger	*Taxidea taxus*	—	SSC	Unknown
Pocketed free-tailed bat	*Nyctinomops femorosaccus*	—	SSC	1989
Big-free tailed bat	*Nyctinomops macrotis*	—	SSC	1985

Sources: USFWS 2021b, 2023; CDFW 2024a, 2025
[1] Federal Status: FE = endangered; FT = threatened; PT = proposed threatened; CH = critical habitat designated by the U.S. Fish and Wildlife Service; BGEPA = protected under the Bald and Golden Eagle Protection Act; BCC = Birds of Conservation Concern designated by the U.S. Fish and Wildlife Service (USFWS 2021b)
[2] State Status: SE = endangered; ST = threatened: CAN = candidate; CE = candidate endangered, SSC = California species of special concern designated by the California Department of Fish and Wildlife; FP = fully protected species designated by the California Department of Fish and Wildlife
[3] Presumed extant

Of the 17 special-status wildlife species with potential to occur, 6 were determined to have a moderate potential to occur and 11 were determined to have a low potential to occur in the Wildlife RSA. One of the species is federally and state listed as endangered: Bald Eagle; two are state candidates: mountain lion (CDFW 2020) and Burrowing Owl (CDFW 2024c); and three are CDFW fully protected species: White-Tailed Kite, California Least Tern, and Bald Eagle. Least Bell's Vireo and California Least Tern may occur crossing the Wildlife RSA, but are not expected to nest within the Wildlife RSA. Special-status wildlife species with potential to occur in the Wildlife RSA are included in Table 6-3, and the following subsections describe these special-status wildlife species, divided into special-status reptiles and amphibians, birds, and mammals. No special-status invertebrates or fishes were found to have potential habitat in the Wildlife RSA. However, a discussion of Southern California steelhead is included below to evaluate whether the Shared Passenger Track Alternatives would conflict with the goals of the recovery plan for this species.

The proposed IAMFs discussed in Chapter 8 are intended to minimize, reduce, or avoid potential unintentional effects on biological resources. Where specific IAMFs are intended to minimize, reduce, or avoid effects on specific wildlife species, they are identified below.

No federally or state-listed plant species are expected to occur within the Botanical RSA. No federally or state-listed wildlife species are expected to breed or nest within the Wildlife RSA. However, there is a low potential for Least Bell's Vireo transients, but Least Bell's Vireos are not expected to breed or nest in the Wildlife RSA based on the lack of suitable breeding habitat. There is a low potential for transient California Least Terns, but there is no foraging or nesting habitat within the Wildlife RSA for this species. There is a low potential for Bald Eagles to forage in the Wildlife RSA in the winter, but Bald Eagles are not expected to nest in the Wildlife RSA.

Table 6-3 Special-Status Wildlife Species with Potential to Occur in the Wildlife Resource Study Area

Common Name	Scientific Name	Federal Status[1]	State Status[2]	Potential to Occur
Federally and State-Listed Species				
Birds				
Burrowing Owl	*Athene cunicularia hypugaea*	BCC	CAN	Moderate (nesting and foraging)
Bald Eagle	*Haliaeetus leucocephalus*	Delisted, BGEPA	SE, FP	Low (foraging)

Common Name	Scientific Name	Federal Status[1]	State Status[2]	Potential to Occur
California Least Tern	*Sternula antillarum browni*	FE	SE, FP	No nesting
Least Bell's Vireo	*Vireo bellii pusillus*	FE, CH	SE	No nesting
Mammals				
Mountain lion	*Puma concolor*	—	SCAN	Low
Other Special-Status Wildlife Species				
Reptiles and Amphibians				
Coast horned lizard	*Phrynosoma blainvillii*	—	SSC	Low
Birds				
Long-Eared Owl	*Asio otus*	—	SSC	Low (nesting and foraging)
Mountain Plover	*Charadrius montanus*	BCC	SSC	Low (wintering)
White-Tailed Kite	*Elanus leucurus*	—	FP	Moderate (nesting and foraging)
Loggerhead Shrike	*Lanius ludovicianus*	—	SSC	Moderate (nesting and foraging)
Yellow Warbler	*Setophaga petechia*	—	SSC	Moderate (nesting and foraging)
Mammals				
Pallid bat	*Antrozous pallidus*	—	SSC	Low (roosting and foraging)
Mexican long-tongued bat	*Choeronycteris mexicana*	—	SSC	Low (roosting and foraging)
Townsend's big-eared bat	*Corynorhinus townsendii*	—	SSC	Low (roosting and foraging)
Western mastiff bat	*Eumops perotis californicus*	—	SSC	Low (roosting and foraging)
Western red bat	*Lasiurus blossevillii*	—	SSC	Low (roosting and foraging)
Western yellow bat	*Lasiurus xanthinus*	—	SSC	Moderate (roosting and foraging)
Pocketed free-tailed bat	*Nyctinomops femorosaccus*	—	SSC	Moderate (roosting and foraging)
Big free-tailed bat	*Nyctinomops macrotis*	—	SSC	Low (roosting and foraging)

Sources: USFWS 2021b, 2023; CDFW 2024a, 2025

[1] Federal Status: BCC = Birds of Conservation Concern designated by the U.S. Fish and Wildlife Service; BGEPA = protected under the Bald and Golden Eagle Protection Act; CH = critical habitat designated by the U.S. Fish and Wildlife Service; FE = endangered; FT = threatened, FCAN = candidate

[2] State Status: FP = fully protected species designated by the California Department of Fish and Wildlife; SE = endangered; SCAN = candidate; SSC = California species of special concern designated by the California Department of Fish and Wildlife; ST = threatened

6.3.1 Insects

The scarcity of open space and the fragmentation and disturbance of the remaining open space within the Wildlife RSA have precluded the presence of special-status insects. Because the monarch butterfly is a candidate for listing under FESA, this species is discussed below despite the lack of habitat for an overwintering population in the Wildlife RSA.

6.3.1.1 Monarch Butterfly (Danaus plexippus pop. 1; overwintering population)

In December 2020, USFWS determined that listing of the monarch butterfly (*Danaus plexippus* pop. 1; overwintering population) was warranted but precluded. With that finding, the monarch butterfly became a candidate for listing.

Monarch butterflies are reliant on milkweeds (*Asclepias* spp.) as host plants for caterpillars. Adults require a diverse range of flowers for nectar as fuel during breeding and migration. Overwintering sites consist of tall trees, within 1 mile of the coast of the Pacific Ocean. Overwintering tree groves include Monterey pine (*Pinus radiata*), Monterey cypress (*Cupressus macrocarpa*), Coast redwood (*Sequoia sempervirens*), coast live oak (*Quercus agrifolia*), Douglas fir (*Pseudotsuga menziesii*), Torrey pine (*Pinus torreyana*), western sycamore (*Platanus racemosa*), bishop pine (*Pinus radiata*), and others.

Threats to monarch butterflies include habitat fragmentation, loss and degradation of overwintering groves, pesticide use that can destroy milkweed host plants, climate change, parasites and disease, and nonnative milkweeds (monarch butterflies continue to lay eggs on these species rather than overwinter because the nonnative milkweeds do not die back in winter).

The California overwintering population of the monarch butterfly has been designated as a candidate species for listing under the FESA because of substantial population declines. An estimated 4.5 million monarch butterflies overwintered on the California coast in the 1980s, whereas in 2020, the population estimate for migratory overwintering monarch butterflies was less than 2,000 butterflies.

Monarch butterflies observed in iNaturalist (2022) are mapped in Appendix M-1. These observations can be assumed to be those of migrating monarch butterflies, which are present throughout the Supplemental RSA. In the western United States, overwintering monarch butterflies occur on the coast. The nearest known overwintering monarch butterflies are known in Los Angeles County at Woodland Cemetery in Santa Monica near the interchange of I-10 and I-405 (Monarch Program 2024). Suitable overwintering sites within the Supplemental RSA occur at Elysian Park, cemeteries with large trees, and golf courses. No known overwintering sites occur within the Wildlife RSA and this species is likely only present during migration. This species (overwintering population) is therefore not expected to occur in the Wildlife RSA.

6.3.2 Fish

No special-status fish species were observed or expected to occur within the Wildlife RSA. A discussion of Southern California steelhead (*Oncorhynchus mykiss irideus*) is included below to evaluate whether the Shared Passenger Track Alternatives would conflict with the goals of the recovery plan for this species.

6.3.2.1 Southern California Steelhead (Oncorhynchus mykiss irideus pop. 10)

The Southern California steelhead recovery plan (NOAA Fisheries 2012) includes protection, restoration, and maintenance of habitats for Southern California steelhead that would allow for *O. mykiss irideus* to have both anadromous and resident forms and to disperse between watersheds. The steelhead in Southern California are a distinct population segment of the species that is ecologically discrete from the other populations of *O. mykiss* along the West Coast of North America and, under the FESA, this distinct population segment and was listed as endangered in 1998 by NOAA Fisheries (USFWS 1998b).

The project section is in the Mojave Rim Biogeographic Population Group of the recovery plan. This population group includes the Los Angeles River, the San Gabriel River, and the Santa Ana

River and tributaries (including the Arroyo Seco, east and west forks of the San Gabriel River, and Mill, Lytle, and Fish Creeks). The upper watersheds of the San Gabriel River watershed (east and west forks) still provide good to very good habitat conditions for resident *O. mykiss irideus*, but these fish are isolated from the anadromous component of the population found in the mainstem of the San Gabriel River (NOAA Fisheries 2012). In the mainstems of the Los Angeles and Santa Ana Rivers, the habitat conditions in the Mojave Rim are generally poor for *O. mykiss irideus*, providing little suitable spawning and rearing habitat for anadromous *O. mykiss irideus* because of barriers, channelization, flood control activities, loss of surface flows, and poor water quality (NOAA Fisheries 2012). However, tributaries of the Los Angeles River, such as the Arroyo Seco, Mill, and Alder Creeks, and of the Santa Ana River, such as Harding Canyon, Coldwater Canyon, and San Antonio Creeks, contain suitable habitat for steelhead (NOAA Fisheries 2012).

In the Mojave Rim, critical recovery action includes the San Gabriel River population. These actions include implementing operating criteria to ensure the pattern and magnitude of groundwater extractions—and releases from the Morris, San Gabriel, and Cogswell Dams—would provide essential habitat functions to support the life history and habitat requirements for adult and juvenile steelhead. The physical modification of Morris, San Gabriel, Cogswell, and Santa Fe Dams and roads, highways, and railway crossings would be such to allow steelhead natural routes of migration to upstream spawning and rearing habitats and the passage of smolts and kelts downstream to the estuary and ocean (NOAA Fisheries 2012). Similar actions are proposed for the Los Angeles River watershed and the Santa Ana River watershed; however, these actions are not critical recovery actions. For railway crossings, this would include:

- Not interfering with water releases
- Not creating barriers to dispersal
- Maximizing clear spanning of rivers (to allow natural fluvial processes)
- Minimizing approach-fill to rivers

The Shared Passenger Track Alternatives would not create a barrier to dispersal to steelhead in the San Gabriel River, the Los Angeles River, or the Santa Ana River or interfere with water releases. The permanent project impacts have been clearly defined for all of the aquatic resources, including for these rivers. These permanent project impacts in the river channels include:

- No impacts in the Los Angeles River channel
- Piers in the San Gabriel River channel (a total of nine piers across the channel, including seven piers in the channel, approximately 140 square feet per pier in the channel)
- No impacts in the Santa Ana River channel

Clear spanning of rivers has been maximized to allow natural fluvial processes, and approach-fill has been minimized as much as possible.

6.3.3 Reptiles and Amphibians

The herpetofauna (reptiles and amphibians) of the south coast ecoregion is diverse because of the diversity of habitat, topography, history, and climate (Stebbins 2003). However, the lack of open space and the fragmentation and disturbance of the remaining open space within the Wildlife RSA have precluded the presence of almost all of the special-status herpetofauna and only one special-status species, a reptile, was determined to have potential to occur in the Wildlife RSA: the coast horned lizard (*Phrynosoma blainvillii*), a CDFW species of special concern (CDFW 2025). No special-status amphibians are expected in the Wildlife RSA.

6.3.3.1 Coast Horned Lizard (Phrynosoma blainvillii)

Coast horned lizard is a CDFW species of special concern (CDFW 2025) and is found in areas with sandy soils and low vegetation in valleys, foothills, and semi-arid mountains in coastal sage, annual grasslands, forests, woodlands, chaparral, riparian woodland, and open areas with patches of loose soil. Historically, coast horned lizards were common throughout Southern California, especially associated with coastal dune systems (Jennings and Hayes 1994). Coast

horned lizards are found in lowlands along sandy washes with scattered shrubs along dirt roads. Shade is an important habitat component in daily thermal regulation (Jennings and Hayes 1994). Coast horned lizards are frequently found near ant hills (Stebbins 2003) because coast horned lizards are insectivorous and their diet consists mainly of native harvester ants (*Pogonomyrmex* spp.); however, this species is negatively affected by the introduced Argentine ant (*Linepithema humile*) (Haas et al. 2002). Irrigation, such as lawn irrigation, which is present in urban areas, tends to support the Argentine ant (Haas et al. 2002). Key habitat elements for this species include loose, fine soils, an abundance of native ants and other insects, open areas with limited overstory for basking, and low but relatively dense shrubs for refuge (Jennings and Hayes 1994). Historically, this species would have been abundant in riparian and coastal sage scrub habitats associated with alluvial fans, with smaller populations associated with open vegetation in the dense vegetation in the foothills and mountains (Jennings and Hayes 1994).

Coast horned lizards emerge from hibernation in late March and are active at the surface generally from April through July. Aestivation takes place in July, followed by a brief period of activity in August, until overwintering begins in August through early October (Jennings and Hayes 1994). One egg clutch is laid each year from May through July, and incubation lasts approximately 2 months with hatchlings appearing in late July to early August (Jennings and Hayes 1994).

There are CNDDB records of this species (CDFW 2024a) within the Supplemental RSA in Monterey Park in Los Angeles (1974); in Sycamore Canyon in Whittier (1960); in the San Gabriel River, south of Whittier Dam (historical specimen, no date); in the vicinity of the Santa Ana River in Orange (1922); and in the vicinity of Olive in Orange (historical specimen, pre-1985).

The Wildlife RSA is within the range of coast horned lizard. Sandy soils in suitable habitat (grasslands with some shrubs) are present in the San Gabriel River and the Rio Hondo spreading grounds. This species is tolerant to some forms of human disturbance but is negatively affected by urbanization and does require at least some intact natural shrub community. There is a historical record for this species 2.8 miles northwest of the Wildlife RSA in the San Gabriel River. In surveys in the Puente-Chino Hills (Haas et al. 2002), this species was found primarily in coastal sage scrub and chamise chaparral and usually was detected along ridgelines. Observations were primarily made along dirt roadsides, especially near thick vegetation (Haas et al. 2002). There is a low potential for this species to occur. In addition, the general proposed IAMFs are intended to minimize, reduce, or avoid potential unintentional effects on the species.

6.3.4 Birds

Ten special-status bird species have a low to moderate potential to occur in the Wildlife RSA, including three listed species: Least Bell's Vireo (federally and state-listed as endangered), California Least Tern (federally and state-listed as endangered, state fully protected), and Bald Eagle (federally delisted, state-listed as endangered and fully protected) (CDFW 2025; USFWS 2023). With few exceptions, any bird present in the Wildlife RSA would also be protected under the MBTA and California Fish and Game Code Section 3503. Avian species observed in eBird (2024) are mapped in Appendix L.

6.3.4.1 Bald Eagle (Haliaeetus leucocephalus)

Bald Eagles are state-listed as endangered, fully protected (CDFW 2025; USFWS 2023) and are protected under the federal Bald and Golden Eagle Protection Act. Bald Eagles are found along coasts, rivers, reservoirs, and large lakes and are typically close to water. During migration, Bald Eagles are in the mountains and open country and often winter in very dry western valleys (Buehler 2022). Their diet is mainly fish, but they also consume birds (ducks, coots, auklets) and mammals (jackrabbits, muskrats) when fish are scarce and sometimes eat turtles, crabs, and shellfish, and often carrion (Buehler 2022). Bald Eagles hunt by watching from a high perch. Their preferred habitat is large bodies of water surrounded by large, tall trees.

Bald Eagles nest in large, very tall trees, usually in a tree standing high above the surrounding forest. Nests may be reused for years. Although nesting Bald Eagles are sensitive to human

disturbance, wintering Bald Eagles may be found closer to disturbed areas and may spend more time in upland habitat, sometimes quite far away from large waterbodies.

Bald Eagles roost in large trees that are open and accessible, and the trees may be deciduous or coniferous. Roost sites may be associated with aquatic foraging areas but may also be 3.7 to 11 miles from foraging areas. Territory size varies widely based on nesting density and food supply and reliable estimates are limited, but it is suggested that a territory is approximately 250 to 500 acres (Buehler 2000).

Pesticides and environmental contaminants led to decreased reproduction and survival of Bald Eagles, including effects from dichlorodiphenyltrichloroethane (DDT), which was likely responsible for eggshell thinning, reproductive failures, and population declines. After 1947, some populations exhibited declines because of nest failures related to DDT exposure. Since the ban of DDT in 1972, most populations have made improvements in reproductive success across the range of the species (Buehler 2000). In Southern California, a “hacking” program for Bald Eagles was instituted at Santa Catalina Island. There are now six breeding pairs of Bald Eagles residing on Santa Catalina Island.

In Southern California, former nest sites that have been inactive for decades are now exhibiting activity. The nearest recently active nest site (2011) is 7 miles east of the Supplemental RSA (CDFW 2024a) associated with Irvine Lake in Orange County (Table 6-4). Lake Mathews (21 miles east of the Supplemental RSA) was a historical communal wintering site for Bald Eagles. Successful fledging of Bald Eagles continues at Santa Catalina Island (36 miles southwest of the Supplemental RSA) (CDFW 2024a).

Table 6-4 Bald Eagle Nest and Communal Wintering Data in the Vicinity of the Supplemental Resource Study Area

Nest/ Communal Wintering Location	Observation Type	Date	Distance to and Direction from Supplemental RSA	Notes
Irvine Lake	Nest	2011	7 miles east	One fledgling observed in 2010, two in 2011, unclear if checked in 2012. Last known nesting in Orange County in 1927.
Lake Mathews	Communal wintering	1981	21 miles east	Between 1974 and 1975, 44 individuals were observed. In 1979, 9 individuals; in 1980, 10 individuals; and in 1981, 1 individual.
Santa Catalina Island	Nest	2017	36 miles southwest	Six breeding pairs and an average of 4 to 6 younger eagles residing on Santa Catalina Island.

Source: CDFW 2024a
RSA = resource study area

Sources of Bald Eagle mortality include collisions with vehicles, because Bald Eagles scavenge carcasses on transportation corridors. Bald Eagles are also susceptible to collisions with power lines or by electrocution, leading to injury and death (Buehler 2000).

Bald Eagles have been observed during the winter months in the Santa Ana River (near Anaheim Coves Park) and are associated with Fullerton Creek (in Panorama Nature Preserve), Gilman Circle, and the Rio Hondo, and an area in Pico Rivera between the Rio Hondo and the San Gabriel River (eBird 2024) (Table 6-5). There is a low potential for Bald Eagles to occur in the Wildlife RSA, associated with open water and foraging over the Rio Hondo and Los Angeles, San Gabriel, and Santa Ana Rivers. Potential foraging habitat is present associated with the open water of the Raymond Retarding Basins and the Lakeside Residential Community pond, where the primary prey item would be water birds. Similarly, the duckweed blooms in the Los Angeles

River would also support water birds. Avian and mammalian prey would both be available associated with the San Gabriel River and the Rio Hondo and Rio Hondo spreading grounds. Bald Eagles might forage in these areas as suitable avian or mammalian prey may be available. Bald Eagles have a low potential to occur in the Wildlife RSA (foraging) and are not expected to breed or nest in the Wildlife RSA.

Table 6-5 Bald Eagle Observations (eBird) within the Supplemental Resource Study Area

Observation Type	Observation Location	Observation Date	Distance to Project Footprint (mile[s])	Notes
Individual	Anaheim Coves Park	February 2024	1.3	Numerous observations up until February of 2024
Individual	Upper Santa Ana River	December 2023	2.3	Subadults and adults on Santa Ana River
Individual	Rio Hondo spreading grounds	2023	0.8	None
Individual	Anaheim	January 2018	0.2	Bald Eagle with wing tag
Individual	Gilman Circle	December 2017	2.5	At Key Ranch perched on tall tree
Multiple	Santa Ana River, Orange	January 2016	3.0	Adults flying north parallel to Santa Ana River
Individual	Orange, Vista Point, N State College Blvd	March 2015	2.7	Adult in Alta Vista golf course direction
Individual	Santa Ana River, Orange	December 2013	3.0	Flying over Santa Ana River, headed east up Santa Ana River
Juvenile individual	Rio Hondo spreading grounds	February 2008	0.9	Juvenile bird that had been present since December 2007
Juvenile individual	Pico Rivera	February 2008	0.5	Juvenile bird present since mid-December 2007
Individual	Orange	January 2004	1.7	None (location details lacking)
Individual	Upper Santa Ana River: Taft Ave to Lincoln Ave	December 2000	1.6	None
Second year individual	Anaheim Coves Park (Burris Basin)	January 1999	1.5	None
Pair	In Burris sandpit	January 1998	0.4 to 1.5	Anaheim (location details lacking; mapped location more likely to be approximately 1.5 miles from Shared Passenger Track Alternatives footprint)

Source: eBird 2024

6.3.4.2 California Least Tern (Sternula antillarum browni)

California Least Tern (*Sternula antillarum browni*) nesting colonies are federally and state-listed as endangered (CDFW 2025; USFWS 2023) and California fully protected. This species is found nesting along the coast from San Francisco to North Baja California. California Least Terns are colonial breeders and breed on bare or sparsely vegetated areas that are flat, including sandy beaches, paved areas, landfills, and alkali flats.

California Least Terns are known to currently nest at Burris Basin (Anaheim Coves Park) in the Santa Ana River and have been observed there since the 1990s with confirmed nesting since 2004. This area is a mitigation area for California Least Tern (2.4 acre island) that was created in a groundwater recharge basin in a public park (CDFW 2024a). A CNDDB record at Anaheim Lake from 2016 documented four active nests (CDFW 2024a). The species was observed in May 2024 at Burris Basin (Anaheim Coves Park) on the Santa Ana River, about 1.3 miles north of the Wildlife RSA. The terns observed there are breeding from April through August every year and are often observed across the Shared Passenger Track Alternatives footprint to the south at Haster Basin Recreational Area, approximately 2.0 miles from the Wildlife RSA. It is believed that the terns nest and breed at Anaheim Coves Park and travel to Haster Basin Recreational Area to forage (eBird 2024).

The Wildlife RSA is within the range of California Least Terns and this species is known both upstream and downstream of the Wildlife RSA in the Santa Ana River. However, California Least Tern nesting colonies have not persisted in areas with high degrees of disturbance such as the disturbance in the Santa Ana River observed within the Wildlife RSA. Flood control activities would remove nests within the Shared Passenger Track Alternatives footprint. This species is not expected to nest in the Wildlife RSA.

6.3.4.3 Least Bell's Vireo (Vireo bellii pusillus)

Least Bell's Vireo is federally and state-listed as endangered (USFWS 2023; CDFW 2025). Least Bell's Vireo is a summer resident that uses riparian woodlands for nesting and foraging. Preferred habitat is dense riparian woodlands dominated by willows and with a well-developed understory. Most nest sites are near the edge of riparian thickets.

Actions that cause the destruction or reduce habitat suitability of Least Bell's Vireo habitat include removal or destruction of riparian vegetation; thinning of riparian growth, especially at ground level; removal or destruction of adjacent upland habitats (that are important for foraging); and increases in human disturbances. Specific activities that would reduce habitat suitability for Least Bell's Vireo would include stream channelization, water impoundment or extraction, water diversion, intensive recreation, and development (USFWS 1998a).

This species is now an uncommon local summer resident below about 2,000 feet elevation in willows and other low, dense valley foothill riparian habitat and lower portions of canyons in coastal Southern California from Santa Barbara County south, as well as along the western edge of the deserts in desert riparian habitat. More than 99 percent of Least Bell's Vireos in California occur in Southern California, from Santa Barbara County southward (USFWS 2006).

This species has been documented in the CNDDB (CDFW 2024a) within the Supplemental RSA (1897 record) in Elysian Park in Los Angeles; another record in Los Angeles in 1913; in 1895 in Florence in South Gate; in 1899 in Whittier, possibly in the San Gabriel River west of Whittier; in 1900 in Cerritos; and most recently in 2011 associated with the Coyote Hills Golf Course in Fullerton. This site was noted to be a nest site and contains multiple territories in 2007, 2008, 2009, and 2011. There are additional Least Bell's Vireo nest sites that have been recorded in the CNDDB (CDFW 2024a); these include two nest sites upstream of the San Gabriel River, two upstream of the Rio Hondo, and one in the Arroyo Seco, a tributary of the Los Angeles River.

There are over 17 eBird observations of Least Bell's Vireos in the Supplemental RSA (eBird 2024) (detailed in Table 6-6). In association with the Los Angeles River, these observations occur in the Rio de Los Angeles State Park and Cudahy City Park adjacent to the Los Angeles River, and in a vegetated portion of the Los Angeles River near Steelhead Park. In association with the San Gabriel River, there are observations to the north, at Whittier Boulevard from up to 2009 (2.0 miles to the north of the Shared Passenger Track Alternatives footprint). One of these pairs was noted to be breeding. The Upper Santa Ana River observations have included breeding Least Bell's Vireos up to and including the breeding season of 2023. Breeding has been observed at Burris Basin (1.5 miles north of the Shared Passenger Track Alternatives footprint), the West Weeping Willow Avenue Retention Basin (2.5 miles north of the Shared Passenger Track Alternatives footprint), Upper Santa Ana River – Lincoln Avenue to Glassell Street (2.7 miles

north of the Shared Passenger Track Alternatives footprint), and Upper Santa Ana River – Tustin Avenue at Lincoln Avenue (3.0 miles north of the Shared Passenger Track Alternatives footprint). All of these eBird (2024) records were determined to be breeding pairs/active nests. There is an observation of Least Bell's Vireo from 2006 associated with Santiago Creek, at Hart Park, approximately 2.2 miles to the southeast of the Shared Passenger Track Alternatives footprint (eBird 2024).

The Wildlife RSA is within the potential range of this species, but typical suitable riparian habitat is not present; therefore, Least Bell's Vireo has a low potential to occur and would only be expected to be a transient and to occur associated with watercourses. When vegetation is sufficient to provide cover, Least Bell's Vireos may occur associated with the Santa Ana River, the San Gabriel River, the Rio Hondo spreading grounds, and the Los Angeles River. Numerous golf courses are present associated with watercourses within the Supplemental RSA, and suitable riparian habitat may be present in these golf courses. The drainages in the confines of the Wildlife RSA lack the riparian vegetation needed to support this species. Should riparian vegetation become established, it is anticipated that the vegetation would remain only for short periods of time, because flood control activities would remove this riparian vegetation. Temporary riparian vegetation in these drainages could provide movement corridors for Least Bell's Vireo. Observed individuals are expected to be transient, and no nesting is expected within the Wildlife RSA.

Table 6-6 Least Bell's Vireo Observations (eBird) within the Supplemental Resource Study Area

Observation Type	Observation Location	Observation Date	Distance to Project Footprint (miles)	Direction from Project Footprint
Pair, breeding	Upper Santa Ana River: Tustin Ave to Lincoln Ave	June 2023 (observed previous years)	3.0	North
Pair(s), breeding	Upper Santa Ana River: Lincoln Ave to Glassell St	July 2023, June 2022, 2021, 2020	2.7	North
Pair, nesting	Upper Santa Ana River: W Weeping Willow Ave Retention Basin	August 2021	2.5	North
Multiple, nesting	Upper Santa Ana River: Burris Basin	March 2017	1.5	North
Individual	Los Angeles River: Rio de Los Angeles State Park/Taylor Yard	April 2016, March 2011	2.9	North
Unknown	Los Angeles River: Oros St (Steelhead Park)	May 2016, May 2015, April 2015	2.1	North
Individual	Los Angeles River: Cudahy City Park	January 2012	2.4	South
Pairs	Coyote Hills Golf Course: Fullerton	June to July 2011, 2009, 2008, 2007	1.65	North
Pair	San Gabriel River – Whittier Blvd	August 2009	2.0	North
Individual	San Gabriel River: Whittier Blvd	August 2009, November 2005	2.0	North
Individual	Santiago Creek: Hart Park	May 2006	2.4	Southwest

Source: eBird 2024

6.3.4.4 *Burrowing Owl (Athene cunicularia hypugaea)*

Burrowing Owl is a USFWS bird of conservation concern and was listed as a candidate for potential listing as a protected species under the CESA by the California Fish and Game Commission on October 10, 2024 (CDFW 2024c, 2025; USFWS 2023), and is a California species of special concern. As a candidate for potential listing, Burrowing Owls are temporarily afforded the same protection as state-listed endangered or threatened species. Burrowing Owls are year-round residents throughout much of California. Migrants from other parts of western North America can augment local populations in lowland areas in the winter (Shuford and Gardali 2008). The breeding season in California is February 1 to August 31 (CDFG 2012). Burrowing Owls prefer open, dry, short grassland habitats with few trees, but are adapted to human-altered landscapes. They often occupy burrows abandoned by burrowing mammals such as California ground squirrels. They also use artificial burrows such as abandoned pipes, culverts, and debris piles (Shuford and Gardali 2008).

The Wildlife RSA is within the range of this species. Burrowing Owls are present at the San Gabriel River, Rio Hondo and Rio Hondo spreading grounds, Raymond Retarding Basins, Fullerton Municipal Airport, open fields, sports fields, and in disturbed areas. There were 16 eBird (2024) observations of Burrowing Owls in the Supplemental RSA (Table 6-7). Similar to the highly suitable habitat in the Imperial Valley, concrete-lined aquatic features may provide a sufficient prey base through aquatic invertebrates and burrow opportunities at the edges of the concrete. Burrowing Owls may nest, overwinter, or migrate through habitat in the San Gabriel River and the Rio Hondo and spreading grounds and concrete-lined aquatic features.

Table 6-7 Burrowing Owl Observations within the Supplemental Resource Study Area

Most Recent Observation Date	Location Description	Distance from Shared Passenger Track Alternatives	
		Miles	Feet (if within Wildlife RSA)
October 2019	S Santa Fe Ave	0.04	190
January 2017	Union Station, Track 9b	0.13	718
October 2022	Atlantic Blvd (in warehouse)	0.20	1,050
October 2016	Near Los Angeles River	0.45	N/A
January 2008	Coyote Creek	0.45	N/A
January 2023	Rio Hondo (Pico Rivera)	0.75	N/A
January 2023	Rio Hondo (all winters from 2008)	0.83	N/A
November 2017	San Gabriel River (winters from 2012 to 2017)	0.87	N/A
December 2018	Los Angeles State Historic Park	0.95	N/A
May 1975	Bell Army Office	0.95	N/A
February 2014	La Mirada Community Regional Park	1.11	N/A
January 2018	San Gabriel River	1.25	N/A
September 2022	San Gabriel River	1.32	N/A
October 2019	Esperanza Middle School	2.09	N/A
June 1961	Excelsior High School	2.13	N/A

Most Recent Observation Date	Location Description	Distance from Shared Passenger Track Alternatives	
		Miles	Feet (if within Wildlife RSA)
November 2001	Ascot Hills: individual found/trapped in east Los Angeles and released here	2.86	N/A
February 2011	Rio De Los Angeles Park	3.00	N/A

Source: eBird 2024
N/A = not applicable; RSA = resource study area

Burrowing Owls were observed in 1921 within the Wildlife RSA in the Los Angeles area and in 2010 in the Hellman Wilderness Park approximately 3.0 miles north of the Wildlife RSA (CDFW 2024a). Burrowing Owls were observed in the San Gabriel Coastal spreading grounds, 1.0 mile from the Wildlife RSA on the west side of the San Gabriel River; 0.8 mile northeast of the Rio Hondo spreading grounds; and in the Rio de Los Angeles State Park, about 2.75 miles north of the northern end of the Wildlife RSA (eBird 2024). The Los Angeles River and adjacent habitat are not expected to provide habitat for Burrowing Owls. Similarly, large patches of wild oats and annual brome grassland, and disturbed or disturbed/barren areas, provide habitat suitable for species such as Burrowing Owls. Burrowing Owls may nest, overwinter, or migrate through habitat in the San Gabriel River and the Rio Hondo and spreading grounds. Burrowing Owls may be found in open areas such as disturbed fields in the Wildlife RSA. This species has a moderate potential to occur in the Wildlife RSA.

6.3.4.5 Long-Eared Owl (Asio otus)

Long-Eared Owls are USFWS birds of conservation concern and California species of special concern (CDFW 2025; USFWS 2023). Long-Eared Owls occur in wooded habitats that are either open or adjacent to grasslands, meadows, or shrublands. Habitat includes forest with extensive meadows, groves of conifers or deciduous trees in prairies, or streamside groves in the desert (Marks et al. 2020). Key habitat components for Long-Eared Owls include dense cover for nesting and roosting with open areas for foraging (Shuford and Gardali 2008). Long-Eared Owls forage on small mammals, small birds, bats, lizards, and snakes at night, sometimes before dusk, over fields or open woods (Marks et al. 2020).

The nesting season extends from February through July. Long-Eared Owls use old corvid or hawk nests (in trees or sometimes cliff ledges) for nesting but also use squirrel nests, mistletoe brooms, and natural platforms (Shuford and Gardali 2008).

No Long-Eared Owls were reported in the eBird (2024) dataset in the Supplemental RSA. This is a difficult species to detect, and the lack of observations may be because of detection probabilities for this species being low. The Wildlife RSA is within the current range of this species; however, dense woodlands for nesting and roosting are not present or rare and consist of ornamental tree species in parks or landscaped areas within the Wildlife RSA. Therefore, Long-Eared Owl has a low potential to occur within the Wildlife RSA and would only occur associated with the San Gabriel River and possibly the Rio Hondo and spreading grounds.

6.3.4.6 Mountain Plover (Charadrius montanus)

Mountain Plover is a USFWS bird of conservation concern and a California species of special concern (wintering birds) (CDFW 2025; USFWS 2023). This insectivorous species breeds in the short-grassland prairies, including overgrazed pastures and arid lands of the high plains east of the Rocky Mountains. Mountain Plovers prefer habitat with short grass or bare soils and are usually observed far from water (Knopf and Wunder 2023). They are a winter resident in California where they are associated with short-grass grasslands (Shuford and Gardali 2008), and their winter habitat includes desert flats and plowed fields (Knopf and Wunder 2023).

Mountain Plovers have disappeared from much of their former breeding range because of the conversion of short-grass prairie to farmland (Knopf and Wunder 2023).

The Wildlife RSA is within the current wintering range but, as expected, outside the known breeding range of this species. Potentially suitable habitat for this species is present in the San Gabriel River, the Rio Hondo and spreading grounds, and the Santa Ana River. Suitable habitat in these areas includes wild oats and annual brome grassland, barren areas, and disturbed habitat. No Mountain Plovers were reported in the Supplemental RSA in eBird (2024) or the CNDDB (CDFW 2024a). Mountain Plover was observed in 2015 at the Santa Fe Dam Recreation Area (12 miles to the northeast of the Wildlife RSA) and at Seal Beach (10 miles to the southwest of the Wildlife RSA) in 2016 (eBird 2024).

The potential exists for Mountain Plovers to be present in the Wildlife RSA associated with short grass and bare ground in the San Gabriel River and Rio Hondo and spreading grounds. However, as a result of flood control activities in these rivers and the rarity of this species, there is a low probability of this species being present.

6.3.4.7 White-Tailed Kite (Elanus leucurus)

White-Tailed Kite is a state fully protected species (CDFW 2025). They are found in savanna, open woodlands, river valleys, marshes, desert grasslands, partially cleared lands, and cultivated fields. Required habitat components include trees for perching and nesting with open areas containing high populations of rodents (Dunk 2020). White-Tailed Kite forages on small mammals (mice and voles primarily), birds, lizards, and insects, with 95 percent of prey items being small mammals. White-Tailed Kites are increasing in numbers, possibly because of the introduction of the house mouse (*Mus musculus*) from Europe (Dunk 2020). White-Tailed Kites nest in the top of a tree, in open country, or in trees at the edge of a forest. This species may nest twice in the same season (Dunk 2020).

There were numerous observations of White-Tailed Kites (eBird 2024) in the Supplemental RSA, including observations at the San Gabriel River, Whittier Narrows/Rio Hondo Dam, the Los Angeles River, Sepulveda Wildlife Basin, Walt Disney Concert Hall, and Taylor Yard Park. Open areas with a sufficient small mammal prey base and adjacent trees for perching are present at the San Gabriel River, the Rio Hondo and spreading grounds, the Raymond Retarding Basins, and Fullerton Municipal Airport. Areas with open fields, sports fields, and disturbed areas with available perches (including transmission towers) also provide habitat. There is a sufficient small mammal prey base to support this species and suitable nesting habitat (tall trees) throughout the Wildlife RSA and there is a moderate potential for White-Tailed Kites to occur, forage, and nest.

6.3.4.8 Loggerhead Shrike (Lanius ludovicianus)

Loggerhead Shrike is a California species of special concern (CDFW 2025). This species is found in semi-open areas with lookout posts such as wires, trees, or shrubs. Loggerhead Shrikes breed in semi-open areas such as riparian areas, open woodlands, agricultural areas, grasslands, broken chaparral, desert scrub, and beaches with scattered shrubs. Loggerhead Shrikes nest in dense trees or shrubs, and the nest is well hidden by foliage. In the winter, Loggerhead Shrikes may be found in more open areas, as long as hunting perches are available. Their populations are declining, but the causes of these declines are not clear—possible causes are the use of chemical pesticides, habitat loss, collisions with vehicles, and human disturbance (Wiggins 2005).

There are over 25 observations of Loggerhead Shrikes in the Supplemental RSA (eBird 2024). The nearest record is an observation in the Los Angeles River approximately 0.35 mile to the northwest of the Wildlife RSA. Observations occur in most of the major rivers, including the Santa Ana River, approximately 1.5 miles north of the Wildlife RSA, and the San Gabriel River, and La Mirada Creek.

There is a moderate probability of Loggerhead Shrikes occurring in the Wildlife RSA and this species is expected to be associated with the San Gabriel River and the Rio Hondo and spreading grounds.

6.3.4.9 Yellow Warbler (Setophaga petechia)

Nesting Yellow Warbler is a California species of special concern (CDFW 2025); however, current populations are being reviewed by CDFW to determine if they are stable because of their preference for "edge" habitats and second-growth areas. They can be found in bushes, swamp edges, riparian areas, streams, and gardens. In the west, they are found in riparian vegetation close to water along streams and wet meadows. Tree species found in occupied habitat for this species are willows, alders, and cottonwoods. This migratory species winters in the tropics (Lowther et al. 2025).

Yellow Warblers were observed at over 400 locations. The closest observations to the Shared Passenger Track Alternatives footprint occurred in 2023 in Neff Park within the Wildlife RSA, in 2023 in Fullerton, in 2016 in the San Gabriel River, and in 2010 in Anaheim (eBird 2024). Yellow Warbler observations associated with parks consist of observations at Twin Lakes Recreational Park, Hiltscher Park, Ralph B. Clark Regional Park, Fullerton Community Gardens, Henry Boissenranc Park, La Mirada Creek Park, Bell Gardens Park, City Terrace Park, Augustus Hawkins Nature Park, Hazard Park, Lincoln Park, Grand Park, Vista Hermosa Park, Buena Vista Meadows, Rose Hill Park/Ernest E. Debs Regional Park, and Rio de Los Angeles State Park. Yellow Warbler observations associated with drainages consist of observations at La Mirada Creek, the San Gabriel River, Santiago Creek, the Santa Ana River, Fullerton Creek, the Rio Hondo and spreading grounds, and the Los Angeles River. Yellow Warbler observations associated with reservoirs and lakes consist of observations at Echo Lake and Ivanhoe Reservoir (eBird 2024).

Willows and mulefat were present along the margins of the San Gabriel River, along with other tree species such as sycamore. Ornamental trees and willows provide "edge" habitat for this species at the Rio Hondo spreading grounds. Ornamental landscaping associated with developed areas, especially city parks, throughout the Wildlife RSA provides habitat for Yellow Warblers. There is a moderate potential for Yellow Warblers to nest in the Wildlife RSA.

6.3.5 Mammals

Nine special-status mammals (eight are California species of special concern; CDFW 2025) have potential to occur within the Wildlife RSA and all but one, mountain lion (state candidate), are bat species: pallid bat, Mexican long-tongued bat, Townsend's big-eared bat, western mastiff bat, western red bat, western yellow bat, pocketed free-tailed bat, and big free-tailed bat.

Crucial habitat elements for bats include riparian trees, nectar and pollen sources, upland woodland tree species (such as oaks and conifers), grasslands, scrub vegetation, leaf-litter, perennial water, natural rock caves, rocky outcrops, artificial caves (mines), and built structures such as buildings and bridges (Hathaway et al. 2004), with specific species requiring specific habitat elements. Of these habitat elements, within the Wildlife RSA upland woodland trees, nectar and pollen sources, grasslands, scrub vegetation, leaf-litter, perennial water, and built (potential roost) structures are present.

Studies in areas with higher habitat quality such as the Puente Hills (Remington 2006) and Griffith Park (Remington and Cooper 2009) have had positive survey results for western red bat (Griffith Park and Puente Hills), western yellow bat (Puente Hills), pallid bat (Puente Hills), pocketed free-tailed bat (Puente Hills), and western mastiff bat (Puente Hills). Habitat within the Wildlife RSA may provide habitat elements for species present in the area. For instance, Sycamore Canyon in the Puente Hills, although 3.2 miles from the Wildlife RSA, is less than 1 mile from relatively good quality habitat in the San Gabriel River that connects to the habitat in the San Gabriel River within the Wildlife RSA. Sycamore Canyon is just over 2 miles from habitat in the Rio Hondo spreading grounds, and this habitat is continuous with the Rio Hondo spreading grounds in the Wildlife RSA. Similarly, some arroyos in the Puente Hills connect to habitat (and golf courses) associated with drainages such as La Mirada Creek that are a part of the Wildlife RSA. These connections could link special-status bat species to important or limiting habitat elements that may be important for the species or during certain times of year.

Within the Wildlife RSA, urban areas are likely to provide limited and lower-quality foraging habitat for the majority of the potentially occurring special-status bat species. Some bat species are tolerant of human disturbance and may roost in structures associated with urban land use; however, bats roosting in urban areas are often at risk of roost disturbance and disruption.

Potential roost sites are expected to be scattered and limited to areas where suitable trees, snags, buildings, bridges, and culverts are present; however, there may be areas within the Wildlife RSA, such as bridges along drainages, where concentrations of roost sites for one or more bat species are possible. Dead and dying trees can provide roosting opportunities for crevice and cave-dwelling species (Hathaway et al. 2004). Water sources, drainages, and canyons tend to funnel bat activity (Remington and Cooper 2009).

6.3.5.1 Pallid Bat (Antrozous pallidus)

Pallid bat is a California species of special concern (CDFW 2025). This gregarious species ranges throughout California, primarily in the low and mid-level elevations (below 6,000 feet). They are found in a variety of habitats, in arid to semi-arid habitats, and are known to roost in buildings, bridges, caves, mines, and tree snags. At lower elevations, they are strongly associated with oak savanna habitat and forage on beetles, grasshoppers, and moths along riparian corridors, over grasslands, and in agricultural areas (Wilson and Ruff 1999).

The Wildlife RSA is within the current range of this species, and potentially suitable low- to moderate-quality foraging and roosting habitats are present. The highly urbanized nature of the Wildlife RSA and effects from existing trains and vehicles (collisions) increase the mortality risk to this species because this is a low-flying species. There is suitable foraging habitat present associated with the open water at the Raymond Retarding Basins and Lakeside Residential Community pond, occasional open water associated with the Los Angeles River, the Rio Hondo and spreading grounds, the San Gabriel River, and other watercourses. There are corridors consisting of lower-quality riparian habitat within the Wildlife RSA, but that connect to higher-quality riparian areas. These include the San Gabriel River and the Rio Hondo and associated spreading grounds. There are wild oats and annual brome grasslands associated with the San Gabriel River and Rio Hondo spreading grounds with suitable roosting habitat (bridges, buildings, tree snags) in the Wildlife RSA adjacent to these areas. Although the Los Angeles River and the Santa Ana River connect to higher-quality habitat, within the Wildlife RSA, these rivers are not considered habitat for pallid bats.

Pallid bats were observed in the western Puente Hills in 2004 with evidence of roosting (Remington 2006), but information regarding associations with specific canyons was not available. Suitable habitat in the canyons in the Puente Hills connects to drainages/watercourses with suitable habitat within the Wildlife RSA. There is a low potential for pallid bats to occur within the Wildlife RSA.

6.3.5.2 Mexican Long-Tongued Bat (Choeronycteris mexicana)

Mexican long-tongued bat is a California species of special concern (CDFW 2025). This species is adapted to feed on pollen and nectar and specializes in feeding on the flowers of agaves and columnar cactus. However, in the south coast region this species is known to be associated with residential areas rather than native habitat and to feed on hummingbird feeders and other nectar-rich plants, possibly even farmed avocados (Miner and Stokes 2005). The southern part of the south coast ecoregion represents the northwestern edge of the distribution of this species (Miner and Stokes 2005).

Mexican long-tongued bats roost near entrances to caves, rock crevices, and abandoned buildings. In the south coast region, the species is known to roost in residential areas in garages, sheds, and porches, and under houses built on stilts (Miner and Stokes 2005). They are known from Los Angeles, Orange, and Ventura Counties and are observed during fall and winter in the south coast ecoregion but are not expected to breed in California (Miner and Stokes 2005). This is an uncommon to rare species but it appears to have a stable population in the ecoregion. They

are difficult to detect acoustically and are most often detected through public contact investigations (Miner and Stokes 2005).

Within the Wildlife RSA, this species would be associated with ornamental land cover types, including residential parks and residential lots (this land cover type was mapped globally as developed), and would be expected to be associated with any areas with high amounts of available nectar sources. Roost sites could include any available buildings and bridges that contain cave-like structures. The species has a low potential to occur in the Wildlife RSA because it is uncommon to rare in the area.

6.3.5.3 Townsend's Big-Eared Bat (Corynorhinus townsendii)

Townsend's big-eared bat is a California species of special concern (CDFW 2025). This species was previously a candidate for listing as threatened or endangered in California, but the California Fish and Game Commission rejected the petition and these findings were adopted during the October 19–20, 2016, California Fish and Game Commission meeting. There is strong evidence for population declines for this species in the south coast ecoregion (Miner and Stokes 2005).

Townsend's big-eared bats are colonial and are found throughout California in a wide variety of habitats, such as desert scrub, sagebrush, chaparral, and deciduous and coniferous forests (Miner and Stokes 2005). Roosting habitat including caves and cave-like structures such as mines, tunnels, abandoned buildings, and bridges are an essential component of habitat for this species (Pierson and Rainey 1998b). Although considered a cave-dwelling species, the western species of Townsend's big-eared bats are likely to be found in buildings along the coast (Pierson and Rainey 1998b).

Roosting sites for this species are limited and this species is extremely sensitive to human disturbance. The primary threat to this species is the loss or disturbance of maternity and hibernation roost sites (Pierson and Rainey 1998b).

Females form maternity groups in the spring in caves and shelters, with maternal colonies rarely exceeding 100 bats. Maternal roosts form between March and June with pups born between May and July (Pierson and Rainey 1998b). Maternal roosts have warm, stable temperatures for pup rearing. Most maternity colonies are abandoned by mid-September. If left undisturbed, natal roosts experience repeated annual visitation by females (Pierson and Rainey 1998b).

Townsend's big-eared bats are often found in mesic sites and open water is important for both for drinking and feeding (Remington 2006). Populations are not known to move more than a few kilometers (or miles) from their natal roost and movement during the nursery season is confined to within 15 kilometers of the primary roost (Pierson and Rainey 1998b). When the colony disbands in the fall and the animals move to hibernacula, individuals have never been recorded more than 43 kilometers from the banding site (Pierson and Rainey 1998b).

This species feeds on moths (85 percent of the volume of prey) but also forages on beetles, leaf hoppers, and small flies. Edge habitat between forested and open areas is preferred for foraging. Individuals forage low over open pastures or high in crowns of trees (Stokes et al. 2005).

No CNDDB records for this species were found in the Los Angeles Basin, which could mean this species is not historically present within the Wildlife RSA. Although this species was described as common on the coastal plain and abundant in the inland valleys and foothills in the 1930s and 1940s (Miner and Stokes 2005), no known roosts were described in Los Angeles County in a comprehensive survey conducted from 1987 to 1991 (Pierson and Rainey 1998b). The nearest known areas with Townsend's big-eared bats populations appear to be in San Diego County, such as at the Santa Ysabel Ranch Open Space Reserve approximately 80 miles to the southeast of the Wildlife RSA (Hathaway et al. 2004).

The highly urbanized nature of the Wildlife RSA and effects from existing trains and vehicles (collisions) reduce the likelihood of this species being present, because this is a low-flying species, with high mortality risks from vehicle and rail collisions. Suitable foraging (associated with the San Gabriel River, the Rio Hondo and spreading grounds, and areas with ornamental tree plantings) and roosting habitat (old buildings) are present in the Wildlife RSA. The potential

for this bat species to be present is low because of the sensitivity of this species to human disturbance and the high mortality risks of an existing train corridor to a low-flying species.

6.3.5.4 Western Mastiff Bat (Eumops perotis californicus)

Western mastiff bat is a California species of special concern (CDFW 2025). A free-tailed bat, it is the largest native bat in California. It ranges in the north from the San Francisco Bay area east to the Sierra Nevada and southward through the rest of the state. It occupies arid and semi-arid areas and roosts primarily in crevices in vertical cliffs and in broken terrain with exposed rock faces. This species is primarily cliff roosting but also roosts in large boulders or in human constructions such as buildings and bridges (Siders 2005) and has been documented roosting in palm trees. It has been found roosting in high buildings, trees, and tunnels. This species prefers deep crevices that are at least 16 to 20 feet above the ground and roosting sites that have unobstructed moderately large openings that can be entered from below, because it cannot take flight from a flat surface and must free-fall to achieve lift for successful flight (Wilson and Ruff 1999).

This species forages on large moths, crickets, grasshoppers, dragonflies, cicadas, beetles, and bees, often foraging as high as several hundred to 2,000 feet above the ground. Western mastiff bats have been known to travel more than 25 miles from roost sites to forage in a variety of habitats (Wilson and Ruff 1999).

This species has been documented (CDFW 2024a) within the Wildlife RSA in Buena Park (1990 record) and Los Angeles (1990 record). In the Supplemental RSA, western mastiff bats have been documented in Craig Regional Park in La Habra (no date), Orange (1989 record), and Tustin (1949). Western mastiff bats were observed in 2004 through 2006 in the western Puente Hills associated with Arroyo Pescadero, which is about 3.5 miles northeast of the Wildlife RSA and has a connection to the Wildlife RSA through La Mirada Creek (Remington 2006).

It is likely that this species forages over the open water associated with the Raymond Retarding Basins, the San Gabriel River, the Rio Hondo and spreading grounds, and the Los Angeles River. This species frequently forages in broad, open areas and may forage more than several miles from a roost. Foraging habitat includes mountain meadows, dry desert washes, floodplains, chaparral, oak woodland, open ponderosa pine forests, grassland, and agricultural areas, where primarily moths are consumed (Pierson and Rainey 1998a). The species also has a low potential to use bridges and buildings because of the need for high roosts This species is known to be a high-flying species.

This species has a low potential to occur in the Wildlife RSA. Although suitable foraging habitat is present (open water areas) and there is a reduced risk of collision mortality with the existing trains and vehicles because this species is a highflyer, this species does require a roost that is at least 16 to 20 feet above the ground. This limits potential roosting sites within the Wildlife RSA. However, some bridges could provide suitable roosts, such as bridges associated with the Los Angeles River. Therefore, this species may be present within the Wildlife RSA, but the potential for this species to occur is low.

6.3.5.5 Western Red Bat (Lasiurus blossevillii)

Western red bat is a California species of special concern (CDFW 2025). Western red bats are solitary and migratory and are typically found associated with mature, intact sycamore and cottonwood riparian vegetation. However, individuals are now being detected in urban areas with ornamental trees in Orange and San Diego Counties with evidence of breeding in Southern California (Remington and Cooper 2009). This species was historically common in Southern California, but is no longer common, likely because of extensive habitat loss (Remington 2006).

Western red bats roost in foliage and require a range of trees for roosting because the bats often move their roost spot from tree to tree. Broad-leaved trees with dense foliage are required and these can include orchard trees (avocado, apricots, and citrus). Western red bats also rely on riparian habitats for foraging (Remington and Cooper 2009).

Western red bats were detected in Griffith Park in 2008, approximately 6 miles to the north of the Wildlife RSA, with evidence of this species roosting in habitat associated with the Los Angeles River (Remington and Cooper 2009). There are numerous parks adjacent to the Los Angeles River in this area and between the Wildlife RSA and Griffith Park with potential to provide suitable roost sites. Habitat quality diminishes in and adjacent to the Los Angeles River south of Spring Street and it is unlikely there are suitable roost sites for western red bats in this area.

Western red bats were detected in six different canyons in the western Puente Hills, approximately 3.0 miles west of the Wildlife RSA (Remington 2006). Western red bat was observed in Sycamore Canyon, Turnbull Canyon, Powder Canyon, Arroyo San Miguel, Ecology Canyon, and La Canada Verde Creek. Sycamore Canyon is approximately 3.2 miles from the Wildlife RSA associated with the San Gabriel River and 3.5 miles from the Wildlife RSA associated with the Rio Hondo and spreading grounds. Sycamore Canyon is less than 1.0 mile from the San Gabriel River (just across I-605) and approximately 2.2 miles from the Rio Hondo spreading grounds. La Canada Verde Creek is about 3.0 miles to the northeast of the Wildlife RSA and Arroyo San Miguel is about 3.5 miles northeast of the Wildlife RSA and both have a connection to the Wildlife RSA through La Mirada Creek. Turnbull Canyon is about 3.0 miles northeast of the Wildlife RSA and 2.5 miles east of the San Gabriel River and Powder Canyon is about 6.5 miles north of the Wildlife RSA. Powder Canyon connects to the Wildlife RSA via Coyote Creek.

Western red bats would be expected to be associated with the San Gabriel River, the Rio Hondo and spreading grounds, and ornamental habitats with large areas of broad-leaved trees with upstream connections to the Puente Hills. Western red bats are known both to the north and to the east of the Wildlife RSA and are known to roost in ornamental trees in urban areas. The probability of western red bats being present within the Wildlife RSA is low because this species is uncommon in Southern California and because there is a lack of large areas with broad-leaved trees to provide suitable roost sites, including trees in intact mature riparian areas, within the Wildlife RSA.

6.3.5.6 Western Yellow Bat (Lasiurus xanthinus)

Western yellow bat is a California species of special concern (CDFW 2025). This noncolonial bat species is often associated with water features such as stock tanks, ponds, streams, and rivers in open grassy areas and scrub, and can be found in canyon and riparian habitats. Capture sites are reported over swimming pools, residential areas (lawns), and orchards (Bolster 1998). This species is associated with dry, thorny vegetation in the Mexican Plateau and in the southwestern United States, and with palms and other desert riparian habitats. They often occur in palm oases but may be expanding their range to include palms in landscaping (Bolster 1998). This bat usually roosts in the skirts of dead palm fronds in both native and nonnative palms (Bolster 1998) and has been documented roosting in cottonwoods. The species is insectivorous (Bolster 1998) and prefers open water areas for foraging for beetles, bugs, flies, moths, butterflies, grasshoppers, and crickets. Threats to the species include domestic predators, the cosmetic removal of dead palm fronds, and loss of habitat (Bolster 1998).

Western yellow bat may forage over the open water associated with the Wildlife RSA at the Raymond Retarding Basins, the San Gabriel River, the Rio Hondo and spreading grounds, and the Los Angeles River. This species also has a moderate potential for using adjacent trees for roosting, especially palm trees. Western yellow bat was observed in Sycamore Canyon, Turnbull Canyon, Powder Canyon, Arroyo San Miguel, and La Canada Verde Creek in the western Puente Hills in 2000 (Remington 2006). Sycamore Canyon is approximately 3.2 miles from the Wildlife RSA associated with the San Gabriel River and 3.5 miles from the Wildlife RSA associated with the Rio Hondo and spreading grounds. Sycamore Canyon is less than 1.0 mile from the San Gabriel River (just across I-605) and approximately 2.2 miles from the Rio Hondo spreading grounds. La Canada Verde Creek is about 3.0 miles to the northeast of the Wildlife RSA, and Arroyo San Miguel is about 3.5 miles northeast of the Wildlife RSA; both have a connection to the Wildlife RSA through La Mirada Creek. Turnbull Canyon is about 3.0 miles northeast of the

Wildlife RSA and 2.5 miles east of the San Gabriel River, and Powder Canyon is about 6.5 miles north of the Wildlife RSA. Powder Canyon connects to the Wildlife RSA via Coyote Creek.

Roosting habitat (trees and palms, under fronds) and foraging habitat (water features, open grassy areas) for this species are both abundant in the Wildlife RSA, and the species is known in several locations in the Supplemental RSA. The species is expected to be associated with open water, including the Raymond Retarding Basins, Lakeside Community pond, the San Gabriel River, the Rio Hondo and spreading grounds, and the Los Angeles River. Roost sites are expected to be associated with palms and occasionally cottonwoods, which are present in both residential areas and in ornamental land cover types. Western yellow bats are a low-flying species, with high mortality risks from vehicle and rail collisions. This species has a moderate potential to occur within the Wildlife RSA.

6.3.5.7 Pocketed Free-Tailed Bat (Nyctinomops femorosaccus)

Pocketed free-tailed bat is a California species of special concern (CDFW 2025) and occurs throughout California in a variety of habitats including desert scrub, desert riparian, chaparral, and pine-oak forests (Pierson and Rainey 1998a). This colonial species roosts in crevices in rugged cliffs, high rocky outcrops, and slopes, but may also roost in buildings, caves, and under roof tiles. Colonies are usually fewer than 100 individuals. The species forages on large moths, but its diet includes small moths and beetles. It pursues prey on the wing. As aerial insectivores, they tend to forage high above the forest canopy or in open desert areas. During the dry season, this species uses large open sources of water with a large surface area from which to drink. As with all molossids, the species requires a constant, high population of insects to feed the colony and migrates southward in the winter to sustain the colony with insects.

Pocketed free-tailed bat may forage and drink using the open water associated with the Wildlife RSA at the Raymond Retarding Basins, the San Gabriel River, the Rio Hondo and spreading grounds, and the Los Angeles River and has a low to moderate potential for roosting in buildings. As little is known about the ecology of this species, it may roost under bridges. The nearest CNDDB record is from 1989, a male collected in Brea, which was mapped within the Supplemental RSA to the north of the Wildlife RSA. Pocketed free-tailed bats were observed in Sycamore Canyon, approximately 3.2 miles from the Wildlife RSA associated with the San Gabriel River and 3.5 miles from the Wildlife RSA associated with the Rio Hondo and spreading grounds in 2004, 2005, and 2006 (Remington 2006). These observations were less than 1.0 mile from the San Gabriel River (just across I-605) and approximately 2.2 miles from the Rio Hondo spreading grounds. These bats were also observed in Turnbull Canyon in 2004, 2005, and 2006 about 3.0 miles northeast of the Wildlife RSA and 2.5 miles east of the San Gabriel River (Remington 2006) and in Powder Canyon in 2004, 2005, and 2006 about 6.5 miles north of the Wildlife RSA (Remington 2006). Powder Canyon connects to the Wildlife RSA via Coyote Creek.

Pocketed free-tailed bats are known to occur in the western Puente Hills just east of the Wildlife RSA (approximately 3 to 6 miles from the Wildlife RSA). Free-tailed bats are far-ranging species and may roost in the foothills but may forage over much larger areas (Miner and Stokes 2005). Water sources tend to funnel bat activity, and the species occurs in canyons that are adjacent to or feed into the San Gabriel River, the Rio Hondo and associated spreading grounds, and Coyote Creek. Canyons and drainages are important habitat components for bats because canyons often contain riparian habitats, insect prey, trees, cliff and rock features, and water sources; and drainages contain water sources, trees, and insect prey. It is probable that bats follow canyons and drainages for foraging and to seek out water sources. This species may forage in the Wildlife RSA and roost in crevices in areas such as the Puente Hills, but may also roost in buildings. As this is a high-flying species, it would be less affected by collisions with vehicles and trains in the existing rail corridor and so would be more likely to be present in this area. Pocketed free-tailed bats have a moderate potential to occur in the Wildlife RSA.

6.3.5.8 *Big Free-Tailed Bat (Nyctinomops macrotis)*

Big free-tailed bat is a California species of special concern (CDFW 2025) that requires high cliffs or rocky outcrops for roosting sites; it also roosts in buildings, caves, and holes in trees (Pierson and Rainey 1998a). This species is found associated with desert scrub, arroyo, and woodland habitats. It feeds mainly on large moths but may take crickets, grasshoppers, flying ants, stinkbugs, froghoppers, and leafhoppers.

Females form maternity colonies in the summer, and very few roosts have ever been found. A colony of 130 bats was discovered in the Chiso Mountains in Big Bend National Park in Texas in a horizontal rock crevice above a talus slope in a narrow rock canyon (Pierson and Rainey 1998a). Big free-tailed bats have also been found in buildings and caves, and occasionally in tree hollows (Pierson and Rainey 1998a). Big free-tailed bats are rarer than pocketed free-tailed bats and are found farther north along the coast in the south coast ecoregion (Miner and Stokes 2005). Despite this species being rare, it has a scattered distribution throughout much of California and could be expected almost anywhere (Pierson and Rainey 1998a). Free-tailed bats are far-ranging species and may roost in the foothills but may forage over much larger areas (Miner and Stokes 2005).

As aerial insectivores foraging on moths, crickets, grasshoppers, and flying ants (Pierson and Rainey 1998a), big free-tailed bats tend to forage high above the forest canopy or in open desert areas. As with all molossids, this species requires a constant, high population of insects to feed the colony and migrates southward in the winter to sustain the colony with insects.

This species may forage over the open water associated with the Wildlife RSA at the Raymond Retarding Basins, the San Gabriel River, the Rio Hondo and spreading grounds, and the Los Angeles River and has a moderate potential for roosting in tree cavities, bridges, or buildings in the Wildlife RSA. The nearest CNDDB record is from 1985 with an exact location unknown in Los Angeles (central) in the Wildlife RSA. During surveys in the Puente Hills (Remington 2006) from 2004 through 2006, big free-tailed bats were not detected.

This species may roost in buildings and trees in the Wildlife RSA and may forage in areas with available insects. However, this species has a low potential to occur in the Wildlife RSA because it prefers high cliffs for roosting sites and is found associated with wooded habitat types. In addition, foraging is preferred above the forest canopy rather than over open water. Although there are some wooded areas (e.g., adjacent to the San Gabriel River and some ornamental habitats) within the Wildlife RSA, this habitat type is minimal. Therefore, this species has low potential to occur within the Wildlife RSA.

6.3.5.9 Mountain Lion (*Puma concolor*)

Mountain lions are legally classified as a “specially protected mammal” in California, and it is unlawful to possess, transport, import, or sell any mountain lion or part or product thereof. In July 2019, the Center for Biological Diversity petitioned the California Fish and Game Commission to list mountain lions as threatened under the CESA within a proposed evolutionarily significant unit in Southern California and along the central coast in California. In April 2020, the commission found that the listing of the evolutionarily significant unit may be warranted and designated the mountain lion within the evolutionarily significant unit as a candidate species under the CESA (CDFW 2020). Species classified as candidate species are afforded the same protection as listed species under the CESA. CDFW is now completing a status review of mountain lions within the proposed evolutionarily significant unit. Upon completion, CDFW will make a recommendation on listing to the commission (CDFW 2020).

Mountain lions are found wherever deer are present, because deer are the primary food source for this species in most areas but they are opportunistic feeders (Currier 1983). Mountain lions tend to select home ranges with rugged terrain, naturally barren areas, chaparral, coastal sage scrub, riparian areas, woodland, and grassland and avoid areas with agriculture, desert, roads, and urban areas (Zeller et al. 2017).

Mountain lions have few offspring, with an average of two kittens per litter, which stay with the mother until age 1.5 to 2 years (Currier 1983). Females become sexually mature at 2 to 3 years. Free-ranging mountain lions likely live about 12 years (Currier 1983).

The main risks to mountain lions include loss of habitat, barriers that restrict connectivity with other mountain lion populations (reducing genetic diversity in the population and increasing intraspecific mortalities because of mountain lion conflicts), mortalities caused by roads, losses caused by human conflicts (mountain lions can be "taken" in depredation killings if they are deemed to be a threat to humans), and widespread presence of anticoagulant rodenticides (rat poisons) (National Park Service 2021).

Near the Supplemental RSA, mountain lions are known in the Santa Monica Mountains, the Chino Hills, the Puente Hills, the Santa Ana Mountains, the eastern Peninsular range, the Transverse Ranges, and the San Bernardino Mountains (Vickers et al. 2015). Mountain lion observations have not been recorded in the CNDDB.

Within the Santa Monica Mountains, the Santa Susana Mountains (including the Simi Hills), the Los Angeles Forest, and the Verdugo Hills from 2002 to 2012, mountain lions were captured, genotyped, and radio-tracked. Freeways were substantial barriers to movement and were almost never crossed, acting as home-range boundaries. Approximately 50 percent of the mortalities were due to intraspecific strife (i.e., mountain lions killing other mountain lions, with adult males killing their offspring, brothers, or a previous mate). Young males rarely were able to disperse to a home range with mating opportunities and most died before dispersal. In the Santa Monica Mountains, P22 was the only male to successfully disperse, settling in Griffith Park and crossing two freeways (405 and 101). P22 had a home range of 26 square kilometers compared to 500 square kilometers for adult male P1. P22 had no opportunities for mating and his home range was entirely bounded by freeways and urbanization. North of U.S. Highway 101 (Santa Susana Mountains), three subadult males were killed on roads and three successfully crossed roads and established home ranges as adults. None of the males of the Santa Monica Mountains successfully dispersed and established viable home ranges, although all three from the Santa Susana Mountains did (Riley et al. 2014).

Mountain lions within the Supplemental RSA observed in iNaturalist (2022) are mapped in Appendix M-2. Two individual mountain lions were mapped in the Supplemental RSA: P-22, an adult male known to inhabit Griffith Park until December 2022 when he was killed by a vehicle strike (NPR 2022), and P-41, an adult male found dead from secondary poisoning in 2017 (Mercury News 2017). P-41 had the second smallest home range of any adult male mountain lion studied by the National Park Service, with P-22 having the smallest home range.

Mountain lions may occur in the Supplemental RSA and the Wildlife RSA because suitable habitat is present. Mountain lions may occur in drainages such as the San Gabriel River, the Rio Hondo and spreading grounds, and the Los Angeles River or in stormwater control channels opportunistically or to navigate to other suitable habitat areas. Mountain lions that may occur in the Supplemental RSA are heavily constrained by urbanization, the threats that urbanization poses, and the risk of vehicle strikes from existing roads.

6.4 Aquatic Resources

Aquatic resources within the Aquatic RSA have been heavily modified because of urbanization (e.g., concrete-lined channels) and transportation and rail infrastructure. In addition, these areas are subject to periodic disturbance for flood control purposes, including eradication and removal of vegetation, removal of accumulated sediment, and tilling of earthen channels and basins. This routine flood control maintenance[14] prevents establishment of vegetation in the concrete-lined

[14] Channel maintenance activities conducted by USACE and local flood control jurisdictions (e.g., Los Angeles County Department of Public Works, Orange County Flood Control District) include removing deposits of sediment, vegetation,

channels and mature vegetative growth forms (e.g., woodlands, forest) in earthen-bottom channels and basins, and limits the extent and diversity of natural and seminatural vegetative communities as well as natural biogeochemical functions. Based on current conditions, aquatic resources within the Aquatic RSA are expected to perform a limited set of aquatic ecological functions.

Aerial imagery interpretation and field investigations in the 3,612.73-acre Aquatic RSA identified a total of 99.04 acres of aquatic resources considered USACE or SWRCB jurisdictional aquatic resources. This acreage consists of 97.15 acres of nonwetland waters of the U.S. (basin, built watercourse, and riverine features) and 1.89 acres of wetlands (freshwater emergent wetland, freshwater forested/shrub wetland). No Section 9 (33 U.S.C. 401) or Section 10 navigable waters of the U.S. (33 U.S.C. 403) were identified in the Aquatic RSA.

A total of 153.86 acres of areas considered subject to California Fish and Game Code Section 1600 et seq. were identified in the Aquatic RSA.[15] This acreage consists of 151.94 acres of unvegetated lakes and streambeds in the form of basins (including Lakeside Residential Community pond), built watercourses, and riverine features, and 1.92 acres of associated riparian vegetation (freshwater emergent wetland, freshwater forested/shrub wetland, and riparian scrub).

Table 6-8 presents a summary of the aquatic resources mapped in the project section.

Table 6-8 Aquatic Resources Considered Waters of the U.S. and Waters of the State, and Subject to California Fish and Game Code Section 1600 et seq.[5]

Aquatic Resource Category[1]	USACE or SWRCB Wetland Waters of the U.S.	USACE or SWRCB Nonwetland Waters of the U.S.	CDFW Streambed	CDFW Lakes	CDFW Associated Riparian Vegetation[2]
Wetlands					
Freshwater Emergent Wetland[3]	1.83	—	—	—	1.84
Freshwater Forested/ Shrub Wetland	0.06	—	—	—	0.06
Wetlands Subtotal	1.89	—	—	—	1.90
Nonwetland Waters					
Basin	N/A	20.81	—	36.96	<0.01
Built Watercourse	N/A	0.43	0.57	—	—
Riverine[4]	N/A	75.91	114.43	—	0.02
Nonwetlands Subtotal	N/A	97.15	115.00	36.96	0.02

and other materials that can inhibit the ability of built flood control channels to convey floodwaters. Such maintenance activities are authorized under USACE Los Angeles District Regional General Permit 41 (USACE 2019) and the 2021 USACE Nationwide Permit Program (USACE 2021).

[15] Aquatic resources potentially subject to California Fish and Game Code Section 1600 et seq. identified in the Aquatic RSA are generally inclusive of aquatic resources considered subject to USACE or SWRCB jurisdiction (i.e., overlapping).

Aquatic Resource Category[1]	USACE or SWRCB Wetland Waters of the U.S.	USACE or SWRCB Nonwetland Waters of the U.S.	CDFW Streambed	CDFW Lakes	CDFW Associated Riparian Vegetation[2]
Total Wetlands and Nonwetland Waters	**1.89**	**97.15**	**115.00**	**36.96**	**1.92**

Source: Authority 2025b

[1] As defined by *U.S. Army Corps of Engineers Wetland Delineation Manual* (USACE 1987), USFWS National Wetlands Inventory (USFWS 2016a, 2024b), and *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al. 1979).

[2] Within the Aquatic RSA, California Fish and Game Code Section 1600 "associated riparian vegetation" occurs in wetlands (freshwater emergent wetland, freshwater forested/shrub wetland) as well as nonwetland (basin, riverine) conditions.

[3] The bulrush marsh identified in the San Gabriel River (Feature 12, Wetlands 2 and 3) portion of the RSA is classified as "freshwater emergent wetland" for USACE or SWRCB (CWA Section 404/401 and the Porter-Cologne Water Quality Control Act) jurisdiction and "associated riparian vegetation" for CDFW Section 1600 jurisdiction. The cattail marsh identified in the La Mirada Creek (Feature 19) portion of the RSA is classified as "freshwater emergent wetland" for purposes of CDFW Section 1600 jurisdiction and "riverine" for purposes of USACE or SWRCB (CWA Section 404/401 and Porter-Cologne Water Quality Control Act) jurisdiction, because this feature does not meet the USACE or SWRCB wetland definitions. Refer to Sections 6.4.1.1 and 6.4.2.2 for additional detail.

[4] The mulefat thickets habitat identified in the Rio Hondo (Feature 9, Basin #3) and San Gabriel River (Feature 12) portions of the RSA is classified as "riverine" for purposes of USACE or SWRCB (CWA Section 404/401) jurisdiction and as "associated riparian vegetation" for purposes of CDFW Section 1600 jurisdiction. Refer to Sections 6.4.2.1 and 6.4.2.2 for additional detail.

[5] Aquatic resource acreages are based on the project footprint dated August 2024 and include both Shared Passenger Track Alternatives A and B. Specifically, the Aquatic RSA includes both LMF options (26th Street LMF and 15th Street LMF) and both the optional Norwalk/Santa Fe Springs and Fullerton HSR platform and station facilities. In summary, there is no difference in the location or extent of aquatic resource acreages or aquatic resource impacts between Shared Passenger Track Alternatives A and B.

CDFW = California Department of Fish and Wildlife; CWA = Clean Water Act; HSR = high-speed rail; LMF = light maintenance facility; N/A = not applicable; RSA = resource study area; SWRCB = State Water Resources Control Board; USACE = U.S. Army Corps of Engineers

A USACE Preliminary Jurisdictional Delineation form and aquatic feature summary were prepared for the project section and submitted to USACE under separate cover in June 2018. The Preliminary Jurisdictional Delineation form identifies wetland and nonwetland waters of the U.S. mapped within the RSA. On July 31, 2018, the USACE Los Angeles District issued a Preliminary Jurisdictional Determination for the project section stating that, upon review of the mapped aquatic resources, waters of the U.S. may be present in the project section in the locations identified by the Authority. Based on a comprehensive evaluation of the aquatic resources identified pursuant to the current (2023) definition of waters of the U.S., the Authority has determined that the location, nature, and extent of waters of the U.S., including wetlands, are the same under both the September 2021 and September 2023 definitions. Accordingly, the Authority will not request a new or amended Preliminary Jurisdictional Determination from USACE.

Section 6.4.1, Wetland Aquatic Resources, and Section 6.4.2, Nonwetland Aquatic Resources, provide narrative descriptions of aquatic resources identified and mapped within the Aquatic RSA. These resources meet the statutory definitions and technical criteria for USACE or SWRCB wetland and nonwetland waters of the U.S. and SWRCB wetland and nonwetland waters of the state, and the statutory definition for areas subject to California Fish and Game Code Section 1600 et seq. Summary tables and mapbooks of aquatic resources considered USACE, SWRCB, or CDFW jurisdictional aquatic resources are provided in Appendices F and H, respectively.

6.4.1 Wetland Aquatic Resources

Within the Aquatic RSA, delineators identified and mapped two types of wetland aquatic resources considered subject to USACE, SWRCB, and CDFW jurisdiction, consisting of freshwater emergent wetland and freshwater forested/shrub wetland. Sections 6.4.1.1 and 6.4.1.2 describe the locations, physical and biological characteristics, and jurisdiction of these wetland areas. Refer to Appendix F and Appendix H for acreages of each of the wetland and nonwetland aquatic resources by feature.

6.4.1.1 Freshwater Emergent Wetland

Within the Aquatic RSA, delineators identified three freshwater emergent wetlands, two of which met the USACE and SWRCB wetland definitions. One moderately sized (1.73 acres) freshwater emergent wetland was identified in the San Gabriel River in the vicinity of the existing railroad crossing and the dominant low-flow channel (Feature 12 – Freshwater Emergent Wetland 3). A smaller freshwater emergent wetland (0.10 acre) was identified in the San Gabriel River along the left descending (eastern) bank in the vicinity of a large (approximately 7.5-foot-wide) stormwater outlet (Feature 12 – Freshwater Emergent Wetland 2). Lastly, a small (0.01 acre) freshwater emergent wetland (Feature 19 – Freshwater Emergent Wetland) was identified in La Mirada Creek in the vicinity of the existing railroad crossing; however, this area did not meet either the USACE or SWRCB wetland definition, as described below. Accordingly, this particular wetland feature is included herein for purposes of CDFW jurisdiction under the general statutory definition for "associated riparian vegetation," and in Section 6.4.2.2, Riverine, for purposes of USACE or SWRCB jurisdiction under the general statutory definition for "nonwetland waters."

Five representative wetland sample points (SP) were established in Feature 12 – Freshwater Emergent Wetland 3: SP-9, SP-10, SP-11, SP-12, and SP-13. Of these, SP-9, SP-11, and SP-12 were in the San Gabriel River and SP-10 and SP-13 were in nonwetland waters of the U.S. Two representative wetland SPs were established in Feature 12 – Freshwater Emergent Wetland 2: SP-14 and SP-15. Of these, SP-14 was in the wetland and SP-15 was in the associated nonwetland waters of the U.S. (Appendix F).

Photo stations (PS) PS-58, PS-59, PS-60a, PS-60b, and PS-61 provide representative photographs of Feature 12 – Freshwater Emergent Wetland 3 and adjacent upland areas. PS-62 and PS-63 provide representative photographs of Feature 12 –Freshwater Emergent Wetland 2 (Appendix J, Site Photographs).

Perennial, emergent monocots that create defined uniform stands dominate the freshwater emergent wetlands at the sample points in the San Gabriel River. Dominant hydrophytic species included California bulrush (OBL), willow smartweed (FACW), southern cattail (OBL), barnyard grass (FACW), curly dock (FAC), and African umbrella sedge (FACW).

Wetland soils in the San Gabriel River freshwater emergent wetland sample points consisted predominantly of silts and sands. Observed hydric soil indicators consisted of redoximorphic conditions (oxidized iron concentrations) in soil matrices, classified as redox dark surface. Some of these areas in the Aquatic RSA are substantially disturbed; these soils were considered to be problematic (as described in USACE 2008b:97) because of frequent maintenance activities.

Observed primary indicators of hydrology included high water table (A2), saturation (A3), water marks (B1, nonriverine), sediment deposits (B2, nonriverine), drift deposits (B3, nonriverine), inundation visible on aerial imagery (B7), and biotic crust (B12). Observed secondary indicators of hydrology include water marks (B1, riverine), sediment deposits (B2, riverine), drift deposits (B3, riverine), drainage patterns (B10), and saturation visible on aerial imagery (C9).

Two representative wetland SPs were established in the freshwater emergent wetland in La Mirada Creek: SP-18 and SP-19 (Appendix F). PS-22, PS-74, and PS-75 provide representative photographs of these wetlands and adjacent upland areas (Appendix J).

Modest sediment accumulation in the portion of La Mirada Creek (up to 6 inches) falling within the Aquatic RSA has allowed the establishment of sparse patches of hydrophytic (rooted) vegetation over the grouted riprap lining. This consists of pioneer species adapted to disturbance, including southern cattail (OBL), umbrella plant (FACW), willow smartweed (FACW), barnyard grass (FACW), and dense-flowered sprangletop (FACW). Based on the results of the field survey, this wetland feature did not meet either the USACE or SWRCB wetland definition, because of the thin soil profile, the confirmed absence of redoximorphic features, and the presence of an (artificial) restrictive barrier to the underlying substrate. However, this feature is likely to be subject to California Fish and Game Code Section 1600 et seq. and falls under the general statutory definition for "associated riparian vegetation" (Table 6-8).

On August 16, 2017, USACE Los Angeles District Regulatory staff (Veronica Li and Miriam Yemane) conducted a field verification of wetland and nonwetland aquatic resources in the study area portion of the San Gabriel River. Based on inspection of soils, vegetation, and hydrology adjacent to Feature 12 – Freshwater Emergent Wetland 3, USACE advised the Authority to expand the delineated limits of this wetland feature. In addition, USACE agreed with the delineation of Feature 12 – Freshwater Emergent Wetland 2. Based on feedback from USACE during the verification, the Authority has amended the original wetland delineation data forms for SP-10 and SP-12 and the accompanying maps to reflect USACE's observations and direction (Appendix F).

6.4.1.2 Freshwater Forested/Shrub Wetland

Within the Aquatic RSA, delineators identified a single (0.06 acre) small stand of freshwater forested/shrub wetland (Feature 12 – Freshwater Forested/Shrub Wetland 1) in the San Gabriel River, along the right descending (western) bank in the vicinity of a small (approximately 3.0-foot-wide) stormwater outlet.

Two representative wetland SPs (SP-16 and SP-17) were established in Feature 12 – Freshwater Forested/Shrub Wetland 1, both in the San Gabriel River (Appendix F).

Dominant vegetation in this stand consisted of Goodding's willow (FACW) overstory and an understory of barnyard grass (FACW), willow smartweed (FACW), and rough cocklebur (FAC). PS-66 and PS-67 provide representative photographs of Feature 12 – Freshwater Forested/ Shrub Wetland 1 and adjacent upland areas (Appendix J).

Wetland soils in the San Gabriel River freshwater forested/shrub wetland SPs consisted predominantly of sands and silt (sandy loam). Observed hydric soil indicators consisted of redoximorphic conditions (oxidized iron concentrations) in soil matrices, classified as redox dark surface.

No primary indicators of hydrology were present at the time of the field survey. This is a result of several factors, including routine maintenance of this reach of the river, the seasonal timing of the survey (August 2016), and the extended drought cycle leading up to the survey. Observed secondary indicators of hydrology consisted of drift deposits (B3, riverine) drainage patterns (B10) and saturation visible on aerial imagery (C9). Two secondary indicators are required to meet the hydrology parameter.

6.4.2 Nonwetland Aquatic Resources

Within the Aquatic RSA, delineators identified and mapped three types of nonwetland aquatic resources considered subject to USACE, SWRCB, and CDFW jurisdiction, consisting of basins, riverine features, and built watercourses. With the exception of the mulefat thicket shrubland identified in the Rio Hondo spreading grounds (falling within CDFW jurisdiction and outside USACE or SWRCB jurisdiction), the features fall under the jurisdiction of USACE, SWRCB, and CDFW. Table 6-9 provides a brief description of each type of nonwetland aquatic resource with respect to jurisdictional aquatic resource category, channel design, and type of substrate.

Table 6-9 Description of Nonwetland Aquatic Resources

Aquatic Resource	Description of Feature
Features 1 (Los Angeles River in Los Angeles), 5 (Rio Hondo in Pico Rivera), 14 (North Fork Coyote Creek in Santa Fe Springs), 15 (Milan Creek in Santa Fe Springs), 19 (La Mirada Creek in La Mirada), 20 (Coyote Creek in South Buena Park and La Mirada),[1] 28 (Fullerton Creek in Fullerton)[1]	Riverine: Concrete bed and bank, trapezoidal channel
Features 18 (La Mirada Creek in La Mirada), 20 (Coyote Creek in South Buena Park and La Mirada), 30 (Fullerton Creek in Fullerton), 38 (Carbon Creek in Anaheim), 41 (Brea Creek in Buena Park)	Riverine: Concrete bed and bank, box channel

Aquatic Resource	Description of Feature
Features 12 (San Gabriel River in Pico Rivera), 40 (Santa Ana River in Anaheim and Orange)	Riverine: Earthen bed and concrete/riprap bank, trapezoidal channel
Features 29 and 31 (unnamed features in Fullerton and Anaheim)	Built watercourse: Concrete bed and bank, trapezoidal channel
Features 7–10 and 55–58 (Rio Hondo spreading grounds in Pico Rivera),[2] 23 (Lakeside Residential Community pond in Buena Park), 37 (Raymond Retarding Basin northwest in Anaheim), 39 (Raymond Retarding Basin southeast in Anaheim)	Basin: Earthen bed and bank, basin

Source: Authority 2025b
[1] Feature 20 (Coyote Creek) and Features 28/30 (Fullerton Creek) transition between a concrete bed and bank box trapezoidal channel and a concrete bed and bank box channel within the Aquatic RSA.
[2] USACE or SWRCB Clean Water Act Section 404/401 jurisdiction for basin features was mapped laterally between the toes of bank, whereas CDFW 1600 jurisdiction was mapped between the tops of bank. The portion of Feature 55 (Rio Hondo Basin #5) occurring within the Aquatic RSA includes only the eastern bank of the basin; therefore, this feature falls within CDFW Section 1600 jurisdiction but outside of USACE or SWRCB Clean Water Act Section 404/401 jurisdiction.
CDFW = California Department of Fish and Wildlife; RSA = resource study area; SWRCB = State Water Resources Control Board; USACE = U.S. Army Corps of Engineers

Sections 6.4.2.1 through 6.4.2.3 describe the locations, physical and biological characteristics, and jurisdiction of these nonwetland aquatic resources. Refer to Appendix F and Appendix H for acreages of each of the wetland and nonwetland aquatic resources by feature.

6.4.2.1 Basins

Within the Aquatic RSA, delineators identified 11 basins encompassing 20.81 acres of USACE or SWRCB jurisdiction, and 36.95 acres of CDFW jurisdiction. The basins consist of eight spreading grounds associated with the Rio Hondo, the Lakeside Residential Community pond, and the two Raymond Retarding Basins. The Rio Hondo spreading ground basins (Features 7 through 10 and 55 through 58) are dry throughout most of the year. The Lakeside Residential Community pond is inundated throughout the year for recreational boating and aesthetics. The Raymond Retarding Basins (Features 37 and 39) are periodically inundated throughout the year.

Given the frequency and extent of routine maintenance in the Rio Hondo spreading grounds and the Raymond Retarding Basins, evidence of an ordinary high-water mark was not discernable. In these circumstances, the ordinary high-water mark was estimated based on aerial imagery, and it consisted of the entire basin floor from toe of bank to toe of bank. The ordinary high-water mark for the Lakeside Residential Community pond was also estimated based on aerial imagery, and it consisted of the entire inundated area. The Rio Hondo spreading grounds support Bermuda grass (FACU) and sparse, isolated patches of mulefat (FAC) predominantly along bank slopes and landward of the ordinary high-water mark. The Raymond Retarding Basins support sparse patches (less than 5 percent cover) of hydrophytic vegetation such as dense-flowered sprangletop (FACW), willow smartweed (FACW), and rough cocklebur (FAC), but are dominated by upland vegetation consisting of ruderal native and nonnative species including common horseweed (FACU), Bermuda grass (FACU), Russian thistle (FACU), and annual sunflower (FACU). Based on aerial photograph interpretation, the Lakeside Residential Community pond supports only ornamental vegetation along its margins.

PS-7, PS-8, and PS-43 provide representative photographs of the Rio Hondo spreading ground basins and Raymond Retarding Basins (Appendix J).

6.4.2.2 Riverine

Within the Aquatic RSA, delineators identified 16 riverine features, encompassing 75.91 acres of USACE or SWRCB jurisdiction and 114.43 acres of CDFW jurisdiction. These features consist of (north to south) the Los Angeles River (two mapped features), the Rio Hondo, the San Gabriel River (three mapped features), North Fork Coyote Creek, Milan Creek, La Mirada Creek (two mapped features), Coyote Creek, Brea Creek, Fullerton Creek (two mapped features), Carbon

Creek, and the Santa Ana River. These watercourses exhibit perennial or intermittent surface water flows and have less than 5 percent cover of hydrophytic vegetation.

Riverine features within the Aquatic RSA consist of concrete-lined, unvegetated channels. These include the Los Angeles River, the Rio Hondo, North Fork Coyote Creek, Milan Creek, La Mirada Creek, Coyote Creek, Brea Creek, Fullerton Creek, and Carbon Creek. The most common physical indicators of an ordinary high-water mark consisted of water stains and debris wrack. However, pioneer wetland and riparian vegetation was observed in a subset of these channels, as described below.

The concrete-lined portions of the Los Angeles River and Brea Creek falling within the Aquatic RSA periodically support duckweed blooms in still or slow-moving water or on ground surfaces where water levels have dropped. Access constraints prohibited delineators from identifying species supported at these locations; common species found in such blooms include water fern, Mexican mosquito fern, and Brazilian waterweed. Species falling in the duckweed blooms herbaceous alliance are generally hydrophytic. However, based on the absence of soils and the presence of an artificial restrictive barrier to the underlying substrate, as well as the landscape position of these blooms (uniform, flat riverbed), delineators preliminarily determined these features would not meet the three-parameter wetland definition for USACE and SWRCB or qualify as CDFW associated riparian vegetation.

As described in Section 6.4.1.1, modest sediment accumulation in La Mirada Creek (up to 6 inches) has allowed the establishment of sparse patches of hydrophytic vegetation over the grouted riprap lining, consisting of pioneer species adapted to disturbance, including southern cattail, barnyard grass, and dense-flowered sprangletop. Based on the results of field surveys, this wetland feature did not meet the three-parameter wetland definition for USACE and SWRCB because of the thin soil profile, the confirmed absence of redoximorphic features, and the presence of an artificial restrictive barrier to the underlying substrate. Accordingly, this particular wetland feature is included in this section for purposes of USACE or SWRCB jurisdiction (under the general statutory definition for “nonwetland waters”) and in Section 6.4.1.1 for purposes of CDFW jurisdiction (under the definition for “associated riparian vegetation”).

The earthen-bottom San Gabriel River supports two separate freshwater emergent wetlands and one stand of freshwater forested/shrub wetland, as described in Sections 6.4.1.1 and 6.4.1.2. In addition, two small stands of mulefat (FAC) are along the toe of the western bank of the San Gabriel River, approximately 384 square feet and 187 square feet in size. One representative wetland SP was established in one of the wetland features in the San Gabriel River (SP-8, PS-68). Both features support an overstory of mulefat (FAC) and an understory of predominantly upland species consisting of tocalote (UPL), foxtail brome (UPL), and wild radish (*Raphanus sativus*, UPL). Based on the vegetative composition, these stands did not meet the three-parameter criteria for USACE-defined wetlands. The remaining portion of the San Gabriel River within the Aquatic RSA is composed of unvegetated channel interspersed with salt grass (FAC), wild oats and annual brome grassland (FACU and UPL), and curly dock (FAC).

The earthen-bottom portion of the Santa Ana River within the Aquatic RSA is denuded of vegetation but does support some nonnative annual grasses.

Upland vegetation along the margins of these channels is composed of nonnative, invasive species including castor bean (FACU), shortpod mustard (UPL), fountain grass (UPL), London rocket (UPL), Mexican fan palm (FACW), rough cocklebur, Russian thistle, tree of heaven (FACU), and Bermuda grass.

PS-2, PS-5, PS-68, PS-72, PS-18, PS-21, PS-22, PS-26, PS-47, PS-35, PS 41, and PS-45 provide representative photographs of a subset of these riverine features (Appendix J).

6.4.2.3 Built Watercourses

Within the Aquatic RSA, two built watercourses encompassing 0.43 acre of USACE or SWRCB jurisdiction and 0.57 acre of CDFW jurisdiction were identified (features 29 and 31). These two features are concrete-lined, unvegetated channels excavated in uplands for stormwater drainage

and nuisance flows. Based on the results of remote assessment and reconnaissance-level field surveys, delineators determined that these built watercourses appear to exhibit relatively permanent surface water flows[16] and have faint indicators of an ordinary high-water mark observable from public rights-of-way (water stains along concrete banks). Access restrictions limited further field investigation. Features 29 and 31 discharge to Fullerton Creek approximately 1,959 linear feet and 56 linear feet from the Aquatic RSA, respectively. Fullerton Creek is a tributary to North Fork Coyote Creek, which in turn is a tributary to the San Gabriel River. The San Gabriel River discharges to the Pacific Ocean (a traditionally navigable water) approximately 4.2 miles downstream from the North Fork Coyote Creek confluence.

Based on the Preliminary Jurisdictional Delineation methodology (USACE 2016) and the *U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook* (USACE and USEPA 2007), revised guidance (USACE and USEPA 2008), the *Revised Definition of "Waters of the United States"; Conforming* (USACE and USEPA 2023), and the preamble to the USACE Regulatory program operating regulations (USACE 1986), built watercourse features 29 and 31 are considered jurisdictional under CWA Sections 404 and 401. PS-36 provides a representative photograph of built watercourse feature 29 (Appendix F).

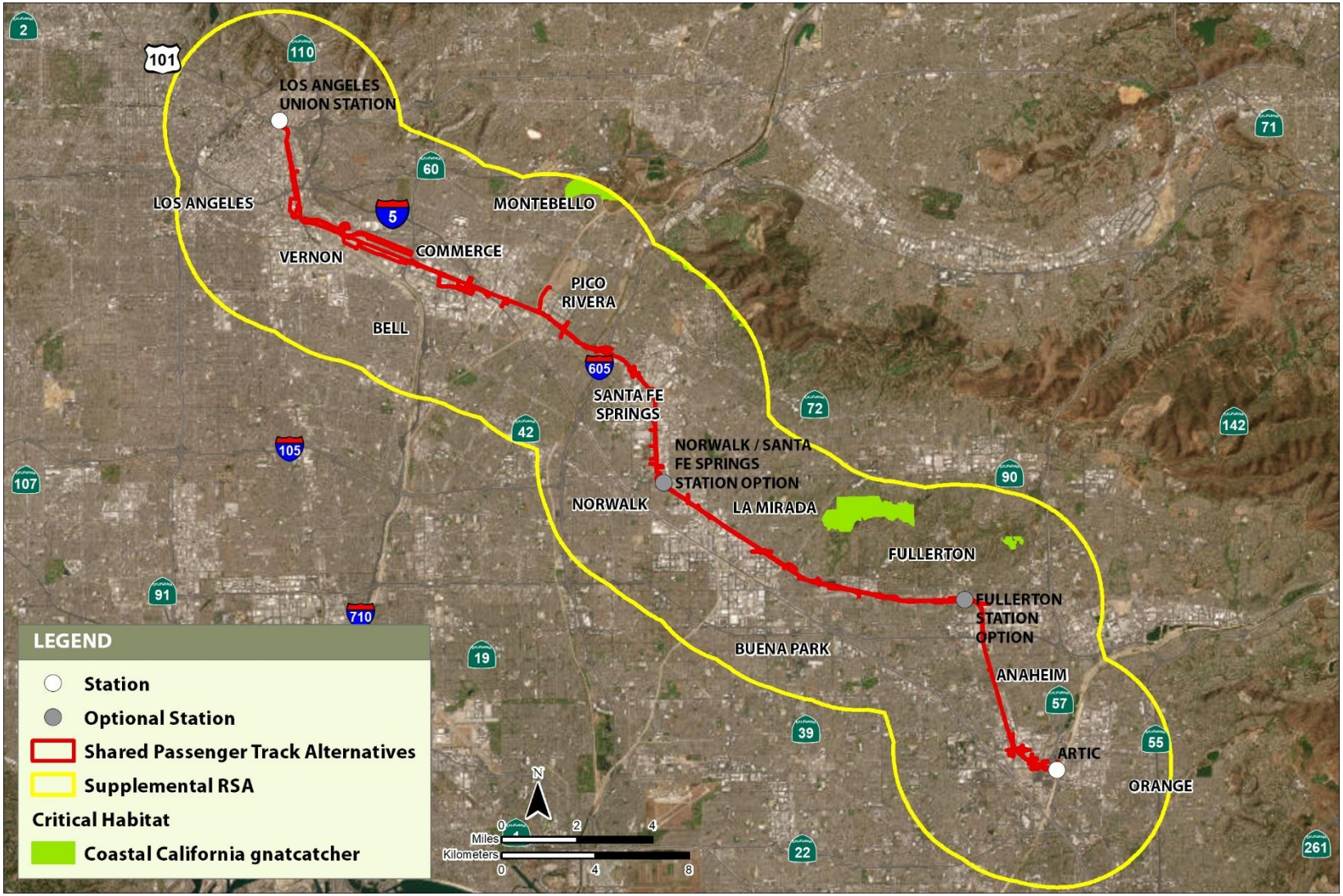
6.5 Critical Habitat

USFWS critical habitat is not present within or adjacent to the Wildlife RSA (Figure 6-2). Within the 3-mile Supplemental RSA, critical habitat for the federally listed as threatened Coastal California Gnatcatcher is present. This includes critical habitat just over 1 mile to the northeast of the Shared Passenger Track Alternatives near State Route 39 and just under 2 miles to the northeast of the Shared Passenger Track Alternatives in the Fullerton area. Coastal California Gnatcatcher critical habitat is also present along a wide corridor approximately 3 miles to the northeast of the Shared Passenger Track Alternatives, and this corridor extends from Montebello through Whittier, La Habra Heights, and north of Brea.

6.6 Essential Fish Habitat

Essential fish habitat was not found to be present within or adjacent to the Wildlife RSA. No areas that provide habitat for marine or anadromous fish for spawning, breeding, feeding, or growth to maturity were identified.

[16] Relatively permanent waters are defined as nonnavigable tributaries of traditionally navigable waters that typically flow year-round or have continuous flow at least seasonally, and can include built ditches and canals (USACE and USEPA 2007, 2008, 2023; USACE 1986).



Sources: Authority 2025a; USFWS 2020; ESRI World Imagery 2024; ESRI World Streetmap 2024

Figure 6-2 U.S. Fish and Wildlife Service Designated Critical Habitat

6.7 Locally Protected Biological Resources (Trees and Shrubs)

Codes or ordinances for Los Angeles County and the cities of Los Angeles, Montebello, Pico Rivera, Santa Fe Springs, La Mirada, Buena Park, Fullerton, and Anaheim include requirements to either avoid injuring, damaging, or removing trees and shrubs (generally within public rights-of-way) or require a permit for such activities. A summary of tree protection measures is included in Table K-2 of Appendix K. The County of Los Angeles has an Oak Tree Ordinance, and the city of Los Angeles Municipal Code provides for the protection of oaks (*Quercus* spp.) (other than scrub oak [*Quercus dumosa*]), Southern California black walnut (*Juglans californica* var. *californica*), western sycamore, and California bay (*Umbellularia californica*).

No oak woodlands were mapped within the Botanical RSA during field visits and none were observed in Google Earth Pro (2016 through 2024) or ArcGIS (2016 through 2024) imagery in Los Angeles County or the city of Los Angeles. In the city of Los Angeles, the identification of individual oaks, California black walnuts, western sycamores, and California bay would require field verification and compliance with Chapter 4, Article 6, Preservation of Protected Trees; Ordinance 177404 of the city of Los Angeles Municipal Code. Mapping of individual trees and the application for permits for removal would occur during the construction phase of the project section.

6.8 Wildlife Movement Corridors

When analyzing resources for wildlife connectivity, wildlife corridors can be viewed on what is termed a *landscape level*, meaning viewing resource connectivity on a large scale by viewing the region with the inclusion of existing vegetation, mountain ranges, rivers, lakes, basins, conserved areas, roadways, urban developments, and community parks—essentially the entirety of the existing natural landscape.

Theoretically, wildlife could disperse, forage, and breed in open spaces within and beyond the Los Angeles Basin. The Los Angeles and San Gabriel Rivers connect the foothills of the San Gabriel Mountains to the northeast, the Santa Monica Mountains to the northwest, and the California coast to the west. Based on the desktop analysis of the Supplemental RSA, including a review of Spencer et al. (2010), South Coast Wildlands (2008) and Penrod et al. (2001), no interstate connections, natural landscape blocks, wildlife corridors, or essential connectivity areas are present within the Supplemental RSA.

Watercourses, canyons, ridgetops, and known pathways for wildlife movement were reviewed to determine if wildlife movement corridors were present. In addition to already present wildlife movement corridors, there are interagency conservation planning efforts to identify and conserve high-priority wildlife corridors (South Coast Wildlands 2008).

Wildlife movement corridors are essential to the long-term viability of native flora and fauna because isolated habitat remnants are highly unstable. Wildlife corridors connect intact blocks of habitat (such as nature preserves or other undeveloped areas) and this connection reduces the effects of habitat fragmentation and instability by allowing species to both travel through these corridors between habitat blocks and, in some cases, inhabit the wildlife corridors. Wildlife corridors provide connections for not only wildlife, but connections for the species in the vegetation communities that the wildlife are dependent on. Landscape connectivity enhances population viability with a large amount of evidence that wildlife movement corridors allow for the movement of many species (Penrod et al. 2001).

Riparian habitat and waterways are often identified as primary habitat conduits in linkages and, where semicontiguous or contiguous habitat is present in the linkages, the habitat allows for wildlife movement in the linkage. Linkage barriers are often impediments to movement such as roads, urbanized areas, habitat gaps, agricultural areas, water diversions (dams, diversions, or channelization), and railroads (Penrod et al. 2001).

The connectivity provided by wildlife corridors is important for mammals, birds, herpetological species, fish, and seed dispersers and pollinators, with seed dispersers and pollinators aiding in the maintenance of the linkages for vegetation upon which the wildlife rely. Flying species such

as birds, bats, and insects use wildlife corridors (Penrod et al. 2001). Avian species identified in the South Coast Missing Linkages include Golden Eagle, Le Conte's Thrasher (*Toxostoma lecontei*), Least Bell's Vireo, Coastal California Gnatcatcher, Southwestern Willow Flycatcher, Snowy Plover (*Charadrius nivosus*), and California Least Tern. Fish include southern steelhead trout, three-spined stickleback (*Gasterosteus aculeatus*), and Santa Ana sucker. Reptiles and amphibians include southwestern pond turtle (*Actinemys pallida*), western spadefoot (*Spea hammondii*), and Arroyo toad (*Bufo microscaphus californicus*). Invertebrates include Quino checkerspot butterfly (*Euphydryas editha quino*).

Keystone species and keystone interactions are maintained through wildlife corridors. Keystone species are the ecological governors of ecosystems and are required to exist in the ecosystem to maintain functionality. Large, undisturbed core areas are often required for keystone species; however, even with large core areas, without connectivity habitat fragmentation leads to instability. Large carnivores such as mountain lion are considered to be a keystone species in Southern California and are found to use wildlife movement corridors for dispersal, avoiding the urban matrix for dispersing (Penrod et al. 2001). Other large carnivores identified for the South Coast Missing Linkages (Penrod et al. 2001) include coyote and bobcat (*Lynx rufus*). The wildlife movement corridors in this document refer to habitat in watercourses including the Los Angeles River, the Rio Hondo and spreading grounds, the San Gabriel River, and the Santa Ana River. These corridors could provide movement corridors for wildlife adapted to disturbance, including regionally common mammal species such as coyote, raccoon, skunk, and opossum, with the potential for use by bat species associated with bridge areas and palms/trees, including special-status bat species. Avian species include waterfowl (e.g., ducks, geese, gulls, stilt), riparian/shrub species (Yellow Warbler, Cassin's Kingbird, Blue Grosbeak), urban species (Hummingbirds, Starlings, Common Raven), species that nest under bridges (Swifts and Swallows), and grassland avian species. Mountain lions use both watercourses and ridgelines for movement, and they take advantage of bridge undercrossings as movement corridors under roadways. Burrowing Owls are known in the Rio Hondo and spreading grounds and the San Gabriel River. California Least Tern is known to fly between Burris Basin and Haster Basin Recreation Area, with the Santa Ana River as the connection between these two areas. The Los Angeles River physically connects Least Bell's Vireo occupied habitat to suitable riparian habitat in the headwaters of the San Gabriel River, but the concrete-lined channel of the Los Angeles River and flood control activities in the San Gabriel River prevent establishment of riparian vegetation.

Rare events in wildlife movement are important for maintaining genetic diversity. Although mountain lion studies over several years may indicate no movement of mountain lions across State Route 91, over a longer period of time, successful crossings are observed, and these crossings are important for the transfer of genetic material across areas that are regarded as isolated islands. The highly constrained nature of the RSA does not preclude the importance as a wildlife movement corridor. It is important because of the potential to support special-status wildlife and for these rare events to occur.

Long-term planning in the region includes large-scale projects such as the re-establishment of riparian areas adjacent to the Los Angeles River (at Taylor Yard) through the Los Angeles River Ecosystem Restoration Project (USACE and City of Los Angeles 2015), the Los Angeles River Master Plan (County of Los Angeles and Los Angeles County Public Works 2022), and County of Los Angeles Measure A Grant Funds (County of Los Angeles 2023) for natural lands and open spaces. In many cases, the county and city general plans include goals for increased groundwater retention, which includes the removal of concrete-lined channels, which increases the biological value of the existing corridors, including segments of the Los Angeles River and potentially the Rio Hondo, but also smaller watercourses connected to these larger corridors. Most general plans include goals to avoid the loss of open space and increase green space including trees, bioswales, and overall habitat quality in the Los Angeles Basin.

The linkages described in South Coast Missing Linkages (South Coast Wildlands 2008) were evaluated during the desktop analysis. Linkages 28, 29, 30, 31, and 43 occur directly adjacent to the Supplemental RSA.

- Linkage 28 occurs 3.0 miles to the north of the Supplemental RSA and connects the Santa Monica Mountains (Griffith Park) to the Verdugo Hills/San Rafael Hills to the northeast.
  - The proposed Linkage 28 is to the north of the Shared Passenger Track Alternatives and is connected to the Shared Passenger Track Alternatives by the Los Angeles River. North of this linkage along the Los Angeles River are the Los Angeles State Historic Park, Elysian Park, Ernest E. Debs Regional Park, Silver Lake, and the Rio de Los Angeles State Park.
  - Although Linkage 28 is short and would be useful, wildlife would need to cross I-5 and potentially Highway 134 and there is currently no plan for how to do so in a heavily urbanized environment. The Blanchard Canyon Channel, with a tie-in to the Los Angeles River Ecosystem Restoration Project (USACE and City of Los Angeles 2015), could be a starting point, but currently no linkage exists.
- Linkage 29 begins near the Whittier Narrows Dam/San Gabriel Valley at the southern end, connecting the Puente Hills, and follows the San Gabriel River north through the Santa Fe Dam to the San Gabriel Mountains.
- Linkage 30 connects the Puente Hills and eventually the Santa Ana Mountains through mountainous, relatively intact habitat.
- Linkage 31 connects the Santa Ana Mountains to the San Gabriel Mountains to the north through San Dimas. This linkage is ranked as severely threatened (Penrod et al. 2001).
- Linkage 43, the Coal Canyon linkage, links the Puente Hills to the Santa Ana Mountains and provides habitat connectivity for mountain lion, bobcat, coyote, and mule deer. This linkage has been identified as a choke point, is ranked as severely threatened, and was preserved and is now owned by California State Parks. The primary barrier is State Route 91, with an underpass available as the linkage feature. Urbanization threatens this linkage (Penrod et al. 2001).

Of these five linkages, only Linkage 29 indicates connectivity to habitat within the Supplemental RSA with connectivity to the San Gabriel River and the Rio Hondo and spreading grounds.

The Essential Habitat Connectivity Report (Spencer et al. 2010) was updated based on additional research and quantitative modeling. The linkages described in South Coast Missing Linkages (South Coast Wildlands 2008) were not always practical because some were planned across entirely urbanized environments with no possibility of connection (e.g., Linkage 28). The updated design includes only potential riparian wildlife movement corridors within the Supplemental RSA. These corridors include the Los Angeles River, the San Gabriel River, and the Santa Ana River. The Rio Hondo was not included in the wildlife movement corridors; however, the Rio Hondo is a tributary of the Los Angeles River. This is realistic and reflects not only existing wildlife behavior but long-term land-use planning in the region.

An evaluation of the wildlife corridors identified on Figure 5-3, sheets 1 through 24, during the desktop and field analysis yielded the following findings:

- These areas have a high human occupancy. There are homeless encampments including under bridges and in vegetated areas. Other human effects include biking/walking trails, roadways, railways, housing developments, transmission lines, and industrial areas. This human presence increases “edge effects” and lowers the value of the corridor to function effectively for species to inhabit and for species movement.
- These routes are highly constrained by surrounding urban environments. Many of these watercourses are subject to ongoing disturbance through flood control activities including vegetation removal.
- With the exception of the Rio Hondo and spreading grounds, these corridors are narrow. The Santa Ana River is approximately 350 feet wide, the San Gabriel River is approximately 280 to 560 feet wide, the Rio Hondo and spreading grounds are approximately 1,100 to 1,500 feet

wide, and the Los Angeles River is approximately 350 feet wide. Corridors should be a minimum of 1,000 feet wide to function effectively (Bond 2003).

- There is a lack of natural open space and habitat in many of the wildlife corridors. Habitat quality in some of the watercourses is low because of flood control activities such as vegetation and sediment removal. These activities create landscape gaps that function as barriers to dispersal. Large areas completely devoid of vegetation in concrete-lined channels were noted to be present, and these areas also function as barriers. The Los Angeles River is completely channelized within the Shared Passenger Track Alternatives footprint and lacks substantial stands of riparian habitat or natural vegetation communities. Despite the concrete bottom of the Los Angeles River, the river continues to support algae, insects, invertebrates such as crayfish, fish, and local and migratory birds such as geese, ducks, herons, egrets, and kingfishers. Fish species in the Los Angeles River include old-world nonnative species categorized as carp (includes many different fresh-water species), black bullhead (*Ameiurus melas*) and largemouth bass (*Micropterus salmoides*), both native to the eastern U.S.; mosquito fish (*Gambusia affinis*), stocked by County Vector Control; and tilapia (includes many species native to Africa). These fish provide food for the avian species using the river. The Rio Hondo spreading grounds, San Gabriel River, Raymond Retarding Basins, and Santa Ana River are soft bottom within the Shared Passenger Track Alternatives footprint. However, although these features support some nonnative grassland vegetation, they generally lack substantial riparian or natural vegetation communities because of maintenance activities and scouring during storm events.

The Supplemental RSA is in both the spring and summer breeding area and the fall migration area for monarch butterflies (*Danaus plexippus plexippus* pop. 1; federally listed as a candidate species for threatened or endangered status). The coastal areas of Southern California to the west of the Supplemental RSA provide overwintering sites for monarchs.

A review of the USFWS avian migration corridors was conducted. For the Pacific Flyway for waterfowl, the corridor is along the coastal areas west of the San Gabriel Mountains.

6.9 Habitats of Concern

Habitats of concern evaluated in the region include essential fish habitat, designated critical habitat, wildlife movement corridors, and protected trees.

6.9.1 Riparian Areas

Riparian vegetation within the Wildlife RSA include Hardstem and California bulrush marsh herbaceous alliance, mulefat thickets shrubland alliance, Goodding's willow – red willow riparian woodland and forest alliance, and cattail marshes herbaceous alliance (Table 6-10). Two of these riparian vegetation types are also California Sensitive Natural Communities; hardstem and California bulrush marsh herbaceous alliance has a state rank of S3S4 and Goodding's willow – red willow riparian woodland and forest alliance has a state rank of S3.

Table 6-10 Riparian Areas within the Wildlife Resource Study Area

Aquatic Resource	Vegetation Classification Alliance (Sawyer et al. 2009)	Feature Number	Aquatic Resource Classification		Description
			USACE/SWRCB	CDFW Section 1600 et seq.	
San Gabriel River	Hardstem and California bulrush marsh herbaceous alliance[1]	Feature 12, San Gabriel River – Freshwater Emergent Wetland #3	Freshwater emergent wetland	Associated riparian vegetation	Dominant species included California bulrush, willow smartweed southern cattail, barnyard grass, curly dock, and African umbrella sedge
	Mulefat thickets shrubland alliance	Feature 12, San Gabriel Riparian #2, Mulefat	Freshwater emergent wetland	Riparian	Small stand of mulefat along the toe of the western bank, 187 square feet, with an overstory of mulefat and an understory of upland species such as tocalote, foxtail brome, and wild radish
		Feature 12, San Gabriel Riparian #3, Mulefat	Freshwater emergent wetland	Riparian	Similar to Feature 12, #2 mulefat, but 384 square feet in size
	Goodding's willow – red willow riparian woodland and forest alliance[2]	Feature 12, San Gabriel Freshwater Emergent Wetland #1, 2, and 3	Freshwater forested/shrub wetland	Freshwater forested/shrub wetland	Three stands consisting of Goodding's willow overstory with an understory of barnyard grass, willow smartweed, and rough cocklebur
		Not within Aquatic RSA	N/A	N/A	Six small stands present outside of the Aquatic RSA; Goodding's willow with an understory of Bermuda grass, saltgrass, and California bulrush
La Mirada Creek	Cattail marshes herbaceous alliance	Feature 19, La Mirada, Freshwater Emergent Wetland	Riverine	Freshwater emergent wetland	Southern cattail, umbrella plant, willow smartweed, barnyard grass, and dense-flowered sprangletop observed in sparse patches in the grouted riprap lining

Aquatic Resource	Vegetation Classification Alliance (Sawyer et al. 2009)	Feature Number	Aquatic Resource Classification		Description
			USACE/SWRCB	CDFW Section 1600 et seq.	
Rio Hondo spreading grounds	Mulefat thickets shrubland alliance	Feature 9, Basin #3 (mulefat thickets)	Riverine	Associated riparian vegetation	Patches of mulefat observed along slopes of the bank with dense-flowered sprangletop, willow smartweed, and rough cocklebur, but dominated by common horseweed, Bermuda grass, Russian thistle, and annual sunflower
	Goodding's willow – red willow riparian woodland and forest alliance	Within Wildlife RSA, Rio Hondo Basin #3	N/A	N/A	Two small patches of Goodding's willow present with an understory of Bermuda grass and other nonnative grasses
Unnamed drainage, Fullerton Municipal Airport	Cattail marshes herbaceous alliance	Within Wildlife RSA	N/A	N/A	Southern cattail, umbrella plant, willow smartweed, barnyard grass, and dense-flowered sprangletop

Sources: CDFW 2023; Sawyer et al. 2009
[1] California Sensitive Natural Communities state rank of S3S4 (CDFW 2023)
[2] California Sensitive Natural Communities state rank of S3 (CDFW 2023)
CDFW = California Department of Fish and Wildlife; N/A = not applicable; RSA = resource study area; SWRCB = State Water Resources Control Board; USACE = U.S. Army Corps of Engineers

6.9.2 Special-Status Natural Communities

Special-status natural communities include both those communities on the List of California Terrestrial Natural Communities recognized by the CNDDB (CDFW 2023) that were initially classified according to the "Preliminary Descriptions of the Terrestrial Natural Communities of California" (Holland 1986) but have since been reclassified according to the *Manual of California Vegetation* (Sawyer et al. 2009). The natural communities included in this list are evaluated using NatureServe's Heritage Methodology and are ranked by CDFW. Rarity score global (G) and state (S) rankings ranging from 1 (very rare and threatened) to 5 (demonstrably secure) have been assigned to natural communities (CDFW 2023). Natural communities with ranks of S1 through S3 are considered Sensitive Natural Communities.

The terrestrial communities identified through the CNDDB search of the Supplemental RSA included California walnut woodland, Southern California arroyo chub/Santa Ana sucker stream, southern coast live oak riparian forest, southern costal salt marsh, southern cottonwood willow riparian forest, southern sycamore willow riparian forest, southern willow scrub, and walnut forest (Table 6-11).

For purposes of this discussion, *special status* (1) reflects terrestrial and aquatic plant communities recognized as important by the scientific community, (2) represent a rare vegetation type, (3) have limited distribution, or (4) are recognized as rare by CDFW (ranks of S1 to S3) (CDFW 2023). Table 6-11 summarizes the special-status natural communities recognized in the CNDDB and whether these communities were noted through field surveys to be present in the Supplemental RSA and Botanical RSA. One special-status natural community was mapped within the Botanical RSA (within 100 feet of the Shared Passenger Track Alternatives footprint): Goodding's willow – red willow, and one CNDDB-mapped special-status natural community was mapped within the Supplemental RSA: Southern California arroyo chub/Santa Ana sucker stream. In addition to special-status natural communities recognized in the CNDDB are special-status natural communities recognized as rare by CDFW (CDFW 2023). The communities identified as Sensitive Natural Communities based on state rankings of S1 through S3 that were present within the Botanical RSA included hardstem and California bulrush marshes herbaceous alliance and Goodding's willow – red willow riparian woodland and forest alliance.

Table 6-11 Special-Status Natural Communities Occurring in the Botanical and Supplemental Resource Study Areas

Special-Status Natural Communities	Within the Botanical Resource Survey Area?	Within the Supplemental Wildlife Resource Study Area?
California walnut woodland	No	No
Southern California arroyo chub/Santa Ana sucker stream	No	**Yes**
Southern coast live oak riparian forest	No	No
Southern coastal salt marsh	No	No
Southern cottonwood willow riparian forest	No	No
Southern sycamore alder riparian woodland	No	No
Southern willow scrub	No	No
Walnut forest	No	No
Black willow	**Yes**	No
Hardstem and California bulrush marsh	**Yes**	No

Source: CDFW 2023

7 AFFECTED ENVIRONMENT AND EFFECTS ANALYSIS

This chapter discusses the potential effects of Shared Passenger Track Alternatives A and B, the HSR station options, and the No Project Alternative on biological and aquatic resources based on the desktop assessment and the results of field surveys. Potential effects are described separately for two distinct phases: construction and operation (including maintenance). The major activities included in the construction phase are earthwork; bridge, aerial structure, and road crossing construction; railway systems construction; utility installation and upgrades; and tunnel construction. The operational phase would begin after construction is complete and includes activities associated with operation of the HSR system, including necessary maintenance activities.

This section describes the anticipated effects of the project section alternatives (i.e., the No Project Alternative and the Shared Passenger Track Alternatives) during both construction and operational phases. Potential effects on biological and aquatic resources are evaluated based on the context and intensity of the effects. The context in which effects on biological and aquatic resources would occur ranges in scope from the individual RSAs to a larger regional consideration (i.e., the Los Angeles Basin).

Historically, the Los Angeles Basin was characterized by valley grasslands, coastal sage scrub, oak woodlands, riparian scrub, woodland and forest, meadows and marshes, and playas and vernal pools. Substantial areas of these natural communities have been lost to development (e.g., residential, commercial, petroleum, transportation). The historical trend of loss or alteration of these natural communities has compromised the biological complexity of the region and has been a factor in species listings by federal and state agencies. As such, occurrences of special-status plant or wildlife populations are considered sensitive resource areas in the context of the existing, altered conditions of the RSAs and surrounding areas. Most of the land in the region is urbanized, with the exception of mountainous areas. Natural or seminatural areas in the mountains could support special-status species; however, these habitat areas generally occur over 1 mile from the project section.

Potential effects on biological and aquatic resources associated with the project section were analyzed for direct effects (i.e., effects that result in the immediate removal or disturbance of the resource) and for indirect effects (i.e., effects separated from the activity in space or time) through mapping of suitable habitat and quantifying effects on habitat.

In determining the potential direct and indirect effects associated with construction and operations on biological and aquatic resources, the following assumptions and limitations were applied:

- Construction effects were considered temporary if they could be fully restored to predisturbance conditions following construction. Project activities that may result in temporary effects include construction staging and storage areas; construction laydown; access roads; surface water diversions; dewatering; demolition; falsework and scaffolding; relocation or upgrading of underground utilities; foot, vehicle, and machine traffic; and other workspace that would not be occupied by project facilities during HSR operations.
- Construction effects were considered permanent when they would have lasting effects beyond the construction phase or could not be fully restored following construction. Permanent effects included right-of-way for at-grade track segments, elevated structure track segments (everything under the aerial extent of the structure), watercourse and waterbody (i.e., basin) crossings, road crossings, electrical substations, and facilities for maintenance-of-way.
- Because desktop analysis and observations from public rights-of-way were often used in lieu of surveys, the presence of special-status species is assumed in the absence of surveys where suitable habitat is present. Accordingly, this analysis provides conservative estimates of the magnitude and severity of effects on special-status species.

The following IAMFs, which are described fully in Chapter 8, would be incorporated, as applicable, during all construction and operations and maintenance (O&M) activities to minimize, reduce, or avoid adverse effects on biological resources to the maximum extent practicable. The Draft EIR/EIS prepared for the project section also proposes appropriate mitigation measures to reduce the potential for such effects and offset through compensation any unavoidable adverse effects where necessary.

- **BIO-IAMF#1, Designate Project Biologist, Designated Biologists, Species-Specific Biological Monitors, and General Biological Monitors (Biomonitors)**
- **BIO-IAMF#3, Prepare Worker Environmental Awareness Program (WEAP) Training Materials and Conduct Construction Period WEAP Training (WEAP – Construction)**
- **BIO-IAMF#4, Conduct O&M Period WEAP Training (WEAP –O&M)**
- **BIO-IAMF#5, Prepare and Implement a Biological Resources Management Plan (BRMP)**
- **BIO-IAMF#6, Establish Monofilament Restrictions (Monofilament)**
- **BIO-IAMF#7, Prevent Entrapment in Construction Materials and Excavations (Entrapment)**
- **BIO-IAMF#8, Delineate Equipment Staging Areas and Traffic Routes (Demarcate)**
- **BIO-IAMF#9, Dispose of Construction Spoils and Waste (Waste Storage)**
- **BIO-IAMF#10, Clean Construction Equipment (Equipment Cleaning)**
- **BIO-IAMF#11, Maintain Construction Sites and BMP Training (BMPs)**
- **BIO-IAMF#12, Design the Project to Be Bird Safe (Bird Safe)**

Other resource IAMFs applicable to impacts on biological and aquatic resources include:

- **HMW-IAMF#6, Spill Prevention (Spills)**
- **HYD-IAMF#1, Stormwater Management (Stormwater)**
- **HYD-IAMF#3, Prepare and Implement a Construction Stormwater Pollution Prevention Plan (SWPPP)**
- **HYD-IAMF#4, Prepare and Implement an Industrial Stormwater Pollution Prevention Plan (SWPPP – Industrial)**
- **AQ-IAMF#1, Fugitive Dust Emissions (Dust)**

7.1 No Project Alternative

Under the No Project Alternative, recent development trends and infrastructure maintenance in the project section are anticipated to continue, leading to ongoing biological and aquatic resources impacts. Capital improvements to existing highways, airports, conventional rail systems, flood control facilities, and aquifer recharge facilities, described in adopted regional transportation plans and municipal general plans, would likely be implemented (pending availability of funding). In addition, industrial, residential, and associated infrastructure development projects (e.g., shopping centers, wastewater conveyance upgrades) are planned. These planned improvements and growth initiatives would result in associated direct and indirect effects on biological and aquatic resources during construction and operation.

Future improvements would have comparable effects on biological and aquatic resources as similar past and ongoing improvement projects, such as habitat loss and degradation, thereby potentially reducing special-status species populations and water quality. However, these development and improvement projects would be subject to environmental impact analysis, regulatory and resource agency permits and approvals, and incorporation of mitigation measures sufficient to avoid, minimize, reduce, and compensate for impacts on biological and aquatic

resources. In addition, it is assumed that existing infrastructure would continue to be subject to routine O&M activities including inspections, repairs, and removal of vegetation, debris, and sediment from channels and basins.

Based on forecasted population growth in the region, existing and future transportation systems (including both highway and conventional rail) would experience more traffic and congestion under the No Project Alternative.

7.2 Shared Passenger Track Alternatives

The Draft EIR/EIS analyzes two build alternatives, Shared Passenger Track Alternative A and Shared Passenger Track Alternative B, as described in Section 2.2, High-Speed Rail Build Alternatives. Both Shared Passenger Track Alternatives consist of new and upgraded track, an LMF, traction power, electrical interconnection infrastructure, grade separations, bridges, access roads, drainage improvements, communications towers, security fencing, passenger train HSR stations, and other necessary facilities to introduce HSR service into the Los Angeles – San Diego – San Luis Obispo Rail Corridor from LAUS to ARTIC. Shared Passenger Track Alternative B would follow the same alignment and share most of the same project features and operational assumptions as Shared Passenger Track Alternative A, except for the location of the LMF as described in Section 2.2.2.4, Light Maintenance Facility. Both project alternatives have been designed to minimize, reduce, or avoid effects on biological and aquatic resources to the maximum extent practicable. Potential effects on biological and aquatic resources are discussed throughout the following sections.

7.2.1 High-Speed Rail Station Options

As described in Section 2.2.1, Shared Passenger Track Alternative A, the project section would provide service between LAUS and ARTIC. LAUS was environmentally approved as a part of HSR's Burbank to Los Angeles Project Section. This project section would not modify the proposed changes therein. Although the project section would connect to this HSR station, the Draft EIR/EIS does not include the LAUS HSR station in the environmental analysis.

Two HSR station options are proposed under Shared Passenger Track Alternative A: (1) Norwalk/Santa Fe Springs Station or (2) Fullerton Station. The proposed HSR station option at Norwalk/Santa Fe Springs is partially within the existing Norwalk/Santa Fe Springs Transportation Center at 12700 Imperial Highway, on the border of Norwalk and Santa Fe Springs. The proposed HSR station option at Fullerton would be built directly west of the existing Fullerton Transportation Center at 120 E Santa Fe Avenue in Fullerton. Additional details regarding these HSR station options are provided in Section 2.2.1.3, High-Speed Rail Station Facilities. The proposed HSR stations and optional HSR platform and station facilities for Shared Passenger Track Alternative B would be the same as for Shared Passenger Track Alternative A as discussed in Section 2.2.1.3. Effects on biological and aquatic resources are discussed further in the sections below.

7.2.2 Electric Power Utility Improvements

As described in Section 2.2.1.2, trains would draw power for the California HSR System from California's existing electricity grid and distributed via an OCS.[17] Shared Passenger Track Alternative A would not include construction of a separate power source, although it would include the extension of power lines to a series of power substations positioned along the railroad corridor. The proposed ancillary facilities for Shared Passenger Track Alternative B would be the same as for Shared Passenger Track Alternative A, as described in Section 2.2.1.2.

[17] OCS is part of the traction power electrification system, which supplies electric energy coming from a TPSS to nonself-powered rail vehicles operating beneath the overhead wires through roof-mounted current collection equipment.

7.3 Riparian Habitat, Vegetation Communities, Land Cover Types, and Special-Status Natural Communities

Direct effects on riparian habitat, vegetation communities, land cover types, and special-status natural communities are quantified in Table 7-1 for Shared Passenger Track A and Shared Passenger Track B. The difference in the direct effects on vegetation communities between Shared Passenger Track Alternatives is included in this table.

Table 7-1 Direct Effects on Riparian Habitat, Vegetation Communities, Land Cover Types, and Special-Status Natural Communities within the Shared Passenger Track Alternatives

Vegetation Classification Alliance	Direct Effects, Shared Passenger Track Alternative A			Direct Effects, Shared Passenger Track Alternative B			Difference Between Shared Passenger Track Alternatives A and B (acres)			Norwalk/Santa Fe Springs High-Speed Rail Station Option			Fullerton High-Speed Rail Station Option		
	Permanent (acres)	Temporary (acres)	Shading (acres)	Permanent (acres)	Temporary (acres)	Shading (acres)	Permanent (acres)	Temporary (acres)	Shading (acres)	Permanent (acres)	Temporary (acres)	Shading (acres)	Permanent (acres)	Temporary (acres)	Shading (acres)
Natural and Seminatural Upland Habitats															
Eucalyptus – tree of heaven – black locust woodland seminatural alliance	--	--	--	--	--	--	0	0	0	--	--	--	--	--	--
Wild oats and annual brome grasslands seminatural alliance	0.42	0.20	0.03	0.42	0.20	0.03	0	0	0	--	--	--	--	--	--
Aquatic Habitats															
Hardstem and California bulrush marsh herbaceous alliance	0.18	--	0.05	0.18	--	0.05	0	0	0	--	--	--	--	--	--
Mulefat thickets shrubland alliance	--	--	--	--	--	--	0	0	0	--	--	--	--	--	--
Cattail marshes herbaceous alliance	--	--	--	--	--	--	0	0	0	--	--	--	--	--	--
Goodding's willow – red willow riparian woodland and forest alliance	--	--	--	--	--	--	0	0	0	--	--	--	--	--	--
Duckweed blooms and relatives' provisional herbaceous alliance	0.43	<0.01	--	0.43	<0.01	--	0	0	0	--	--	--	--	--	--
Salt grass flats herbaceous alliance[1]	--	--	--	--	--	--	0	0	0	--	--	--	--	--	--
Open water	--	--	--	--	--	--	0	0	0	--	--	--	--	--	--
Unvegetated channel	0.80	0.13	--	0.80	0.13	--	0	0	0	--	--	--	--	--	--
Urban Habitats															
Developed	698.52	121.18	0.02	746.03	121.44	0.02	-47.51	-0.26	0	--	--	--	8.55	0.12	--
Barren	3.27	3.53	--	3.27	3.53	--	0	0	0	--	--	--	--	--	--
Disturbed/ruderal	12.65	11.55	0.07	12.66	11.55	0.01	0.01	0	0	--	--	--	0.03	--	--
Ornamental	14.61	13.32	--	15.51	13.32	--	-0.90	0	0	--	--	--	1.32	--	--
TOTAL	**730.88**	**149.92**	**0.17**	**779.30**	**150.18**	**0.17**	**-48.42**	**-0.26**	**0**	**0.00**	**0.00**	**0.00**	**9.90**	**0.12**	**0.00**

Sources: Sawyer et al. 2009 and calculations generated using ESRI World Imagery 2024 and ESRI World Streetmap 2024 from data generated by field surveys and aerial photo interpretation
[1] Salt grass flats were not mapped separately from wild oats and annual brome grasslands and were observed in the San Gabriel River, so this effect was not calculated.
Totals may not be additive because of rounding.
-- = No effect; N/A = not applicable

7.3.1 Construction Effects on Riparian Habitat, Vegetation Communities, Land Cover Types, and Special-Status Natural Communities

7.3.1.1 Temporary

Shared Passenger Track Alternative A

Direct, temporary effects on riparian habitat, vegetation communities, land cover types, and special-status natural communities may result from construction crews removing vegetation (including through trimming) in access roads and staging and storage areas, and from construction vehicles and personnel disturbing vegetation (i.e., trampling, covering, and crushing individual plants or populations). Most of these direct temporary impacts would occur because of staging and laydown areas, which would occur in the general vicinity of the work site and would be accessed by nonresidential roadways.

These effects could result in the temporary loss of intact riparian habitat, vegetation communities, or special-status natural communities. After a temporary loss of a vegetation community, if restoration does not occur, recolonization tends to occur by plant species adapted to disturbance. In Southern California, nonnative, invasive species often colonize areas after disturbance, which can result in conversion of native habitat to disturbed/ruderal habitat or nonnative grassland habitat.

Temporary direct effects could also include temporary soil compaction associated with travel routes, which would temporarily reduce suitable habitat for native plant species.

Temporary direct impacts on duckweed blooms and relatives' provisional herbaceous alliance, a riparian community are anticipated. This is both a riparian community and a CDFW special-status natural community (S3) (CDFW 2023). Approximately less than 0.01 acre would be lost through temporary construction impacts. Approximately 0.13 acre of temporary construction impacts on unvegetated channels, which are classified as riverine, are anticipated. Biologically, riparian habitats are found adjacent to many riverine areas and are an important component of riparian systems.

There would be 0.20 acre of temporary impacts on wild oats and annual brome grasslands seminatural alliance, 121.18 acres of temporary impacts on developed land cover type, 3.53 acres of temporary impacts on barren land cover type, 11.55 acres of temporary impacts on disturbed/ruderal land cover type, and 13.32 acres of temporary impacts on ornamental land cover type. However, none of these vegetation communities or land cover types are considered to be riparian or special-status natural communities. Impacts on these communities are therefore not considered under CEQA.

Temporary indirect construction effects on riparian habitat, vegetation communities, land cover types, and special-status natural communities could occur and could include the following:

- Changes in erosion and sedimentation from construction activities could alter the soil and substrate conditions, changing the species composition in vegetation communities and leading to reductions in native plants communities and increases in nonnative and invasive plant species.
- Construction equipment leaks could result in soil and water contamination.
- Temporary changes in hydrology could temporarily reduce water availability to plant species, inhibiting plant growth, survival, and germination.
- Construction dust could affect plants by reducing their photosynthetic capability (especially during flowering periods).
- Construction of temporary features (such as staging areas and access roads) could fragment special-status species' habitat, which could temporarily prevent the dispersal of plant species or temporarily alter movement of wildlife species, including pollinators or seed dispersers.

- Construction equipment, vehicles, and personnel could facilitate the spread of invasive and noxious weeds. Noxious plant species could outcompete native plant species, and pathogens could affect native plant communities.

To prevent the spread of invasive species, areas that currently have low levels of invasive "weedy" species such as ornamental land cover types should be revegetated to a similar habitat type after temporary disturbance. Incorporation of **BIO-IAMF#1, Biomonitors**; **BIO-IAMF#3, WEAP – Construction**; **BIO-IAMF#5, BRMP**; **BIO-IAMF#8, Demarcate**, will ensure the procedures to minimize, reduce, or avoid impacts on biological resources are implemented so that the mitigation measures can be applied. These IAMFs are intended to comply with the regulatory procedures to minimize, reduce, or avoid impacts on biological resources. These IAMFs will appropriately identify biological resources in the project footprint and ensure storage of construction waste to prevent multiple trips and associated increases in vegetation trampling. The IAMFs have been incorporated into the Shared Passenger Track Alternatives design to reduce impacts on riparian habitats and special-status natural communities. The IAMFs listed above would not entirely avoid temporary effects on riparian habitat and special-status natural communities, and it is anticipated that Shared Passenger Track Alternative A would result in substantial temporary effects on riparian habitat and special-status natural communities.

Even with implementation of IAMFs, temporary construction impacts on riparian habitat, vegetation communities, land cover types, and special-status natural communities are anticipated to be significant because temporary impacts are anticipated on riparian habitats and special-status natural communities and IAMFs would not completely minimize, reduce, or avoid these impacts.

Shared Passenger Track Alternative B

Temporary construction impacts for Shared Passenger Track Alternative B would be the same as those of Shared Passenger Track Alternative A for riparian habitat and special-status natural communities. There is no riparian habitat or special-status natural community in either LMF site at 15th Street or 26th Street and there is therefore no difference in impacts or impact acreages for either alternative for riparian habitats or special-status natural communities.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

There are no riparian habitat or special-status natural communities at the Norwalk/Santa Fe Springs HSR Station Option, so impacts would be the same as those of the Shared Passenger Track Alternatives within the station area. If selected, this HSR station option would not add to the related impact associated with the Shared Passenger Track Alternatives. Construction of the HSR station platform, facilities, and parking would occur within the same area that would be modified under the Shared Passenger Track Alternatives. With inclusion of the Norwalk/Santa Fe Springs HSR Station Option, temporary impacts on riparian habitat or special-status natural communities would be the same as those of the Shared Passenger Track Alternatives.

High-Speed Rail Station Option: Fullerton

There are no riparian habitat or special-status natural communities at the site. Therefore, the Fullerton HSR Station Option would not result in any impacts on these resources. If selected, it would not add to the related impact associated with the Shared Passenger Track Alternatives. With inclusion of the Fullerton HSR Station Option, temporary impacts on riparian habitat and special-status natural communities in the station area would be the same as under the Shared Passenger Track Alternatives.

7.3.1.2 Permanent

Shared Passenger Track Alternative A

Permanent direct construction effects on riparian habitat, vegetation communities, land cover types, and special-status natural communities may consist of the removal of vegetation, topsoil,

and seedbank for the placement of permanent infrastructure within the project limits of construction. Direct effects from the Shared Passenger Track Alternatives would occur where the limits of construction overlap with vegetation communities. Shared Passenger Track Alternative A—which includes grading, new and upgraded track, construction of grade separations, bridges, access roads, HSR and Metrolink station sites, an LMF, drainage improvements, and the installation of utility improvements and security fencing—could permanently remove existing vegetation communities. In addition to removal, the permanent degradation of vegetation communities could occur because of shading from overcrossings and aerial structures. Excess dust and piled dirt could bury viable seed banks, lower germination rates, or otherwise negatively affect native species in vegetation communities.

Permanent impacts on one special-status natural community, hardstem California bulrush marsh, are anticipated. This is both a riparian community and a CDFW special-status natural community (S3) (CDFW 2023). Both shading impacts (0.05 acre) and permanent impacts (0.18 acre) are expected on this community. Permanent impacts are expected on duckweed blooms and relatives' provisional herbaceous alliance (0.43 acre), a riparian community. Unvegetated channel is considered riverine and there is 0.80 acre of permanent construction impacts anticipated on unvegetated channel.

There would be 0.42 acre of permanent impacts and 0.03 acre of shading impacts on wild oats and annual brome grasslands seminatural alliance, 698.52 acres of permanent impacts and 0.02 acre of shading impacts on developed land cover type, 3.27 acres of permanent impacts on barren land cover type, 12.65 acres of permanent impacts on disturbed/ruderal land cover type, 0.07 acre of shading impacts, and 14.61 acres of permanent impacts on ornamental land cover type.

Permanent indirect construction effects on vegetation communities and land cover types may consist of effects on native plant communities that would prevent re-establishment after the construction period, including the following:

- Erosion, siltation, sedimentation, and runoff into native plant communities could alter the soil conditions to make the soil no longer suitable for native plant communities.
- Construction equipment leaks could result in soil and water contamination.
- Habitat fragmentation could prevent the dispersal of plant species or could alter survival and movement of wildlife species, including pollinators or seed dispersers.
- Noxious plant species (nonnative, detrimental species) or pathogens could be introduced from construction equipment, vehicles, and personnel. Noxious plant species could outcompete native plant communities, and pathogens could remove native plants communities.

Incorporation of **BIO-IAMF#1, Biomonitors**; **BIO-IAMF#3, WEAP – Construction**; **BIO-IAMF#5, BRMP**; **BIO-IAMF#8, Demarcate**; **BIO-IAMF#10, Equipment Cleaning**; **BIO-IAMF#11, BMPs**; **HYD-IAMF#3, SWPPP**; and **AQ-IAMF#1, Dust**, will ensure the procedures to minimize, reduce, or avoid impacts on biological resources are implemented so that the mitigation measures can be applied. These IAMFs are intended to comply with the regulatory procedures to minimize, reduce, or avoid impacts on biological resources. These IAMFs will appropriately identify biological resources in the Shared Passenger Track Alternative A footprint and ensure storage of construction waste to prevent multiple trips and associated increases in vegetation trampling. The IAMFs also require the cleaning of equipment to prevent the spread of invasive weed species. Construction spills would be properly cleaned up and disposed of and fugitive dust deposition on plants would be minimized through the requirement of a dust control plan.

The IAMFs listed above would not entirely avoid permanent effects on riparian habitat and special-status natural communities and it is anticipated that Shared Passenger Track Alternative A would result in adverse permanent effects on riparian habitat and special-status natural communities.

Shared Passenger Track Alternative B

Permanent impacts for Shared Passenger Track Alternative B would be the same as those of Shared Passenger Track Alternative A for riparian habitat, vegetation communities, and special-status natural communities. There is no riparian habitat or special-status natural community in either LMF site at 15th Street or 26th Street and there is no difference in impact acreages for either alternative for riparian habitats or special-status natural communities.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

There are no riparian habitat or special-status natural communities at the site. With inclusion of the Norwalk/Santa Fe Springs HSR Station Option, permanent impacts on these resources would therefore be the same as those of the Shared Passenger Track Alternatives within the station area. Construction of the HSR station platform, facilities, and parking would occur within the same area that would be modified under the Shared Passenger Track Alternatives.

High-Speed Rail Station Option: Fullerton

There are no riparian habitat or special-status natural communities at the Fullerton HSR Station Option. Therefore, this option would not result in any impacts on these resources. If selected, it would not add to the related impact associated with the Shared Passenger Track Alternatives. With inclusion of the Fullerton HSR Station Option, permanent impacts on riparian habitat and special-status natural communities would be the same as under the Shared Passenger Track Alternatives.

7.3.2 Operation and Maintenance Effects on Riparian Habitat, Vegetation Communities, Land Cover Types, and Special-Status Natural Communities

Potential temporary and permanent effects on riparian habitats, vegetation communities, land cover types, and special-status natural communities that may result from project O&M are described in the subsections below.

7.3.2.1 Shared Passenger Track Alternative A

Ongoing O&M activities (e.g., routine inspection and maintenance of the HSR right-of-way) are unlikely to have direct effects on riparian habitat, vegetation communities, land cover types, and special-status natural communities because these activities would occur where the natural vegetation (i.e., areas with potential habitat for special-status plant species) has already been removed during Shared Passenger Track Alternative A construction. Direct effects, if they occur, would include mortality from incidental trampling or crushing outside of the work area caused by increased human activity related to the maintenance of equipment and facilities associated with the HSR system.

Other permanent effects could include accidental fire from sparks, human error, or electrical malfunctions. Chemical spills from fuel, transmission fluid, lubricating oil, and motor oil leaks could contaminate the soils or the water column, resulting in degraded habitat of special-status plants. Vegetation and pest control activities could lead to direct effects, with the application of herbicides for weed abatement activities contributing to chemical runoff (or application drift) and pollution of adjacent suitable habitats, resulting in direct mortality. The use of pesticides could result in losses of pollinators or seed dispersers. Invasive species could be inadvertently introduced through unclean equipment or shoes.

With incorporation of **BIO-IAMF#4, WEAP – O&M**, WEAP training will be provided on a regular basis for maintenance crews to reduce the potential of unplanned permanent effects such as those from invasive species, unintended fires, inadvertent chemical spills, and the improper use of herbicides and pesticides.

Incorporation of the IAMF will ensure the procedures to minimize, reduce, or avoid impacts on biological resources are implemented so that the mitigation measures can be applied. The IAMF listed above would not entirely avoid permanent operational effects on riparian habitat and

special-status natural communities and it is anticipated that Shared Passenger Track Alternative A would result in adverse permanent operational effects on riparian habitat and special-status natural communities.

7.3.2.2 Shared Passenger Track Alternative B

Permanent O&M impacts for Shared Passenger Track Alternative B would be the same as those of Shared Passenger Track Alternative A for riparian habitat, vegetation communities, land cover, and special-status natural communities. There is no riparian habitat or special-status natural community in either LMF site at 15th Street or 26th Street and there is no difference in the impact acreages for either alternative for riparian habitats or special-status natural communities.

7.3.2.3 High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

With inclusion of the Norwalk/Santa Fe Springs HSR Station Option, impacts would be the same as those of the Shared Passenger Track Alternatives within the station area. Ongoing maintenance activities at the HSR station option site would occur within a larger area than what would be required under the Shared Passenger Track Alternatives, but riparian or special-status natural communities are not present at this site.

High-Speed Rail Station Option: Fullerton

With inclusion of the Fullerton HSR Station Option, impacts would be the same as those for the Shared Passenger Track Alternatives in the station area for riparian or special-status natural communities, because there are no riparian or special-status natural communities present at the Fullerton HSR Station Option.

7.4 Special-Status Plant Species

7.4.1 Construction Effects on Special-Status Plant Species

Refer to Chapter 8 for a comprehensive summary of IAMFs incorporated into the project design. Potential temporary and permanent effects on special-status plant species that may result from Shared Passenger Track Alternatives construction are described in the subsections below.

7.4.1.1 Temporary

Shared Passenger Track Alternative A

Direct, temporary effects may result from construction crews removing vegetation in access roads and staging and storage areas, and from construction vehicles and personnel disturbing vegetation (i.e., trampling, covering, and crushing individual plants, populations, or suitable potential habitat for special-status plant species). These effects could result in the temporary loss of individual plants, resulting in lower population productivity. Temporary effects could also include temporary soil compaction associated with travel routes, temporarily reducing suitable habitat for special-status plant species. Most of these direct temporary impacts would occur because of staging and laydown areas, which would occur in the general vicinity of the work site and would be accessed by nonresidential roadways.

One location that was mapped as suitable for southern tarplant and lucky morning-glory could not be accessed because of access restrictions. This site is a 1.37-acre temporary construction easement in the Botanical RSA on the north side of Coyote Creek. Based on review of aerial imagery, potentially suitable habitat exists at this site (based on the existing habitat, observed level of disturbance, and surrounding habitat uses). If the site is suitable for southern tarplant and lucky morning-glory and if these species are present, up to 1.37 acres of temporary direct effects on southern tarplant and lucky morning-glory would occur (Table 7-2).

Table 7-2 Estimated Potential Effects on Suitable Habitats for Special-Status Plant Species within the Botanical Resource Study Area

Special-Status Plant Species	State Status[1]	Direct Effects	
		Permanent (acres)	Temporary (acres)
Southern tarplant and lucky morning-glory	1B.1	0	1.37
Lucky morning-glory	1B.1	0	1.37

Source: Calculations generated using ESRI World Imagery 2024 from data generated by field surveys and aerial photo interpretation
[1] California Rare Plant Ranking (CRPR): 1B: rare, threatened, and endangered in California and elsewhere
Threat rank: 0.1: seriously threatened in California

Indirect, temporary effects on special-status plant species could occur and include the following:

- Changes in erosion and sedimentation from construction activities could alter the soil and substrate conditions preferred by special-status plant species.
- Construction equipment leaks could result in soil and water contamination.
- Temporary changes in hydrology could temporarily reduce water availability to plant species, inhibiting plant growth, survival, and germination.
- Construction dust could affect plants by reducing their photosynthetic capability (especially during flowering periods).
- Construction of temporary features (such as staging areas and access roads) could fragment special-status species' habitat, which could temporarily prevent the dispersal of plant species or temporarily alter movement of wildlife species, including pollinators or seed dispersers.
- Noxious plant species (nonnative, detrimental) could be introduced.
- Construction equipment, vehicles, and personnel could facilitate the spread of invasive and noxious weeds. Noxious plant species could outcompete special-status plant species, and pathogens could affect special-status plant communities.

IAMFs have been incorporated in project design to reduce effects on special-status plant species. **BIO-IAMF#1, Biomonitors**, and **BIO-IAMF#3, WEAP – Construction**, will reduce erosion and sedimentation. A BRMP including all of the biological resources' avoidance and minimization measures will be developed (**BIO-IAMF#5, BRMP**). Staging and access areas will be sited to minimize, reduce, or avoid sensitive biological resources (**BIO-IAMF#8, Demarcate**). Construction waste will be stored at or near the construction site to decrease construction truck trips and reduce dust (**BIO-IAMF#9, Waste Storage**). Erosion and sedimentation will be reduced through **BIO-IAMF#11, BMPs**, and implementation of Shared Passenger Track Alternative A's SWPPP (**HYD-IAMF#3, SWPPP**), with the SWPPP also reducing accidental spills of hazardous materials. **AQ-IAMF#1, Dust**, will minimize dust on plants through the dust control plan. With incorporation of IAMFs it is anticipated that Shared Passenger Track Alternative A would result in adverse effects on special-status plant species.

Shared Passenger Track Alternative B

Temporary impacts for Shared Passenger Track Alternative B would be the same as those of Shared Passenger Track Alternative A for special-status plants. There is no habitat for special-status plants in either LMF site at 15th Street or 26th Street so there is no difference in the impact acreages for either alternative for special-status plants.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

With inclusion of the Norwalk/Santa Fe Springs HSR Station Option, impacts would be the same as those of the Shared Passenger Track Alternatives within the station area. Construction of the HSR station platform, facilities, and parking would occur within the same area that would be

modified under the Shared Passenger Track Alternatives. There is no habitat for special-status plants at the site.

High-Speed Rail Station Option: Fullerton

With inclusion of the Fullerton HSR Station Option, impacts would be the same as those of the Shared Passenger Track Alternatives within the station area. Construction of the HSR station platform, facilities, and parking would occur within a larger area than what would be modified under the Shared Passenger Track Alternatives, but there is no habitat for special-status plants at the site.

7.4.1.2 Permanent

There would be no permanent construction impacts on special-status plant species because the only location with potential suitable habitat for special-status plant species is in a temporary disturbance area. Therefore, special-status plant species will not be discussed further here.

7.4.2 Operation and Maintenance Effects on Special-Status Plant Species

The only location where special-status plant species are anticipated to occur is in a temporary disturbance area. Once construction is finished, no activities associated with operations would occur in this area. Special-status plant species during operations are therefore not discussed further.

7.5 Special-Status Wildlife Species

The project section is within an existing rail corridor where many of the operational effects described below already exist. However, train speeds within the existing rail corridor may be slower than are expected for the HSR system, and increased speeds could result in greater direct mortality of wildlife species during the operational phase as compared to existing conditions.

7.5.1 Reptiles and Amphibians

7.5.1.1 Construction Effects on Special-Status Reptiles and Amphibians

Construction of the Shared Passenger Track Alternatives is not anticipated to considerably contribute to the adverse temporary or permanent impacts on special-status reptile and amphibian species. There is only one special-status species in this group with potential to occur: the reptile coast horned lizard. Although this species may disperse into the Wildlife RSA from the Puente Hills and intact riparian areas, the ongoing periodic disturbance associated with flood control activities in the suitable habitat in the San Gabriel River and the Rio Hondo and spreading grounds precludes the establishment of this species as long as flood control activities continue. Flood control activities include the removal of vegetation required for shade, the removal of accumulated sediment, and the tilling of earthen-bottom channels, all of which would cause the direct mortality of burrowing individuals. Construction effects on special-status reptiles and amphibians are not discussed further.

7.5.1.2 Operation and Maintenance Effects on Special-Status Reptiles and Amphibians

Operation of the Shared Passenger Track Alternatives is not anticipated to considerably contribute to adverse temporary or permanent impacts on special-status reptile and amphibian species. There is only one special-status species in this group with potential to occur: coast horned lizard. For the reasons discussed in the construction section above, operation effects on special-status reptiles and amphibians are not discussed further.

7.5.2 Special-Status Birds, Raptors, and Migratory Birds (Including Birds Covered Under the Migratory Bird Treaty Act)

Within the Wildlife RSA, ten special-status bird species were identified as having potential to occur: Bald Eagle (foraging), Least Bell's Vireo (transient), California Least Tern (transient), Long-Eared Owl (nesting), Burrowing Owl (nest sites and wintering sites), Mountain Plover (wintering),

Yellow Warbler (nesting), White-Tailed Kite (nesting and foraging), and Loggerhead Shrike (nesting). All of these bird species are state species of special concern, with the exception of Least Bell's Vireo, which is federally and state-listed as endangered; California Least Tern, which is federally and state-listed as endangered and state fully protected; Bald Eagle, which is state-listed as endangered, fully protected, and protected under the Bald and Golden Eagle Protection Act; and White-tailed Kite, which is also state fully protected.

7.5.2.1 Construction Effects on Special-Status Birds, Raptors, and Migratory Bird Species

Mapped suitable habitat types for special-status wildlife species were overlaid with the permanent and temporary impact layers of the Shared Passenger Track Alternatives. From this information, it was determined if direct permanent or temporary direct impacts were expected and if there was a difference in the impacts between the Shared Passenger Track Alternatives. This information is included in Table 7-3. Direct permanent and temporary impacts are anticipated to affect up to ten special-status avian species, including two raptors (Bald Eagle and White-Tailed Kite) and nesting habitat for migratory bird species, four of which are special-status species.

Table 7-3 Potential Direct Effects on Suitable Habitat for Special-Status Avian Species within the Wildlife Resource Study Area

Special-Status Avian Species	Federal Status[1]	State Status[2]	Habitat Types Included	Direct Effects Expected?		Differences Between the Shared Passenger Track Alternatives
				Permanent	Temporary	
Long-Eared Owl (nesting) *Asio otus*	BCC	SSC	Wild oats and annual brome grassland, hardstem and California bulrush marsh, Goodding's willow – red willow, mulefat, barren, disturbed, developed, unvegetated channel and eucalyptus habitat in San Gabriel and Rio Hondo and spreading grounds	Yes, foraging and adjacent nesting	Yes, foraging and adjacent nesting	None
Burrowing Owl (burrow sites and some wintering sites) *Athene cunicularia hypugaea*	BCC	SSC, CAN	Wild oats and annual brome grassland, disturbed habitat in San Gabriel River, Rio Hondo/spreading grounds, disturbed habitat at Fullerton Municipal Airport, wild oats and annual brome grassland and barren at Raymond Retarding Basins	Yes, burrow sites, wintering sites, and adjacent foraging	Yes, burrow sites, wintering sites, and adjacent foraging	Yes, greater permanent effects under Shared Passenger Track Alternative B (0.01 acre)
Mountain Plover (wintering) *Charadrius montanus*	BCC	SSC	Wild oats and annual brome grasslands and barren ground in the San Gabriel River, Rio Hondo and spreading grounds, and the Raymond Retarding Basins; unvegetated channel in the Santa Ana River	Yes, wintering	Yes, wintering	None
White-Tailed Kite (nesting) *Elanus leucurus*	---	FP	Wild oats and annual brome grassland, disturbed habitat in San Gabriel River, Rio Hondo/spreading grounds, disturbed habitat at Fullerton Municipal Airport, wild oats and annual brome grassland and barren at Raymond Retarding Basins	Yes, nesting	Yes, nesting	Yes, greater permanent effects under Shared Passenger Track Alternative B (0.90 acre)

Special-Status Avian Species	Federal Status[1]	State Status[2]	Habitat Types Included	Direct Effects Expected?		Differences Between the Shared Passenger Track Alternatives
				Permanent	Temporary	
Bald Eagle (nesting and wintering) *Haliaeetus leucocephalus*	Delisted, BGEPA	SE, FP	Wild oats and annual brome grassland, hardstem and California bulrush marsh, Goodding's willow – red willow, mulefat, barren, disturbed, developed, unvegetated channel and eucalyptus habitat in San Gabriel and Rio Hondo and spreading grounds, duckweed blooms in Los Angeles River, foraging from high bridges over Los Angeles River, open water, wild oats and annual brome grassland and barren in Raymond Retarding Basins, open water in Lakeside Residential Community pond	Yes, foraging only	Yes, foraging only	None
Loggerhead Shrike (nesting) *Lanius ludovicianus*	—	SSC	Wild oats and annual brome grassland, disturbed habitat in San Gabriel River, Rio Hondo/spreading grounds, disturbed habitat at Fullerton Municipal Airport, wild oats and annual brome grassland and barren at Raymond Retarding Basins	Yes, nesting	Yes, nesting	Yes, greater permanent effects under Shared Passenger Track Alternative B (0.90 acre)
Yellow Warbler (nesting) *Setophaga petechia*	—	SSC	Wild oats and annual brome grassland, hardstem and California bulrush marsh, mulefat thickets, Goodding's willow – red willow riparian woodland and forest, ornamental habitat in the San Gabriel River and the Rio Hondo/spreading grounds; parks or areas with large areas of ornamental trees	Yes, nesting	Yes, nesting	Yes, greater permanent effects under Shared Passenger Track Alternative B (0.90 acre)
California Least Tern (nesting colony) *Sternula antillarum browni*	FE	SE, FP	California bulrush marsh, mulefat thickets, Goodding's willow – red willow riparian woodland and forest; no breeding habitat present in the Wildlife RSA	Yes, transient (foraging), no nesting habitat present	Yes, transient (foraging), no nesting habitat present	None

Special-Status Avian Species	Federal Status[1]	State Status[2]	Habitat Types Included	Direct Effects Expected?		Differences Between the Shared Passenger Track Alternatives
				Permanent	Temporary	
Least Bell's Vireo (nesting) *Vireo bellii pusillus*	FE, CH	SE	Wild oats and annual brome grassland, hardstem and California bulrush marsh, mulefat thickets, cattail marshes herbaceous alliance, Goodding's willow – red willow riparian woodland and forest, developed ornamental and disturbed/ruderal habitats if they provide perching areas in the San Gabriel River and the Rio Hondo and spreading grounds; no breeding habitat	Yes, transient (foraging), no nesting habitat present	Yes, transient (foraging), no nesting habitat present	None
Nesting bird habitat	—	—	Wild oats and annual brome grassland, hardstem and California bulrush marsh, mulefat thickets, Goodding's willow – red willow riparian woodland and forest, cattail marshes herbaceous alliance, ornamental, disturbed/ ruderal habitats, and eucalyptus – tree of heaven – black locust groves woodland seminatural alliance	Yes	Yes	Yes. There would be 0.91 acres greater permanent impacts under Shared Passenger Track Alternative B than under Shared Passenger Track Alternative A.

Sources: Calculations generated using ESRI World Imagery 2024 and ESRI World Streetmap 2024 from data generated by field surveys and aerial photo interpretation; USFWS 2021b, 2023; CDFW 2024a, 2025

[1] Federal Status
BCC = Birds of Conservation Concern designated by the U.S. Fish and Wildlife Service (USFWS 2021b); BGEPA = protected under the Bald and Golden Eagle Protection Act; CH = U.S. Fish and Wildlife Service–designated critical habitat; FE = endangered

[2] State Status
FP = fully Protected species designated by the California Department of Fish and Wildlife; SE = endangered; SSC = California Species of Special Concern designated by the California Department of Fish and Wildlife, CAN = candidate for listing by the California Department of Fish and Wildlife

Temporary

Shared Passenger Track Alternative A

Temporary construction effects on avian species may result from construction vehicle traffic, the temporary use of land for staging and access areas, noise, and light (affecting local movement) from construction activities, and other construction-related activities that are temporary in nature.

Construction activities could directly affect special-status passerine birds, special-status raptors, and migratory birds through the disturbance of potential active nests and nesting habitat. Such disturbance includes noise associated with construction activities and equipment. Excessive temporary noise will contribute to avoidance behavior and negative responses from avian species. Effects may include the displacement, mortality, or injury of special-status bird species. If construction occurs during the breeding season (February 1 through September 1), active nests could be disturbed, potentially causing the loss of eggs or developing young (i.e., nest abandonment during the incubation, nestling, or fledgling stages of these species).

Indirect effects on birds as a result of temporary habitat conversion could include shifts in foraging patterns or territories, disruption of migration patterns caused by night lighting, increased predation, and decreased reproductive success. Effects may include the displacement, mortality, or injury of special-status bird species. The inadvertent introduction of invasive (noxious) weeds could reduce habitat suitability for these species and could reduce foraging success and therefore survivability and reproduction.

BIO-IAMF#1, Biomonitors; **BIO-IAMF#3, WEAP – Construction**; **BIO-IAMF#6, Monofilament**; **BIO-IAMF#7, Entrapment**; **BIO-IAMF#8, Demarcate**; **BIO-IAMF#9, Waste Storage**; **BIO-IAMF#10**, **Equipment Cleaning**; and **BIO-IAMF#11, BMPs**, will be incorporated into Shared Passenger Track Alternative A. Through incorporation of these IAMFs, qualified biologists will prepare and ensure compliance with the BRMP, prepare WEAP training materials, and perform WEAP training. Injury or death of avian species would be prevented by the restriction of monofilament use and the management of construction trenches, pipes, or culverts through activities such as capping fence posts for birds. Unintentional impacts on avian species will be avoided by siting staging and access areas in designated areas. Construction waste materials will be stored at or near the construction site to decrease construction truck trips, which will reduce disturbance of avian nests by vehicles. Invasive species will be reduced by the cleaning of construction equipment and best management practices (BMP), employing waste management to prevent the attraction and feeding of predators. The IAMFs listed above would not entirely avoid temporary effects on special-status birds, raptors, and migratory birds. For instance, the IAMFs do not provide avoidance for active nests, which would be a substantial impact on special-status birds. With incorporation of these IAMFs, it is anticipated that Shared Passenger Track Alternative A will result in substantial temporary effects on nesting special-status birds, raptors, and migratory birds.

Shared Passenger Track Alternative B

Temporary construction impacts for Shared Passenger Track Alternative B would be the same as those of Shared Passenger Track Alternative A for special-status birds, raptors, or migratory birds, because temporary impacts for nesting birds would be 29.29 acres, which is the same as Shared Passenger Track Alternative A.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

With inclusion of the Norwalk/Santa Fe Springs HSR Station Option, impacts would be the same as those of the Shared Passenger Track Alternatives within the station area. Construction of the HSR station platform, facilities, and parking would occur within the same area that would be modified under the Shared Passenger Track Alternatives. There is nesting habitat for raptors and migratory birds at the site; however, no temporary impacts on this habitat at this HSR station option are anticipated.

High-Speed Rail Station Option: Fullerton

With inclusion of the Fullerton HSR Station Option, no additional temporary construction impacts on special-status birds, raptors, or migratory birds would be anticipated in the station area. Impacts associated with the addition of this station would therefore be the same as those of the Shared Passenger Track Alternatives. Construction of the HSR station platform, facilities, and parking would occur in a larger area than what would be modified under the Shared Passenger Track Alternatives. Although there is additional suitable nesting habitat for raptors and migratory birds in the area of additional disturbance for the HSR station elements, the Fullerton HSR Station Option would not result in any impacts on special-status birds, raptors, or migratory birds. Therefore, if this HSR station option is selected, it would not add to the related impact associated with the Shared Passenger Track Alternatives.

Permanent

Shared Passenger Track Alternative A

Ten special-status bird species have been identified as having a low to moderate potential of occurring in the Wildlife RSA (Table 6-3), in addition to suitable nesting habitat for migratory birds. Construction activities (e.g., grubbing, grading, excavation, driving off-road) could remove or disturb potential nesting habitat for special-status birds, raptors, and migratory birds. Direct effects may include bird mortality or injury, or the permanent conversion and loss of occupied nesting and foraging habitat to Shared Passenger Track Alternative A infrastructure, including grading, new and upgraded track, construction of grade separations, bridges, access roads, HSR station sites, an LMF, drainage improvements, the installation of radio towers, the modification of existing transmission/distribution lines, and the installation of utility improvements and security fencing. Lighting of project elements can affect movement and migration patterns of avian species. Fragmentation of habitats and landscapes resulting from project construction through widening of tracks, improvements to and addition of HSR station sites and maintenance facilities, and addition of fencing could interfere with seasonal movement and dispersal of migratory and special-status birds. Habitat fragmentation reduces the probability of a population's survivability, but this is dependent on factors such as the remaining patch size, the dispersal traits of species, and the time-scale of the effects. Excessive permanent noise will contribute to avoidance behavior and negative responses from avian species. During the breeding season, noise could cause birds to avoid suitable adjacent nesting habitat.

Expected permanent direct effects during construction include the following:

- If construction occurs during the breeding season (February 1 to September 1), active passerine and raptor nests could be disturbed, potentially causing the loss of eggs or developing young (i.e., nest abandonment during the incubation, nestling, or fledgling stages).
- Burrowing Owls extensively use open landscapes with suitable natural or artificial burrows. Suitable habitat exists in some areas within the limits of construction.
- Construction of Shared Passenger Track Alternative A elements could increase electrocution risks to avian species.
- Night lighting can disrupt local movement and migration patterns of avian species.

Indirect effects during the construction period may include:

- The permanent or temporary displacement of special-status bird species to avoid disturbance caused by construction (e.g., noise, visual stimuli)
- Displacement could also result from the actual fragmentation of the landscape caused by construction of the HSR components (e.g., security fences, elevated structures, railbeds, associated facilities).

These indirect effects could interfere with the daily movement, foraging, and dispersal of these bird species. Repeated exposure to disturbance can reduce reproductive success and increase

mortality through the exposure of nests to predators and the elements. Indirect construction effects on birds are anticipated to be less than the direct effects of construction and are expected to be short-term effects.

With incorporation of IAMFs, it is anticipated that Shared Passenger Track Alternative A will result in permanent construction effects on special-status birds, raptors, and migratory birds. **BIO-IAMF#1, Biomonitors**; **BIO-IAMF#3, WEAP – Construction**; **BIO-IAMF#6, Monofilament**; **BIO-IAMF#7, Entrapment**; **BIO-IAMF#8, Demarcate**; **BIO-IAMF#9, Waste Storage**; **BIO-IAMF#10, Equipment Cleaning**; **BIO-IAMF#11, BMPs**; and **BIO-IAMF#12, Bird Safe**, will be incorporated into project design. Through incorporation of these IAMFs, qualified biologists will prepare and ensure compliance with the BRMP, prepare WEAP training materials, and perform WEAP training. Injury or death of avian species would be prevented by the restriction of monofilament use and the management of construction trenches, pipes, or culverts through activities such as capping fence posts for birds. Unintentional impacts on avian species will be avoided by siting staging and access areas in designated areas. Construction waste materials will be stored at or near the construction site to decrease construction truck trips, which will reduce disturbance of avian nests by vehicles. Invasive species will be reduced by the cleaning of construction equipment and BMPs, employing waste management to prevent the attraction and feeding of predators. The catenary systems, masts, and other structures will be designed to be bird and raptor safe in accordance with applicable standards.

The IAMFs listed above would not entirely avoid permanent effects on special-status birds, raptors, and migratory birds. The IAMFs do not provide avoidance for active nests, which would have a substantial impact on special-status birds. With incorporation of these IAMFs, it is anticipated that Shared Passenger Track Alternative A will result in substantial permanent effects on nesting special-status birds, raptors, and migratory birds.

Shared Passenger Track Alternative B

Permanent construction impacts for Shared Passenger Track Alternative B would be similar to those of Shared Passenger Track Alternative A for special-status birds, raptors, or migratory birds, because permanent impacts on nesting birds would be 42.92 acres for Shared Passenger Track Alternative B (0.91 acre greater than for Shared Passenger Track Alternative A). In addition, permanent impacts on Burrowing Owl would be 16.35 acres (0.01 acre greater), on Yellow Warbler would be 16.54 acres and on White-Tailed Kite would be 20.61 acres (both 0.90 acre greater), and on Loggerhead Shrike would be 15.93 acres (0.90 acre greater).

The losses caused by shading would be the same for Shared Passenger Track Alternative B as those of Shared Passenger Track Alternative A for special-status birds, raptors, or migratory birds.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

With inclusion of the Norwalk/Santa Fe Springs HSR Station Option, there would be no permanent impacts on special-status birds, raptors, or migratory birds within the station area. Construction of the HSR station platform, facilities, and parking would occur in the same area that would be modified under the Shared Passenger Track Alternatives. There is nesting habitat for raptors and migratory birds at the site; however, no permanent impacts are expected on this habitat. The Norwalk/Santa Fe Springs HSR Station Option would not result in any permanent impacts on special-status birds, raptors, or migratory birds. Therefore, if this HSR station option is selected, it would not add to the related impact associated with the Shared Passenger Track Alternatives.

High-Speed Rail Station Option: Fullerton

With inclusion of the Fullerton HSR Station Option, impacts would be greater than those of the Shared Passenger Track Alternatives within the station area. Construction of the HSR station platform, facilities, and parking would occur within a larger area than what would be modified under the Shared Passenger Track Alternatives. There is suitable habitat for raptors and migratory birds within the area of additional disturbance for the HSR station elements. Additional

permanent impacts are anticipated on Burrowing Owl (0.03 acre), White-Tailed Kite (1.32 acres), Loggerhead Shrike (1.32 acres), Yellow Warbler (1.32 acres), and nesting birds (1.42 acres).

7.5.2.2 Operation and Maintenance Effects on Special-Status Birds, Raptors, and Migratory Bird Species

Shared Passenger Track Alternative A

Maintenance effects (e.g., from mowing, weed control, driving off-road) on birds during operations would result in the removal or disturbance of areas that provide potential nesting habitat for a diverse population of birds. O&M activities conducted in areas of nesting habitat during the breeding season (between February 1 and September 1) could disturb nesting birds, which could cause nest abandonment and subsequent loss of eggs or developing young at active nests in or near the area of activity. Operational effects (e.g., project operation at grade or on an elevated structure) could result in injury or mortality from bird strikes or bird interactions with fencing and the electrical systems, or direct strikes with the train, as well as permanent disturbance as a result of noise, wind, or visual stimuli. Excessive operational noise will contribute to avoidance behavior and negative responses from avian species. During the breeding season, noise could cause birds to avoid suitable adjacent nesting habitat.

Moving trains could kill or injure birds through bird strikes, and losses through the fence or the electrical systems could occur. Mowing and weed control during the nesting season during operations would remove or disturb areas that provide potential nesting habitat for a diverse population of birds.

Indirect effects could occur from operational activities that disrupt nesting birds, potentially leading to nest failure or abandonment. Indirect effects may include avoidance behavior by some species in response to increased noise, lighting, and startle and motion disturbances during HSR O&M activities.

Increases in noise can make avian calls inaudible, an effect referred to as *masking*. This effect occurs at approximately 60 to 65 A-weighted decibels depending on the ambient noise that the birds have become habituated to. Noise pollution is associated with changes in behavior associated with migration, communication, detection of prey, and predator avoidance in wildlife (Collins et al. 2022). How wildlife responds to noise pollution varies, with some species indicating habituation over time, some exhibiting fear responses, and some ungulate and small mammal species using anthropogenic noise as a “shield” to use as shelter from predators. Acute, infrequent noise can startle animals and may cause an escape response and chronic, continuous noise over longer periods of time can alter anti-predator behavior such as vigilance. Increased noise can inhibit predators more than prey, resulting in a lesser need for vigilance by prey. Mammalian studies suggest that there are fear and avoidance responses caused by increases in noise pollution, but reductions in predation efficiency (Martinig and McLaren 2019). However, if ambient noise pollution is of sufficient levels, the addition of small amounts of noise will not appreciably affect wildlife behavior. Because of the noise levels in the existing urbanized environment, it is not expected that the construction noise levels will appreciably affect wildlife behavior.

Night lighting could disrupt migrations or local movement patterns of avian species. Birds may become disoriented by lights from the approaching train, resulting in collisions with the train.

Rodent control programs could directly poison avian predators through consumption of poisoned rodents or a reduction in the amount of available prey.

Long-term indirect effects on special-status birds may still occur if species that nest in the same location each year (e.g., raptors) are unable to adapt to the presence of new HSR facilities or infrastructure and have to find new nest sites elsewhere.

With incorporation of **BIO-IAMF#4, WEAP – O&M**, and **BIO-IAMF#12, Bird Safe**, the Authority will implement WEAP training on a regular basis for maintenance crews to reduce the potential of unplanned effects and the project will be designed to be bird and raptor safe in compliance with

applicable standards. The IAMFs listed above would not entirely avoid operational effects on special-status birds, raptors, and migratory birds. The IAMFs do not provide avoidance for active nests, which would have a substantial impact on special-status birds. With incorporation of these IAMFs, it is anticipated that Shared Passenger Track Alternative A will result in substantial operational effects on nesting special-status birds, raptors, and migratory birds.

Shared Passenger Track Alternative B

Operational impacts for Shared Passenger Track Alternative B would be the same as those of Shared Passenger Track Alternative A for special-status birds, raptors, or migratory birds. There is no habitat for special-status birds, raptors, or migratory birds in either LMF site at 15th Street or 26th Street.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

With inclusion of the Norwalk/Santa Fe Springs HSR Station Option, impacts would be the same as those of the Shared Passenger Track Alternatives within the station area. Operation of the HSR station platform, facilities, and parking would occur within the same area that would be modified under the Shared Passenger Track Alternatives. There is nesting habitat for raptors and migratory birds at the site.

High-Speed Rail Station Option: Fullerton

With inclusion of the Fullerton HSR Station Option, impacts would be greater than those of the Shared Passenger Track Alternatives within the station area. Operation of the HSR station platform, facilities, and parking would occur within a larger area than what would be modified under the Shared Passenger Track Alternatives. There is suitable nesting habitat for raptors and migratory birds in the area of additional disturbance for the HSR station elements.

7.5.3 Special-Status Mammals

Project activities have the potential to affect special-status mammals. The special-status mammal species identified as having potential to occur within the Wildlife RSA include eight bat species and mountain lion. The bat species are pallid bat, Townsend's big-eared bat, western mastiff bat, western red bat, western yellow bat, Mexican long-tongued bat, pocketed free-tailed bat, and big free-tailed bat.

7.5.3.1 Construction Effects on Special-Status Mammals

Mapped suitable habitat types for special-status wildlife species were overlaid with the permanent and temporary impact layers of the Shared Passenger Track Alternatives. From this information, it was determined if direct permanent or temporary direct impacts were expected for special-status species and if there was a difference in the impacts between the Shared Passenger Track Alternatives. This information is included in Table 7-4 for mammals.

Table 7-4 Potential Effects on Suitable Habitat for Special-Status Mammal Species within the Wildlife Resource Study Area

Special-Status Mammals	Federal Status	State Status[1]	Habitat Types Included	Direct Effects Expected?		Differences Between the Shared Passenger Track Alternatives
				Permanent	Temporary	
Pallid bat *Antrozous pallidus*	—	SSC	Wild oats and annual brome grassland, hardstem and California bulrush marsh, mulefat thickets, Goodding's willow – red willow riparian woodland and forest, ornamental habitat in the San Gabriel River and the Rio Hondo/spreading grounds; open water; bridges mapped on Figure 5-3, sheets 1 through 24	Yes	Yes	None
Mexican long-tongued bat *Choeronycteris mexicana*	—	SSC	Ornamental areas (large enough to support foraging), residential and abandoned buildings (not mapped), broad-leaved tree areas	Yes	Yes	Yes. There would be 0.90 acre greater permanent impacts of suitable habitat for this species under Shared Passenger Track Alternative B than under Shared Passenger Track Alternative A.
Townsend's big-eared bat *Corynorhinus townsendii*	—	SSC	Los Angeles River bridges (some cave-like structures), ornamental tree areas, wild oats and annual brome grassland, hardstem and California bulrush marsh, mulefat thickets, Goodding's willow – red willow riparian woodland and forest, ornamental habitat in the San Gabriel River and the Rio Hondo/spreading grounds	Yes	Yes	None
Western mastiff bat *Eumops perotis californicus*	—	SSC	Wild oats and annual brome grassland; hardstem and California bulrush marsh; mulefat thickets; Goodding's willow – red willow riparian woodland and forest; ornamental habitat in the San Gabriel River, the Rio Hondo/spreading grounds, and the Raymond Retarding Basins; open water associated with the Los Angeles River and Lakeside Residential Community pond; high bridges in the Los Angeles River	Yes	Yes	Yes. There would be 0.01 acre less shading impacts on suitable habitat for this species under Shared Passenger Track Alternative B than under Shared Passenger Track Alternative A.

Special-Status Mammals	Federal Status	State Status[1]	Habitat Types Included	Direct Effects Expected?		Differences Between the Shared Passenger Track Alternatives
				Permanent	Temporary	
Western red bat *Lasiurus frantzii*	—	SSC	Areas with broad-leaved trees, ornamental areas, residential if heavily treed; San Gabriel River and Rio Hondo/spreading grounds	Yes	Yes	Yes. There would be 0.90 acre greater permanent impacts and 0.01 acre less shading impacts on suitable habitat for this species under Shared Passenger Track Alternative B than under Shared Passenger Track Alternative A.
Western yellow bat *Lasiurus xanthinus*	—	SSC	Areas with palm trees (ornamental); open water associated with Lakeside Residential Community pond, the Los Angeles River, Raymond Retarding Basins, San Gabriel River, and Rio Hondo/ spreading grounds	Yes	Yes	Yes. There would be 0.90 acre greater permanent impacts and 0.01 acre less shading impacts on suitable habitat for this species under Shared Passenger Track Alternative B than under Shared Passenger Track Alternative A.
Pocketed free-tailed bat *Nyctinomops femorosaccus*	—	SSC	Wild oats and annual brome grassland; hardstem and California bulrush marsh; mulefat thickets; Goodding's willow – red willow riparian woodland and forest; ornamental habitat in the San Gabriel River, the Rio Hondo/spreading grounds, and the Raymond Retarding Basins; open water associated with the Los Angeles River and Lakeside Residential Community pond; high bridges in the Los Angeles River	Yes	Yes	None

Special-Status Mammals	Federal Status	State Status[1]	Habitat Types Included	Direct Effects Expected?		Differences Between the Shared Passenger Track Alternatives
				Permanent	Temporary	
Big free-tailed bat *Nyctinomops macrotis*	—	SSC	Wild oats and annual brome grassland; hardstem and California bulrush marsh; mulefat thickets; Goodding's willow – red willow riparian woodland and forest; ornamental habitat in the San Gabriel River, the Rio Hondo/spreading grounds, and the Raymond Retarding Basins; high bridges in the Los Angeles River; heavily treed ornamental areas	Yes	Yes	None
Mountain lion *Puma concolor*	—	PT	Wild oats and annual brome grassland, hardstem and California bulrush marsh, Goodding's willow – red willow, mulefat, barren, disturbed, developed, unvegetated channel and eucalyptus habitat in the San Gabriel River and Rio Hondo and spreading grounds, duckweed blooms in the Los Angeles River, foraging from high bridges over the Los Angeles River, open water, wild oats and annual brome grassland and barren in Raymond Retarding Basins, open water in Lakeside Residential Community pond	Yes	Yes	Yes. There would be 0.91 acre greater permanent impacts on suitable habitat for this species under Shared Passenger Track Alternative B than under Shared Passenger Track Alternative A.

Sources: Calculations generated using ESRI World Imagery 2024 and ESRI World Streetmap 2024 from data generated by field surveys and aerial photo interpretation; USFWS 2021b, 2023; CDFW 2024a, 2025

[1] State Status
SSC = California Species of Special Concern designated by the California Department of Fish and Wildlife; PT = proposed threatened

Temporary

Shared Passenger Track Alternative A

The placement of temporary structures and staging areas, as well as equipment operation, would result in noise or dust, which could affect bats and mountain lion. Construction activities could attract raptors or other opportunistic predators (such as raccoons and feral cats) that could increase predation on bats. Alternately, raccoons and feral cats are prey species for mountain lions and could attract mountain lions to the construction area. Excessive temporary noise will interfere with movement and roosting behavior in bats and mountain lions.

Temporary alterations in traffic patterns and pedestrian infrastructure could temporarily change activity, lighting, and noise along adjacent roadways, which could cause temporary displacement and disruption of foraging and roosting. Indirect effects on mammal species from temporary habitat conversion could include shifts in foraging patterns or territories, potential increases in foraging costs, increased risk of vehicle strikes, and decreased reproductive success. Temporary night lighting could disrupt local movement for both bats and mountain lions or migration patterns of bat species. Where night lighting is prolonged, bats will be attracted to the area because of the increase in nocturnal insects. However, artificial lighting will lead to increases potential in bat mortality caused by disorientation from construction equipment.

With incorporation of **BIO-IAMF#1, Biomonitors**; **BIO-IAMF#3, WEAP – Construction**; **BIO-IAMF#7, Entrapment**; **BIO-IAMF#8, Demarcate**; **BIO-IAMF#9, Waste Storage**; and **BIO-IAMF#11, BMPs**, it is expected that Shared Passenger Track Alternative A will result in temporary effects on special-status mammal species.

Through incorporation of these IAMFs, qualified biologists will monitor construction, prepare WEAP training materials, and perform WEAP training. Injury or death of mammalian species would be prevented through the management of construction trenches, pipes, or culverts. Unintentional impacts on mammalian species will be avoided by siting staging and access areas in designated areas. Construction waste materials will be stored at or near the construction site to decrease construction truck trips, which will reduce disturbance of special-status mammals by vehicles. BMPs and employing waste management to prevent the attraction and feeding of predators.

The IAMFs listed above would not entirely avoid temporary effects on special-status mammals and it is anticipated that Shared Passenger Track Alternative A would result in substantial temporary effects on special-status mammals.

Shared Passenger Track Alternative B

Temporary construction impacts for Shared Passenger Track Alternative B would be the same as those of Shared Passenger Track Alternative A for special-status mammals.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

With inclusion of the Norwalk/Santa Fe Springs HSR Station Option, impacts would be the same as those of the Shared Passenger Track Alternatives within the station area. Construction of the HSR station platform, facilities, and parking would occur within the same area that would be modified under the Shared Passenger Track Alternatives. There is habitat for special-status mammals, including western red bat, western yellow bat, and mountain lion, at the site. However, the Norwalk/Santa Fe Springs HSR Station Option would not result in any impacts on special-status mammals. This HSR station option would not add to the impact caused by the Shared Passenger Track Alternatives.

High-Speed Rail Station Option: Fullerton

With inclusion of the Fullerton HSR Station Option, impacts would be the same as those of the Shared Passenger Track Alternatives within the station area. Although suitable habitat exists for western red bat, western yellow bat, and mountain lion at this site, no temporary impacts are anticipated at the Fullerton HSR Station Option in these suitable habitat areas. Therefore, the

temporary construction impacts would be the same as those of the Shared Passenger Track Alternatives in the station area.

Permanent

Shared Passenger Track Alternative A

Increased lighting after sunset could disrupt activities, including foraging activities, in both special-status bat species and mountain lions. Increased lighting can cause some bat species to leave an area while being an attractant for other bat species. Increased lighting can become an attractant because nocturnal insects are drawn by lighting, which in turn attracts foraging bats. Special-status bats that are attracted to lighted construction areas would have higher potential mortality through effects such as disorientation, vehicle strikes, and entrapment. Lighting that creates avoidance behavior and changes foraging patterns can lead to reductions in the availability of food for bats, reducing the fitness of individuals and therefore possibly the population. Excessive permanent noise will cause roost and natal colony abandonment in bats and avoidance behavior in mountain lions.

Direct effects on mountain lions could include construction vehicle and construction equipment collisions. Mountain lions have been found to avoid wildlife corridors with human activity. Permanent construction impacts on mountain lion for Shared Passenger Track Alternative A include permanent impacts of 32.36 acres on mountain lion habitat.

Direct effects would include the permanent conversion of suitable special-status bat and foraging habitat to Shared Passenger Track Alternative A infrastructure associated with grading, new and upgraded track, grade separations, bridges, access roads, HSR station sites, an LMF, drainage improvements, utility improvements, radio towers, and security fencing. In addition, direct effects would include fragmentation of habitats and landscapes, which would interfere with seasonal movement and dispersal of special-status bats. Permanent construction impacts on special-status bats for Shared Passenger Track Alternative A include permanent impacts on 6.93 acres of pallid bat habitat, 14.61 acres of Mexican long-tongued bat habitat, 10.65 acres of Townsend's big-eared bat habitat, 3.24 acres of western mastiff bat habitat, 16.22 acres of both western red bat and western yellow bat habitat, and 11.86 acres of both pocketed free-tailed bat and big free-tailed bat habitat.

Removal or disturbance of roost sites could cause the direct mortality of special-status bats during construction or could cause the special-status bats to be displaced. Bats require roost sites for stable temperatures and to avoid predators and, if suitable alternate roost sites are not available, special-status bats may be predated or die from exposure.

Bats may be particularly sensitive to noise pollution, because they use echolocation to hunt insect prey and for orientation, and it has been determined that bats avoid foraging in proximity to loud noise and that foraging efficiency declines in proximity to traffic noise (Schaub et al. 2008; Siemers and Schaub 2011).

Indirect construction effects could include increases in pedestrian and vehicle traffic. Changes in the patterns of human activity because of construction may affect human disturbance, and noise, in adjacent habitat areas, which could result in the disruption of foraging and roosting areas for special-status bats and mountain lions. Construction artificial lighting at night is not expected to cause appreciable indirect effects in this urban setting because train and facility lighting is not expected to differ substantially from baseline light levels.

With incorporation of **BIO-IAMF#1, Biomonitors**; **BIO-IAMF#3, WEAP – Construction**; **BIO-IAMF#7, Entrapment**; **BIO-IAMF#8, Demarcate**; and **BIO-IAMF#9, Waste Storage**, it is expected that Shared Passenger Track Alternative A will result in permanent effects on special-status mammal species.

Through incorporation of these IAMFs, qualified biologists will monitor construction, prepare WEAP training materials, and perform WEAP training. Injury or death of mammalian species would be prevented through the management of construction trenches, pipes, or culverts. Unintentional impacts on mammalian species will be avoided by siting staging and access areas

in designated areas. Construction waste materials will be stored at or near the construction site to decrease construction truck trips, which will reduce disturbance of mammals by vehicles. Invasive species will be reduced by the cleaning of construction equipment and BMPs.

The IAMFs listed above would not entirely avoid permanent effects on special-status mammals and it is anticipated that Shared Passenger Track Alternative A will result in substantial permanent effects on special-status mammals.

Shared Passenger Track Alternative B

Permanent construction impacts for Shared Passenger Track Alternative B would be similar to those of Shared Passenger Track Alternative A for special-status mammals. Shared Passenger Track Alternative B would result in 33.27 acres of impacts on mountain lion habitat (0.91 acre greater than Shared Passenger Track Alternative A), 15.51 acres of impacts on Mexican long-tongued bat habitat (0.90 acre greater), and 17.12 acres of impacts on western red bat and western yellow bat habitat (0.90 acre greater). Shading impacts would be 0.04 acre for western mastiff bat, western red bat, and western yellow bat (0.01 acre fewer). Otherwise, the impacts between the Shared Passenger Track Alternatives on special-status mammals are the same.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

With inclusion of the Norwalk/Santa Fe Springs HSR Station Option, impacts would be the same as those of the Shared Passenger Track Alternatives within the station area because the Norwalk/Santa Fe Springs HSR Station Option does not include any additional impacts on special-status mammals and would not add to the impact caused by the Shared Passenger Track Alternatives. Construction of the HSR station platform, facilities, and parking would occur within the same area that would be modified under the Shared Passenger Track Alternatives. There is habitat for special-status mammals, including western red bat, western yellow bat, and mountain lion at the site; however, no additional impacts would result.

High-Speed Rail Station Option: Fullerton

With inclusion of the Fullerton HSR Station Option, impacts would be greater than those of the Shared Passenger Track Alternatives within the station area. Construction of the HSR station platform, facilities, and parking would occur within a larger area than what would be modified under the Shared Passenger Track Alternatives. There is suitable habitat for special-status mammals within the area of additional disturbance, including habitat for mountain lion (1.35 acres of impacts), Mexican long-tongued bat (1.32 acres of impacts), Townsend's big-eared bat (0.07 acre of impacts), western mastiff bat (0.07 acre of impacts), western red bat (1.32 acres of impacts), western yellow bat (1.32 acres of impacts), pocketed free-tailed bat (0.07 acre of impacts), and big free-tailed bat (0.07 acre of impacts). No permanent shading impacts are anticipated.

7.5.3.2 Operation and Maintenance Effects on Special-Status Mammals

Shared Passenger Track Alternative A

Direct operational effects on mammals would include ground disturbance during operational activities. Burrowing, denning, and foraging habitat may be directly affected. In addition, increased noise levels and human presence may accelerate local shifts in populations. Some free-ranging mammals may avoid the area and be funneled along the project section new and upgraded tracks until locating a wildlife crossing. Operations of Shared Passenger Track Alternative A at grade or on elevated structure could result in injury or mortality from bat strikes or bat interactions with electrical systems. Night lighting may attract insects and therefore may attract some bat species to the Wildlife RSA, which could result in mortality of bats from collisions with trains or electrical systems. Night lighting would disrupt foraging activities, local movements, and migration patterns of bat species. Where night lighting is prolonged, bats will be attracted to the area because of the increase in nocturnal insects, which will increase the probability of collisions with the trains.

Noise impacts from operations can disrupt mammalian wildlife behavior, resulting in disruptions in the ability to forage, find mates, and avoid predation. Mountain lions are sensitive to human noises and train noise could prevent mountain lions from using a crossing. Mountain lions are most active at night, when the trains are only active for maintenance purposes.

Operations of the HSR trains could result in displacement of mammal species from noise, wind, and visual stimuli, and from the actual fragmentation of the landscape because of the construction of infrastructure. Excessive operational noise will cause roost and natal colony abandonment in bats and avoidance behavior in mountain lions. These effects may result in shifts in foraging patterns or territories, or dispersal movements, increased predation, decreased reproductive success, and reduced population viability. Vehicles, including trains, have a direct risk of collision for both bat species and mountain lions. Many bat species are long lived but have low fecundity (one to two offspring per year) (Kunz and Fenton 2003), so even a moderate increase in mortality can have large effects on populations (Schorcht et al. 2009). In addition to the direct effects associated with collision mortalities, roads and rail systems can act as barriers to movements of bats and mountain lions between habitats. Increased night lighting has substantial effects on bat behavior and increases in noise and night lighting could also affect both bat species and mountain lions or affect how bats and mountain lions use the project footprint, including the permanent project components such as the HSR station sites, the LMF, surface and elevated tracks, and roadway crossings. However, in an urban environment, operational lighting is not expected to increase appreciably from existing conditions. Other direct effects could include disturbance of roost/nest sites below bridges and in undercrossings during construction or removal and reinstallation of these components.

Mountain lions are highly mobile species, requiring large home ranges of 500 to 700 acres. Males have larger home ranges, with greater risks of mortality from roads and railroads. In the region, foraging habitat would exist in the mountain ranges and dispersal habitat would occur in the watercourses.

Exposure to operational noise can cause changes in wildlife behavior. The changes will depend on the species, timing, intensity, frequency, duration, and level of existing ambient noise. Foraging efficiency, mating success, and survival can all be affected by the species' responses to noise, which may include behavioral changes, stress, and fleeing or hiding.

Whether specific species are attracted to or deterred from the surface and elevated track components and the roadway crossings of the project corridor would depend on species-specific habitat requirements. For example, species that prefer to forage in closed environments may be less likely to cross the wide-open area of the surface and elevated tracks, but species more adapted to open environments may be attracted to the openness of the surface and elevated tracks and roadway crossings. Pallid bats, western mastiff bats, western yellow bats, pocketed free-tailed bats, and big free-tailed bats may be attracted to the open environment of the surface and elevated track components.

Low-flying species are more prone to collisions than high-flying species, and juveniles are more vulnerable than adults, with a substantial bias toward male casualties (Fensome and Mathews 2016). Pallid bats, Townsend's big-eared bats, Mexican long-tongued bats, western red bats, and western yellow bats are low-flying species. In a study in 2016, it was found that most bat casualties were of the genus *Pipistrellus* and *Myotis* (Fensome and Mathews 2016). Less common were casualties of high-flying species. It has been observed that the higher a bat flies as it approaches a road/crossing, the more likely it is to cross (Bennett and Zurcher 2013), and although low-flying species are less likely to cross, it was still demonstrated that these species have much higher mortality associated with roads and crossings. Low-flying species often prefer to use bridges and underpasses to cross rather than to fly directly over the road or crossing (Bennett and Zurcher 2013).

Roads and rail systems can act as barriers to movements of bats and mountain lions, and how this affects a species depends on species-specific behavior as well as habitat availability (Fensome and Mathews 2016). For example, a species that requires a larger home range would have a higher risk from roads, because these species are more likely to risk collisions. Mountain

lions have large home ranges. Although little is known about bat ecology for many species, western mastiff bats are known to have large home ranges and possibly the molossids (pocketed free-tailed bats and big free-tailed bats) also have large home ranges. From a habitat perspective, having highly suitable bat or mountain lion habitat next to a rail system would increase the likelihood of collisions, because bats or mountain lions are more likely to be present.

Casualties of bats increase near other linear habitat features that bats use such as tree lines, hedges, rivers, forest edges, and woodland paths (Lesinski 2008; Ikovic et al. 2014). Bat mortalities are generally related to the quality of habitat bordering the road, and bats are more likely to be killed where roads bisect high-quality habitat or when roads pass near foraging locations such as waterbodies (i.e., basins) and riparian habitats (Medinas et al. 2012). The presence of trees and shrub layers adjacent to the road or crossing increased the likelihood of road-crossing behavior (Bennett and Zurcher 2013).

Although habitat quality in the Wildlife RSA is low, when the HSR alignment crosses rivers, the potential risks of collisions with low-flying bat species and species attracted to lights increases. Pallid bat, Townsend's bat, western red bat, and western yellow bat are low-flying bat species. It is likely that special-status bat species are attracted to light sources because lights attract prey (insects). Although ornamental trees are present, there are no large forested areas or palm oases, so the general absence of trees and shrubs of sufficient height next to the HSR alignment in the vicinity of the bridges reduces the probability that bats would cross the HSR. Townsend's big-eared bats prefer to be at or near edges of habitat and the lack of trees/shrubs might preclude this species. The presence of undercrossings/bridges below the project section does provide alternate crossing strategies for low-flying species. Undercrossings and bridges provide potential roosting and hibernation areas, and these areas are likely to be disturbed during maintenance. Bats roosting in the undercrossings have collision risks when exiting roosts. The overcrossings present are roadways or railways, which present collision risks for low-flying species.

Local noise and motion disturbance effects resulting from operations may cause avoidance behavior or alter foraging ability/efficiency for bat species and mountain lion. Night lighting could disrupt local movement or migration patterns of bat species and mountain lion. Rodent control programs could directly poison predators through consumption of poisoned rodents or a reduction in available prey.

To reduce the potential for direct and indirect effects on special-status mammals during operations, the Authority will conduct WEAP training on a regular basis for maintenance crews (**BIO-IAMF#4, WEAP – O&M**).

The IAMF listed above would not entirely avoid operational effects on special-status mammals and it is anticipated that Shared Passenger Track Alternative A will result in substantial operational effects on special-status mammals.

Shared Passenger Track Alternative B

Operational effects for Shared Passenger Track Alternative B would be the same as those of Shared Passenger Track Alternative A for special-status mammals. There is no habitat for special-status mammals in either LMF site at 15th Street or 26th Street.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

With inclusion of the Norwalk/Santa Fe Springs HSR Station Option, impacts would be the same as those of the Shared Passenger Track Alternatives within the station area. Operation of the HSR station platform, facilities, and parking would occur within the same area that would be modified under the Shared Passenger Track Alternatives. There is suitable habitat for special-status mammals, including mountain lion, western red bat and western yellow bat, at the site.

High-Speed Rail Station Option: Fullerton

With inclusion of the Fullerton HSR Station Option, impacts would be greater than those of the Shared Passenger Track Alternatives within the station area. Operation of the HSR station

platform, facilities, and parking would occur within a larger area than would be modified under the Shared Passenger Track Alternatives. There is suitable habitat for special-status mammals, including mountain lion, western red bat and western yellow bat, within the area of additional disturbance for the HSR station elements.

7.6 Aquatic Resources

Aquatic resources considered subject to USACE, SWRCB, or CDFW jurisdiction identified within the Aquatic RSA consist of freshwater emergent wetland, freshwater forested/shrub wetland, basin, riverine, and built watercourse features.

Construction of Shared Passenger Track Alternative A would result in both temporary and permanent effects on aquatic resources as described in the following sections. Anticipated permanent and temporary effects of construction are presented both quantitatively (e.g., acreage, linear feet) and qualitatively. O&M effects on aquatic resources would be temporary and localized, and they are unlikely to result in direct or indirect effects discernable from existing maintenance practices during or following these activities.

It is anticipated that potential effects on aquatic functions and services will be minimized or eliminated through incorporation of IAMFs described below and in Chapter 8.

7.6.1 Construction Effects on Aquatic Resources

7.6.1.1 Temporary

Shared Passenger Track Alternative A

Construction of Shared Passenger Track Alternative A is expected to result in temporary effects on aquatic resources considered subject to USACE, SWRCB, or CDFW jurisdiction. These effects include both direct and indirect effects and are described below.

As described in Section 6.4, the Aquatic RSA is heavily disturbed and consists predominantly of concrete-lined, unvegetated channels. In addition, earthen-bottom channels and basins are regularly maintained (disced, mowed, or treated) for capacity, thus altering natural functions on a routine basis.

Under Shared Passenger Track Alternative A, construction activities that would result in temporary direct effects on aquatic resources include staging and storage; construction laydown; access roads; surface water diversions; dewatering; demolition; falsework and scaffolding; relocation or upgrading of underground utilities; foot, vehicle, and machine traffic; and other workspace that would not be occupied during HSR operations. Table 7-5 summarizes the estimated acreage of temporary direct effects by aquatic resource category. The resultant effects of these activities on aquatic functions and services could include temporary effects on substrate and vegetation; currents, circulation, and drainage patterns; and water quality, as summarized below. Appendix I-1, U.S. Army Corps of Engineers-State Water Resources Control Board Waters of the U.S. and State Effects, provides a more detailed summary table of temporary and permanent effects on USACE or SWRCB waters of the U.S., and Appendix I-2, California Department of Fish and Wildlife Lakes, Streambeds, and Associated Riparian Vegetation Effects, provides a summary table of permanent and temporary effects on areas subject to California Fish and Game Code Section 1600 et seq. These appendices provide a feature-by-feature breakdown of temporary and permanent effects on aquatic resources, by acreage and linear feet.

Construction of Shared Passenger Track Alternative A would result in temporary direct effects on a total of 1.52 acre of aquatic resources considered USACE or SWRCB wetland and nonwetland, consisting of 0.29 acre of freshwater emergent wetland (San Gabriel River), 1.21 acres of riverine (Rio Hondo, San Gabriel River, North Fork Coyote Creek, La Mirada Creek, Coyote Creek, and Brea Creek), and 0.02 acre of built watercourse (unnamed feature 29).

Shared Passenger Track Alternative A would result in temporary direct effects on a total of 2.31 acres of areas considered subject to California Fish and Game Code Section 1600 et seq.[18] consisting of 0.29 acre of freshwater emergent wetland (San Gabriel River), regulated as associated riparian vegetation; 1.99 acres of riverine (Rio Hondo, San Gabriel, North Fork Coyote Creek, La Mirada Creek, and Coyote Creek), regulated as streambed; and 0.03 acre of built watercourse (unnamed feature 29), also regulated as streambed.

Table 7-5 Temporary Direct Effects on Aquatic Resources Considered Waters of the U.S. and Waters of the State, and Subject to California Fish and Game Code Section 1600 et seq.[5]

Aquatic Resource Category[1]	USACE/ SWRCB Wetland Effects	USACE/ SWRCB Nonwetland Waters of the U.S. Effects	CDFW Streambed Effects	CDFW Lakes Effects	CDFW Associated Riparian Vegetation Effects[2]
Wetlands					
Freshwater emergent wetland[3]	0.29	--	--	--	0.29
Freshwater forested/shrub wetland	--	--	--	--	--
Wetlands subtotal	0.29	--	--	--	0.29
Nonwetland Waters					
Basin	N/A	--	--	--	--
Built watercourse	N/A	0.02	0.03	--	--
Riverine[4]	N/A	1.21	1.99	--	--
Nonwetlands subtotal	N/A	1.23	2.02	--	--
Grand total	**0.29**	**1.23**	**2.02**	--	**0.29**

[1] As defined by *U.S. Army Corps of Engineers Wetland Delineation Manual* (USACE 1987), U.S. Fish and Wildlife Service National Wetlands Inventory (USFWS 2016a, 2024b), and *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al. 1979).
[2] Within the Aquatic RSA, California Fish and Game Code Section 1600 "associated riparian vegetation" occurs in wetlands (freshwater emergent wetland, freshwater forested/shrub wetland) as well as nonwetland (basin, riverine) conditions, depending on the hydrologic, geomorphic, soils, and vegetative conditions. Refer to Sections 6.4.1.1, 6.4.2.1, and 6.4.2.2 for additional detail.
[3] The bulrush marsh identified in the San Gabriel River portion of the RSA is classified as "freshwater emergent wetland" for USACE or SWRCB (CWA Section 404/401 and Porter-Cologne Water Quality Control Act) jurisdiction and "associated riparian vegetation" for CDFW Section 1600 jurisdiction. The cattail marsh identified in the La Mirada Creek (Feature 19) portion of the RSA is classified as "freshwater emergent wetland" associated riparian vegetation for purposes of CDFW Section 1600 jurisdiction and "riverine" for purposes of USACE or SWRCB (CWA Section 404/401 and Porter-Cologne Water Quality Control Act) jurisdiction, because this feature does not meet the USACE or SWRCB wetland definitions. Refer to Sections 6.4.1.1 and 6.4.2.2 for additional detail.
[4] The mulefat thickets habitat identified in the San Gabriel River portion of the RSA is classified as "riverine" for purposes of USACE or SWRCB (CWA Section 404/401) jurisdiction and as "associated riparian vegetation" for purposes of CDFW Section 1600 jurisdiction. Refer to Section 6.4.2.2 for additional detail.
[5] Aquatic resource impact acreages are based on the project footprint dated August 2024 and include both Shared Passenger Track Alternatives A and B. Specifically, the Aquatic RSA includes both LMF options (26th Street LMF and 15th Street LMF) and both the Norwalk/Santa Fe Springs and Fullerton HSR station options. In summary, there is no difference in the location or extent of aquatic resource acreages or aquatic resource impacts between Shared Passenger Track Alternatives A and B.
-- = No effect; < = less than; CDFW = California Department of Fish and Wildlife; HSR = high-speed rail; LMF = light maintenance facility; N/A = not applicable; RSA = resource study area; SWRCB = State Water Resources Control Board; USACE = U.S. Army Corps of Engineers

[18] Aquatic resources potentially subject to California Fish and Game Code Section 1600 et seq. identified in the Aquatic RSA are generally inclusive of aquatic resources considered subject to USACE or SWRCB jurisdiction (i.e., overlapping).

These temporary activities could lead to disturbance of substrate in and adjacent to aquatic resources in the construction zones. The excavation and stockpiling of bed or basin substrate, use of surface water diversions and cofferdams, and installation of access roads and forms (e.g., for concrete pours) could directly alter currents, circulation, and drainage patterns of surface waters, particularly during the wet season (October–April) when precipitation and high flows are more prevalent. Fill materials and structures can modify flow patterns through the obstruction of flow; changes in the direction or velocity of water circulation; increasing erosion, siltation, or runoff; and through reduction of the capacity of a watercourse or waterbody (i.e., basin).

The presence of construction equipment and materials in aquatic resources and the excavation and stockpiling of bed or basin substrate have the potential to also degrade water quality through accidental leaks, spills, and the erosion of stockpiles (e.g., sidecast substrate). The introduction of pollutants and sediment into surface waters would further degrade water quality in riverine and built watercourse features. These effects are of particular concern during the wet season (October–April).

Construction of Shared Passenger Track Alternative A also has the potential to result in temporary indirect effects on aquatic resources considered subject to USACE, SWRCB, or CDFW jurisdiction. Construction equipment, vehicles, and personnel could spread invasive and noxious weeds through activities such as spreading soils during grading and using unclean equipment and vehicles from other project sites. The introduction and establishment of these species have the potential to outcompete regulated riparian and wetland habitats. However, as described in Chapter 6, Survey Findings and Results, aquatic resources in the project section are generally restricted to a very low level of aquatic ecological functions because of routine maintenance practices, flood control modifications (e.g., concrete lining), and the heavily urbanized rail corridor. The presence of watercourses supporting state- and federally regulated riparian and wetland habitats within the temporary disturbance footprint of Shared Passenger Track Alternative A is limited to the San Gabriel River and La Mirada Creek. Accordingly, the potential adverse effects of invasive and noxious weeds on these regulated resources during construction would be limited to these watercourses within the project footprint and immediate vicinity.

In addition, the excavation and stockpiling of bed or basin substrate, use of surface water diversions and cofferdams, and installation of access roads and forms (e.g., for concrete pours) in aquatic areas has the potential to indirectly alter currents, circulation, and drainage patterns of surface waters in proximity to construction zones, including in downstream reaches of riverine and built watercourse features. These activities also have the potential to temporarily degrade water quality near construction zones through leaks, spills, and the erosion of stockpiles, including in downstream reaches of built watercourses and riverine features. The introduction of pollutants and sediment into surface waters could further degrade water quality downstream in receiving waters such as the Los Angeles River, Rio Hondo, San Gabriel River, and Santa Ana River. These major watercourses are listed by Los Angeles and Santa Ana RWQCBs as “impaired” for one or more pollutants (Los Angeles RWQCB 2018; Santa Ana RWQCB 2016). These potential indirect effects are of particular concern during the wet season (October–April). However, based on the limited number and restricted size of proposed temporary in-channel fill or structures, indirect changes to flow patterns, velocities, erosion, siltation, runoff, channel capacity, and water quality would be minimal.

To reduce potential temporary direct and indirect effects on aquatic resources considered subject to USACE, SWRCB, or CDFW jurisdiction, biological monitors will oversee construction activities (**BIO-IAMF#1, Biomonitors**), stop work if necessary, and implement WEAP training (**BIO-IAMF#3, WEAP – Construction**). In addition, temporary staging and access areas will be sited in designated areas and avoid aquatic resources and sensitive habitats to the extent feasible (**BIO-IAMF#5, BRMP**; and **BIO-IAMF#8, Demarcate**), excavated material will be returned as backfill or, if unsuitable for treatment and reuse, will be disposed of at an off-site location (**BIO-IAMF#9, Waste Storage**), and the introduction of invasive plant species will be minimized through incorporation of **BIO-IAMF#10, Equipment Cleaning**. Furthermore, the Authority will prepare and implement a construction site BMP manual (**BIO-IAMF#11, BMPs**). Stormwater and nuisance

runoff resulting from changes in impervious surfaces or accidental releases of hazardous materials will be controlled and treated through the construction of stormwater management facilities and low-impact development techniques (**HYD-IAMF#1, Stormwater**; **HYD-IAMF#3, SWPPP**; and **HYD-IAMF#4, SWPPP – Industrial**). Lastly, standard construction BMPs will be implemented to prevent and clean up accidental releases of hazardous materials (**HMW-IAMF#6, Spills**).

Shared Passenger Track Alternative B

Temporary construction impacts on aquatic resources for Shared Passenger Track Alternative B would be the same as those of Shared Passenger Track Alternative A, because there is no difference in the location or extent of existing aquatic resources or aquatic resource impacts between the alternatives. Specifically, no aquatic resources were identified within the project footprint of either LMF site (26th Street LMF and 15th Street LMF).

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

With inclusion of the Norwalk/Santa Fe Springs HSR Station Option, impacts would be the same as those of the Shared Passenger Track Alternatives within the station area. Construction of the HSR station platform, facilities, and parking would occur within the same area that would be modified under the Shared Passenger Track Alternatives. No aquatic resources or areas subject to California Fish and Game Code Section 1600 et seq. were identified at the HSR station option site.

High-Speed Rail Station Option: Fullerton

With inclusion of the Fullerton HSR Station Option, impacts would be the same as those of the Shared Passenger Track Alternatives within the station area. Construction of the HSR station platform, facilities, and parking would occur within a larger area than would be modified under the Shared Passenger Track Alternatives, but no aquatic resources or areas subject to California Fish and Game Code Section 1600 et seq. were identified at the HSR station option site.

7.6.1.2 Permanent

Construction of Shared Passenger Track Alternative A is expected to result in permanent effects on aquatic resources considered subject to USACE, SWRCB, or CDFW jurisdiction. These effects include both direct and indirect effects and are described below.

Shared Passenger Track Alternative A

Under Shared Passenger Track Alternative A, construction activities that would result in permanent direct effects on aquatic resources considered subject to USACE, SWRCB, or CDFW jurisdiction include modification of watercourse and waterbody crossings, and construction and modification of stormwater drainage facilities and access roads. The resultant effects of these activities on aquatic functions and services include permanent effects on substrate and vegetation; currents, circulation, and drainage patterns; wetlands; and nonwetland riparian areas, as described below.

Table 7-6 summarizes the estimated acreage of permanent direct effects by aquatic resource category for Shared Passenger Track Alternative A. Appendix I-1 provides a more detailed summary table of temporary and permanent effects on USACE or SWRCB waters of the U.S., and Appendix I-2 provides a summary table of permanent and temporary effects on areas subject to California Fish and Game Code Section 1600 et seq. These appendices provide a feature-by-feature breakdown of temporary and permanent effects on aquatic resources, by acreage and linear feet.

Construction of Shared Passenger Track Alternative A would permanently affect a total of 0.10 acre of aquatic resources considered USACE or SWRCB wetland and nonwetland, consisting of 0.01 acre of freshwater emergent wetland (San Gabriel River) and 0.09 acre of

riverine (Rio Hondo, San Gabriel River, North Fork Coyote Creek, La Mirada Creek, Coyote Creek, and Brea Creek).

Shared Passenger Track Alternative A would permanently affect a total of 0.21 acre of areas considered subject to California Fish and Game Code Section 1600 et seq.,[19] consisting of 0.01 acre of freshwater emergent wetland (San Gabriel River), regulated as associated riparian vegetation; and 0.20 acre of riverine (Rio Hondo, San Gabriel River, North Fork Coyote Creek, La Mirada Creek, Coyote Creek, and Brea Creek), regulated as streambed.

Table 7-6 Permanent Direct Effects on Aquatic Resources Considered Waters of the U.S. and Waters of the State, and Subject to California Fish and Game Code Section 1600 et seq.[5]

Aquatic Resource Category[1]	USACE/ SWRCB Wetland Effects	USACE/ SWRCB Nonwetland Waters of the U.S. Effects	CDFW Streambed Effects	CDFW Lakes Effects	CDFW Associated Riparian Vegetation Effects[2]
Wetlands					
Freshwater emergent wetland[3]	0.01	--	--	--	0.01
Freshwater forested/shrub wetland	--	--	--	--	--
Wetlands subtotal	0.01	--	--	--	0.01
Nonwetland Waters					
Basin	N/A	--	--	--	--
Built watercourse	N/A	--	--	--	--
Riverine[4]	N/A	0.09	0.20	--	--
Nonwetlands subtotal	N/A	0.09	0.20	--	--
Grand total	**0.01**	**0.09**	**0.20**	**--**	**0.01**

[1] As defined by *U.S. Army Corps of Engineers Wetland Delineation Manual* (USACE 1987), U.S. Fish and Wildlife Service National Wetlands Inventory (USFWS 2016a, 2024b), and *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al. 1979).
[2] Within the Aquatic RSA, California Fish and Game Code Section 1600 "associated riparian vegetation" occurs in wetlands (freshwater emergent wetland, freshwater forested/shrub wetland) as well as nonwetland (basin, riverine) conditions, depending on the hydrologic, geomorphic, soils, and vegetative conditions. Refer to Sections 6.4.1.1, 6.4.2.1, and 6.4.2.2 for additional detail.
[3] The bulrush marsh identified in the San Gabriel River portion of the RSA is classified as "freshwater emergent wetland" for USACE or SWRCB (CWA Section 404/401 and Porter-Cologne Water Quality Control Act) jurisdiction and "associated riparian vegetation" for CDFW Section 1600 jurisdiction. The cattail marsh identified in the La Mirada Creek (Feature 19) portion of the RSA is classified as "freshwater emergent wetland" associated riparian vegetation for purposes of CDFW Section 1600 jurisdiction and "riverine" for purposes of USACE or SWRCB (CWA Section 404/401 and Porter-Cologne Water Quality Control Act) jurisdiction, because this feature does not meet the USACE or SWRCB wetland definitions. Refer to Sections 6.4.1.1 and 6.4.2.2 for additional detail.
[4] The mulefat thickets habitat identified in the San Gabriel River portion of the RSA is classified as "riverine" for purposes of USACE or SWRCB (CWA Section 404/401) jurisdiction and as "associated riparian vegetation" for purposes of CDFW Section 1600 jurisdiction. Refer to Section 6.4.2.2 for additional detail.
[5] Aquatic resource impact acreages are based on the project footprint dated August 2024 and include both Shared Passenger Track Alternatives A and B. Specifically, the Aquatic RSA includes both LMF options (26th Street LMF and 15th Street LMF) and both the Norwalk/Santa Fe Springs and Fullerton HSR station options. In summary, there is no difference in the location or extent of aquatic resource acreages or aquatic resource impacts between Shared Passenger Track Alternatives A and B.
-- = No effect; < = less than; CDFW = California Department of Fish and Wildlife; HSR = high-speed rail; LMF = light maintenance facility; N/A = not applicable; RSA = resource study area; SWRCB = State Water Resources Control Board; USACE = U.S. Army Corps of Engineers

[19] Aquatic resources potentially subject to California Fish and Game Code Section 1600 et seq. identified in the Aquatic RSA are generally inclusive of aquatic resources considered subject to USACE or SWRCB jurisdiction (i.e., overlapping).

Under Shared Passenger Track Alternative A, the following types of permanent structures (fill material) would be installed in aquatic resources: bridge supports (piers, footings), retaining walls, and open channel or culvert modifications. In addition, the following structures would be either replaced or modified in aquatic resources: concrete channel bed, banks, or sidewalls; county maintenance roads; county access roads; and public bike paths.

Specifically, existing in-channel piers would be extended and new pier walls would be built in the Rio Hondo and San Gabriel River; permanent access roads would be built, modified, or relocated in the Rio Hondo and the San Gabriel River; a storm drain outlet would be built in the San Gabriel River; existing piers would be modified, reconstructed, or extended in North Fork Coyote Creek, La Mirada Creek, and Brea Creek; a headwall and culvert would be removed and reconstructed in La Mirada Creek; a culvert would be extended in Coyote Creek; and portions of open concrete-lined channels would be replaced with box culverts or extension of existing box culverts in feature 29. The installation of new bridge supports, retaining walls, and access roads and the modification of open channels or culverts would permanently alter currents, circulation, and drainage patterns. Fill materials can modify flow patterns through the obstruction of flow; changes in the direction or velocity of water circulation; increasing erosion, siltation, or runoff; and reduction of the capacity of a watercourse or waterbody.

The placement of concrete structures in earthen-bottom aquatic features considered subject to USACE, SWRCB, or CDFW jurisdiction in the San Gabriel River would permanently alter the existing natural substrate and vegetation, and potentially reduce natural biogeochemical and habitat functions performed by wetlands and riparian vegetation within the project footprint of these structures. Within the Aquatic RSA, freshwater emergent wetlands and freshwater forested/shrub wetlands are found in the San Gabriel River, and nonwetland riparian vegetation (mulefat thicket scrubland) is found in the San Gabriel River and the Rio Hondo spreading grounds. Based on the limited extent and early establishment stage of wetlands and riparian vegetation (i.e., pioneer wetland and riparian species) within the proposed limits of disturbance, these activities and structures are not expected to result in permanent effects on biogeochemical functions or water quality.

Construction of Shared Passenger Track Alternative A also has the potential to result in permanent indirect effects on aquatic resources considered subject to USACE, SWRCB, or CDFW jurisdiction. Construction equipment, vehicles, and personnel could spread invasive and noxious weeds, which have the potential to outcompete regulated riparian and wetland habitats. However, based on the heavily modified condition of aquatic resources in the project section, as well as routine maintenance practices, the presence of watercourses supporting state- and federally regulated riparian and wetland habitats within the permanent disturbance footprint of Shared Passenger Track A is limited to the San Gabriel River and La Mirada Creek. Accordingly, the potential for permanent habitat conversion would be limited to these watercourses within the project footprint and immediate vicinity.

In addition, the placement of bridge supports, box culverts, and retaining walls and the replacement or modification of concrete channel bed, banks, or sidewalls; county maintenance roads; county access roads; and public bike paths could result in permanent indirect effects on currents, circulation, and drainage patterns in the vicinity of the limits of disturbance (e.g., downstream for riverine and built watercourse features). Fill materials can modify flow patterns through the obstruction of flow; changes in the direction or velocity of water circulation; increasing erosion, siltation, or runoff; and reduction of the capacity of a watercourse or waterbody. However, based on the limited number and restricted size of proposed permanent in-channel fill or structures, indirect changes to flow patterns, velocities, erosion, siltation, runoff, and channel capacity would be minimal.

Lastly, potential effects from shading associated with construction of a 30-foot-wide bridge widening over the San Gabriel River could result in permanent indirect effects on approximately 0.1 acre of area under the widened bridge deck subject to California Fish and Game Code Section 1600 et seq. and potentially waters of the state regulated under Porter-Cologne. Shading from overhead structures reduces the amount of direct and indirect sunlight available for plants

and therefore has the potential to inhibit photosynthesis and result in plant mortality. Habitat affected would include hardstem and California bulrush marsh, wild oats, and annual brome grasslands.

To reduce permanent direct and indirect effects on aquatic resources considered subject to USACE, SWRCB, and CDFW jurisdiction during the construction phase, the Authority will incorporate the following IAMFs as a part of the project: **BIO-IAMF#1**, **Biomonitors**; **BIO-IAMF#3**, **WEAP – Construction**; **BIO-IAMF#5, BRMP**; **BIO-IAMF#8, Demarcate**; **BIO-IAMF#9, Waste Storage**; **BIO-IAMF#10**, **Equipment Cleaning**; **BIO-IAMF#11**, **BMPs**; **HYD-IAMF#1, Stormwater**; **HYD-IAMF#3, SWPPP**; **HYD-IAMF#4, SWPPP – Industrial**; and **HMW-IAMF#6, Spills**.

Shared Passenger Track Alternative B

Permanent construction impacts on aquatic resources for Shared Passenger Track Alternative B would be the same as those of Shared Passenger Track Alternative A, because there is no difference in the location or extent of aquatic resource acreages or aquatic resource impacts between the alternatives. Specifically, no aquatic resources were identified within the footprint of either LMF site (26th Street LMF and 15th Street LMF).

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

With inclusion of the Norwalk/Santa Fe Springs HSR Station Option, impacts would be the same as those of the Shared Passenger Track Alternatives within the station area. Construction of the HSR station platform, facilities, and parking would occur within the same area that would be modified under the Shared Passenger Track Alternatives. No aquatic resources or areas subject to California Fish and Game Code Section 1600 et seq. were identified at the HSR station option site.

High-Speed Rail Station Option: Fullerton

With inclusion of the Fullerton HSR Station Option, impacts would be the same as those of the Shared Passenger Track Alternatives within the station area. Construction of the HSR station platform, facilities, and parking would occur within a larger area than would be modified under the Shared Passenger Track Alternatives, but no aquatic resources or areas subject to California Fish and Game Code Section 1600 et seq. were identified at the HSR station option site.

7.6.2 Operation and Maintenance Effects on Aquatic Resources

Operation of Shared Passenger Track Alternative A may result in permanent adverse effects on aquatic resources considered subject to USACE, SWRCB, or CDFW jurisdiction, and would also require routine inspections and maintenance activities. These effects include both direct and indirect effects and are described below.

7.6.2.1 Shared Passenger Track Alternative A

Permanent effects of Shared Passenger Track Alternative A on aquatic resources considered subject to USACE, SWRCB, or CDFW jurisdiction would be restricted to the construction phase, as discussed in Section 7.6.1, Construction Effects on Aquatic Resources.

O&M activities for Shared Passenger Track Alternative A would consist of periodic inspections, maintenance of structures (e.g., repairs to piers, retaining walls, maintenance access roads), use of water diversions or dewatering equipment, and removal of accumulated sediment, debris, and vegetation from the vicinity of structures sited within and adjacent to aquatic resources considered subject to USACE, SWRCB, and CDFW jurisdiction. As described in Section 6.4, these activities are already conducted on a routine basis in the project section, resulting in regular disturbances to aquatic resources within the Aquatic RSA. As also described in Section 6.4, aquatic resources within the Aquatic RSA are generally restricted to a very low level of aquatic ecological functions, based on routine maintenance practices, flood control modifications (e.g., concrete lining), and the heavily urbanized rail corridor.

Based on this information, the proposed O&M activities associated with Shared Passenger Track Alternative A are unlikely to result in direct or indirect effects discernable from existing maintenance practices on aquatic resources within the Aquatic RSA during or following these activities.

7.6.2.2 Shared Passenger Track Alternative B

Permanent impacts of O&M activities on aquatic resources for Shared Passenger Track Alternative B would be the same as those of Shared Passenger Track Alternative A, because there is no difference in the location or extent of existing aquatic resources or aquatic resource impacts between the Shared Passenger Track Alternatives. Specifically, no aquatic resources were identified within the project footprint of either of the LMF sites (26th Street LMF and 15th Street LMF).

7.6.2.3 High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

With inclusion of the Norwalk/Santa Fe Springs HSR Station Option, impacts would be the same as those of the Shared Passenger Track Alternatives within the station area. Ongoing maintenance activities at the HSR station option site would occur within a larger area than would be required under the Shared Passenger Track Alternatives, but no aquatic resources or areas subject to California Fish and Game Code Section 1600 et seq. were identified at this site.

High-Speed Rail Station Option: Fullerton

With inclusion of the Fullerton HSR Station Option, impacts would be the same as those of the Shared Passenger Track Alternatives within the station area. Ongoing maintenance activities at the HSR station option site would occur within a larger area than would be required under the Shared Passenger Track Alternatives, but no aquatic resources or areas subject to California Fish and Game Code Section 1600 et seq. were identified at this site.

7.7 Habitats of Concern

7.7.1 Essential Fish Habitat

Based on the absence of essential fish habitat within the Wildlife RSA, direct or indirect effects on essential fish habitat during construction or operational activities are not anticipated.

7.7.2 Critical Habitat

USFWS-designated critical habitat contains physical or biological factors that are essential to the conservation of the species and that may require special management considerations or protections. USFWS has designated final critical habitat for many species in the region, including Coastal California Gnatcatcher, Southwestern Willow Flycatcher, Least Bell's Vireo, Santa Ana sucker, Western Snowy Plover, Nevin's barberry (*Berberis nevinii*), and Ventura Marsh milk-vetch (*Astragalus pycnostachyus* var. *lanosissimus*). None of these species were determined to have potential to occur within the Wildlife RSA. No proposed or designated critical habitat occurs within the Wildlife RSA for any of these species. Within the Supplemental RSA, the only designated critical habitat that overlaps is designated critical habitat for the Coastal California Gnatcatcher. This critical habitat is approximately 1.4 miles from the Shared Passenger Track Alternatives footprint. This distance is substantially far so that the critical habitat would not be directly or indirectly affected by the project construction or O&M activities.

7.7.3 Wildlife Movement Corridors

The project section is in a highly urbanized and industrial setting. No interstate connections, natural landscape blocks, or essential connectivity areas are present in the project section (Spencer et al. 2010; CDFW 2024b). Overall, the project section lacks substantial natural open space and is not within the boundaries of designated wildlife movement corridors. However, the opportunity exists for movement of common wildlife species that are adapted to highly urbanized environments (such as coyote, skunk, raccoon, opossum, and some avian species) to travel

along the Rio Hondo and spreading grounds, the San Gabriel River, and the Santa Ana River (and to a lesser extent along other watercourses). The potential wildlife movement corridors for common wildlife species are depicted on Figure 5-3, sheets 1 through 24. Direct and indirect effects could occur on species in these corridors.

It is expected that most special-status wildlife species would not use these corridors for movement because they lack sufficient cover and vegetation (native or otherwise). Should special-status wildlife species occur in these identified wildlife movement corridors, the design of the crossings would not hinder movement. No additional design features for movement corridors are suggested here because of both the lack of quality habitat and the lack of substantial barriers to movement in the design.

7.7.3.1 Construction Effects on Wildlife Movement Corridors

Temporary

Shared Passenger Track Alternative A

The placement of temporary barriers during construction could temporarily impede wildlife movement through areas with restricted crossing opportunities during active construction periods within a particular construction section segment.

Temporary construction activities occurring at or in the vicinity of wildlife movement corridors (linkages) may result in indirect disruption of wildlife movement through lighting, noise, motion, and startle effects. Excessive temporary noise will cause avoidance of foraging areas and potential roost sites in bats, with potential roost and natal colony abandonment, nest abandonment in avian species, avoidance of nesting sites for birds, and avoidance behavior in mountain lions. Wildlife habitat and land cover types in the construction footprint have the potential to support several special-status wildlife species. Noise, lighting, and human activity associated with construction activities have the potential to disturb the life cycles of these special-status species.

The placement of temporary barriers during construction would impede wildlife movement through areas with restricted crossing opportunities; however, based on the design of the Shared Passenger Track Alternatives, most crossings at the identified wildlife movement corridors would be elevated and would not impede movement.

Wildlife habitat and land cover types in the construction footprint have the potential to support movement of not only resident native species, but several special-status wildlife species such as Burrowing Owl, mountain lion, special-status bats, Black Skimmer, and California Least Tern. Construction activities have the potential to disturb the movement and life cycles of both common, native species and special-status species.

Temporary construction activities occurring at or near wildlife movement corridors would result in indirect disruption of wildlife movement through nighttime lighting effects that would disrupt normal behavioral patterns, including foraging behavior and migration. Construction noise would create avoidance behaviors, and temporary physical barriers may exist. Additionally, temporary disturbance associated with construction from lighting, construction noise, and human presence may provide a barrier to dispersal along the corridor. Construction trash can attract common predators and increase predator stress for native and special-status wildlife. Trash can also increase prey species availability for rare species such as mountain lions, attracting mountain lions away from wildlife movement corridors and into construction areas, thereby increasing human and mountain lion interaction risks. This is an impact on mountain lions because along movement corridors, especially in an urban-wildland interface, mountain lions suspected of killing pets or livestock, those that pose an imminent threat to public safety, or those caught in the act of attacking livestock or humans run the risk of being killed under a depredation permit for public safety. Construction traffic creates noise and lighting and increases collision risk. Trenches, pipes, and other similar structures associated with construction can also create traps for wildlife.

Indirect effects on wildlife movement corridors could include shifts in foraging patterns or territories, increased predation, and decreased reproductive success. Effects could also include

displacement, mortality, or injury of wildlife species. The inadvertent introduction of invasive (noxious) weeds would reduce habitat suitability in the wildlife movement corridor and would reduce foraging success and therefore survivability and reproduction. Indirect effects would also include construction noise and effects on foraging and migration patterns from nighttime construction lighting. Construction trash provides food for opportunistic predators such as coyotes, raccoons, and crows that are adapted to disturbance and although some of this species are native, they can become overpopulated and prey on native species, including special-status species such as birds and bats dependent on the wildlife movement corridors.

To reduce temporary impacts on wildlife movement corridors, the Authority will incorporate **BIO-IAMF#1, Biomonitors**; **BIO-IAMF#3, WEAP – Construction**; **BIO-IAMF#7, Entrapment**; **BIO-IAMF#8, Demarcate**; and **BIO-IAMF#11, BMPs**.

With incorporation of these IAMFs, it is anticipated that Shared Passenger Track Alternative A will result in adverse temporary effects on wildlife movement corridors.

Shared Passenger Track Alternative B

Temporary construction impacts for Shared Passenger Track Alternative B would be the same as those of Shared Passenger Track Alternative A for wildlife movement corridors. There are no wildlife movement corridors in the vicinity of either LMF site at 15th Street or 26th Street.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

With inclusion of the Norwalk/Santa Fe Springs HSR Station Option, impacts would be the same as those of the Shared Passenger Track Alternatives within the station area. Construction of the HSR station platform, facilities, and parking would occur within the same area that would be modified under the Shared Passenger Track Alternatives. Wildlife movement corridors are not present at this site. The Norwalk/Santa Fe Springs HSR Station Option would not result in any temporary impacts on wildlife movement corridors. Therefore, if this HSR station option is selected, it would not add to the related impact associated with either Shared Passenger Track Alternative.

High-Speed Rail Station Option: Fullerton

With inclusion of the Fullerton HSR Station Option, impacts would be the same as those of the Shared Passenger Track Alternatives within the station area. Construction of the HSR station platform, facilities, and parking would occur within a larger area than what would be modified under the Shared Passenger Track Alternatives, but wildlife movement corridors are not present at this site. The Fullerton HSR Station Option would not result in any temporary impacts on wildlife movement corridors. Therefore, if it is selected, it would not add to the related impact associated with either Shared Passenger Track Alternative.

Permanent

Shared Passenger Track Alternative A

Existing linear facilities, highways, state routes, railroad alignments, roadways and canals, and urban uses impede wildlife movement for terrestrial animals including free-ranging mammals such as coyote, raccoon, and skunk. Collision risk is increased near linear facilities, and these are often mortality sinks. As a result, the ability of wildlife species to move freely is diminished. Natural dispersal corridors such as waterways have also become increasingly constrained as a result of adjacent land use, conversion of infrastructure, and ongoing flood control activities in the waterways.

It is not expected that any permanent direct effects from the placement of permanent linear barriers to wildlife movement would occur. Most of the wildlife movement corridors are below elevated track, so fencing would not be required across the corridors.

Indirect effects on wildlife movement corridors as a result of permanent habitat conversions through the introduction of invasive (noxious) weeds would reduce habitat suitability in the wildlife movement corridor. Other permanent indirect effects would include changes in movement and

migration routes from construction lighting and noise. Increases in predator populations can occur because of construction trash and this can lead to permanent losses of special-status wildlife species in highly stressed wildlife movement corridors.

Construction activities occurring at or in the vicinity of wildlife movement corridors (linkages) may result in indirect disruption of wildlife movement through lighting, noise, motion, and startle effects.

To reduce impacts on wildlife movement corridors, the Authority will incorporate **BIO-IAMF#1, Biomonitors**; **BIO-IAMF#3, WEAP – Construction**; **BIO-IAMF#7, Entrapment**; **BIO-IAMF#8, Demarcate**; **BIO-IAMF#9, Waste Storage**; **BIO-IAMF#10**, **Equipment Cleaning**; and **BIO-IAMF#11, BMPs**.

With incorporation of these IAMFs, it is anticipated that Shared Passenger Track Alternative A will result in adverse permanent effects on wildlife movement corridors.

Shared Passenger Track Alternative B

Permanent construction impacts for Shared Passenger Track Alternative B would be the same as those of Shared Passenger Track Alternative A for wildlife movement corridors. There are no wildlife movement corridors in the vicinity of either LMF site at 15th Street or 26th Street.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs
With inclusion of the Norwalk/Santa Fe Springs HSR Station Option, impacts would be the same as those of the Shared Passenger Track Alternatives within the station area. Construction of the HSR station platform, facilities, and parking would occur within the same area that would be modified under the Shared Passenger Track Alternatives. Wildlife movement corridors are not present at this HSR station option site. The Norwalk/Santa Fe Springs HSR Station Option would not result in any permanent impacts on wildlife movement corridors. Therefore, if this HSR station option is selected, it would not add to the related impact associated with either Shared Passenger Track Alternative.

High-Speed Rail Station Option: Fullerton
With inclusion of the Fullerton HSR Station Option, impacts would be the same as those of the Shared Passenger Track Alternatives within the station area. Construction of the HSR station platform, facilities, and parking would occur within a larger area than what would be modified under the Shared Passenger Track Alternatives, but wildlife movement corridors are not present at this HSR station option site. The Fullerton HSR Station Option would not result in any permanent impacts on wildlife movement corridors. Therefore, if this HSR station option is selected, it would not add to the related impact associated with either Shared Passenger Track Alternative.

7.7.3.2 Operation and Maintenance Effects on Wildlife Movement Corridors

The existing uses in the project section include frequent passenger and freight train uses and existing noise levels that likely already exceed 85 decibels at these crossings.

Shared Passenger Track Alternative A

Operational activities associated with Shared Passenger Track Alternative A would be intermittent in nature. Operations would expose wildlife to noise levels that could exceed 100 A-weighted decibel sound exposure level (i.e., noise exposure from an individual train passage) for at-grade crossings. This criterion would be exceeded, but for only a short distance (i.e., traversed) in immediate proximity to the crossings. The project section is within an existing passenger and freight train corridor, and noise is expected to increase with operation of the train. Regularly passing trains may not provide enough undisturbed time between passes, which could cause wildlife to discontinue use of some or all crossing areas.

O&M could result in indirect effects if these operations restrict wildlife movement in wildlife movement corridors. This could restrict gene flow, increase habitat fragmentation, and decrease

foraging habitat. Regular maintenance at specific sites near movement corridors could dissuade wildlife movement through these areas because of human presence. There would be an impact on wildlife movement corridors during operations.

As described above, operation of Shared Passenger Track Alternative A would result in impacts on wildlife movement corridors including injury or mortality from bird or bat strikes, bird or bat interactions with fencing and the electrical systems, or direct strikes with the train; and permanent disturbances caused by noise, wind, and visual stimuli including lighting that would affect movement, foraging, migration, and breeding. Night lighting can alter migration patterns. Poisoning of avian predators or special-status mammals through the consumption of poisoned rodents could occur, which would be a substantial impact. Poisoning would also result in a reduced prey base for avian predators as a result of rodenticide programs.

Moving trains could kill or injure birds through bird strikes, losses through the fence, or the electrical systems. Mowing and weed control during the nesting season during operations would remove or disturb areas that provide potential nesting habitat for a diverse population of birds.

To reduce permanent direct and indirect effects on wildlife movement corridors during the O&M phase, the Authority will incorporate **BIO-IAMF#4, WEAP – O&M**; and **BIO-IAMF#12, Bird Safe**.

The IAMFs listed above would not entirely avoid operational effects on wildlife movement corridors and it is anticipated that Shared Passenger Track Alternative A will result in permanent adverse effects on wildlife movement corridors.

Shared Passenger Track Alternative B

Operational impacts for Shared Passenger Track Alternative B would be the same as those of Shared Passenger Track Alternative A for wildlife movement corridors. There are no wildlife movement corridors in the vicinity of either LMF site at 15th Street or 26th Street.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

With inclusion of the Norwalk/Santa Fe Springs HSR Station Option, impacts would be the same as those of the Shared Passenger Track Alternatives within the station area. Operation of the HSR station platform, facilities, and parking would occur in the same area that would be modified under the Shared Passenger Track Alternatives, but wildlife movement corridors are not present at this site.

High-Speed Rail Station Option: Fullerton

With inclusion of the Fullerton HSR Station Option, impacts would be the same as those of the Shared Passenger Track Alternatives within the station area. Ongoing maintenance activities at the HSR station option site would occur within a larger area than what would be required under the Shared Passenger Track Alternatives, but wildlife movement corridors are not present at this site.

7.7.4 Locally Protected Biological Resources (Tree and Shrub Preservation Policies or Ordinances)

Construction and operation of the Shared Passenger Track Alternatives would result in direct and indirect effects on locally protected biological resources (trees and shrubs) protected under county and local plans and ordinances and would conflict with these policies. The local policies regarding protected trees and shrubs are summarized in Table 7-7 with a full summary provided in Appendix K.

Table 7-7 Local Policies Regarding Protected Trees and Shrubs within the Shared Passenger Track Alternatives and Tree and Shrub Protections

Lead Agency	Policy	Tree Protections
County of Los Angeles (2025)	Code of Ordinances, Section 12.28, Section 17.04.340	No removal of natural vegetation on sloping terrain in the unincorporated territory of the county
	Code of Ordinances, Section 17.04.340	Protection of trees, plants, shrubs, grass, fruits, or flowers, or any portion thereof, growing in a park
	Code of Ordinances, Section 22.126, Tree Planting Requirements	Projects with new uncovered parking lots with at least 15 parking spaces will plant at least three trees for every 10,000 square feet of developed lot area. The shade plan should result in a minimum of 50 percent shade coverage within 15 years of planting the trees.
County of Los Angeles (2025)	Oak Tree Permits, Section 22.174	Protection of oaks in unincorporated areas of the county
	Tree Planting Requirements, Section 22.126	Tree planting requirements for new buildings and for uncovered parking lots
City of Los Angeles (2025)	Municipal Code, Section 41.31, Section 1, Subdivision 12 of Subsection A	Protected trees include (1) oak trees including valley oak (*Quercus lobata*), California live oak (*Quercus agrifolia*) or any other oak tree indigenous to Southern California, excluding scrub oak (*Quercus berberidifolia*), (2) Southern California black walnut (*Juglans californica* var. *californica*), (3) western sycamore (*Platanus racemosa*), and (4) California bay (*Umbellularia californica*). Protected shrubs include (5) Mexican elderberry, and (6) toyon. The protected tree or shrub will be replaced within the property by at least four specimens of a protected variety except where the protected species is relocated.
City of Los Angeles (2025)	Chapter 6, Article 2	Depict existing protected trees and relocation and replacement trees specified by this code on a plot plan.
City of Montebello (2024)	Municipal Code, Section 12.08.090	Prohibits damage to street trees
City of Pico Rivera (2025)	Municipal Code, Section 12.040.020	Permit to damage any street tree
City of Santa Fe Springs (2025)	Municipal Code, Section 96.133	Permit to damage any street tree
City of Buena Park (2025)	Municipal Code, Section 12.20.020	Prohibits damage to street trees
City of Fullerton (2025)	Municipal Code, Section 9.06.090	Permit to damage any street tree
City of Anaheim (2004, 2025)	Municipal Code, Section 13.12.080	Permit to damage any street tree
	General Plan Green Element	Specifies street trees be preserved where practical

Sources: City of Anaheim 2004, 2025a, 2025b; City of Buena Park 2025; City of Fullerton 2025; City of Los Angeles 2025; City of Montebello 2024; City of Pico Rivera 2025; City of Santa Fe Springs 2025; County of Los Angeles 2025b

7.7.4.1 Construction Effects on Locally Protected Biological Resources (Trees and Shrubs)

Potential temporary and permanent effects on locally protected trees and shrubs that may result from construction are described below. Incorporation of IAMFs will prevent several potential effects typically associated with construction and operations of linear transportation projects.

Temporary

Shared Passenger Track Alternative A

Direct effects on protected trees and shrubs from construction activities could occur from trimming or pruning trees and shrubs for HSR stations, tracks, maintenance and equipment storage areas, access roads, road overcrossings, and substations.

Dust, debris, and other airborne pollutants resulting from construction activities may temporarily affect trees and shrubs by covering leaves with substances that may inhibit photosynthesis. Soil compaction, the placement of fill and other material, shading by equipment, and alterations to the microtopography could stress trees, causing poor growth and loss of leaves or roots during the construction period. Direct effects from construction activities could result from unintentional contamination, such as chemical leaks and spills, which may affect water or soils that protected trees and shrubs depend upon. These effects could become permanent if the source of the unintentional contamination is not properly removed.

Indirect effects on protected trees and shrubs could result from temporary changes in hydrology and topography (as a result of temporary staging areas; access roads; equipment storage; and foot, vehicle, and machine traffic), which may inhibit water and nutrient intake and thereby inhibit growth or cause leaf mortality. Temporary effects on plant species, either common or special status, could indirectly affect trees and shrubs if these species provide nitrogen, soil aeration, root protection, and moisture retention.

With incorporation of **BIO-IAMF#1, Biomonitors**; **BIO-IAMF#3, WEAP – Construction**; and **BIO-IAMF#8, Demarcate**, it is anticipated that Shared Passenger Track Alternative A will result in temporary effects on protected trees and shrubs. These IAMFs would not entirely avoid effects on protected trees and substantial effects on protected trees and shrubs are anticipated.

Shared Passenger Track Alternative B

Temporary construction impacts for Shared Passenger Track Alternative B would be the same as those of Shared Passenger Track Alternative A for protected trees and shrubs. There are no protected trees and shrubs present in either LMF site at 15th Street or 26th Street.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

With inclusion of the Norwalk/Santa Fe Springs HSR Station Option, impacts would be the same as those of the Shared Passenger Track Alternatives within the station area. Construction of the HSR station platform, facilities, and parking would occur within the same area that would be modified under the Shared Passenger Track Alternatives. There is suitable habitat for protected trees and shrubs. The Norwalk/Santa Fe Springs HSR Station Option includes temporary impacts on protected trees and shrubs; if it is selected, impacts would be the same as those of the Shared Passenger Track Alternatives.

High-Speed Rail Station Option: Fullerton

With the inclusion of the Fullerton HSR Station Option, impacts would be greater than those of the Shared Passenger Track Alternatives within the station area. Construction of the HSR station platform, facilities, and parking would occur within a larger area than would be modified under the Shared Passenger Track Alternatives. There is suitable habitat for protected trees and shrubs in the area of additional disturbance for the HSR station elements. The Fullerton HSR Station Option includes temporary impacts on protected trees and shrubs; if selected, it would add to the related impact associated with either Shared Passenger Track Alternative.

Permanent

Shared Passenger Track Alternative A

Direct permanent effects on protected trees and shrubs are anticipated in areas where permanent infrastructure requires the removal of protected trees and shrubs or temporary activities require clearing (e.g., materials staging, temporary access roads, construction rights-of-way). Direct effects from construction activities could result from unintentional contamination, such as chemical leaks and spills, which could affect water or soils used by protected trees and shrubs, potentially resulting in their death. These effects could be temporary if contaminants are properly removed.

Indirect permanent effects on protected trees and shrubs could occur as a result of changes in erosion and sedimentation. Displaced sediment and alterations to microtopography could change the soil and substrate conditions required by protected trees and shrubs. Permanent changes in hydrology and topography could damage the soil environment surrounding a tree's roots by affecting the level of necessary symbionts in the soil (i.e., mycorrhizae for oaks), or lead to fungal infections, root rot, lack of proper drainage, and difficulty in obtaining oxygen or other necessary elements. These factors affect the growth of roots and vegetation and could lead to the death of protected trees and shrubs.

With incorporation of **BIO-IAMF#1, Biomonitors**; **BIO-IAMF#3, WEAP – Construction**; and **BIO-IAMF#8, Demarcate**, it is anticipated that Shared Passenger Track Alternative A will result in permanent effects on protected trees and shrubs. These IAMFs would not entirely avoid effects on protected trees and shrubs and substantial effects on protected trees are anticipated.

Shared Passenger Track Alternative B

Permanent construction impacts for Shared Passenger Track Alternative B would be the same as those of Shared Passenger Track Alternative A for protected trees and shrubs. There are no protected trees and shrubs present in either LMF site at 15th Street or 26th Street.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

With inclusion of the Norwalk/Santa Fe Springs HSR Station Option, impacts would be the same as those of the Shared Passenger Track Alternatives within the station area. Construction of the HSR station platform, facilities, and parking would occur within the same area that would be modified under the Shared Passenger Track Alternatives. There is suitable habitat for protected trees and shrubs. The Norwalk/Santa Fe Springs HSR Station Option includes permanent impacts on protected trees and shrubs; if it is selected, impacts would be the same as those of either Shared Passenger Track Alternative.

High-Speed Rail Station Option: Fullerton

With inclusion of the Fullerton HSR Station Option, impacts would be greater than those of the Shared Passenger Track Alternatives within the station area. Construction of the HSR station platform, facilities, and parking would occur within a larger area than what would be modified under the Shared Passenger Track Alternatives. There is suitable habitat for protected trees and shrubs within the area of additional disturbance for the HSR station elements. The Fullerton HSR Station Option includes permanent impacts on protected trees and shrubs; if it is selected, impacts would be the same as those of either Shared Passenger Track Alternative.

7.7.4.2 Operation and Maintenance Effects on Locally Protected Biological Resources (Trees and Shrubs)

Potential effects on protected trees and shrubs that may result from operation are described in the subsections below.

Operational effects, which include frequent noise, light, vibration, and wind speeds of up to 220 miles per hour from moving trains, may occur on a daily basis from operation of the HSR system. Additionally, constant operational effects associated with the proposed HSR stations would include high vehicle and foot traffic.

Shared Passenger Track Alternative A

Direct effects on locally protected biological resources (trees and shrubs) in immediate proximity to the tracks may result from frequent wind disturbance generated by moving trains. Trees and shrubs growing adjacent to tracks and HSR stations may be damaged by forceful wind, which could also stunt growth and promote desiccation.

Indirect effects on protected trees and shrubs could result from permanent changes in hydrology and topography, which may also affect the soil environment surrounding a tree's and shrub's roots. Compaction of soil from high foot and vehicle traffic at the proposed HSR stations or in maintenance access areas could inhibit the tree's oxygen and nutrient intake around the root zone. These changes may also alter the level of necessary symbionts in the soil (i.e., mycorrhizae for oaks), or cause fungal infections, root rot, and lack of proper drainage. These factors may result in the death of the tree or shrub.

To reduce the potential for direct and indirect effects on protected trees and shrubs during operations, the Authority will conduct WEAP training on a regular basis for maintenance crews (**BIO-IAMF#4**). This IAMF would not entirely avoid permanent operational effects on protected trees and shrubs and it is anticipated that Shared Passenger Track Alternative A will result in substantial permanent operational effects on protected trees and shrubs.

Shared Passenger Track Alternative B

Permanent operational impacts for Shared Passenger Track Alternative B would be the same as those of Shared Passenger Track Alternative A for protected trees and shrubs. There are no protected trees present in either LMF site at 15th Street or 26th Street.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

With inclusion of the Norwalk/Santa Fe Springs HSR station option, impacts would be the same as those of the Shared Passenger Track Alternatives within the station area. Operation of the HSR station platform, facilities, and parking would occur within the same area that would be modified under the Shared Passenger Track Alternatives. There is suitable habitat for protected trees and shrubs.

High-Speed Rail Station Option: Fullerton

With inclusion of the Fullerton HSR station option, impacts would be greater than those of the Shared Passenger Track Alternatives within the station area. Operation of the HSR station platform, facilities, and parking would occur within a larger area than would be modified under the Shared Passenger Track Alternatives. There is suitable habitat for protected trees and shrubs in the area of additional disturbance for the HSR station elements.

7.8 Shared Project Track Alternatives Comparison Summary

A full summary of the differences in biological impacts between the Shared Passenger Track Alternatives, the HSR station options, and the LMFs is included in Table 7-8. There is no difference between Shared Passenger Track Alternative A and Shared Passenger Track B for any of the biological resources. There is also no difference associated with the Norwalk/Santa Fe Springs HSR Station Option, the Fullerton HSR Station Option, or the LMF.

Table 7-8 Impact Summary of Shared Passenger Track Alternatives and High-Speed Rail Station Options

Biological Resource	Shared Passenger Track A	Shared Passenger Track B	Impact Difference between Shared Passenger Track Alternative A and Shared Passenger Track Alternative B	Norwalk/Santa Fe Springs HSR Station Option Impacts	Fullerton HSR Station Option Impacts
Temporary riparian habitat, vegetation communities, land cover types, and special-status natural communities	<0.01-acre temporary impacts on duckweed blooms and 0.13 acre temporary impacts on unvegetated channel (refer to Table 7-1)	<0.01-acre temporary impacts on duckweed blooms and 0.13-acre temporary impacts on unvegetated channel (refer to Table 7-1)	None	None	None
Permanent riparian habitat, vegetation communities, land cover types, and special-status natural communities	0.18 acre permanent and 0.05 acre shading impacts on hardstem and California bulrush marsh, 0.43 acre duckweed blooms, and 0.80 acre unvegetated channel (refer to Table 7-1)	0.18 acre permanent and 0.05 acre shading impacts on hardstem and California bulrush marsh, 0.43 acre duckweed blooms, and 0.80 acre unvegetated channel (refer to Table 7-1)	None	None	None
Permanent special-status plant species	None (refer to Table 7-2)	None (refer to Table 7-2)	None	None	None
Temporary special-status plant species	1.37 acre temporary impacts on both southern tarplant and lucky morning glory (refer to Table 7-2)	1.37 acre temporary impacts on both southern tarplant and lucky morning glory (refer to Table 7-2)	None	None	None
Temporary special-status birds, raptors, and migratory birds	Impacts on ten special-status species, migratory birds, and raptors (refer to Table 7-3)	Impacts on ten special-status species, migratory birds, and raptors (refer to Table 7-3)	None	Impacts on migratory birds and raptors; no impacts on special-status birds; within the same area as the Shared Passenger Track Alternatives	Impacts on migratory birds and raptors; no impacts on special-status birds; within a larger area than the Shared Passenger Track Alternatives

Biological Resource	Shared Passenger Track A	Shared Passenger Track B	Impact Difference between Shared Passenger Track Alternative A and Shared Passenger Track Alternative B	Norwalk/Santa Fe Springs HSR Station Option Impacts	Fullerton HSR Station Option Impacts
Permanent special-status birds, raptors, and migratory birds	Impacts on ten special-status species, migratory birds, and raptors (refer to Table 7-3)	Impacts on ten special-status species, migratory birds, and raptors (refer to Table 7-3)	None	Impacts on migratory birds and raptors; no impacts on special-status birds; within the same area as the Shared Passenger Track Alternatives	Impacts on migratory birds and raptors; no impacts on special-status birds; within a larger area than the Shared Passenger Track Alternatives
Temporary special-status mammals	Impacts on nine special-status species (refer to Table 7-4)	Impacts on nine special-status species (refer to Table 7-4)	None	Impacts on special-status mammals; within the same area as the Shared Passenger Track Alternatives	Impacts on special-status mammals; within a larger area than the Shared Passenger Track Alternatives
Permanent special-status mammals	Impacts on nine special status species (refer to Table 7-4)	Impacts on nine special status species (refer to Table 7-4)	None	Impacts on special-status mammals; within the same area as the Shared Passenger Track Alternatives	Impacts on special-status mammals; within a larger area than the Shared Passenger Track Alternatives
Temporary aquatic resources	0.29 acre wetland, 1.23 acre nonwetland, 2.02 acre streambed, 0.29 acre riparian vegetation (refer to Table 7-5)	0.29 acre wetland, 1.23 acre nonwetland, 2.02 acre streambed, 0.29 acre riparian vegetation (refer to Table 7-5)	None	None	None
Permanent aquatic resources	0.01 acre wetland, 0.09 acre nonwetland, 0.20 acre streambed, 0.01 riparian vegetation (refer to Table 7-6)	0.01 acre wetland, 0.09 acre nonwetland, 0.20 acre streambed, 0.01 riparian vegetation (refer to Table 7-6)	None	None	None

Biological Resource	Shared Passenger Track A	Shared Passenger Track B	Impact Difference between Shared Passenger Track Alternative A and Shared Passenger Track Alternative B	Norwalk/Santa Fe Springs HSR Station Option Impacts	Fullerton HSR Station Option Impacts
Temporary wildlife movement corridors	Rio Hondo and spreading grounds, the San Gabriel River, and the Santa Ana River (refer to Section 7.7.3)	Rio Hondo and spreading grounds, the San Gabriel River, and the Santa Ana River (refer to Section 7.7.3)	None	None	None
Permanent wildlife movement corridors	Rio Hondo and spreading grounds, the San Gabriel River, and the Santa Ana River (refer to Section 7.7.3)	Rio Hondo and spreading grounds, the San Gabriel River, and the Santa Ana River (refer to Section 7.7.3)	None	None	None
Temporary protected trees	Comply with local tree policies (refer to Table 7-7)	Comply with local tree policies (refer to Table 7-7)	None	Comply with local tree policies (refer to Table 7-7); within the same area that would be modified under the Shared Passenger Track Alternatives	Comply with local tree policies (refer to Table 7-7); within a larger area than what would be modified under the Shared Passenger Track Alternatives
Permanent protected trees	Comply with local tree policies (refer to Table 7-7)	Comply with local tree policies (refer to Table 7-7)	None	Comply with local tree policies (refer to Table 7-7); within the same area that would be modified under the Shared Passenger Track Alternatives	Comply with local tree policies (refer to Table 7-7); within a larger area than what would be modified under the Shared Passenger Track Alternatives

HSR = high-speed rail

7.9 Cumulative Effects

Effects from the Shared Passenger Track Alternatives, in combination with other past, present, and reasonably foreseeable projects, could result in cumulative effects on special-status plant and animal species, special-status plant communities, jurisdictional aquatic resources, and habitats of concern. A full discussion of other projects considered for cumulative impacts including additional analysis is included in Section 3.19, Cumulative Impacts, of the Draft EIR/EIS. Construction and operational changes from the Shared Passenger Track Alternatives and other past, present, and reasonably foreseeable future projects are discussed in the project section Draft EIR/EIS.

The project section is within a heavily urbanized environment and would occur entirely along an existing freight and passenger rail corridor. Other cumulative projects in the region include various transportation, residential, commercial, and industrial projects. The project section would be one of the larger projects built in the general vicinity of the project section.

The existing developments in the project section have already heavily affected special-status plant and animal species, special-status plant communities, jurisdictional aquatic resources, protected trees, wildlife movement corridors, and critical habitat. Disturbances could be direct and indirect, and temporary and permanent, and could include the following:

- Potential modification to habitats occupied by special-status plant species adapted to disturbance or plant species associated with the wetlands/rivers and alluvial processes associated with these rivers
- Impairment of wildlife movement corridors, including effects on species genetic variation, on population gene flow and on the ability for species to migrate to areas that are required to carry out the species' important life history events (including breeding)
- Potential incremental effects on jurisdictional wetland and nonwetland aquatic resources and their associated functions and services, including direct and indirect effects on water quality, currents, circulation, and drainage patterns, vegetation, and wildlife habitat

Based on this information, the Shared Passenger Track Alternatives are expected to result in a contribution to cumulative effects on special-status plant and animal species, special-status plant communities, jurisdictional aquatic resources, protected trees, and wildlife movement corridors.

With respect to special-status plants, Shared Passenger Track Alternative A is expected to result in temporary effects, both individually and cumulatively. There is currently one location where two special-status plant species (southern tarplant and lucky morning-glory) may be present, and surveys of this area need to be conducted prior to the initiation of work. The probability of southern tarplant and lucky morning-glory being present is low, but the incorporation of IAMFs identified in Section 7.4, Special-Status Plant Species, would not avoid and minimize all potential impacts on these species.

Shared Passenger Track Alternative A is expected to result in effects, both individually and cumulatively, on special-status wildlife species. One reptile, 11 birds, and nine mammals (eight bats) were determined to have some potential to occur in the Wildlife RSA. Two of the species are federally listed as endangered: Least Bell's Vireo and California Least Tern; three are state-listed as endangered: Least Bell's Vireo, California Least Tern, and Bald Eagle; two are state candidate species: mountain lion and Burrowing Owl; and three are CDFW fully protected species: White-Tailed Kite, California Least Tern, and Bald Eagle (USFWS 2023; CDFW 2025). No effects are expected on the three federally listed wildlife species from Shared Passenger Track Alternative A, and federal take permits are not anticipated to be required for these species. Adverse effects on special-status wildlife species, including special-status mammals and special-status avian species, are expected during both the construction and operational phases of Shared Passenger Track Alternative A with incorporation of IAMFs, both individually and cumulatively.

No USFWS critical habitat or essential fish habitat is present within the Shared Passenger Track Alternative A footprint; therefore, no direct effects on these biological resources, either individually or cumulatively, are anticipated. No USFWS critical habitat or essential fish habitat is within the Wildlife RSA; therefore, no indirect effects on these resources, either individually or cumulatively, are anticipated.

Two special-status natural communities (Goodding's willow – red willow and hardstem and California bulrush marsh) are within the Wildlife RSA with both temporary and permanent direct effects anticipated on hardstem and California bulrush marsh. Because of the lack of native and special-status natural communities in the region, this impact would be adverse, both individually and cumulatively. IAMFs listed in Section 7.3, Riparian Habitat, Vegetation Communities, Land Cover Types, and Special-Status Natural Communities are incorporated into the project design.

Protected trees may be affected by the project section. IAMFs listed in Section 7.7.4, Locally Protected Biological Resources (Tree and Shrub Preservation Policies or Ordinances), are incorporated into project design.

Wildlife corridors that are identified as essential connections between natural landscape blocks were identified in the major watercourses present within the Supplemental RSA including in the Los Angeles River, the Rio Hondo and spreading grounds, the San Gabriel River, and the Santa Ana River. These corridors are constrained with limited biological resources. However, the impact on these wildlife corridors would be adverse both individually and cumulatively because of the rareness of biological resources and movement corridors in the region. Cumulatively, the wildlife corridors are a part of planned projects for improvements in biological functions and quality. These include the Los Angeles River, the Rio Hondo and spreading grounds, the San Gabriel River, and the Santa Ana River. IAMFs listed in Section 7.7.3, Wildlife Movement Corridors are incorporated into project design. With respect to jurisdictional aquatic resources, the Shared Passenger Track Alternatives are expected to result in adverse effects, both individually or cumulatively, on aquifer recharge, navigation, aquatic recreation, and commercial or recreational fishing.

The Shared Passenger Track Alternatives would also comply with federal, state, and local regulations through regulatory agency consultation and permitting. Other projects in the vicinity would also be required to comply with regulatory requirements such as federal, state, and local government laws and regulations that protect special-status plant and animal species, wildlife movement corridors, and jurisdictional aquatic resources. Therefore, cumulative effects associated with past, present, and reasonably foreseeable projects are expected to be further mitigated through consultation and permitting with the appropriate regulatory agencies.

Present and reasonably foreseeable future projects that were reviewed as part of this analysis included:

- **California HSR Burbank to Los Angeles Project Section** (Authority 2021): The approximately 14-mile project section proposes to use the existing railroad right-of-way to the greatest extent possible, adjacent to the Los Angeles River, through the cities of Burbank, Glendale, and Los Angeles with proposed HSR stations near the Hollywood Burbank Airport and at LAUS. Construction would involve demolition of existing structures, clearing, and grubbing; reduction of permeable surface area; handling, storing, hauling, excavating, and placing of fill; pile driving; and construction of aerial structures, bridges, road modifications, utility upgrades and relocations, HSR electrical systems, and railbeds. Impacts on biological and aquatic resources include direct and indirect effects on special-status plant and wildlife species, special-status natural communities, jurisdictional aquatic resources, water quality, wildlife movement, and protected trees.
- **Link Union Station Project** (Metro and Authority 2024): The Los Angeles Country Metropolitan Transportation Authority, as the owner of LAUS, is proposing the Link Union Station Project to address the capacity constraints at LAUS. The project build alternative would include new lead tracks north of LAUS (Segment 1: Throat Segment), an elevated throat and rail yard with concourse-related improvements at LAUS (Segment 2: Concourse

Segment), and 10 run-through tracks that would extend south of LAUS Platforms 2 through 6 and merge into a minimum of four tracks on the U.S. Highway 101 viaduct and continue south (Segment 3: Run-Through Segment). Construction would involve demolition of existing structures and buildings, site development and required infrastructure and roadway improvements, and staging and fill activities. Impacts on biological and aquatic resources include direct and indirect effects on special-status wildlife species, nesting birds, wildlife movement, and water quality.

- **Los Angeles River Ecosystem Restoration Integrated Feasibility Report** (USACE and City of Los Angeles 2015): Of the eight reaches in this report, three overlap with the Supplemental RSA: reaches 6, 7, and 8. There are two preferred plans, the National Ecosystem Restoration Preferred Plan and the Locally Preferred Plan, and both were reviewed with respect to the Shared Passenger Track Alternatives. The sub-plans for reaches 6 and 7 for the National Ecosystem Restoration Preferred Plan and the Locally Preferred Plan are the same. In the sub-plan for reach 6 (Taylor Yard), riparian corridors would be restored with widening of the soft-bottom bed of the Los Angeles River by over 300 feet, with the establishment of a wetland at the upstream end of the reach. Reach 7 (Arroyo Seco/Los Angeles River State Historic Park) involves restoration of the Arroyo Seco tributary and restoration of three streams that are currently confined to storm drains/culverts, as well as restoration of freshwater marsh at the Los Angeles State Historic Park and terraces adjacent to the right bank of the Los Angeles River to include riparian vegetation and connect to marsh areas in the rivers. To facilitate this terracing, the existing railroad track would be trestle at grade. In reach 8 (Los Angeles Trailer and Container Intermodal Facility [LATC]) for the National Ecosystem Restoration Preferred Plan, the LATC (Mission Yard) site would be restored to riparian habitat. The restored wash would meander through the property and would connect to the existing Los Angeles River channel through a wide culvert or designed confluence. In the Locally Preferred Plan, reach 8 would be terraced on the right bank upstream of LATC and on the left bank downstream of LATC with riparian vegetation planted. This would include the channel being modified to soft bottom (currently concrete) and widening of the reach to establish freshwater marsh. The marsh would extend into the LATC site 500 feet, and riparian habitat would extend 1,000 feet into the LATC site. Flows would be diverted out of the Los Angeles River into the LATC site to create a wetland. To allow for the connection of the Los Angeles River to the adjacent restored areas, a railroad trestle would be included for the project.
- **Los Angeles River Revitalization Master Plan:** Activity in the vicinity of the project section includes the reach 8 – Union Pacific LATC, which is outside of the project section. The Los Angeles River in this area is concrete lined, with existing rail lines adjacent to the channel on both banks. This section of the river would be modified with terracing on the right bank upstream of the Union Pacific LATC and on the left bank downstream of the Union Pacific LATC. Terraced areas would be planted with riparian vegetation. The riverbed would be changed from concrete lined to soft bottom, with a freshwater marsh extending into the Union Pacific LATC site by 500 feet and riparian areas extending another 1,000 feet. A railroad bridge is included to allow river flows from the riverbed to exchange with the restored areas to the west. The Shared Passenger Track Alternatives would not preclude or conflict with the restoration and recreation activities proposed under the *Los Angeles River Revitalization Master Plan*.
- **OCVIBE Project** (City of Anaheim 2022): The OCVIBE project involves the development of residential, entertainment, retail and hospitality, office, hotel, institutional, parks and open space, and parking uses on approximately 96.19 acres at the confluence of State Route 57 and the Santa Ana River, in Anaheim. Impacts on biological and aquatic resources include direct and indirect effects on nesting birds and water quality.
- **Parkwest Residential Development Project** (City of Fullerton 2022): The Parkwest project involves demolition and removal of an existing surface parking lot and parking structure, and redevelopment of a 2.82-acre site with apartment units, hotel, retail, restaurant, and parking

in Fullerton. Impacts on biological and aquatic resources include direct and indirect effects on nesting birds and water quality.

- **Southern California Steelhead Recovery Plan** (NOAA Fisheries 2012): In the Mojave Rim Biogeographic Population Group of this recovery plan, the actions in the San Gabriel River include physical modifications of Morris, San Gabriel, Cogswell, and Santa Fe Dams, as well as roads, highways, and railway crossings to allow steelhead natural routes of migration to upstream spawning and rearing habitats.
- **Draft Recovery Plan for the Santa Ana Sucker** (USFWS 2014): In the Los Angeles River Watershed Recovery Unit, reintroductions are considered for Big Tujunga Creek, Little Tujunga Creek, and Haines Creek, which are not within or near the Supplemental RSA. There is one potential reintroduction site of Santa Ana suckers in the Los Angeles Reach at Arroyo Seco Creek, to the northeast of Glendale and the Los Angeles River, near U.S. Highway 101 and I-405, which is not within the Supplemental RSA. Suitable habitat in this area is approximately 7 miles from the Wildlife RSA. Reintroductions in the San Gabriel River Watershed are above Cogwell Dam, north of San Gabriel Dam, or above Whittier Narrows Dam, areas that are not within the Supplemental RSA. In the Santa Ana River Watershed Recovery Unit, reintroduction sites are considered above S La Cadena Drive, between Prado Dam and the drop-structure at S La Cadena Drive and at the Santa Ana River from State Route 90 to Prado Dam. These reintroduction sites are outside the Supplemental RSA.

8 RECOMMENDED IMPACT AVOIDANCE AND MINIMIZATION FEATURES

The following IAMFs will minimize, reduce, or avoid potential direct and indirect effects on biological resources (i.e., special-status plant and wildlife species, habitats of concern, wildlife movement corridors, and native flora and fauna) and aquatic resources (i.e., water quality, wetlands, riparian vegetation, and flowing water) associated with construction of the Shared Passenger Track Alternatives. The successful implementation of the recommended standard IAMFs described herein will reduce the nature and magnitude of the Shared Passenger Track Alternatives' effects on special-status plant and wildlife species and regulated aquatic resources.

The following IAMFs will be considered as additional analysis is being completed for the Draft EIR/EIS and may be incorporated, as applicable, during construction and O&M activities to minimize, reduce, or avoid effects on biological and aquatic resources. These IAMFs do not represent a complete list of potential IAMFs that may be developed to minimize, reduce, or avoid and eliminate potential effects on special-status plant, wildlife, and aquatic resources.

8.1 BIO-IAMF#1: Designate Project Biologist, Designated Biologists, Species-Specific Biological Monitors, and General Biological Monitors

At least 15 business days prior to commencement of ground-disturbing activity, including but not limited to geotechnical investigations, utility realignments, creation of staging areas, or initial clearing and grubbing, the Authority-designated contractor will submit the name(s) and qualifications of Project Biologists, Designated Biologists, Species-Specific Biological Monitors, and General Biological Monitors retained to conduct biological resource monitoring activities and implement avoidance and minimization measures to the wildlife agencies. No ground-disturbing activity will begin until the Authority-designated contractor has received written approval from the USFWS, NOAA Fisheries, where applicable, and the CDFW that the biologists and monitors have been approved to conduct the specified work. The Project Biologist is responsible for ensuring the timely implementation of the biological avoidance and minimization measures as outlined in the BRMP, and for guiding and directing the work of the Designated Biologists and Biological Monitors. Designated Biologists will be responsible for directly overseeing and reporting the implementation of general and species-specific conservation measures. In some instances, Designated Biologists will only be approved for specific species, in which case they will only be authorized to conduct surveys and implement measures for the species for which they have been approved. Species-Specific Biological Monitors will be responsible for implementation of species-specific measures for the species for which they have been approved, and will report directly to a Designated Biologist. General Biological Monitors will report directly to a Designated Biologist or to the Project Biologist. General Biological Monitors will be responsible for conducting WEAP training, implementing general conservation measures, conducting general compliance monitoring, and reporting on compliance monitoring activities. The term Project Biologist is used in these IAMFs to mean the Project Biologist, Designated Biologists, Species-Specific Biological Monitors, and General Biological Monitors, as appropriate. When the contractor is specified as implementing an IAMF, it is assumed that the contractor, or its contractor or agent, is implementing the IAMF under the supervision of biologists and biological monitors, as appropriate.

8.2 BIO-IAMF#3: Prepare Worker Environmental Awareness Program Training Materials and Conduct Construction Period Worker Environmental Awareness Program Training

Prior to ground-disturbing activity, the Project Biologist will prepare a WEAP for the purpose of training construction crews to recognize and identify sensitive biological resources that may be encountered in the vicinity of the project footprint. The WEAP training materials will be submitted to the Authority-designated contractor for review and approval. A video of the WEAP training

prepared and presented by the Project Biologist and approved by the Authority-designated contractor may be used if the Project Biologist is not available to present the training in person.

At a minimum, WEAP training materials will include the following information: key provisions of the FESA, the CESA, the Bald and Golden Eagle Protection Act, the MBTA, California Fish and Game Code 1600, Porter-Cologne, and the CWA; the consequences and penalties for violation or noncompliance with these laws and regulations and project authorizations; identification and characteristics of special-status plants, special-status wildlife, jurisdictional waters, and special-status plant communities and explanations about their ecological value; hazardous substance spill prevention and containment measures; the contact person in the event of the discovery of a dead or injured wildlife species; and review of avoidance, minimization, and mitigation measures.

The Project Biologist will present WEAP training to construction personnel before they work in the project footprint. As part of the WEAP training, construction timing in relation to species' habitat and life-stage requirements will be detailed and discussed on project maps, which would depict areas of planned minimization and avoidance measures. Crews will be informed during the WEAP training that, except when necessary, as determined in consultation with the Project Biologist, travel within the project footprint is restricted to established roadbeds, which include pre-existing and project-built unimproved and improved roads. A fact sheet conveying this information will be prepared by the Project Biologist for distribution to the construction crews and to others who enter the project footprint. Fact sheet information will be duplicated in a wallet-sized format and will be provided in other languages as necessary to accommodate non-English speaking workers. Construction staff will attend the WEAP training prior to beginning work on site and will attend the WEAP training on an annual basis thereafter.

Upon completion of the WEAP training, each member of the construction crew will sign a form stating that they attended the training, understood the information presented, and agreed to comply with the requirements set out in the WEAP training. The Project Biologist will submit the signed WEAP training forms to the Authority-designated contractor on a monthly basis. On an annual basis, the Authority-designated contractor will certify that WEAP training had been provided to construction personnel. On a monthly basis, the Project Biologist will provide updates relevant to the training to construction personnel during the daily safety ("tailgate") meeting.

8.3 BIO-IAMF#4: Conduct Operation and Maintenance Period Worker Environmental Awareness Program Training

Prior to initiating O&M activities, O&M personnel will attend a WEAP training session arranged by the Authority-designated contractor.

At a minimum, O&M WEAP training materials will include the following information: key provisions of the ESA, CESA, the Bald and Golden Eagle Protection Act, the MBTA, Porter-Cologne, and the CWA; the consequences and penalties for violation or noncompliance with these laws and regulations and project authorizations; identification and characteristics of special-status plants, special-status wildlife, jurisdictional waters, and special-status plant communities and explanations about their ecological value; hazardous substance spill prevention and containment measures; and the contact person in the event of the discovery of a dead or injured wildlife species. The training will include an overview of provisions of the biological resources management plan, annual vegetation, and management plan; weed control plan; and security fencing and wildlife exclusion fencing maintenance plans pertinent to O&M activities. A fact sheet prepared by the Authority-designated contractor environmental compliance staff will be prepared for distribution to the O&M employees. The training will be provided by the Authority-designated contractor environmental compliance staff. The training sessions will be provided to employees prior to their involvement in O&M activity and will be repeated for O&M employees on an annual basis. On completion of the WEAP training, O&M employees will, in writing, verify their attendance at the training sessions and confirm their willingness to comply with the requirements set out in those sessions.

8.4 BIO-IAMF#5: Prepare and Implement a Biological Resources Management Plan

Prior to ground-disturbing activity, the Project Biologist will prepare the BRMP, which will include a compilation of the biological resources avoidance and minimization measures applicable to the HSR section. Project environmental plans, such as the Restoration and Revegetation Plan and Weed Control Plan, will be included as appendices to the BRMP. The BRMP is intended to serve as a comprehensive document that sets out the range of avoidance and minimization measures to support the appropriate and timely implementation of those measures. The implementation of these measures will be tracked through final design, construction, and operational phases. The BRMP will contain, but not be limited to, the following information:

- A master schedule that presents construction of the project, preconstruction surveys, and establishment of buffers and exclusions zones to protect sensitive biological resources.
- Specific measures for the protection of special-status species.
- Identification (on construction plans) of the locations and quantity of habitats to be avoided or removed, along with the locations where habitats are to be restored.
- Identification of agency-approved Project Biologist(s) and Biological Monitor(s), including those responsible for notification and report of injury or death of federally or state-listed species.
- Measures to preserve topsoil and control erosion.
- Design of protective fencing around Environmentally Sensitive Areas and the construction staging areas.
- Locations of trees to be protected as wildlife habitat (roosting sites) and locations for planting replacement trees.
- Specification of the purpose, type, frequency, and extent of chemical use for insect and disease control operations as part of vegetative maintenance within sensitive habitat areas.
- Specific measures for the protection of vernal pool habitat and riparian areas. These measures may include erosion and siltation control measures, protective fencing guidelines, dust control measures, grading techniques, construction area limits, and biological monitoring requirements.
- Provisions for biological monitoring during ground-disturbing activities to confirm compliance and success of protective measures. The monitoring will: (1) identify specific locations of wildlife habitat and sensitive species to be monitored; (2) identify the frequency of monitoring and the monitoring methods (for each habitat and sensitive species to be monitored); (3) list required qualifications of biological monitor(s); (4) identify the reporting requirements; and (5) provide an accounting of impacts on special-status species habitat compared to preconstruction impact estimates.

The BRMP will be submitted to the Authority for review and approval prior to ground-disturbing activity.

8.5 BIO-IAMF#6: Establish Monofilament Restrictions

Prior to ground-disturbing activity, the Project Biologist will verify that plastic monofilament netting (erosion control matting) or similar material is not being used as part of erosion control activities. The Project Biologist will identify acceptable material for such use, including geomembranes, coconut coir matting, tackified hydroseeding compounds, and rice straw wattles (e.g., Earthsaver wattles: biodegradable, photodegradable, burlap). Within developed or urban areas, the Project Biologist may allow exceptions to the restrictions on the type of erosion control material if the Project Biologist determines that the construction area is of sufficient distance from natural areas to ensure the avoidance of potential impacts on wildlife.

8.6 BIO-IAMF#7: Prevent Entrapment in Construction Materials and Excavations

At the end of each workday during construction, the Authority-designated contractor will cover excavated, steep-sided holes or trenches more than 8 inches deep and that have sidewalls steeper than 1:1 (45 degree) slope with plywood or similar materials or provide a minimum of one escape ramp per 100 feet of trenching (with slopes no greater than 3:1) built of earth fill or wooden planks. The Project Biologist will thoroughly inspect holes and trenches for trapped animals at the start and end of each workday.

The Authority-designated contractor will screen, cover, or elevate at least 1 foot above ground construction pipe, culverts, or similar structures with a diameter of 3 inches or greater that are stored overnight within the project footprint. These pipes, culverts, and similar structures will be inspected by the Project Biologist for wildlife before such material is moved, buried, or capped.

8.7 BIO-IAMF#8: Delineate Equipment Staging Areas and Traffic Routes

Prior to ground-disturbing activity, the Authority-designated contractor will establish staging areas for construction equipment in areas that minimize effects on sensitive biological resources, including habitat for special-status species, seasonal wetlands, and wildlife movement corridors. Staging areas (including temporary material storage areas) will be in areas occupied by permanent facilities, where practicable. Equipment staging areas will be identified on final project construction plans. The Authority-designated contractor will flag and mark access routes to ensure that vehicle traffic within the project footprint is restricted to established roads, construction areas, and other designated areas.

8.8 BIO-IAMF#9: Dispose of Construction Spoils and Waste

During ground-disturbing activities, the Authority-designated contractor may temporarily store excavated materials produced by construction activities in areas at or near construction sites within the project footprint. Where practicable, the Authority-designated contractor will return excavated soil to its original location to be used as backfill. Excavated waste materials unsuitable for treatment and reuse will be disposed of at an off-site location, in conformance with applicable state and federal laws.

8.9 BIO-IAMF#10: Clean Construction Equipment

Prior to ground-disturbing activity, the Authority-designated contractor will ensure that equipment entering the work area is free of mud and plant materials. The Authority-designated contractor will establish vehicle cleaning locations designed to isolate and contain organic materials and minimize opportunities for weeds and invasive species to move in and out of the project footprint. Cleaning may be done by washing with water, blowing with compressed air, brushing, or other hand cleaning. The cleaning areas will be located so as to avoid impacts on surface waters and appropriate Stormwater Pollution Prevention Plan BMPs will be implemented so as to further control potential for the spread of weeds or other invasive species. Cleaning stations will be inspected regularly (at least monthly).

8.10 BIO-IAMF#11: Maintain Construction Sites and BMP Training

Prior to ground-disturbing activity, the Authority-designated contractor will prepare a construction site BMP field manual. The manual will contain standard construction site housekeeping practices required to be implemented by construction personnel. The manual will identify BMPs for the following topics: temporary soil stabilization, temporary sediment control, wind erosion control, nonstormwater management, waste management and materials control, rodenticide use, and other general construction site cleanliness measures, including trash control and removal.

All construction personnel will receive training on the BMP field manual implementation prior to working within the project footprint. All personnel will acknowledge, in writing, their understanding of the BMP field manual implementation requirements. The BMP field manual will be updated by

January 31 of each year. The Authority will provide, on an annual basis, training updates to all construction personnel.

8.11 BIO-IAMF#12: Design the Project to Be Bird Safe

Prior to final construction design, the contractor will ensure that the catenary system, masts, and other structures such as fencing, electric lines, communication towers, and facilities are designed to be bird and raptor safe in accordance with the applicable recommendations presented in *Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 2006* (APLIC 2006) and *Reducing Avian Collisions with Power Lines: State of the Art in 2012* (APLIC 2012). Applicable Avian Power Line Interaction Committee recommendations include, but are not limited to:

- Ensuring sufficient spacing of phase conductors to prevent bird electrocution.
- Configuring lines to reduce vertical spread of lines or decreasing the span length if such options are feasible.
- Marking lines and fences (e.g., Bird Flight Diverter for fencing and lines) to increase the visibility of lines and reduce the potential for collision. Where fencing is necessary, using bird-compatible design standards to increase visibility of fences to prevent collision and entanglement.
- Installing perch guards to discourage avian presence on and near project facilities.
- Minimizing the use of guywires. Where the use of guywires is unavoidable, demarcating guywires using the best available methods to minimize avian strikes (e.g., line markers).
- Reusing or co-locating new transmission facilities and other ancillary facilities with existing facilities and disturbed areas to minimize habitat impacts and avoid collision risks.
- Using structures with monopole or dual-pole design versus lattice tower design to minimize perching and nesting opportunities. Communication towers will conform to Recommended Best Practices for Communication Tower Design, Siting, Construction, Operation, Maintenance, and Decommissioning (USFWS 2021a).
- Using facility lighting that does not attract birds or their prey to project sites. Best practices include using nonsteady burning lights (red, dual red and white strobe, strobe-like flashing lights) to meet Federal Aviation Administration requirements, using motion or heat sensors and switches to reduce the time when lights are illuminated, using appropriate shielding to reduce horizontal or skyward illumination, and avoiding the use of high-intensity lights (e.g., sodium vapor, quartz, and halogen). Lighting will not be installed under viaduct and bridge structures in riparian habitat areas.

Additional bird operational actions will be required for dry lakes and playas, Audubon Important Bird Areas, and documented avian movement corridors. These measures include:

- Avoid, to the extent feasible, siting transmission lines across canyons or on ridgelines to prevent bird and raptor collisions.
- Install bird flight diverters on facilities spanning or within 1,000 feet of stream and wash channels, canals, ponds, and other natural or artificial body of water.
- Install fencing or other type of flight diverter on viaduct structures to encourage birds and raptors to fly over the HSR and avoid flying directly in the path of oncoming trains.
- Ensure poles do not have openings that could entrap birds. Measures may include sealing or capping openings in poles or providing for escape routes (e.g., openings accommodating escape for various species).
- Design aerial structures (e.g., viaducts and bridges) and tunnel portals to discourage birds and bats from roosting in expansion joints or other crevices.

9 PERMITS AND TECHNICAL STUDIES FOR SPECIAL LAWS OR CONDITIONS

Permits expected for the project related to biological and aquatic resources and the effects identified in Chapter 7 include a CWA Section 404 Permit from USACE, Section 408 permission from USACE, a CWA Section 401 Water Quality Certification from SWRCB, and a Section 1602 Lake and Streambed Alteration Agreement from CDFW. These and other permits and technical studies required by regulatory authority are discussed below.

Table 9-1 lists the permits anticipated to be required by the project.

Table 9-1 Permits Anticipated to Be Required

Agency	Regulations	Permits Required
USFWS	FESA	None, "no effect"
	MBTA	Avoidance, minimization, and compensatory mitigation efforts, as identified in this report and in the Draft EIR/EIS
	Executive Order 13186 (Protection of Migratory Bird Populations)	
	BGEPA	
USACE	CWA Section 404	Nationwide Permit Verification: Nationwide Permit 14, Linear Transportation Projects
	Rivers and Harbors Act Section 14 ("Section 408")	Permission/Approval
SWRCB	CWA Section 401	Water Quality Certification
	Porter-Cologne Water Quality Control Act	Waste Discharge Requirements
CDFW	CESA	Avoidance, minimization, and compensatory mitigation efforts, as identified in this report and the Draft EIR/EIS
	California Fish and Game Code Sections 3511, 4700, 5050, and 5515 (Fully Protected Species)	
	California Fish and Game Code Sections 3503, 3503.5, 3511, and 3513 (Bird Nesting Protections)	
	California Fish and Game Code Sections 1600–1616	Lake and Streambed Alteration Agreement

BGEPA = Bald and Golden Eagle Protection Act; CDFW = California Department of Fish and Wildlife; CESA = California Endangered Species Act; CWA= Clean Water Act; EIR/EIS = Environmental Impact Report/Environmental Impact Statement; FESA = Federal Endangered Species Act; MBTA = Migratory Bird Treaty Act; SWRCB = State Water Resources Control Board; USACE = U.S. Army Corps of Engineers; USFWS = U.S. Fish and Wildlife Service

10 REFERENCES

10.1 General

Federal and state legislation is listed in the body of the document following its first use in each chapter (*for example:* Department of Transportation Act of 1966 [49 U.S.C. 1653(f)]). These public documents are not included in this section but can easily be found online. Following is a list of these agencies and their abbreviations (as used in this report):

CFR	Code of Federal Regulations
Cal. Code Regs.	California Code of Regulations
Cal. Fish and Game Code	California Fish and Game Code
Cal. Water Code	California Water Code
Fed. Reg.	*Federal Register*
U.S.C.	U.S. Code

10.2 References Cited

Avian Power Line Interaction Committee (APLIC). 2006. *Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006*. https://www.aplic.org/uploads/files/2613/SuggestedPractices2006(LR-2watermark).pdf (accessed September 2024).

———. 2012. *Reducing Avian Collisions with Power Lines: State of the Art in 2012*. https://www.aplic.org/uploads/files/15518/Reducing_Avian_Collisions_2012watermarkLR.pdf (accessed January 2024).

Bartolome, J. W., W. J. Barry, T. Griggs, and P. Hopkinson. 2007. Valley Grassland. Pages 367–393 in M. G. Barbour, T. Keeler-Wolf, and A. A. Shoenherr (eds.), *Terrestrial vegetation of California*, 3rd Edition. University of California Press, Berkeley, CA.

Beier, P. 1993. Determining Minimum Habitat Areas and Habitat Corridors for Cougars. *Conservation Biology* 7(1):94–108.

Beier, P., and S. Loe. 1992. A Checklist for Evaluating Impacts to Wildlife Movement Corridors. *Wildlife Society Bulletin* 20:434–440.

Beier, P., and R. F. Noss. 1998. Do Habitat Corridors Provide Connectivity? *Conservation Biology* 12:1241–1252.

Beier, P. B., K. L. Penrod, C. L. Luke, W. D. Spencer, and C. R. Cabanero. 2006. South Coast Missing Linkages: restoring connectivity to wildlands in the largest metropolitan area in the United States. In K. R. Crooks and M. A. Sanjayan, editors, *Connectivity and Conservation*. Oxford University Press. https://consbio.org/wp-content/uploads/2022/05/Beier_etal_2006_SCML.pdf (accessed January 2024).

Bennett, A. F. 2003. *Linkages in the Landscape*: *The Role of Corridors and Connectivity in Wildlife Conservation*. The World Conservation Union, Gland, Switzerland. https://portals.iucn.org/library/efiles/documents/FR-021.pdf (accessed January 2024).

Bennett, V. J., and A. Zurcher. 2013. When Corridors Collide: Road-Related Disturbance in Commuting Bats. *Journal of Wildlife Management* 77: 93–101.

Bolster, B. C. (ed.) 1998. *Terrestrial Mammal Species of Special Concern in California*.

Bond, M. 2003. *Principles of Wildlife Corridor Design.* Center for Biological Diversity. October. www.biologicaldiversity.org/publications/papers/wild-corridors.pdf (accessed January 2024).

Buehler, David A. 2000. Bald Eagle *(Haliaeetus leucocephalus), The Birds of North America (*P. G. Rodewald, ed.). Ithaca: Cornell Lab of Ornithology. https://birdsna.org/Species-Account/bna/species/baleag (accessed January 2024).

Buehler, D. A. 2022. Bald Eagle (*Haliaeetus leucocephalus*), version 2.0. In *Birds of the World* (P. G. Rodewald and S. G. Mlodinow, Editors). Cornell Lab of Ornithology, Ithaca, NY, USA. https://doi.org/10.2173/bow.baleag.02 (accessed October 2025).

California Department of Transportation (Caltrans). 2023. *California State Rail Plan*. March. https://dot.ca.gov/-/media/dot-media/programs/rail-mass-transportation/documents/california-state-rail-plan/20230309-casrp-public-dor-guidance.pdf.

California Department of Fish and Game (CDFG). 2011. CNDDB Data Use Guidelines v4.2.

———. 2012. *Staff Report on Burrowing Owl Mitigation*. Sacramento, CA. March 7, 2012.

California Department of Fish and Wildlife (CDFW). 2016. California Natural Diversity Database (CNDDB). Commercial version dated February 28, 2016. Biogeographic Data Branch, Sacramento, CA. (Database query conducted July 2016).

———. 2020. Mountain Lions in California. https://wildlife.ca.gov/Conservation/Mammals/Mountain-Lion#562331240-are-mountains-lions-listed-as-a-threatened-or-endangered-species (accessed January 2024).

———. 2021. California Fish and Game Code. 2021 Edition. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=178840&inline (accessed February 2024).

———. 2023. VegCAMP – Natural Communities – Sensitive Natural Communities. Updated June 1, 2023, 63 pp. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153609&inline.

———. 2024a. California Natural Diversity Database (CNDDB). Commercial version dated February 28, 2016. Biogeographic Data Branch, Sacramento, CA. (Database query conducted July 18, 2016, October 27, 2016, February 24, 2017, April 15, 2017, September 19, 2018, September 28, 2018, April 3, 2020, December 21, 2023, January 24, 2024, September 12, 2024, and December 18, 2024).

———. 2024b. California Essential Habitat Connectivity Viewer. CDFW Biogeographic Information and Observation System (BIOS). https://www.wildlife.ca.gov/Data/BIOS (accessed January 2024).

———. 2024c. Fish and Game Commission: Western Burrowing Owl Becomes CESA Candidate; Wildlife Prosecutor of the Year Named; Waterfowlers Hall of Fame Inductees Recognized. News Archive. October 15, 2024. https://wildlife.ca.gov/News/Archive/fish-and-game-commission-western-burrowing-owl-becomes-cesa-candidate-wildlife-prosecutor-of-the-year-named-waterfowlers-hall-of-fame-inductees-recognized (accessed October 2024).

———. 2025. CNDDB. Special Animals List. Periodic publication. Updated April 2025, 114 pp.

California High-Speed Rail Authority (Authority). 2009. *Alternatives Analysis Methods for Project EIR/EIS*. Version 2. September 8. www.cahighspeedrail.ca.gov/docs/programs/statewide_rail/proj_sections/LA_Anaheim/AppendixA_Alternatives_Analysis_Methods_for_Project_EIR_EIS.pdf (accessed December 2017).

———. 2021. *California High-Speed Rail Authority Burbank to Los Angeles Project Section Final Environmental Impact Report / Environmental Impact Statement*. September. https://hsr.ca.gov/programs/environmental-planning/project-section-environmental-documents-tier-2/burbank-to-los-angeles-project-section-draft-environmental-impact-report-environmental-impact-statement/.

———. 2023a. Los Angeles to Anaheim Supplemental Alternatives Analysis alignment geographic information system files.

———. 2023b. *California High-Speed Rail Project Anaheim to Los Angeles Section Supplemental Alternatives Analysis Report.* November. https://hsr.ca.gov/wp-content/uploads/2023/11/231025-LA-A-SAA-Final-Version11-clean-A11Y.pdf (accessed December 2023).

———. 2024. *Rail Operations Group: Requirements for High-Speed Trainset Fleet and Infrastructure Maintenance Facilities*. June.

———. 2025a. Los Angeles to Anaheim Project Section Preliminary Engineering Project Definition. September.

———. 2025b. *Los Angeles to Anaheim Project Section Draft Aquatic Resources Delineation Report*.

———. 2025c. *Los Angeles to Anaheim Project Section Draft Aquatic Resources Impacts Memorandum*.

California High-Speed Rail Authority (Authority) and Federal Railroad Administration (FRA). 2005. *Final Program Environmental Impact Report/Environmental Impact Statement for the Proposed California High-Speed Train System*. Sacramento, CA and Washington, DC. August.

California Native Plant Society (CNPS), Rare Plant Program. 2024. Rare Plant Inventory (online edition, v9-5). www.rareplants.cnps.org (accessed July 2016, September 2018, April 2020, January 2024).

California State Water Resources Control Board (SWRCB). 2019. *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*. April. Effective May 28, 2020, revised April 6, 2021. https://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/2021/procedures.pdf.

City of Anaheim. 2004. *Final Anaheim General Plan and Zoning Code Update Environmental Impact Report No. 330*. May. www.anaheim.net/932/Volume-I-Final-EIR-Number-330 (accessed October 2016).

———. 2022. *OCVIBE Project DEV2020-00125, Addendum No. 11 to SEIR No. 339*. August. https://www.anaheim.net/DocumentCenter/View/45699/Attachment-1a-CEQA-ExhibitA0ocVbe-Addendum-No-11.

———. 2025a. *City of Anaheim General Plan*, Green Element. https://www.anaheim.net/DocumentCenter/View/9521/F-Green-Element (accessed July 2025).

———. 2025b. *Anaheim Municipal Code*. Section 13.12.080. https://codelibrary.amlegal.com/codes/anaheim/latest/anaheim_ca/0-0-0-51668 (accessed August 2025).

City of Buena Park. 2025. *Buena Park Municipal Code.* Section 12.20.010, Section 12.20.020. https://ecode360.com/42923016#42923016 (accessed August 2025).

City of Fullerton. 2022. *Parkwest Project Initial Study/Mitigated Negative Declaration*. October. https://portal.laserfiche.com/Portal/DocView.aspx?id=1508262&repo=r-3261686e.

———. 2025. *City of Fullerton Municipal Code.* Section 9.06.090, Section 9.06.100. https://codelibrary.amlegal.com/codes/fullerton/latest/fullerton_ca/0-0-0-6387 (accessed August 2025).

City of Los Angeles. 2025. *Los Angeles Municipal Code.* Effective November 12, 1936. Current through legislation effective 2025. https://codelibrary.amlegal.com/codes/los_angeles/latest/lamc/0-0-0-422835 (accessed August 2025).

City of Montebello. 2024. *Montebello Municipal Code.* Section 12.08.090. https://library.municode.com/ca/montebello/codes/code_of_ordinances (accessed October 2024).

City of Pico Rivera. 2025. *Pico Rivera Municipal Code*. Section 12.40.020. https://ecode360.com/PI4985 (accessed August 2025).

City of Santa Fe Springs. 2025. *Code of Santa Fe Springs*. Section 96.133. https://library.municode.com/ca/santa_fe_springs/codes/code_of_ordinances?nodeId=TITIXGERE_CH96STSI_STTR_S96.133PERECUPRTRTRSHPL (accessed July 2025).

Collins, A. C., T. W. Vickers, and F. M. Shilling. 2022. Behavioral responses to anthropogenic noise at highways vary across temporal scales. *Frontiers in Ecology and Evolution* 10:891595. DOI: 10.3389/fevo 2022 891595. https://www.frontiersin.org/journals/ecology-and-evolution/articles/10.3389/fevo.2022.891595/full.

County of Los Angeles. 2023. Regional Park and Open Space District, Measure A. https://rposd.lacounty.gov/measure-a/ (accessed October 2024).

———. 2025a. *Los Angeles County 2035 General Plan.* Prepared by County of Los Angeles Department of Regional Planning, adopted October 6, 2015; most recently updated March 11, 2025. http://planning.lacounty.gov/generalplan (accessed April 2025).

———. 2025b. *Los Angeles County Code of Ordinances*. Through ordinance No. 2025-0039, adopted July 29, 2025. Section 12.28.030, Section 17.04.340, Section 17.04.470, Section 22.56.2060, Section 22.126, Section 22.174.010. https://library.municode.com/ca/los_angeles_county/codes/code_of_ordinances (accessed August 2025).

County of Los Angeles and Los Angeles County Public Works. 2022. *LA River Master Plan*. June. https://pw.lacounty.gov/uploads/swp/LARiverMasterPlan-FINAL-DIGITAL-COMPRESSED.pdf (accessed October 2024).

Cowardin, L. M., V. Carter, F. C. Golet, and E. T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. Prepared for U.S. Department of the Interior, Fish and Wildlife Service, Office of Biological Services.

Crooks, Kevin R., C. L. Burdett, D. M. Theobald, C. Rondinini, and L. Boitani. 2011. *Global Patterns of Fragmentation and Connectivity of Mammalian Carnivore Habitat*. Philosophical Transaction of the Royal Society of Biological Sciences. September.

Currier, M. J. P. 1983. Felis concolor. *Mammalian Species* 200:1–7.

DeLuca, W., T. Meehan, N. Seavy, A. Jones, J. Pitt, J. L. Deppe, and C. B. Wilsey. 2021. The Colorado River Delta and California's Central Valley are critical regions for many migrating North American landbirds. *Ornithological Applications* 123(1). https://academic.oup.com/condor/article/123/1/duaa064/6119082 (accessed September 2024).

DiTomaso, J. M., and E. A. Healy. 2007. *Weeds of California and Other Western States*. Publication 3488, University of California, Agriculture and Natural Resources, Oakland, CA.

Dunk, J. R. 2020. White-tailed Kite (*Elanus leucurus*), version 1.0. In *Birds of the World* (A. F. Poole and F. B. Gill, Editors). Cornell Lab of Ornithology, Ithaca, NY, USA. https://doi.org/10.2173/bow.whtkit.01 (accessed October 2025).

eBird. 2024. eBird: An Online Database of Bird Distribution and Abundance (web application). eBird, Ithaca, New York. www.ebird.org (accessed January, September, and October 2024).

Environmental Systems Research Institute (ESRI). 2020. *National Geographic World Map (Streaming).* http://goto.arcgisonline.com/maps/NatGeo_World_Map (accessed November 2024).

Environmental Systems Research Institute (ESRI) World Imagery. 2024. Website; data from 2010 through 2024. http://goto.arcgisonline.com/maps/World_Imagery.

Environmental Systems Research Institute (ESRI) World Streetmap. 2024. Website; data from 2016 through 2024. http://www.arcgis.com/home/item.html?id=e8a316cc5ab44da8962108ff8c59dc6c.

Federal Highway Administration (FHWA). 1993. Sec. 771.111 Early coordination, public involvement, and project development. www.fhwa.dot.gov/legsregs/directives/fapg/cfr0771.htm (accessed December 2023).

Federal Railroad Administration (FRA). 1999. *Procedures for Considering Environmental Impacts*. May 26.

Fensome, A. G., and F. Mathews. 2016. Roads and Bats: A Meta-Analysis and Review of the Evidence on Vehicle Collisions and Barrier Effects. *Mammal Review* 46(4):311–323.

Google Earth Pro. 2017. Google Earth Imagery for the project site. Imagery dates: May 1994 to February 2016. www.google.com/earth/ (accessed February 2016–February 2017).

———. 2024. Google Earth imagery for the project site. Imagery dates: February 2016 to September 2024. www.google.com/earth/ (accessed September 2024).

Haas, C. D., A. R. Backlin, C. J. Rochester, and R. N. Fisher. 2002. *Monitoring Reptiles and Amphibians at Long-Term Biodiversity Monitoring Stations: The Puente-Chino Hills*. United States Geological Survey Final Report. 43 pp.

Hathaway, S., R. Fisher, C. Rochester, C. Haas, M. Mendelsohn, G. Turschak, D. Stokes, M. Madden-Smith, E. Ervin, K. Pease, and C. Brown. 2004. *Baseline Biodiversity Survey for the Santa Ysabel Ranch Open Space Preserve*. USGS Technical Report. Prepared for the Nature Conservancy and San Diego County Department of Parks and Recreation.

Hickman, J. C. (ed.). 1993. *The Jepson Manual: Higher Plants of California.* Berkeley: University of California Press.

Holland, R. F. 1986. *Preliminary descriptions of the terrestrial natural communities of California. Unpublished report*. California Department of Fish and Game, Natural Heritage Division, Sacramento, CA.

Ikovic, V., M. Durovic, and P. Presentnik. 2014. First Data on Bat Traffic Casualties in Montenegro. *Vespertilio* 17:89–94.

iNaturalist. 2022. iNaturalist: A Community for Naturalists (web application). iNaturalist, Berkeley, California. https://www.inaturalist.org/ (accessed May 2022).

Jennings, M. R., and M. P. Hayes. 1994. *Amphibian and Reptile Species of Special Concern in California.* Final report submitted to the California Department of Fish and Game, Inland Fisheries Division, Rancho Cordova, California, 255 pp.

Jepson Flora Project (eds.). 2015. *Jepson eFlora*. http://ucjeps.berkeley.edu/IJM.html (accessed September 2015).

Knopf, F. L., and M. B. Wunder. 2023. Mountain Plover (*Anarhynchus montanus*), version 1.1. In *Birds of the World* (A. F. Poole, Editor). Cornell Lab of Ornithology, Ithaca, NY, USA. https://doi.org/10.2173/bow.mouplo.01.1 (accessed October 2025).

Kunz, T. H., and M. B. Fenton. 2003. *Bat Ecology.* The University of Chicago Press, Chicago, USA.

Lesinski, G. 2008. Linear Landscape Elements and Bat Casualties on Roads—An Example. *Annales Zoologica Fennici* 45:277–280.

Lichvar, R. W., and S. M. McColley. 2008. *A Field Guide to the Identification of the OHWM in the Arid West Region of the Western United States: A Determination Manual*. https://www.spk.usace.army.mil/Portals/12/documents/regulatory/pdf/Ordinary_High_Watermark_Manual_Aug_2008.pdf.

Lichvar, R. W., N. C. Melvin, M. L. Butterwick, and W. N. Kirchner. 2012. *National Wetland Plant List Indicator Rating Definitions.* ERDC/CREEL TN-12-1. Hanover, NH: U.S. Army Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory.

Lichvar, R. W., D. L. Banks, W. N. Kirchner, and N. C. Melvin. 2016. The National Wetlands Plant List: 2016 wetland ratings. *Phytoneuron* 2016-30:1–17. Published 28 April 2016. ISSN 2153 733X. http://wetland-plants.usace.army.mil/ (accessed May 2016).

Los Angeles County Metropolitan Transportation Authority (Metro) and California High-Speed Rail Authority (Authority). 2024. *Link Union Station: Draft Environmental Impact Statement/ Supplemental Environmental Impact Report*. https://www.linkunionstation.com/ (accessed December 2024).

Los Angeles Department of Water and Power. 2024. *Los Angeles County Flood Control Department Storm Drain System*. https://pw.lacounty.gov/fcd/StormDrain/index.cfm (accessed May 2024).

Los Angeles Regional Water Quality Control Board (RWQCB). 2018. 303(d) Impaired Water Bodies / 303(d) List. https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2018_integrated_report.html (accessed January 2024).

Lowther, P. E., C. Celada, N. K. Klein, C. C. Rimmer, and D. A. Spector. 2025. Yellow Warbler (*Setophaga petechia*), version 1.1. In *Birds of the World* (P. G. Rodewald, Editor). Cornell Lab of Ornithology, Ithaca, NY, USA. https://doi.org/10.2173/bow.yelwar.01.1 (accessed October 2025).

Marks, J. S., D. L. Evans, and D. W. Holt. 2020. Long-eared Owl (*Asio otus*), version 1.0. In *Birds of the World* (S. M. Billerman, Editor). Cornell Lab of Ornithology, Ithaca, NY, USA. https://doi.org/10.2173/bow.loeowl.01 (accessed October 2025).

Martinig, A. R., and A. A. D. McLaren. 2019. Vegetated Highway Medians as Foraging Habitat for Small Mammals. *Wildlife Society Bulletin* 43(2):317–322. DOI: 10.1002/wsb.967.

McKenzie, R. P. 1995. Important Criteria and Parameters of Wildlife Movement Corridors – A Partial Literature Review. For the Southern Columbia Mountains Environmental Sector of the West Kootenay CORE Table. http://www.silvafor.org/assets/silva/PDF/Literature/LandscapeCorridors.pdf (accessed January 2024).

Medinas, D., J. T. Marques, and A. Mira. 2012. Assessing Road Effects on Bats: The Role of Landscape, Road Features, and Bat Activity on Road-Kills. *Ecological Research* 28:227–237.

Mercury News. 2017. California mountain lion P-41, found dead in October, had rat poison in his system. December. https://www.mercurynews.com/2017/12/20/mountain-lion-p-41-found-dead-in-october-had-rat-poison-in-his-system-lab-results-show/.

Miner, K. L., and D. C. Stokes. 2005. *Bats in the South Coast Ecoregion: Status, Conservation Issues, and Research Needs.* U.S. Department of Agriculture, Forest Service, General Technical Report PSW-GTR-195. 211–227.

Monarch Program. 2024. Where to See Overwintering Monarchs in California. https://www.monarchprogram.org/where-to-see-overwintering-monarchs/ (accessed January 2024).

Munsell Color. 2015. *Munsell Soil-Color Charts with Genuine Munsell Color Chips*. January.

National Park Service. 2021. Lions in the Santa Monica Mountains. https://www.nps.gov/samo/learn/nature/pumapage.htm (accessed December 2021).

National Oceanic and Atmospheric Administration (NOAA). 2015a. *National Weather Service Climate Prediction Center, El Nino Southern Oscillation*. www.cpc.ncep.noaa.gov/products/precip/CWlink/MJO/enso.shtml (accessed October 2015).

———. 2015b. *National Weather Service Climate Prediction Center, Madden-Julian Oscillation*. www.cpc.ncep.noaa.gov/products/precip/CWlink/MJO/mjo.shtml (accessed October 2015).

National Oceanic and Atmospheric Administration (NOAA) Fisheries. 2012. *Southern California Steelhead Recovery Plan*. Southwest Region, Protected Resources Division, Long Beach, California.

———. 2023. Essential Fish Habitat Mapper. https://www.habitat.noaa.gov/apps/efhmapper/?page=page_5 (accessed December 2023).

National Public Radio (NPR). 2022. The legacy of Hollywood mountain lion P-22 lives on in wildlife conservation efforts. December. https://www.npr.org/2022/12/21/1144627754/p22-mountain-lion-wildlife-crossing-los-angeles (accessed September 2024).

Newcombe, P. B., C. Nilsson, T. Y. Lin, K. Winner, G. Bernstein, S. Maji, D. Sheldon, A. Farnsworth, and K. G. Horton. 2019. Migratory flight on the Pacific Flyway: strategies and tendencies of wind drift compensation. *Biology Letters* 15: 20190383. http://dx.doi.org/10.1098/rsbl.2019.0383 (accessed September 2024).

Orange County Public Works. 2024. *Orange County Flood Control Department Drainage Facilities.* https://www.ocflood.com/civicax/filebank/blobdload.aspx?BlobID=32717 (accessed May 2024).

Penrod, K., R. Hunter, and M. Marrifield. 2001. Missing Linkages: restoring connectivity to the California landscape. California Wilderness Coalition, The Nature Conservancy, US Geological Survey, Center for Reproduction of Endangered Species, and California State Parks.

Penrod, K., C. R. Cabañero, C. Luke, P. Beier, W. Spencer, and E. Rubin. 2003. *South Coast Missing Linkages Project: A Linkage Design for the Tehachapi Connection*. South Coast Wildlands Project, Monrovia, California. www.scwildlands.org/reports/SCML_Tehachapi.pdf (accessed September 2016).

Pierson, E. D., and W. E. Rainey. 1998a. Distribution, Habitat Associations, Status, and Survey Methodologies for Three Molossid Bat Species (*Eumops perotis, Nyctinomops femorosaccus, Nyctinomops macrotis*) and the Vespertilionid (*Euderma maculatum*). *California Department of Fish and Game, Bird and Mammal Conservation Program Rep.* 96-8. 46 pp.

———. 1998b. Distribution, Status and Management of Townsend's Big-Eared Bat (*Corynorhinus townsendii*) in California. *California Department of Fish and Game, Bird and Mammal Conservation Program Rep.* 96-7. 34 pp.

Provance, M. C., and A. C. Sanders. 2013. Lucky Morning Glory, *Calystegia felix* (Convolvulaceae): A New Species from Southern California, with Notes on the Historical Ecology of the Chino Cienega Belt. *PhytoKeys* 32:1–26.

Reed, W. R. 1993. *Salix gooddingii*. In Fire Effects Information System [Online]. USDA, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (Producer). https://www.fs.usda.gov/database/feis/plants/tree/salgoo/all.html (accessed December 2016).

Remington, S. 2006. *Bat Surveys of the Puente Hills (Whittier Hills, Hacienda Heights, La Habra Heights, and Rowland Heights), Los Angeles County, California, June 2005–May 2006. Final Report.* The Puente Hills Landfill Native Habitat Preservation Authority. July.

Remington, S., and D. S. Cooper. 2009. *Bat Survey of Griffith Park, Los Angeles, California, Draft Report.* Los Angeles Department of Recreation and Parks.

Riley, S. P. D., L. E. K. Serieys, J. P. Pollinger, J. A. Sikich, L. Dalbeck, R. K. Wayne, and H. B. Ernest. 2014. Individual Behaviors Dominate the Dynamics of an Urban Mountain Lion Population Isolated by Roads. *Current Biology* 24(17):1989–1994. http://dx.doi.org/10.1016/j.cub.2014.07.029 (accessed September 2025).

Santa Ana Regional Water Quality Control Board (RWQCB). 2016. Santa Ana Region – 303(d) List of Water Quality Limited Segments. https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2014_2016.shtml (accessed January 2024).

Sawyer, J., T. Keeler-Wolf, and J. Evans. 2009. *A Manual of California Vegetation*. 2nd edition. California Native Plant Society. Sacramento, California: California Native Plant Society. 1,300 pp.

Schaub, A., J. Ostwald, and B. M. Siemens. 2008. Foraging Bats Avoid Noise. *Journal of Experimental Biology* 211:3174–3180.

Schorcht, W., F. Bontadina, and M. Schaub. 2009. Variation of Adult Survival Drives Population Dynamics in a Migrating Forest Bat. *Journal of Animal Ecology* 78:1182–1190.

Shuford, W. D., and T. G. Gardali (eds.). 2008. California Bird Species of Special Concern: A Ranked Assessment of Species, Subspecies, and Distinct Populations of Birds of Immediate Conservation Concern in California. *Studies of Western Birds* 1:1–463. https://wildlife.ca.gov/Conservation/SSC/Birds#book (accessed January 2024).

Siders, M. S. 2005. *Eumpos perotis* Western Mastiff Bat. Western Bat Working Group Species Account. www.wbwg.org/speciesinfo/species_accounts/molossidae/eupe.pdf (accessed September 2016).

Siemers, B. M., and A. Schaub. 2011. Hunting at the Highway: Traffic Noise Reduces Foraging Efficiency in Acoustic Predators. *Proceedings of the Royal Society B* 278:1646–1652.

South Coast Wildlands. 2008. *South Coast Missing Linkages: A Wildland Network for the South Coast Ecoregion.* Produced in cooperation with partners in the South Coast Missing Linkages Initiative. http://www.scwildlands.org/reports/SCMLRegionalReport.pdf (accessed October 2024).

Spencer, W. D., P. Beier, K. Penrod, K. Winters, C. Paulman, H. Rustigian-Romsos, J. Strittholt, M. Parisi, and A. Pettler. 2010. *California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California*. Prepared for California Department of Transportation, California Department of Fish and Game, and Federal Highways Administration. February. https://www.wildlife.ca.gov/Conservation/Planning/Connectivity/CEHC (accessed January 2024).

Stebbins, Robert C. 2003. *A Field Guide to Western Reptiles and Amphibians*. 3rd Edition. Houghton Mifflin Company.

Stokes, D. C., C. S. Brehme, S. A. Hathaway, and N. Fisher. 2005. *Bat Inventory of the Multiple Species Conservation Program Area in San Diego County, California*. Final Report. U.S. Geological Survey, Western Ecological Research Center. Sacramento, CA.

STV, Inc. (STV). 2025. *Replacement of BNSF Storage and Support Track and Associated Container Parking Relocation at the Hobart Intermodal Facility*. August.

U.S. Army Corps of Engineers (USACE).1986. *Regulatory Programs of the Corps of Engineers* (33 CFR 320-332). *Federal Register* Volume 51, Number 219, November.

———. 1987. *Corps of Engineers Wetlands Delineation Manual*. Technical Report Y-87-1, Department of the Army Environmental Laboratory., U.S. Army Corps of Engineers Waterways Experiment Station, Wetlands Research Program, Vicksburg, MS. January. https://www.lrh.usace.army.mil/Portals/38/docs/USACE%2087%20Wetland%20Delineation%20Manual.pdf.

———. 2005. *Regulatory Guidance Letter 05-05: Ordinary High Water Mark Identification.* December 7. https://www.nap.usace.army.mil/Portals/39/docs/regulatory/rgls/rgl05-05.pdf.

———. 2008a. USACE Wetland Determination Data Forms, Arid West Region (version 2.0).

———. 2008b. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region*. Version 2.0. ERDC/EL TR-08-28. Department of the Army Environmental Laboratory. U.S. Army Corps of Engineers Waterways Experiment Station, Wetlands Research Program, Vicksburg, MS. usace.contentdm.oclc.org/utils/getfile/collection/p266001coll1/id/7627.

———. 2016. *Regulatory Guidance Letter No. 16-01 Jurisdictional Determinations*. October.

———. 2019. *Regional General Permit Number 41 for Mechanized Removal of Invasive, Exotic Plants (Exotics) from Waters of the U.S.* September.

———. 2021. 2021 Reissuance and Modification of Nationwide Permits. First published December 27, 2021, in the *Federal Register*. Volume 86, No. 245, Pages 73522 – 73583. https://www.govinfo.gov/content/pkg/FR-2021-12-27/pdf/2021-27441.pdf (accessed January 2024).

U.S. Army Corps of Engineers (USACE) and City of Los Angeles. 2015. *Los Angeles River Ecosystem Restoration Integrated Feasibility Report: Final Feasibility Report and Environmental Impact Statement/Environmental Impact Report Volume 1: Integrated Feasibility Report.* September. https://apps.engineering.lacity.gov/techdocs/emg/docs/lariver/LAR_Vol%201_Integrated%20Feasibility%20Report.pdf (accessed October 2024).

U.S. Army Corps of Engineers and U.S. Environmental Protection Agency (USACE and USEPA). 2007. *U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook*. May. https://www.nap.usace.army.mil/Portals/39/docs/regulatory/jd/jd_guidebook_051207final.pdf.

———. 2008. *Clean Water Act Jurisdiction Following the U.S. Supreme Court Decision in Rapanos v. United States & Carabell v. United States, Memorandum.* December.

———. 2023. *Revised Definition of "Waters of the United States"; Conforming* (33 Code of Federal Regulations [CFR] 328.3(a)(1) – (5)). Issued August 29, 2023, effective September 8, 2023.

U.S. Department of Agriculture, Natural Resources Conservation Service (USDA/NRCS). 2011. *Official Soil Series Descriptions.* Prepared by Soil Survey Staff of the Natural Resources Conservation Service. Lincoln, NE. http://soils.usda.gov/technical/classification/osd/index.html (accessed May 2016).

———. 2016a. *U.S. General Soil Map* (*STATSGO2*) *for California*. Prepared by Soil Survey Staff of the Natural Resources Conservation Service. https://gdg.sc.egov.usda.gov/ (accessed May 2016).

———. 2016b. *Soil Survey Geographic* (*SSURGO*) *Database*. Prepared by Soil Survey Staff of the Natural Resources Conservation Service. https://websoilsurvey.nrcs.usda.gov/app/ (accessed May 2016).

———. 2018. *A Guide for Identifying and Delineating Hydric Soils, Version 8.2.* January.

———. 2024a. *U.S. General Soil Map* (*STATSGO2*) *for California*. Prepared by Soil Survey Staff of the Natural Resources Conservation Service. https://gdg.sc.egov.usda.gov/ (accessed January 2024).

———. 2024b. *Soil Survey Geographic* (*SSURGO*) *Database*. Prepared by Soil Survey Staff of the Natural Resources Conservation Service. https://websoilsurvey.nrcs.usda.gov/app/ (accessed January 2024).

U.S. Fish and Wildlife Service (USFWS). 1998a. Pacific Pocket Mouse (*Perognathus longimembris pacificus*) Recovery Plan. Portland, Oregon. 112 pp.

———. 1998b. "Endangered and Threatened Wildlife and Plants; Listing of Several Evolutionarily Significant Units of West Coast Steelhead." 63 *Federal Register* 32,996. June 17, 1998.

———. 2006. *Least Bell's Vireo 5-Year Review: Summary and Evaluation*. Carlsbad Fish and Wildlife Office. Carlsbad, CA.

———. 2014. *Draft Recovery Plan for the Santa Ana Sucker.*

———. 2016a. *National Wetlands Inventory Mapper*. www.fws.gov/wetlands/data/mapper.HTML (accessed May 2016).

———. 2016b. *Official Species List, California High Speed Rail System: Los Angeles to Anaheim Project Section*. Provided by Carlsbad Fish and Wildlife Office. July.

———. 2017a. IPaC Resource List. *California High Speed Rail System: Los Angeles to Anaheim Project Section*. Provided by Carlsbad Fish and Wildlife Office. April.

———. 2017b. *Official Species List, California High Speed Rail System: Los Angeles to Anaheim Project Section*. Provided by Carlsbad Fish and Wildlife Office. Consultation Code: 08EAR00-2017-SLI-0849. May.

———. 2018. Updated list of threatened and endangered species that may occur in your project location, and/or may be affected by your proposed project. *California High Speed Rail System: Los Angeles to Anaheim Project Section*. Provided by Carlsbad Fish and Wildlife Office. Consultation Code: 08EAR00-2017-SLI-0849. September.

———. 2020. *Official Species List, California High Speed Rail System: Los Angeles to Anaheim Project Section*. Provided by Carlsbad Fish and Wildlife Office. Consultation Code: 08EAR00-2017-SLI-0849. April.

———. 2021a. Recommended Best Practices for Communication Tower Design, Siting, Construction, Operation, Maintenance, and Decommissioning. Migratory Bird Program. Virginia. March.

———. 2021b. *Birds of Conservation Concern 2021: Migratory Bird Program*. Falls Church, VA. 47 pp. https://www.fws.gov/sites/default/files/documents/birds-of-conservation-concern-2021.pdf (accessed January 2024).

———. 2021c. *Official Species List, California High Speed Rail System: Los Angeles to Anaheim Project Section*. Provided by Carlsbad Fish and Wildlife Office. Consultation Code: 08EAR00-2017-SLI-0849. February.

———. 2021d. *Official Species List, California High Speed Rail System: Los Angeles to Anaheim Project Section*. Provided by Carlsbad Fish and Wildlife Office. Consultation Code: 08EAR00-2017-SLI-0849. October.

———. 2023. *List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project.* Provided by Carlsbad Fish and Wildlife Office. Project code: 2024-0029208. December.

———. 2024a. U.S. Critical Habitat Data. https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77 (accessed January 2024).

———. 2024b. *National Wetlands Inventory Mapper*. www.fws.gov/wetlands/data/mapper.HTML (accessed January 2024).

———. 2024c. List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project. Project Code: 2024-0029208. *Project Name: California High Speed Rail System: Los Angeles to Anaheim Project Section*. Provided by Carlsbad Fish and Wildlife Office. December.

———. 2025. List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project. Project Code: 2024-0029208. *Project Name: California High Speed Rail System: Los Angeles to Anaheim Project Section*. Provided by Carlsbad Fish and Wildlife Office. February.

U.S. Geological Survey (USGS). 2011. National Land Cover Database. https://www.usgs.gov/centers/eros/science/national-land-cover-database (accessed September 2015).

———. 2015. 7.5-Minute *Los Angeles, South Gate, Whittier, La Habra, Anaheim* and *Orange*, *California*, Topographic Quadrangles. https://www.usgs.gov/programs/national-geospatial-program/us-topo-maps-america (accessed May 2016).

———. 2016. National Hydrography Dataset. https://www.usgs.gov/national-hydrography/national-hydrography-dataset (accessed May 2016).

———. 2024a. 7.5-Minute *Los Angeles, South Gate, Whittier, La Habra, Anaheim* and *Orange*, *California*, Topographic Quadrangles. https://www.usgs.gov/programs/national-geospatial-program/us-topo-maps-america (accessed January 2024).

———. 2024b. *National Hydrography Dataset*. https://www.usgs.gov/national-hydrography/national-hydrography-dataset (accessed January 2024).

Vickers, T. W., J. N. Sanchez, C. K. Johnston, S. A. Morrison, R. Botta, T. Smith, B. S. Cohen, P. R. Huber, H. B. Ernest, and W. M. Boyce. 2015. Survival and Mortality of Pumas (*Puma concolor*) in a Fragmented, Urbanized Landscape. *PLOS ONE* 10(7):e0131490. DOI: 10.1371/journal.pone.0131490.

Western Regional Climate Center (WRCC). 2016a. *Period of Record General Climate Summary.* Los Angeles Downtown, USC Campus (COOP 045115). Period of Record 1877 to 2015. October. www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca5115 (accessed May 2016).

———. 2016b. *Period of Record General Climate Summary.* Los Angeles Downtown, USC Campus (COOP 045115), Pasadena (COOP 046719), Brea Dam (COOP 041057), and Santa Ana Fire Station (COOP 047888). www.wrcc.dri.edu/cgi-bin/cliMAIN.pl? (accessed May 2016).

———. 2024a. *Period of Record General Climate Summary.* Los Angeles Downtown, USC Campus (COOP 045115). Period of Record 1877 to 2016. www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca5115 (accessed January 2024).

———. 2024b. *Period of Record General Climate Summary.* Los Angeles Downtown, USC Campus (COOP 045115), Pasadena (COOP 046719), Brea Dam (COOP 041057), and Santa Ana Fire Station (COOP 047888). www.wrcc.dri.edu/cgi-bin/cliMAIN.pl? (accessed January 2024).

Wiggins, D. 2005. *Loggerhead Shrike (*Lanius ludovicianus*): A Technical Conservation Assessment*. USDA Forest Service, Rocky Mountain Region. www.fs.fed.us/r2/projects/scp/assessments/loggerheadshrike.pdf.

Wilson, D. E., and S. Ruff. 1999. *The Smithsonian Book of North American Mammals*. Smithsonian Institute Press. Washington, D.C.

Yerkes, R. F., T. H. McCulloh, J. E. Schoellhamer, and J. G. Vedder. 1965. *Geology of the Los Angeles Basin California—An Introduction*. http://pubs.usgs.gov/pp/0420a/report.pdf.

Zeller, K. A., T. W. Vickers, H. B. Ernest, and W. M. Boyce. 2017. Multi-level, multi-scale resource selection functions and resistance surfaces for conservation planning. Pumas as a case study. *PLOS One* 12(6):e0179570. https://doi.org/10.1371/journal.pone.0179570.

10.3 Persons and Agencies Consulted

Walton, Natasha. Wildlife Biologist. 2010. ICF Jones & Stokes. Memorandum regarding bat roost surveys for the California High-Speed Train project. August.

11 PREPARER QUALIFICATIONS

Preparer	Qualifications
Shelly Dayman Senior Wildlife Biologist	• BS, Ecology, University of Calgary • 24 years of wildlife biology and ecology experience • Primary author
Lance Woolley Senior Botanist (Former)	• MA, Botany, Humboldt State University • 11 years of experience conducting botanical surveys • Review
Paul Schwartz Senior Botanist/Wetland Ecologist	• BA, Biology, minor in Botany, Idaho State University • 18 years of wetland delineation experience; 18 years of overall wetland and riparian ecology experience • Co-author of Aquatic Resources Delineation Report, field survey lead
John Markham, MPH, PWS Senior Wetland Ecologist/Regulatory Specialist	• MPH, Environmental Health Sciences, UCLA; BA, Biology, Colorado College • 22 years of permitting, policy development, compensatory mitigation, and wetland and nonwetland waters delineation experience • Co-author • Co-author of Aquatic Resources Delineation Report
Kristen Klinefelter Wetland Ecologist	• MS, Applied Environmental Studies, University College Dublin; BA, Biology, University of California, Santa Barbara • 8 years of wetland delineation and overall wetland and riparian ecology experience • Co-author, quality assurance/quality control
Bobby Tuttle Principal (Former)	• MS, Biology, minor in Aquatic Biology, Texas State University • 25+ years of wildlife and aquatic biology experience; 18 years of wetland delineation experience • Senior review
Rebecca Payne Regulatory Specialist	• Master of Environmental Science and Management, University of California, Santa Barbara; BS, Environmental Biology and Management, University of California, Davis • 18 years of experience • Senior review
Lanika Cervantes Senior Wetland Ecologist/ Regulatory Specialist	• MS, Biology, Ecology focus, California State University of San Marcos; BS, Biological Sciences, California State University San Marcos • 12 years of wetland and nonwetland delineation experience • Senior review
William Kohn Senior Wildlife Biologist (Former)	• BS, Zoology, Humboldt State University • 23 years of wildlife survey experience • Senior review

Preparer	Qualifications
Debra Einstein Leight Managing Director, Environmental Planning (Former)	• 24 years' experience • BA, Environmental Analysis and Design, University of California, Irvine • Quality assurance/quality control review
Deborah Roberts, Environmental Project Manager	• 18 years' experience • MS candidate, Regenerative Studies, California State Polytechnic University, Pomona • Quality assurance/quality control review

11.1 Field Surveys

11.1.1 Delineation of Aquatic Resources Survey Personnel and Experience

Personnel	Qualifications
Paul Schwartz Botanist/Wetland Ecologist	• BA, Biology, minor in Botany, Idaho State University • 18 years of wetland delineation experience; 18 years overall wetland and riparian ecology experience • Primary author, field surveys
James Hickman Biologist/Wetlands Ecologist (Former)	• BA, Environmental Studies, California State University, San Bernardino, BA, Geography, California State University, San Bernardino • 16 years of biological surveys; 13 years of wetland delineation experience • Field surveys
Marisa Maggio Biologist (Former)	• BS, Environmental Science, University of California Santa Cruz • MS candidate, Environmental Hydrology, Cal State University Los Angeles • 9 years of biological surveys; 4 years of wetland delineation experience • Field surveys assistant

11.1.2 Wildlife and Botanical Habitat Assessment Personnel and Experience

Personnel	Qualifications
Zackry West Senior Botanist/Wetland Ecologist (Former)	• BA, Environmental Studies, California State University, San Bernardino • 12 years of wetland delineation experience • Field surveys
James Hickman Senior Biologist/Wetlands Ecologist (Former)	• BA, Environmental Studies, California State University, San Bernardino, BA, Geography, California State University, San Bernardino • 16 years of biological surveys; 10 years wetland delineation experience • Field surveys
Shelly Dayman Senior Wildlife Biologist	• BS, Ecology, University of Calgary • 24 years of wildlife biology and ecology experience • Primary author of Biological and Aquatic Resources Technical Report

Personnel	Qualifications
Marty Lewis Biologist	• MS, Biology, California State University, Long Beach; BS, Zoology, California State University, Long Beach • 9 years of experience as a freshwater ecologist and wildlife biologist • Assisted with wildlife habitat assessment
Lance Woolley Senior Botanist (Former)	• MA, Botany, Humboldt State University • 11 years of experience conducting botanical surveys • Field surveys

APPENDIX A: SPECIAL-STATUS SPECIES POTENTIALLY OCCURRING IN THE RESOURCE STUDY AREA

APPENDIX A. SPECIAL-STATUS SPECIES POTENTIALLY OCCURRING IN THE RESOURCE STUDY AREA

Species	Habitat and Distribution	Blooming Period or Animal Activity	Status Designations	Occurrence Probability in Los Angeles to Anaheim Project Section
PLANTS				
Chaparral sand-verbena *Abronia villosa* var. *aurita*	Annual herb found in chaparral and coastal sage scrub habitats in sandy areas. Elevation range 260 to 5,250 feet.	January to September	FED: — CA: — CRPR: 1B.1	**Not Expected.** This species is not expected to occur. The most recent CNDDB observation within the Botanical RSA is from 1935 (CDFW 2024a) and is associated with the Santa Ana River. Suitable habitat (chaparral, coastal sage scrub, desert dunes) for this species is no longer present in the Botanical RSA. The channelization of the Santa Ana River with an altered flood regime and herbicide application has threatened any remaining habitat in the area.
Marsh sandwort *Arenaria paludicola*	Occurs in wetland and freshwater marshes and grows up through dense mats of *Typha* sp., *Juncus* sp., and *Scirpus* sp. Elevation ranges from sea level to 558 feet. Has been documented within the Santa Ana River (1890 record) (CDFW 2024a) with 1900 record in Hollywood quadrangle (CDFW 2024a).	May to August	FED: END CA: END CRPR: 1B.1	**Not Expected.** The only known extant observations in Southern California are in San Luis Obispo (observed in 2014) and Santa Cruz Counties (observed in 2013) (CDFW 2024a). The drainages that support perennial or intermittent hydrology within the Botanical RSA (sparse hardstem and California bulrush marsh in the San Gabriel River and cattail marsh in La Mirada Creek) are too disturbed and lack the intact freshwater marsh habitat necessary to support this species. Previously known locations are now urban with no suitable habitat (CDFW 2024a).
Braunton's milk-vetch *Astragalus brauntonii*	This perennial herb is observed mostly in the few years after fires and rarely after other disturbances. Soils are carbonates or in stiff, gravelly clay soils overlying granite or limestone. Elevation range is 15 to 2,100 feet. Habitats include closed-cone coniferous forests, chaparrals, coastal sage scrubs, and valley and foothill grasslands (CNPS 2024; CDFW 2024a).	January to August	FED: END CA: — CRPR: 1B.1	**Not Expected.** The Botanical RSA lacks natural vegetation communities (coniferous forests, chaparral, coastal sage scrub, and valley/foothill grasslands) that could support this species. The most recent CNDDB observation of this species in the Botanical RSA was in 1930 and is presumed extirpated (CDFW 2024a).
Horn's milk-vetch *Astragalus hornii* var. *hornii*	This annual herb can be found in alkaline soils in lake margins, meadows and seeps, playas, alkali sinks, and wetland-riparian. Elevation range is 200 to 2,800 feet. Species subject to eradication efforts in the early 1900s because it was poisonous to sheep. Threatened by habitat alteration (CNPS 2024).	May to October	FED: — CA: — CRPR: 1B.1	**Not Expected.** The species is not known in Los Angeles County, with the nearest observation in Riverside County. Lake margins, meadows, seeps, and wetland-riparian areas are present within the Botanical RSA, but the Botanical RSA is not within the expected range of this species.
Ventura marsh milk-vetch *Astragalus pycnostachyus* var. *lanosissimus*	This perennial herb can be found in coastal dunes, coastal scrub, and edges of salt and brackish marshes and swampy areas at elevations from sea level to 115 feet.	June to October	FED: END CA: END CRPR: 1B.1	**Not Expected.** This species of milk-vetch relies on intact coastal natural communities that are absent from the Botanical RSA. The sparse hardstem and California bulrush marsh in the San Gabriel River and cattail marsh in La Mirada Creek are too disturbed to support this species. The last known CNDDB observation is from 1882 and is extirpated (CDFW 2024a). There is USFWS final critical habitat for this species. However, the Supplemental RSA does not overlap with critical habitat (USFWS 2023a).
Parish's brittlescale *Atriplex parishii*	Annual herb found in chenopod scrub, playas, meadows and seeps, and vernal pools. Usually on drying alkali flats with fine soils. Elevation range is 80 to 6,200 feet.	June to October	FED: — CA: — CRPR: 1B.1	**Not Expected.** This species is not expected to occur. The sparse hardstem and California bulrush marsh in the San Gabriel River and cattail marsh in La Mirada Creek are too disturbed to support this species. No suitable habitat is present and no recent occurrences (CNDDB observations in the area are from 1881 and 1907; CDFW 2024a) are documented within the Botanical RSA.
Davidson's saltscale *Atriplex serenana* var. *davidsonii*	Annual herb found in coastal bluff scrub and coastal scrub habitats in alkaline soils. Elevation range is 10 to 820 feet.	April to October	FED: — CA: — CRPR: 1B.2	**Not Expected.** This species is not expected to occur. No suitable coastal bluff scrub or coastal sage scrub habitat is present within the Botanical RSA. A CNDDB observation overlaps with the Botanical RSA; however, this observation is from 1902 (CDFW 2024a).
Nevin's barberry *Berberis nevinii*	This evergreen shrub occurs on sandy or gravelly soil in chaparral, cismontane woodland, coastal scrub, and riparian scrub communities at about 975 to 2,700 feet in elevation. Species has been extirpated from many historical locations.	March to June	FED: END CA: END CRPR: 1B.1	**Not Expected.** During the habitat assessment, the natural vegetation communities inhabited by this species, including chaparral, coastal scrub, and riparian scrub, were not observed within the Botanical RSA and the RSA is outside of the elevation range of this species. There is final USFWS critical habitat for this species and this critical habitat does not occur within the Supplemental RSA (USFWS 2023a).
Catalina mariposa lily[1] *Calochortus catalinae*	This perennial bulbiferous herb is found in coastal sage scrub, foothill woodlands, chaparral, and valley grasslands at elevations of 50 to 2,295 feet. Possibly extant in Santa Monica Mountains (Calflora 2024).	(February) March to June	FED: — CA: — CRPR: 4.2	**Not Expected.** The natural vegetation communities (coastal sage scrub, foothill woodlands, chaparral, and valley grasslands) are not present in Botanical RSA. The most recent observation in the Supplemental RSA is from 1974 (CNPS 2024).

Species	Habitat and Distribution	Blooming Period or Animal Activity	Status Designations	Occurrence Probability in Los Angeles to Anaheim Project Section
Plummer's mariposa lily[1] *Calochortus plummerae*	Herb found in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and valley and foothill grassland habitats on granitic/rocky substrates. Elevation range is 330 to 5,600 feet.	May to July	FED: — CA: — CRPR: 4.2	**Not Expected.** Valley and foothill grasslands would have historically been present within rivers and drainages in the Botanical RSA; however, continued disturbance within these drainages prevents establishment of grasslands and removes native soils. Preferred habitat tends to be woodland/scrub.
Intermediate mariposa lily *Calochortus weedii* var. *intermedius*	This perennial species is known to occur in dry chaparral, valley grassland, and coastal sage scrub. It is often on sandstone outcrops in areas at about 590 feet in elevation. Soil affinities include sandy or clay soils.	May to July	FED: — CA: — CRPR: 1B.2	**Not Expected.** Clay and sandy soils would have historically been present within rivers and drainages in the Botanical RSA; however, continued disturbance within these drainages prevents establishment of grasslands and removes native soils. Preferred habitat tends to be chaparral/scrub.
Lucky morning-glory *Calystegia felix*	Annual rhizomatous herb, native to California in the Los Angeles, San Gabriel, and Santa Ana River basins. Habitats include meadows and seeps (sometimes alkaline) alluvial riparian scrub. Historically associated with wetland and marshy places, but drier habitats may also be suitable. Soils may be silty loam or alkaline. Historical collections of the species had been misidentified as *C. sepium* ssp. *binghamiae.* All known extant occurrences are associated with well-watered landscaping on recently completed industrial, commercial, and residential developments. Found at elevations of 100 to 705 feet.	March to September	FED: — CA: — CRPR: 1B.1	**Low.** The species could be present in landscaped areas within the Botanical RSA; however, it is known from limited localities (mainly Chino) and further information is needed on this species. It appears that soil disturbance/lack of native soils does not preclude this species. Based on current information, extant populations are restricted to Chino and would not be expected in the Los Angeles Basin. In general, this species is not expected based on habitat assessments but, should it be observed, the plants would be avoided until CDFW is notified.
Lewis' evening-primrose *Camissoniopsis lewisii*	This annual herb can be found in a variety of coastal plant communities including coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub, and valley and foothill grasslands, at elevations of 0 to 985 feet. Found on sandy or clay soils (CNPS 2024).	March to May (June)	FED: — CA: — CRPR: 3	**Low.** Valley and foothill grasslands may become established within the rivers and drainages in the Botanical RSA, but continued disturbance through maintenance activities prevents establishment and removes native soils. The only area not excluded from the potential for presence of Lewis' evening-primrose is the same parcel that contains potential habitat for southern tarplant (a small parcel north of Coyote Creek at the Los Angeles/Orange County border). A habitat assessment for Lewis' evening-primrose at this parcel is required.
Southern tarplant *Centromadia parryi* ssp. *australis*	Annual herb found in the margins of marshes and swamps, vernally mesic valley and foothill grasslands, and vernal pool habitats. Often in disturbed sites near the coast; also in alkaline soils, sometimes with saltgrass. Elevation ranges from sea level to 1,575 feet (CNPS 2024).	May to November	FED: — CA: — CRPR: 1B.1	**Low.** This species is adapted to disturbance and CNDDB records are within the Botanical RSA. It is presumed extant in many areas with observations as recent as 2015. A historical CNDDB record from 1931 occurred near the intersection of Garfield Ave and Telegraph Rd (in the footprint; CDFW 2024a). It is known upstream from the Rio Hondo and San Gabriel River in Whittier Narrows Recreational Area in highly disturbed areas, sandy flats, partially landscaped, with planted trees and disked flats in annual grassland in sandy soils (2009 and 2010 observations; Calflora 2024). An observation was recorded in Orange Park Acres, along Santiago Creek, in 2003 in disturbed clay soil on stream terrace, 5 miles east of ARTIC (CDFW 2024a). Assessments and surveys in 2016 determined that native soils required for this species had been removed in the San Gabriel River and the Rio Hondo and spreading grounds, so there is no potential for this species to occur within these areas. A small parcel north of Coyote Creek at the Los Angeles/ Orange County border contains potential suitable habitat for this species and a habitat assessment for southern tarplant at this parcel is required.
Salt marsh bird's-beak *Chloropyron maritimum* ssp. *maritimum* or *Cordylanthus maritimus* spp. *maritimus*	This annual herb occurs in coastal areas from San Luis Obispo County to Baja California, Mexico, at elevations ranging from sea level to 100 feet. Occupied plant communities are coastal dune, salt marsh, and coastal swamp.	May to October	FED: END CA: END CRPR: 1B.2	**Not Expected.** No suitable salt marsh habitat is present within the Botanical RSA. No USFWS critical habitat has been designated for this species (USFWS 2023a).
Monkey-flower savory[1] *Clinopodium mimuloides*	This perennial herb is found in chaparral, north coast coniferous forests, in mesic streambank microhabitats at elevations of 1,000 to 5,905 feet (CNPS 2024).	June to October	FED: — CA: — CRPR: 4.2	**Not Expected.** No chaparral or coniferous forest habitat are present within the Botanical RSA, which is not within the elevation range of this species.
Small-flowered morning-glory[1] *Convolvulus simulans*	This annual herb is found in openings in chaparral or coastal scrub, and valley and foothill grasslands. Microhabitats include clay soils, seeps, or serpentinite. Occurs at elevations of 100 to 2,430 feet. Threatened by development and vehicle use and nonnative plants (CNPS 2024).	March to July	FED: — CA: — CRPR: 4.2	**Not Expected.** No chaparral, coastal scrub, or valley and foothill grassland habitats are present in the Botanical RSA. No clay soils, seeps, or serpentinite are present.

Species	Habitat and Distribution	Blooming Period or Animal Activity	Status Designations	Occurrence Probability in Los Angeles to Anaheim Project Section
Peruvian dodder *Cuscuta obtusiflora* var. *glandulosa*	This parasitic annual vine is found in freshwater marshes and swamps at elevations of 50 to 850 feet. It is thought to be bioregionally extirpated, formerly sporadically collected in Los Angeles (1932) and San Bernardino Counties (1890—1898) and Sonoma, Butte, and Merced Counties (1940s) (CNPS 2024). Outside of California known in the eastern and southern United States, West Indies, and Mexico (Mihai 2012).	July to October	FED: — CA: — CRPR: 2B.2	**Not Expected.** Marsh and swamp habitat is not present in the Botanical RSA. There are 12 records of this species in California from the 1890s, 1930s and 1940s, and this species is thought to be extirpated from California and would not be expected to occur.
Paniculate tarplant[1] *Deinandra paniculata*	This annual herb is found in coastal scrub, valley and foothill grasslands, and vernal pool habitats at elevations of 80 to 3,085 feet. It is sometimes found in sandy and usually found in vernally mesic microhabitats (CNPS 2024).	(March) April to November	FED: — CA: — CRPR: 4.2	**Not Expected.** Coastal scrub, valley and foothill grasslands, and vernal pool habitats are not present in the Botanical RSA.
Slender-horned spineflower *Dodecahema leptoceras*	This annual herb is found in chaparral, cismontane woodland, and coastal scrub (alluvial fan sage scrub), often in flood-deposited terraces and washes. Found often with *Encelia, Dalea,* and *Lepidospartum*. Found in sandy soils between 600 and 2,300 feet in elevation (CDFW 2024a).	April to June	FED: END CA: END CRPR: 1B.1	**Not Expected.** Intact suitable habitat (chaparral, cismontane woodland, alluvial fan sage scrub) is not present in the Botanical BSA. An undated CNDDB observation with the exact location unknown was recorded in the vicinity of the plains of the San Gabriel River. The species is likely extirpated because the area has been extensively developed (CDFW 2024a). No USFWS critical habitat has been designated for this species (USFWS 2023a).
Many-stemmed dudleya *Dudleya multicaulis*	Perennial herb found in chaparral, coastal scrub, and valley and foothill grassland habitats in heavy, often clayey soils or grassy slopes. Elevation range is 0 to 2,590 feet.	April to July	FED: — CA: — CRPR: 1B.2	**Not Expected.** Foothill grasslands may become established within the rivers and drainages, but continued disturbance through maintenance activities prevents establishment and removes native soils. This species is most often associated with coastal sage scrub, which is not present within the Botanical RSA.
Santa Ana River woollystar *Eriastrum densifolium ssp. sanctorum*	This perennial herb is known from a single extended but heavily fragmented population in Riverside and San Bernardino Counties; it formerly extended into Orange County. It is an inhabitant of alluvial fan sage scrub in sandy to gravelly soils at elevations of 490 to 2,000 feet.	June to August	FED: END CA: END CRPR: 1B.1	**Not Expected.** The Botanical RSA lacks alluvial fan sage scrub habitat and is too disturbed to support this species.
Los Angeles sunflower *Helianthus nuttalli* ssp. *parishii*	This coastal subspecies is a perennial rhizomatous herb found in coastal salt and freshwater marshes, typically in wetland-riparian vegetation, but occasionally in nonwetlands at elevations of 30 to 5,500 feet. Historically this species occurred in Los Angeles, Orange, and San Bernardino Counties but it is believed to be extinct. Approximately 27 records in California, with the two most recent records in Los Angeles County in 2002 and 2006 in the Newhall Ranch area in the Santa Clarita River floodplain (Calflora 2024).	August to October	FED: — CA: — CRPR: 1A	**Not Expected.** Although sparse freshwater marsh is known in the San Gabriel River, La Mirada Creek, and an unnamed riverine feature (Feature 22), this species is extremely rare in Southern California, with observations in 2002 and 2006 in the Newhall Ranch area in the Santa Clarita River floodplain (Calflora 2024), which is a large floodplain with intact vegetation. A CNDDB observation (record date 1901) was recorded in east Los Angeles, 1,200 feet from the Botanical RSA (CDFW 2024a).
Vernal barley *Hordeum intercedens*	Annual herb found in coastal dunes, coastal scrub, valley and foothill grassland (saline flats and depressions), and vernal pools. Alkali annual grasslands and vernal pools, sometimes alkali scrub and alkali playa in associated with Domino, Willows, and Travers soils.	March to June	FED: — CA: — CRPR: 3.2	**Not Expected.** Suitable habitat within the Botanical RSA would include grasslands on clay and alkali, or silty-clay soils. Although clay and sandy soils were historically present within rivers and drainages in the Botanical RSA, continued disturbance within these drainages removes native soils and prevents establishment of grasslands.
Mesa horkelia *Horkelia cuneata* ssp. *puberula*	Perennial herb found in chaparral, cismontane woodland, and coastal scrub habitats on sandy or gravelly sites. Elevation range is 230 to 2,650 feet.	February to July	FED: — CA: — CRPR: 1B.1	**Not Expected.** The Botanical RSA is developed and lacks chaparral, woodlands, and coastal scrub habitats.
Southern California black walnut[1] *Juglans californica*	This perennial deciduous tree is found in chaparral, cismontane woodland, coastal scrub, and riparian woodland at elevations of 165 to 2,955 feet (CNPS 2024).	March to August	FED: — CA: — CRPR: 4.2	**Not Observed.** Southern California black walnut was not observed during surveys in the Botanical RSA and no chaparral, cismontane woodland, or coastal scrub is present in the Botanical RSA. Sparse riparian woodland is present in the San Gabriel River, but this species was not present and would have been easily observed if present.
Southwestern spiny rush[1] *Juncus acutus* ssp. *leopoldii*	This perennial rhizomatous herb is found in mesic coastal dunes, coastal scrub, coastal salt marshes and swamps, meadows, and seeps (alkaline seeps) at elevations of 10 to 2,955 feet (CNPS 2024).	(March) May to June	FED: — CA: — CRPR: 4.2	**Not Expected.** Coastal dunes, coastal scrub, coastal salt marshes and swamps, alkaline meadows, and seeps are not present in the Botanical RSA.

Species	Habitat and Distribution	Blooming Period or Animal Activity	Status Designations	Occurrence Probability in Los Angeles to Anaheim Project Section
Coulter's goldfields *Lasthenia glabrata* ssp. *coulteri*	Annual herb found in coastal salt marshes, playas, valley and foothill grassland, and vernal pools. Usually found on alkaline soils in playas, sinks, and grasslands. Elevation range is 5 to 4,000 feet.	February to June	FED: — CA: — CRPR: 1B.1	**Not Expected.** There is limited potential for valley and foothill grassland to be present in the Botanical RSA and there is a lack of native soils.
Robinson's pepper grass[1] *Lepidium virginicum* var. *robinsonii*	Annual herb native to California and Baja California found in chaparral and coastal sage scrub habitat. Usually occurs in nonwetlands but occasionally in wetlands.	January to July	FED: — CA: — CRPR: 4.3	**Not Expected.** No coastal sage scrub or chaparral habitat is present in the Botanical RSA.
California box-thorn[1] *Lycium californicum*	This perennial shrub is found in coastal bluff scrub and coastal sage scrub at elevations of 15 to 490 feet (CNPS 2024; Calflora 2024). Collected at Dominguez Gap Wetlands at the Los Angeles River near Del Amo Boulevard in Los Angeles County in 2024 (Calflora 2024). Sage scrub habitat is present at the Dominguez Gap Wetlands at this location.	March to August (December)	FED: — CA: — CRPR: 4.2	**Not Expected.** No coastal bluff scrub or coastal sage scrub is present in the Botanical RSA. The nearest known observation is over 9 miles away.
Mud nama *Nama stenocarpa*	This herb has possibly been extirpated in Los Angeles County. It inhabits marshes and swamps, such as at lake margins and riverbanks, and grows at elevations of 15 to 1,640 feet.	January to July	FED: — CA: — CRPR: 2B.2	**Not Expected.** There is sparse hardstem and California bulrush marsh present in the San Gabriel River and cattail marsh present in La Mirada Creek and an unnamed riverine feature (Feature 22), but this species is thought to be extirpated from Los Angeles County. A lack of native soils was observed in Botanical RSA.
Gambel's water cress *Nasturtium gambelii*	This perennial wetland herb inhabits brackish and freshwater marshes, streambanks, lake margins, and similar swampy areas at elevations of about 10 to 1,080 feet. This species is nearly extinct in the United States and is known in only four occurrences in California.	April to October	FED: END CA: END CRPR: 1B.1	**Not Expected.** The species is not believed to still occur within Los Angeles County. There are currently only five known populations of this species: four within San Luis Obispo County and one in Santa Barbara County (USFWS 2011). There is sparse hardstem and California bulrush marsh present in the San Gabriel River and cattail marsh present in La Mirada Creek and an unnamed riverine feature (Feature 22), but the known locations of this species are not near the Botanical RSA.
Prostrate vernal pool navarretia *Navarretia prostrata*	Annual herb found in floodplains and vernal pool habitats with alkaline soils. Elevations of 50 to 2,300 feet.	April to July	FED: — CA: — CRPR: 1B.2	**Not Expected.** Floodplains associated with rivers are present. A CNDDB observation west of the Botanical RSA from 1895 (extirpated) was likely originally associated with the floodplain processes of the Rio Hondo and spreading grounds. Flood control activities have removed native soils from the San Gabriel River and the Rio Hondo and spreading grounds, so this species is not expected.
Coast woolly-heads *Nemacaulis denudata* var. *denudata*	This annual herb occurs on coastal sandy beaches, grassland communities, and dunes from sea level to approximately 328 feet in elevation.	March to August	FED: — CA: — CRPR: 1B.2	**Not Expected.** The Botanical RSA lacks coastal dunes.
California orcutt grass *Orcuttia californica*	Annual herb found in vernal pools. Elevation range is 50 to 2,165 feet.	April to August	FED: END CA: END CRPR: 1B.1	**Not Expected.** Vernal pools are not known or expected in the Botanical RSA.
Hubby's phacelia[1] *Phacelia hubbyi*	This annual herb is found in chaparral, coastal scrub, and valley and foothill grassland in gravelly, rocky, and talus microhabitats at elevations of 0 to 3,280 feet (CNPS 2024).	April to July	FED: — CA: — CRPR: 4.2	**Not Expected.** Chaparral, coastal sage scrub, and foothill grassland are not present in the Botanical RSA. An observation was recorded in 2008 1.88 miles to northeast in Supplemental RSA in disturbed coastal sage scrub.
South coast branching phacelia *Phacelia ramosissima* var. *austrolitoralis*	This perennial herb is found in chaparral, coastal dunes, coastal scrub, and marshes and swamps at elevations of 15 to 985 feet.	March to August	FED: — CA: — CRPR: 3.2	**Not Expected.** No chaparral, coastal dunes, coastal sage scrub, marshes, or swamps are within Botanical RSA. One observation was recorded from Malvern Ave and Nicholas Ave in Fullerton in 1932 (Calflora 2024).
Brand's star phacelia *Phacelia stellaris*	Annual herb found in coastal sage scrub and beach dunes habitats in open areas. Elevation range is 15 to 4,970 feet.	March to June	FED: — CA: — CRPR: 1B.1	**Not Expected.** No appropriate coastal sage scrub or coastal dune habitat is present in the Botanical RSA.

Species	Habitat and Distribution	Blooming Period or Animal Activity	Status Designations	Occurrence Probability in Los Angeles to Anaheim Project Section
White rabbit-tobacco *Pseudognaphalium leucocephalum*	This perennial herb is found in dry, sandy creek bottoms within chaparral, cismontane woodland, coastal scrub, and riparian woodland habitats, often on sandy or gravelly soils at elevations of 0 to 6,890 feet (CNPS 2024). Observation in 1990 in streambed of Big Tujunga River in San Gabriel Mountains (Calflora 2024). Appears restricted to the sandy margins of washes or with debris cones feeding from steep canyons.	August to November	FED: — CA: — CRPR: 2B.2	**Not Expected.** Dry, sandy creek bottoms are present within the Botanical RSA but lack intact upland habitat and debris cones feeding from steep canyons.
Nuttall's scrub oak *Quercus dumosa*	Perennial evergreen shrub found in sandy, clay loam soils in closed-cone coniferous forests, chaparral, and coastal scrub. Elevation range is 15 to 1,300 feet.	February to April	FED: — CA: — CRPR: 1B.1	**Not Expected.** The Botanical RSA lacks the natural vegetation, coniferous forest, chaparral, and coastal scrub required by this species.
Engelmann oak[1] *Quercus engelmannii*	This perennial deciduous tree is known in chaparral, cismontane woodlands, riparian woodlands, and valley and foothill grasslands at 165 to 4,265 feet in elevation.	March to June	FED: — CA: — CRPR: 4.2	**Not Observed.** If present, this species would have been observed. It is known in the Supplemental RSA in Ernest E. Debs Regional Park (2023 observation) (Calflora 2024) 3.0 miles to the northeast.
Parish's gooseberry *Ribes divaricatum* var. *parishii*	Parish's gooseberry is a deciduous shrub found in riparian woodland habitats within *Salix* sp. swales. This species is found at elevations from 195 to 1,000 feet.	February to April	FED: — CA: — CRPR: 1A	**Not Expected.** This species is thought to be extinct. The observed riparian habitat within the Botanical RSA consists of mule fat communities, but no *Salix* swales.
Coulter's matilija poppy[1] *Romneya coulteri*	This perennial rhizomatous herb is found in chaparral and coastal scrub from 65 to 3,935 feet and is often found in burned areas (CNPS 2024).	March to July (August)	FED: — CA: — CRPR: 4.2	**Not Expected.** There is no chaparral or coastal sage scrub present in the Botanical RSA. Recent records in the Supplemental RSA include a record in 1958 in Griffith Park, a record in 2020 in Fullerton (in the Supplemental RSA 0.9 mile north), and a record in 2024 in Santiago Park 2.1 miles south in the Supplemental RSA (Calflora 2024).
Sanford's arrowhead *Sagittaria sanfordii*	This emergent perennial rhizomatous herb is known from shallow freshwater marshes and swamps at elevations of 0 to 2,135 feet (CNPS 2024).	May to October (November)	FED: — CA: — CRPR: 1B.2	**Not Expected.** There are no shallow freshwater marshes or swamps capable of supporting this species in the Botanical RSA. An observation occurred in 2020 in the basin adjacent to and east of Alamitos Channel and Coyote Creek, 400 meters south of Willow St in Los Alamitos (8 miles southwest of the Botanical RSA). An observation occurred in 2015 in La Verne in a drainage next to a park (20 miles northeast of the Botanical RSA) (Calflora 2024).
Southern mountains skullcap *Scutellaria bolanderi* ssp. *austromontana*	Southern mountains skullcap is found in mesic conditions within cismontane woodland, lower montane coniferous forest, and chaparral at elevations of 1,400 to 6,500 feet.	June to August	FED: — CA: — CRPR: 1B.2	**Not Expected.** No potential habitat is present; the Botanical RSA lacks woodland, coniferous forest, or chaparral habitat and is not within the elevation range of this species.
Salt spring checkerbloom *Sidalcea neomexicana*	Salt spring checkerbloom is a perennial herb found in alkali playas, brackish marshes, chaparral, coastal scrub, lower montane coniferous forest, and Mojavean desert scrub habitats in alkali areas. This species is found at elevations from sea level to 490 feet.	March to June	FED: — CA: — CRPR: 2B.2	**Not Expected.** The Botanical RSA does contain sparse hardstem and California bulrush marsh in the San Gabriel River and cattail marsh in La Mirada Creek and an unnamed riverine feature (Feature 22); however, flood control activities have removed native soils from these areas, so this species is not expected.
Estuary seablite *Suaeda esteroa*	Estuary seablite is a perennial herb that occurs in coastal marshes and swamps at elevations of sea level to 20 feet.	May to October	FED: — CA: — CRPR: 1B.2	**Not Expected.** The Botanical RSA does not contain coastal marsh habitat and the database record for the species is from the vicinity of Seal Beach (CDFW 2024a).
San Bernardino aster *Symphyotrichum defoliatum*	San Bernardino aster is found in cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, and valley and foothill grassland at elevations of 5 to 6,700 feet. This species also occurs near ditches and stream springs.	July to November	FED: — CA: — CRPR: 1B.2	**Not Expected.** This species occurs near ditches and stream springs, so rivers in the Botanical RSA could provide habitat. A CNDDB observation is within the project footprint, but database species records are from 1901, 1932, and 1933 and the species is thought to be extirpated (CDFW 2024a). Presence of this species is unlikely because of the removal of native soils through flood control activities in the drainages.
Greata's aster *Symphyotrichum greatae*	Greata's aster is a rhizomatous herb found in chaparral and cismontane woodland habitats in mesic canyons. This species occurs at elevations from 2,600 to 4,900 feet.	June to October	FED: — CA: — CRPR: 1B.3	**Not Expected.** The Botanical RSA supports no chaparral or cismontane woodland habitats and is not within the elevation range for this species.

Species	Habitat and Distribution	Blooming Period or Animal Activity	Status Designations	Occurrence Probability in Los Angeles to Anaheim Project Section
FISH				
Santa Ana sucker *Catostomus santaanae*	This species inhabits streams that are small and shallow, with currents ranging from swift (in canyons) to slow (in the bottomlands). They are most abundant where the water is cool (less than 72 degrees Fahrenheit), unpolluted, and clear, although they can tolerate and survive in seasonally turbid water. Suitable habitat must contain algae, aquatic emergent vegetation, macroinvertebrates, and riparian vegetation.	Year-round spawning: early April to early July	FED: THR CA: —-	**Not Expected.** Not expected to occur in the Wildlife RSA because of the absence of emergent and riparian vegetation, and because of the regular disturbance of the channel bottom for recharge. The project does not overlap USFWS-designated "essential" habitat or the known current range of this species. The potential reintroduction sites within the draft recovery plan at the Arroyo Seco, to the northeast of Glendale and within the Los Angeles River near I-101 and I-405, are not within the Wildlife RSA. The confluence of the Arroyo Seco and the Los Angeles River is approximately 1 mile north of the Wildlife RSA. USFWS critical habitat has been designated for this species (USFWS 2023a) and the Supplemental RSA does not overlap with critical habitat for the Santa Ana sucker (USFWS 2023a).
Arroyo chub *Gila orcuttii*	This species is adapted to surviving in the warm, fluctuating streams of the Los Angeles Plain and prefers slow-moving or backwater sections of warm to cool streams with substrates of sand or mud where the depth of the stream is typically greater than 15 inches.	Year-round spawning: February to early August	FED: — CA: SSC	**Not Expected.** The Wildlife RSA lacks the necessary intact river system this species requires. No CNDDB records of species occur within the Wildlife RSA (CDFW 2024a). Arroyo chub has been reintroduced upstream in the Arroyo Seco; however, intact habitat for this species is over 10 miles from the Wildlife RSA.
Southern California steelhead *Oncorhynchus mykiss irideus pop. 10*	The Southern California steelhead is an anadromous (ocean-going) form of the species *O. mykiss irideus*. This distinct population segment occurs from the Santa Maria River south to the United States–Mexico border (CDFW 2024a). Land and water development within coastal drainages (major dams and water diversions) lead to the rapid decline of steelhead abundance, leading to extirpation of populations in many watersheds and sporadic and remnant populations in the remainder of watersheds. Many coastal watersheds retained populations of nonanadromous life history forms of the species (commonly known as resident or rainbow trout), often in the upper reaches of watersheds within national forests. Southern California steelhead was federally listed as endangered in 1997. The California Fish and Game Commission received a petition in June 2021 to list the species as endangered under the CESA and as of October 12, 2022; the commission approved CDFW's request for a 6-month extension to complete the status review report, which was published in January 2024 (CDFW 2024d).	Year-round spawning: winter and early spring	FED: END CA: CAN END	**Not Expected.** Essential habitat components include freshwater spawning sites with sufficient water quantity and quality and an adequate substrate (gravel) to support spawning, incubation, and development; freshwater rearing sites to allow development and growth; freshwater migration corridors free of obstruction to allow for juvenile and adult mobility, cover, and shelter; estuarine areas to provide food, shallow water, and shelter; and marine areas to support growth and development. None of these habitat components were observed within the Wildlife RSA. Sufficient water is not present within the watercourses, and adequate substrates and cover are lacking.
AMPHIBIANS				
Foothill yellow-legged frog south coast distinct population segment *Rana boylii pop. 6*	Foothill yellow-legged frogs are rarely found far from permanent water, with adults basking on exposed rock surfaces near streams. Refuge is taken under submerged rocks and sediments if disturbed, under rocks in the stream, or on shore within a few meters of water during periods of inactivity. Egg clusters are attached to gravel or rocks in moving water near stream margins. Tadpoles require water for at least 3 or 4 months. This diurnal species is found in or near rock streams associated with wet meadows, isolated pools, vegetated backwaters, chaparral, oak woodland, riparian sycamore, cottonwood forest, and mixed coniferous forest. Some major threats include climate change; dams, water development, and diversions; disease (chytridiomycosis); predation from invasive species; livestock grazing; and roads and urbanization	Year-round may hibernate in colder areas breeding: mid-March to May	FED: END CA: END	**Not Expected.** This species is not expected to occur. Within Los Angeles County, the south coast DPS occurs almost exclusively in the Angeles National Forest (USFWS 2021b), which is not within the Supplemental RSA, and the DPS does not occur in Orange County. Although foothill yellow-legged frogs had a historical range that extended from Oregon to the San Gabriel River drainage in Los Angeles County, California, this species has been extirpated from this southern portion of the species' range. The current southern extent of the range is Monterey County and it has been completely extirpated south of San Luis Obispo County (CDFW 2017).
Western spadefoot *Spea hammondii*	Usually common where it occurs. Found from near sea level to 4,470 feet. Occurs primarily in grasslands; occasional populations occur in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg laying (CDFW 2024a). Both the northern and southern DPS of the western spadefoot were listed as proposed threatened by USFWS in December 2023 (USFWS 2023b).	January to May	FED: PR THR CA: SSC	**Not Expected.** This species is not expected to occur because no vernal pools were observed in the Aquatic RSA during the jurisdictional delineation and none were observed during observations in the Wildlife RSA. A recent occurrence was documented in 1998, and it was observed again in 2005 3.6 miles northwest of the project in the Whittier quadrangle in grazed nonnative grassland in Turnbull Canyon Open Space (Workman Hill) (CDFW 2024a). This species was observed in 1998 and 2005 in the Puente Hills Landfill 5.1 miles to the northeast of the Wildlife RSA (CDFW 2024a).

Species	Habitat and Distribution	Blooming Period or Animal Activity	Status Designations	Occurrence Probability in Los Angeles to Anaheim Project Section
REPTILES				
Southwestern pond turtle *Actinemys pallida*	Uncommon in suitable aquatic habitat throughout California. Abundant logs, rocks, submerged vegetation, mud, undercut banks, and ledges are necessary habitat components as well as a water depth greater than 5 feet. Found from near sea level to 4,575 feet. Associated with permanent or nearly permanent water in a wide variety of habitat types. Northwestern and southwestern pond turtle were listed as proposed threatened by USFWS (USFWS 2024) in October 2023. Southwestern pond turtle occurs from Central to Southern California and Baja California, Mexico. Western pond turtle is now recognized as two separate species: northwestern pond turtle (*Actinemys marmorata*) and southwestern pond turtle.	Year-round	FED: PR THR CA: SSC	**Not Expected.** Habitat quality in the Wildlife RSA is highly degraded and no permanent or nearly permanent water with abundant rocks, logs, mud, or submerged vegetation is present. CNDDB observations within the Supplemental RSA include two (extirpated) observations from the 1980s in Coyote Creek in Los Alamitos and one observation from 1989 (presumed extant) at the California State University Arboretum 1.9 miles northeast of the Wildlife RSA (CDFW 2024a). Western pond turtles were observed in the Chino Hills in a reptile and amphibian survey of the Puente and Chino Hills (Haas et al. 2002).
California legless lizard *Anniella* spp.	Occurs primarily in areas with sandy or loose loamy soils under the sparse vegetation of beaches, chaparral, pine-oak woodland, sycamores, cottonwoods, or oaks that grow on stream terraces. Often found near logs, rocks, or old boards or in debris of woodrat nests. Inhabits burrows in suitable soils. Feeds on larval insects, adult beetles, termites, and spiders. Areas with rocky soils or disturbed by human uses are not suitable for this species because silvery legless lizards cannot survive in urbanized, agricultural, or other areas where their burrows are removed or altered (CDFW 2024a).	Early spring to July	FED: — CA: SSC	**Not Expected.** Suitable overstory vegetation is absent within the Wildlife RSA. Areas that might contain loose, loamy soils such as the San Gabriel River and the Rio Hondo and spreading grounds are disturbed on a regular basis by flood control activities and this species is too sensitive to these activities to persist with this level of disturbance. Flood control activities would remove burrows, which this species is dependent on, and kill individuals within the work areas. In a reptile and amphibian survey of the Puente and Chino Hills (Haas et al. 2002), no legless lizards were observed. Silvery legless lizard is no longer a species. Per the CDFW Special Animals List (CDFW 2024c), "Where an occurrence of a legless lizard is not known to the species level, the general concept California legless lizard (*Anniella* spp.) will be applied until further evidence is available. All legless lizards in California are a Species of Special Concern."
Southern California legless lizard *Anniella stebbinsi*	Occurs in coastal sand dunes, sandy washes, and alluvial fans (Stebbins 2003). One large remnant population is at the extensive El Segundo Dunes at Los Angeles International Airport. Another disjunct northern population is in sandy soils in the Piute and Tehachapi Mountains in oak woodlands and mixed conifer forest. Requires moist, warm, loose soil with plant cover, with moisture being essential, in beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces.	Year-round, with brief periods of winter inactivity	FED: — CA: SSC	**Not Expected.** This species would be expected in moist, sandy, loamy soils with sufficient leaf cover. Ongoing disturbance (such as flood control activities) would cause high mortality in this species. Areas that might contain loose, loamy soils such as the San Gabriel River and the Rio Hondo and spreading grounds are disturbed on a regular basis by flood control activities. Soils are disturbed on a regular basis and this species is too sensitive to these activities to persist with this level of disturbance. CNDDB observations are from 1908, 1916, 1939, and 1964 (CDFW 2024a).
Coast horned lizard *Phrynosoma blainvillii*	Found in a wide variety of habitats including coastal sage, annual grassland, chaparral, oak woodland, riparian woodland, and coniferous forest. Key habitat elements are loose, fine soils with a high sand fraction; an abundance of native ants or other insects; and open areas with limited overstory for basking and low—but relatively dense—shrubs for refuge.	Year-round	FED: — CA: SSC	**Low.** This species is tolerant to some forms of human disturbance but requires at least some intact natural scrub community, so any areas of the Wildlife RSA with natural scrub communities could support this species. There are historical records of the species 2.8 miles northwest of the Wildlife RSA at the San Gabriel River, in Monterey Park (data date 1974), two observations in Orange (1922 and unknown data date), and two observations in El Monte (1960 and unknown data date) (CDFW 2024a). In a reptile and amphibian survey of the Puente and Chino Hills (Haas et al. 2002), coast horned lizards were observed only along ridgelines in Chino Hills. Because of the lack of recent observations and the disturbance within the Wildlife RSA, it is unlikely for this species to occur within the Wildlife RSA. However, the watercourses within the Wildlife RSA may provide habitat for species to inhabit and dispersal habitat for this species. Therefore, there is a low potential for this species to occur.
Coast patch-nosed snake *Salvadora hexalepis virgultea*	Thought to extend from near Creston, California southward into Baja California. Known elevation range extends from sea level to around 6,988 feet. Association with brushy or shrubby vegetation, such as chaparral. Presumed to take refuge and perhaps overwinter in burrows or woodrat nests.	March to October	FED: — CA: SSC	**Not Expected.** No brushy or shrubby vegetation is known in the Wildlife RSA. An occurrence has been documented approximately 7 miles northeast of the Wildlife RSA in Yorba Linda in 1993 (CDFW 2024a). In a reptile and amphibian survey of the Puente and Chino Hills (Haas et al. 2002), coast patch-nosed snakes were observed only once and within Chino Hills State Park. This species is heavily affected by roads because it is an active forager and is not expected in the highly urbanized environment of the project.
South coast gartersnake *Thamnophis sirtalis* pop. 1	Found in the coastal plain in Southern California from Ventura County to San Diego County from sea level to 2,800 feet. South coast gartersnakes are found in both marsh and upland areas near permanent water with riparian vegetation. Threats include urbanization, flood control projects, floods, extended droughts, and the presence of introduced aquatic predators.	Year-round	FED: — CA: SSC	**Not Expected.** There is no suitable riparian vegetation and no permanent open water in the Wildlife RSA for south coast gartersnake.

Species	Habitat and Distribution	Blooming Period or Animal Activity	Status Designations	Occurrence Probability in Los Angeles to Anaheim Project Section
INVERTEBRATES				
Crotch's bumble bee *Bombus crotchii*	Nearly endemic to California. Historically known from Southern California from the coast and Coastal Ranges through the Central Valley. Also known from southwestern Nevada and Baja California. Species is in decline throughout the Central Valley. Occupies grasslands and shrublands. Requires undisturbed nest sites and overwintering sites. Food sources for this species include the plant genera *Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia,* and *Eriogonum.* Crotch's bumble bees may rely on sufficient availability of rodent and other animal burrows to provide potential nesting sites. Listed as candidate endangered by the California Fish and Game Commission in June 2019, with the candidacy determination challenged in court and temporarily stayed in February 2021 and a reversal of the court judgment and reinstatement of candidacy on September 30, 2022.	February to October	FED: — CA: CAN END	**Not Expected.** The Wildlife RSA is highly urbanized with disturbed soils, with heavy use of herbicides and pesticides. The suitable food sources for this species are found in native vegetation, which is lacking in the Wildlife RSA. CNDDB observations were recorded in 1940, 1942, 1969, and 2017 within the Supplemental RSA (CDFW 2024a). An observation was recorded from 2017 within a planted area with native California species approximately 2.9 miles southwest of the Wildlife RSA.
Monarch butterfly *Danaus plexippus plexippus* pop. 1 California overwintering population	Overwintering groves trees include Monterey pine (*Pinus radiata*), Monterey cypress (*Cupressus macrocarpa*), coast redwood (*Sequoia sempervirens*), coast live oak (*Quercus agrifolia*), Douglas-fir (*Pseudotsuga menziesii*), Torrey pine (*Pinus torreyana*), western sycamore (*Platanus racemosa*), bishop pine (*Pinus radiata*), and others. Monarchs are reliant on milkweeds (*Asclepias* spp.) as host plants for caterpillars and adults require a diverse range of flowers for nectar as fuel during breeding.	Year-round	FED: CAN CA: —	**Not Expected.** Although monarch butterflies are present, overwintering groves are not known or expected within the Wildlife RSA. The nearest overwintering site is at the El Dorado Nature Center (no observations since 2017) approximately 7.0 miles to the southwest of Schabarum County Park, Rowland Heights (no observations since 2007), which is 7.5 miles north of the Wildlife RSA.
Quino checkerspot butterfly *Euphydryas editha quino*	Restricted to Riverside and San Diego Counties in California and Northern Baja, Mexico. Inhabits scrublands such as coastal sage scrub and chaparral with grasslands or open areas (1 to 2 meters square) between patches of woody shrubs that provide high solar exposure. Primary host plant is California plantain (*Plantago erecta*).	February to May	FED: END CA: —	**Not Expected.** Coastal sage scrub and chaparral with grasslands or open areas between patches are not present in the RSA.
BIRDS				
Tricolored Blackbird *Agelaius tricolor*	Nests in dense colonies in marshes and occasionally in moist thickets, agricultural fields, native grasslands, or sewage treatment plants. Can forage well away from breeding colonies in plowed fields, nonnative grasslands, and fallow agricultural fields with dense vegetation.	Year-round	FED: BCC CA: THR, SSC (nesting colony)	**Not Expected.** Suitable nesting habitat for this species does not occur within the Wildlife RSA. Presumed extant CNDDB observations in El Dorado Regional Park/Nature Center (approximately 6.3 miles to the north of the Wildlife RSA) from 1989 through 1999. Nesting at Peter's Canyon Reservoir (east of the city of Orange and 6.5 miles east of the Wildlife RSA) in 1991 with insufficient foraging habitat in 1994, but potentially suitable cattail marsh in 2014 but not observed (CDFW 2024a). Although there is ruderal vegetation, these lots lack the necessary vegetation density/composition for nesting colonies of this species.
Golden Eagle *Aquila chrysaetos*	Prefers partially or completely open areas, usually around mountains, hills, and cliffs. Habitat includes areas primarily with native vegetation including tundra, shrublands, grasslands, forests, farmlands, rivers, and streams. Prey includes primarily jackrabbits, marmots, hares, ground squirrels, and prairie dogs but can include larger bird and mammal prey and carrion. Golden Eagles avoid developed areas. Golden Eagles nest on cliffs and steep escarpments.	Year-round	FED: BGEPA CA: FP (nesting and wintering)	**Not Expected.** Five observations of Golden Eagle were recorded within the Supplemental RSA: 0.8 mile west of the Wildlife RSA at Disneyland in 2023, 0.9 mile to the north of the Wildlife RSA at the San Gabriel Coastal Basin Spreading Grounds in 2023 and 2016, and 1.3 miles north of the Wildlife RSA in Burris Basin (Anaheim Coves Park) adjacent to the Santa Ana River in March 2013 and February 2016 (eBird 2024). Golden Eagles tend to avoid developed areas and the Wildlife RSA is highly developed. This species is closely tied to populations of jackrabbit and there is a low potential for jackrabbits to be present, so a population sufficient to support Golden Eagles is not likely to occur. It is not expected to nest within the Wildlife RSA.

Species	Habitat and Distribution	Blooming Period or Animal Activity	Status Designations	Occurrence Probability in Los Angeles to Anaheim Project Section
Grasshopper Sparrow *Ammodramus savannarum*	Found in open grasslands and prairies with patches of bare ground. Forages on insects, especially grasshoppers. Grasshopper Sparrows are sensitive to habitat fragmentation; because this species prefers large grassland patches and avoids smaller patches, patches must be larger than 20 acres in size and, in some areas, as large as 250 acres.	Nesting	FED: — CA: SSC (nesting)	**Not Expected.** Open grassland habitat of at least 20 acres may be found in areas such as the San Gabriel River or the Rio Hondo and spreading grounds; however, this species is sensitive to disturbance. Both the San Gabriel River and the Rio Hondo spreading grounds may become inundated with water after rainfall events (regular disturbance events) and these areas are subject to flood control activities. Numerous observations were made along the San Gabriel River in spreading grounds, approximately 0.9 mile north of the Wildlife RSA in January, February, and March 2021 (eBird 2024), but these observations are not during the breeding season. One observation of Grasshopper Sparrow occurred in the Supplemental RSA (eBird 2024) in Hillcrest Park in Fullerton, approximately 0.8 mile north of the Wildlife RSA. This observation was noted as this bird being "out of habitat" at this location. A 2011 CNDDB observation was recorded approximately 6.15 miles to the north of the Wildlife RSA, east of State Route 57 within grasslands in Puente Hills (CDFW 2024a).
Long-Eared Owl *Asio otus*	Distributed broadly throughout the Holarctic. Nests in conifer, oak, riparian, pinyon-juniper, and desert woodlands that are either open or are adjacent to grasslands, meadows, or shrublands. Requires a combination of grassland/open areas for foraging and dense, tall shrubs or trees for nesting and roosting. Nests mainly in oak and riparian habitat in Central and Southern California. Prey includes mostly small mammals such as voles, mice, kangaroo rats, shrews, pocket gophers, and young rats and rabbits.	Year-round	FED: BCC CA: SSC (nesting)	**Low:** Woodlands for nests and roosting are rare in the Wildlife RSA; however, some very large ornamental trees are present adjacent to open foraging habitat at the San Gabriel River. Occurrences have been documented in nearby Weir Canyon Regional Park and Black Star Canyon in 1968 and 1974 (CDFW 2024a). No observations of this species were recorded in the Supplemental RSA in eBird (2024). However, Long-Eared Owls are secretive, nocturnal, and well camouflaged. Therefore, a lack of observations may not mean a lack of presence.
Burrowing Owl *Athene cunicularia hypugaea*	Listed as candidate by the California Fish and Game Commission on October 10, 2024 (CDFW 2024e). Found in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Occurs in agricultural areas throughout the Imperial Valley. Subterranean nester dependent on burrowing mammals, most notably California ground squirrel (*Spermophilus beecheyi*).	Year-round	FED: BCC CA: CAN (burrow sites and some wintering sites)	**Moderate.** Suitable open grassland areas are present in the Wildlife RSA. The San Gabriel River and the Rio Hondo and spreading grounds provide long stretches of suitable foraging and nesting/ wintering habitat. These linear features also connect to other suitable habitat including golf courses and grasslands. Fullerton Municipal Airport and larger open fields/disturbed areas may provide foraging and burrowing opportunities. Similar to highly suitable habitat in the Imperial Valley, concrete-lined aquatic features may provide a sufficient prey base through aquatic invertebrates and burrow opportunities at the edges of the concrete areas. Burrowing Owls may nest, overwinter, or migrate through habitat within the San Gabriel River and the Rio Hondo and spreading grounds and concrete-lined aquatic features. The nearest CNDDB record of Burrowing Owl includes an observation in 2010 in Hellman Wilderness Park approximately 3.0 miles north of the Wildlife RSA and approximately 1.5 miles east of the San Gabriel River (CDFW 2024a). Observation from 1921 in Hermon Hills, Los Angeles, presumed extant (CDFW 2024a). Over 10 pairs of Burrowing Owls observed at Department of Defense Naval Weapons Seal Beach in 1977 and reported occupied in 1983, approximately 7.65 miles south of the Wildlife RSA (CDFW 2024a). There are many records in eBird (2024) including a burrow site at Coyote Creek in 2008 (0.45 mile from the Wildlife RSA), and at the San Gabriel Coastal Basin Spreading Grounds (1.0 mile west of the Wildlife RSA on the west side of the San Gabriel River) with observations in January and early February 2012. It is known at the Rio Hondo spreading grounds (eBird 2024), about 0.8 mile northeast of the Wildlife RSA in the Rio Hondo from January, February, and March 2011; February 2012; and March 2014. One observation was recorded at Rio de Los Angeles State Park about 2.75 miles north of the northern end of the Wildlife RSA in February 2011 (eBird 2024).
Swainson's Hawk *Buteo swainsoni*	Summer (breeding) range is within wide-open spaces in western North America. Nests in grasslands but will also use sage flats and agricultural areas mixed with native habitat. Nests are often within trees. Found in the great plains and in grasslands and agricultural areas in the western deserts.	Nesting	FED: — CA: THR (nesting)	**Not Expected.** The open habitat typical for this species for nesting is not present within the Wildlife RSA. It is not expected to nest in the Wildlife RSA. One historical CNDDB observation for this species was recorded in 1888 in Anaheim (CDFW 2024a) within the Supplemental RSA. A nesting pair at Seal Beach in 2019, approximately 11.0 miles southwest of the Wildlife RSA, is the first known nest in Orange County since 1888 (CDFW 2024a). An observation of a juvenile was recorded in Burris Basin in 2012 (eBird 2024). However, wide-open native grasslands or agricultural areas for nesting are not present within the Supplemental RSA.

Species	Habitat and Distribution	Blooming Period or Animal Activity	Status Designations	Occurrence Probability in Los Angeles to Anaheim Project Section
Coastal Cactus Wren *Campylorhynchus brunneicapillus sandiegensis*	Species occurs in arid shrublands of Southern California: coastal sage scrub, desert succulent shrub, Joshua tree, and desert washes that support dense stands of cactus.	Year-round	FED: BCC CA: SSC (San Diego and Orange Counties only)	**Not Expected.** The Wildlife RSA lacks the cactus habitat necessary for this species. CNDDB records exist within the Supplemental RSA 2.4 miles to the north of the Wildlife RSA in 1998 in La Habra and 2.09 miles north in 2001 and 2002 in the Coyote Hills, both associated with dense cactus stands (CDFW 2024a). Other CNDDB observations occurred 5.5 miles east of the Wildlife RSA in 2000, 5.9 miles east of the Wildlife RSA in 2001, 7.0 miles northeast of the Wildlife RSA in 1994 and 2001, and 7.8 miles southeast of the Wildlife RSA in 1992 (CDFW 2024a). eBird observations, including breeding, were recorded at Ralph B. Clark Park 1.2 mile north in 2002, 2009, 2010, 2013, 2015, 2018, 2020, 2021, 2022, 2023, and 2024 (eBird 2024); and the San Gabriel River (Whittier Blvd) in 2006 (eBird 2024).
Western Snowy Plover *Charadrius nivosus nivosus*	The Pacific coast population of Western Snowy Plovers breeds on coastal beaches, sand spits, dune-backed beaches, beaches at creek and river mouths, and salt pans at lagoons and estuaries and less commonly at bluff-backed beaches, dredged material disposal sites, salt pond levees, dry salt ponds, and river bars. Western Snowy Plovers typically forage on terrestrial and aquatic invertebrates in wet or dry beach-sand.	Nesting	FED: THR (Pacific coastal) CA: SSC (coastal and interior populations, nesting)	**Not Expected.** No beaches or similar habitat are present in the Wildlife RSA. This species forages in sandy areas (whether coastal or interior population) and no sandy areas are present in the Wildlife RSA for either the coastal (federally listed as threatened) or interior (California SSC) population. There is an eBird observation of this species 1.9 miles north of the Wildlife RSA in the San Gabriel River (2016) (eBird 2024).
Mountain Plover *Charadrius montanus*	Prefers dry habitat with short-grass prairie and bare ground. Breeds in the open plains at moderate elevations and winters in short-grass plains and fields, plowed fields, and sandy deserts.	Wintering	FED: BCC CA: SSC (wintering)	**Low (wintering).** Bare ground and short-grass areas present within the Wildlife RSA associated with the San Gabriel River and the Rio Hondo and spreading grounds; however, habitat quality here is low (rather than moderate) because of disturbance. The Wildlife RSA is not within the breeding range of this species. No eBird (2024) or CNDDB (CDFW 2024a) records for this species occur in the Supplemental RSA.
Black Tern *Chlidonias niger*	Breeds in freshwater marshes, either in floating material in the marsh or on the ground close to the water. Prefers large, shallow marshes with abundant vegetation adjacent to open water. Cattails, bulrushes, burweed, or phragmites commonly present in nesting areas.	Nesting	FED: BCC CA: SSC (nesting colony)	**Not Expected.** No areas in the Wildlife RSA contain abundant marsh vegetation adjacent to open water. One observation of Black Tern occurs within the Supplemental RSA, 1.3 miles north of the Wildlife RSA in Burris Basin (Anaheim Coves Park) adjacent to the Santa Ana River (eBird 2024).
Western Yellow-Billed Cuckoo *Coccyzus americanus occidentalis*	This breeding migrant occurs in mature riparian forest along the broad, lower flood bottoms of larger river systems. Nests in riparian forests of willow (*Salix* spp.), often mixed with cottonwoods (*Populus fremontii*), with a lower story of blackberry (*Rubus* spp.), nettles (*Dioica* spp.), or wild grape (*Vitis californica*).	Nesting	FED: THR CA: END (nesting)	**Not Expected.** This species would not occur in the Wildlife RSA because of the absence of extensive riparian forests. There are no recent CNDDB occurrences documented within the Wildlife RSA or the Supplemental RSA, but two historical records exist: one from 1918 from Tustin in the vicinity of the Santa Ana River and another (no date) in Anaheim (CDFW 2024a). There is one observation of Western Yellow-Billed Cuckoo (eBird 2024) in Ernest E. Debs Regional Park from 2012. This observation is 3.2 miles northeast of northern end of the Wildlife RSA. Although this observation is unexpected because of the lack of mature riparian forest, the Arroyo Seco River does provide a riparian pathway to the park.
Olive-Sided Flycatcher *Contopus cooperi*	Found in boreal and western coniferous forests, at forest edge openings, such as meadows and ponds. Winters in South America and Mexico/Central America and migrates through Central America and Mexico to breeding range in coniferous forests of California and the western United States (with some breeding in the eastern United States) and Canada.	Nesting	FED: BCC CA: SSC (nesting)	**Not Expected.** Olive-Sided Flycatchers are not expected to nest within the Wildlife RSA but are expected to migrate through the Los Angeles Basin in spring and fall. Observations (expected to be migrants) were recorded in Fisher Park in May 2023; the upper Santa Ana River in September 2011; Disneyland in May 2021; Fairhaven Memorial Park in May 2020; Satellite Park in May and September 2023; Fullerton Arboretum in May 2010; La Mirada Park in May 2016; La Mirada Creek Park in May 2011, 2012, and 2016 and September 2012 and 2013; Salt Lake Park in April 2014; Hawkins Nature Park in 2013, 2015, 2017, 2018, and 2019; Hazard Park in Boyle Heights in April 2013; San Gabriel Spreading Grounds in May 2021; Elysian Park at Angel's Point in May 2014; Elysian Park in September 2011; Craig Regional Park in 2018; and Silver Lake Reservoir in May 2010 and 2011 (eBird 2024).

Species	Habitat and Distribution	Blooming Period or Animal Activity	Status Designations	Occurrence Probability in Los Angeles to Anaheim Project Section
Yellow Rail *Coturnicops noveboracensis*	Found in freshwater marshlands as a summer resident in the eastern Sierra Nevada in Mono County (CDFW 2024a).	Year-round	FED: BCC CA: SSC	**Not Expected.** Yellow Rails are known in the eastern Sierra Nevada and the Wildlife RSA is not within the range of this species. A CNDDB observation at Los Angeles City College in 1952 (CDFW 2024a) was recorded as "badly emaciated" like other specimens collected in urban areas in Southern California.
White-Tailed Kite *Elanus leucurus*	Raptor found in open grasslands, woodlands, marshes, desert grasslands, partially cleared lands, cultivated fields, scattered oaks, river bottoms, marshes next to deciduous woodlands, and savannas (CDFW 2024a). Forages mainly on small mammals (voles). This species nests in open-country dense-topped trees that are growing in isolation.	Nesting	FED: — CA: FP (nesting)	**Moderate.** Requires open habitat for foraging and trees growing in isolation for nesting. Both foraging and nesting habitat are present in the Wildlife RSA. Over 20 observations of White-Tailed Kites were recorded in the Supplemental RSA in eBird (2024) including at the San Gabriel Coastal Basin Spreading Grounds, Orange (unspecified location), Whittier Narrows/Rio Hondo Dam, Los Angeles (unspecified location), Sepulveda Wildlife Basin, Walt Disney Concert Hall, and Taylor Yard Park (eBird 2024). CNDDB observations include observations in 2008 and 2009 approximately 5.7 miles northeast of the Wildlife RSA and 6.44 miles east of the Wildlife RSA and in 2009 at approximately 6.4 miles and 7.3 miles east of the Wildlife RSA (CDFW 2024a).
Willow Flycatcher *Empidonax traillii*	Willow Flycatchers breed in dense riparian vegetation (over 9 feet tall) along rivers, streams, or other wetlands, including lakes/reservoirs.	Nesting	FED: CA: END	**Not Expected.** This species is not expected to occur within the Wildlife RSA because of the absence of dense riparian forests for breeding and the lack of forest and shrub habitats that would be necessary for migrants/transients. A review of eBird (2024) observations for Willow Flycatchers revealed no observations in the Wildlife RSA. In the Supplemental RSA, observations occurred at Burris Basin in September 2022 (1.5 mile north of the Wildlife RSA), Haster Basin in May 2019 (2.0 miles south of the Wildlife RSA), La Mirada Park in November 2010 and 2022 and May 2023 (about 1.0 mile north of Wildlife RSA); La Mirada Creek Park in May 2011 and 2016; Biola University in May 2012; Bell Gardens Veterans Park (about 0.5 mile south of the Wildlife RSA from the Rio Hondo spreading grounds) in May 2013; the San Gabriel River in September 2005, 2010, and 2011 (between 1.4 and 2.0 miles from the Wildlife RSA); Huntington Park (1.0 mile south of the Wildlife RSA) in 2017; Hawkins Nature Park (1.0 mile southwest of the Wildlife RSA) in September 2018; West Whittier (1.0 mile north of the Wildlife RSA) in 2018; 1.9 mile northeast in Whitter in 2018; a vegetated portion of the Los Angeles River about 2.7 miles north of the Wildlife RSA in September 1994; Ascot Hills Park (2.0 miles northeast of the Wildlife RSA) in 2018; Maywood Riverfront Park (0.75 mile south of the Wildlife RSA) in 2018; 1.9 miles east at Esperanza Elementary School in May 2018; and Silver Lake Reservoir in May 2015 about 3.5 miles north of the Wildlife RSA. No Willow Flycatchers were reported in the eBird (2024) dataset within the Supplemental RSA between June 15 and July 20 when Willow Flycatchers could be nesting.
Southwestern Willow Flycatcher *Empidonax traillii extimus*	Southwestern Willow Flycatchers breed in dense riparian vegetation (over 9 feet tall) along rivers, streams, or other wetlands, including lakes/reservoirs. Within this riparian habitat, dense twig structure and high levels of live green foliage are present. In almost all cases, slow-moving or still surface water or saturated soil is present at or near breeding sites during wet or nondrought years. Commonly associated with willows, cottonwoods, mulefat, boxelder, blackberry, arrowweed, ash, Russian olive, and white alder. Presence of water through a substantial portion of the breeding season is important to support the necessary insect load. During migration, flycatchers use a wider variety of forest and shrub habitats than during breeding but still prefer riparian habitats. Southwestern Willow Flycatchers typically arrive on breeding grounds between early May and late June. Southbound migrants may pass through breeding areas in late July and August. There is only a short period of the breeding season (approximately June 15 through July 20) where a Willow Flycatcher seen within the range of Southwestern Willow Flycatcher is likely that of the subspecies.	Nesting	FED: END CA: END	**Not Expected.** This species is not expected to occur within the Wildlife RSA because of the absence of dense riparian forests for breeding and the lack of forest and shrub habitats that would be necessary for migrants/transients. CNDDB records for Southwestern Willow Flycatchers include two historical observations: a 1894 observation in Los Angeles and a 1906 observation in Pasadena in Arroyo Seco approximately 4.1 miles northeast of the Wildlife RSA (CDFW 2024a). A review of eBird (2024) observations for Southwestern Willow Flycatcher revealed no observations in the Wildlife RSA or the Supplemental RSA.

Species	Habitat and Distribution	Blooming Period or Animal Activity	Status Designations	Occurrence Probability in Los Angeles to Anaheim Project Section
Bald Eagle *Haliaeetus leucocephalus*	Occurs primarily at or near seacoasts, rivers, swamps, and large lakes (large bodies of open water with an abundant supply of fish). Requires suitable perching structures consisting of large trees or snags with heavy limbs. Old growth and mature stands of coniferous and hardwood trees are needed for perching, roosting, and nesting, and these large trees surrounding the body of water are an essential component of suitable habitat. Bald Eagles are sensitive to human disturbance while nesting and nests are at least 0.75 mile from low-density human disturbance and over 1 mile from medium- to high-density human disturbance. Wintering Bald Eagles may be found closer to human disturbance and may spend more time in upland habitats, sometimes quite far away from large waterbodies. Bald Eagles subsist on fish, but also consume birds (often water birds), mammals, and other prey.	Year-round	FED: Delisted, BGEPA CA: END, FP (nesting and wintering)	**Low:** Wintering Bald Eagles may forage for birds (mainly water birds) or mammals in the Wildlife RSA. There are water birds associated with the Santa Ana River and the Los Angeles River. Bald Eagles are not expected to nest in the Wildlife RSA. No CNDDB observations are recorded in the Supplemental RSA (CDFW 2024a). Observations from eBird (2024) in the Supplemental RSA include numerous observations in the Santa Ana River, including Anaheim Coves Park up to February 2024 (1.3 miles north of the Wildlife RSA); the Upper Santa Ana River at Lincoln Ave (2.3 miles north of the Wildlife RSA); at George Key Ranch Historic Park (2.6 miles north of the Wildlife RSA); Panorama Nature Preserve (associated with Fullerton Creek), 2.2 miles north of the Wildlife RSA; the Rio Hondo and spreading grounds (2023); and Pico Rivera (between the Rio Hondo and the San Gabriel River) (0.5 mile north of the Wildlife RSA).
Yellow-Breasted Chat *Icteria virens*	Summer resident with most of the population wintering from Mexico to western Panama. Found in low, dense shrubs in abandoned farm fields, clear cuts, power line corridors, fencerows, forest edges and openings, swamps, and edges of streams and ponds. Often inhabits riparian thickets of willow (*Salix* sp.) and other brushy tangles such as blackberry bushes near watercourses. Nests in low, dense vegetation in shrubs or tangled vines (such as raspberry, blackberry, grapevine, dogwood, hawthorn, cedar, honeysuckle, and sumac). Forages on spiders and insects but may also consume fruits and berries. This species is very cryptic unless males are singing.	Nesting	FED: — CA: SSC (nesting)	**Not Expected.** This species has a low potential to occur within the Wildlife RSA because of the sparseness of existing degraded riparian habitat and lack of suitable scrub habitat; however, this species would not be expected to be nesting and would only be expected to be transient. If present, it may be found in willow or other dense brush or in riparian areas such as in the San Gabriel River or the Rio Hondo and spreading grounds. There was one CNDDB observation in Coyote Hills East (La Habra) approximately 2.1 miles east of the Wildlife RSA in 2001, 5.4 miles east of the Wildlife RSA in 2008, and 11 miles northeast of the Wildlife RSA in 2017 (CDFW 2024a). Observations (eBird 2024) in the Supplemental RSA including nesting in in Burris Basin (Santa Ana River) 1.5 miles north of the Wildlife RSA in June 2023; in Ralph B. Clark Regional Park (1.3 miles northeast of the Wildlife RSA in East Whittier); in the San Gabriel River (1.4 miles north of the Wildlife RSA) (2014, 2020); in La Mirada Creek Park (2.3 miles northeast of the Wildlife RSA in East Whittier in 2009 and 2012); at Whittier Narrows Dam (2.4 miles north of the Wildlife RSA in 2014, 2015, 2017, 2019, and 2020); and at the Los Angeles River (vegetated area) 2.7 miles north of the Wildlife RSA (2010, 2021, 2022).
Least Bittern *Ixobrychus exilis*	Marsh habitat, freshwater or brackish, with tall emergent vegetation. Nests in tall marsh growth.	Nesting	FED: — CA: SSC (nesting)	**Not Expected.** Marsh habitat present within the Wildlife RSA is sparse, and this species requires tall emergent vegetation for nesting. Observations in the Supplemental RSA (eBird 2024) include within the San Gabriel River (1.4 miles north of the Wildlife RSA in 2021) and in a vegetated portion of the Los Angeles River (Elysian Valley), about 2.3 miles north of the Wildlife RSA. Only nesting Least Bitterns are considered Species of Special Concern.
Loggerhead Shrike *Lanius ludovicianus*	Loggerhead Shrikes prefer open pastures and prairies with scattered bushes, hedgerows, mowed roadsides, golf courses, riparian areas, open woodland, agricultural fields, desert washes, desert scrub, grassland, broken chaparral, and beaches with scattered shrubs. Breeding pairs may be found near isolated trees or large shrubs. Nesting occurs in branches up to 14.8 feet above the ground. Loggerhead Shrikes are partial migrants, with some individuals overwintering in breeding grounds. Breeding occurs as early as January in California and continues through July. Preys on insects, birds, lizards, and small mammals, often by skewering prey on thorns or barbed wire.	Nesting	FED: — CA: SSC (nesting)	**Moderate.** Open habitat with scattered bushes is present associated with the San Gabriel River and the Rio Hondo and spreading grounds; other disturbed habitat with open areas and shrubs is present that could support this species if adjacent areas provide enough foraging habitat. Observations in the Supplemental RSA (eBird 2024) include within the Santa Ana River (1.5 miles north of the Wildlife RSA); Ralph B. Clark Regional Park: the San Gabriel River; La Mirada Creek Park; the Los Angeles River (0.35 mile northwest of the Wildlife RSA, south of Atlantic Blvd; the Los Angeles River 2.7 miles north of the Wildlife RSA; and Los Angeles State Historic Park (0.6 mile north of the Wildlife RSA).
California Black Rail *Laterallus jamaicensis coturniculus*	This species is found in areas with water depths of about 1 inch that remain stable throughout the year. Dense vegetation is required for nesting. Habitats include freshwater marshes, wet meadows, and shallow margins of saltwater marshes surrounding bays (CDFW 2024a).	Year-round	FED: — CA: THR, FP	**Not Expected.** There are no freshwater marshes of sufficient size with the required inundation to support this species within the Wildlife RSA. An observation in 1986 in the vicinity of the Santa Ana River and Santiago Creek (approximately 2.5 miles southwest of the Wildlife RSA), is not likely a part of a breeding population (CDFW 2024a). No eBird observations were recorded within the Supplemental RSA (eBird 2024).

Species	Habitat and Distribution	Blooming Period or Animal Activity	Status Designations	Occurrence Probability in Los Angeles to Anaheim Project Section
Lucy's Warbler *Oreothlypis luciae*	Lucy's Warbler breeds in riparian mesquite, willows, and cottonwoods in riparian woodlands, often in dense aggregations. This species breeds mostly in cottonwood-mesquite woods near desert streams or in open groves of mesquite along dry washes in the Sonoran Desert. Lucy's Warblers are also found in sycamore and oak groves near streams in lower parts of canyons close to arid lowlands. This species nests in cavities or abandoned verdin nests and forages for insects at the tops of mesquite trees and at the ends of branches.	Nesting	FED: — CA: SSC (nesting)	**Not Expected.** Lucy's Warblers are not expected to nest in the Wildlife RSA, because no cottonwood or cottonwood-mesquite woodlands are present. Lucy's Warblers were observed in the Supplemental RSA (eBird 2024) associated with the Upper Santa Ana River (2022, 3.0 miles north), Bell Gardens Veterans Park (1.4 miles south of the Wildlife RSA); in oaks in Elysian Park; La Mirada Creek (1.0 mile north; 2020, 2023), and in a vegetated area of the Los Angeles River approximately 2.7 miles north of the Wildlife RSA.
Belding's Savannah Sparrow *Passerculus sandwichensis beldingi*	This species is an obligate resident of coastal salt marshes dominated by pickleweed (*Salicornia* sp.).	Year-round	FED: BCC CA: END	**Not Expected.** The species is restricted to coastal salt marshes; the Wildlife RSA occurs outside the range of the species. There are no CNDDB records from the Supplemental RSA (CDFW 2024a) but one observation approximately 10.9 miles south of the Wildlife RSA in 2008 at Los Cerritos Marsh. No observations (eBird 2024) of Belding's Savannah Sparrow occur within the Supplemental RSA.
Summer Tanager *Piranga rubra*	Summer Tanagers are uncommon breeders in California that winter in the tropics. Found in woodlands and groves (especially oaks, hickory, or pine), and in the southwest breeds in cottonwood-willow riparian habitat along watercourses. This species nests in trees, often in an oak, pine, or cottonwood. This species' diet is insects with some berries.	Nesting	FED: — CA: SSC (nesting)	**Not Expected.** Summer Tanagers are not expected to nest in the Wildlife RSA, because no woodlands or oak groves are present. Observations in the Supplemental RSA (eBird 2024) include Elysian Park; Santiago Creek (south of the Santa Ana River); Fairhaven Memorial Park; La Mirada Creek Park (2.3 miles northeast of the Wildlife RSA) in riparian habitat; and the San Gabriel River, about 3.0 miles to the north of the Wildlife RSA.
Coastal California Gnatcatcher *Polioptila californica californica*	Coastal California Gnatcatcher is a local, uncommon resident of coastal sage scrub, but will also use chaparral, grassland, and riparian habitats where they occur adjacent to or intermixed with sage scrub. This species is found from southern Ventura County south to Los Angeles, Orange, Riverside, San Bernardino, and San Diego Counties, California, and into Baja California, Mexico. This species is found along the immediate coast at Palos Verdes Peninsula, Los Angeles County; and may still occur along the lower, coastal slopes of the San Gabriel and San Bernardino Mountains.	Year-round	FED: THR CA: SSC	**Not Expected.** Coastal sage scrub habitat is absent from the Wildlife RSA. There are documented occurrences in the Supplemental RSA in 2019 in La Habra 2.1 miles to the north (West Coyote Hills), 2020 with 12 pairs and 29 juveniles in Coyote Hills Golf Course (2.0 miles to north) monitored since 1991, in 1998 in West Coyote Hills (La Habra, Fullerton), in 2005 in Montebello Hills (Montebello), in 2005 in Sycamore Canyon (Whittier), and in 2006 at the Coyote Hills Golf Course in Fullerton (CDFW 2024a). Observations from eBird (2024) include observations within mapped gnatcatcher critical habitat (Castlewood Trail in Coyote Hills) 1.7 miles northeast of the Wildlife RSA; sage scrub habitat north of critical habitat in Panorama Nature Preserve; Anaheim Coves Park (Burris Park) 1.3 miles north of the Wildlife RSA (2012); Ralph B. Clark Regional Park (1.2 miles northeast of the Wildlife RSA); the Rio Hondo (0.8 mile northeast of the Wildlife RSA); Pico Rivera; Whittier Narrows Dam (2.4 miles northeast of the Wildlife RSA); and the San Gabriel River (2.0 miles north of the Wildlife RSA).
Vermilion Flycatcher *Pyrocephalus rubinus*	Vermillion Flycatcher is an uncommon breeder in a small area of Southern California and an uncommon winter migrant in southeastern California. This species is found in arid habitats, frequently near water, with short trees along streams, and the edges of ponds. In the winter, strays may be found in open clearings or brushy areas near water.	Nesting	FED: — CA: SSC (nesting)	**Not Expected.** Breeding of this species has been observed within the Supplemental RSA. Habitat with water for breeding for Vermillion Flycatcher is not present within the Wildlife RSA, so this species is not expected. An observation in the Supplemental RSA (eBird 2024) occurred 1.4 miles north of the Wildlife RSA in Anaheim Coves Park (Burris Basin) during a period of heavy Santa Ana winds (October 2009, February and March 2013); there are numerous observations in 2017 and 2018, 2021, 2022, 2023, and 2024 with breeding observed in La Mirada Park, 0.8 mile north of the Wildlife RSA. It was observed at Disneyland in February 2013 and in fall/winter 1.9 mile west at Esperanza Elementary School in December 2017.
Light-Footed Ridgway's Rail *Rallus obsoletus levipes*	Light-Footed Ridgway's Rail is an obligate resident of coastal salt marshes dominated by cordgrass (*Spartina* sp.). This species nests in dense cordgrass, wracks, and hummocks within high-low marsh zones.	Year-round	FED: END CA: END, FP	**Not Expected.** This species is restricted to coastal salt marshes; the Wildlife RSA does not occur within the coastal zone and does not contain coastal salt marshes, and is therefore outside of the range of this species. There are no observations (eBird 2024) of Light-Footed Ridgway's Rail within the Supplemental RSA.

Species	Habitat and Distribution	Blooming Period or Animal Activity	Status Designations	Occurrence Probability in Los Angeles to Anaheim Project Section
Bank Swallow *Riparia riparia*	Nests in colonies in streamside banks across North America. Colonies can range from 10 to 2,000 nests. Builds nests in vertical colonies, usually in loose soils where the birds can burrow, by tunneling into sandbanks, near large bodies of water. Found in low areas along rivers, streams, ocean coasts, or reservoirs. Sometimes found in human-made sites such as sand and gravel quarries and road cuts. Insectivorous. This was once a common bird but is in steep decline. The removal of banks through erosion control, flood control, and road projects removes the banks or makes them less steep and less unsuitable for Bank Swallows.	Nesting	FED: — CA: THR (nesting)	**Not Expected.** Although there are CNDDB observations within the project footprint, these are historical from the 1890s (CDFW 2024a). Bank Swallows would be migratory here and the summer (breeding) range for this species only includes a small portion of northeastern California. This species requires steep dirt slopes for nesting and these are not present in the Wildlife RSA. There are recent observations of Bank Swallows in the eBird data (2024) within the Supplemental RSA, including within the Ralph B. Clark Regional Park (2022), the upper Santa Ana River (2021), La Mirada Community Regional Park (2007), San Gabriel Coastal Basin Spreading Grounds (2022), and Rio Hondo spreading grounds (2021). Although there are now numerous observations of this species, these occur outside the breeding period (generally September through February) and this species likely flies north to breed.
Black Skimmer *Rynchops niger*	Strictly coastal in most areas of North America. Skims water for fish and small crustaceans. Breeds in colonies, and nests are shallow scrapes in sand on open sandy beaches, shell banks, and sand bars.	Nesting	FED: BCC CA: SSC (nesting colony)	**Not Expected.** Coastal habitat is not present within the Wildlife RSA; some open water occurs within the Wildlife RSA, but suitable nesting habitat (sandy areas) is not associated with these open water areas. Observations within the Supplemental RSA (eBird 2024) include an inland nesting colony at Anaheim Coves Park/Burris Basin 1.3 miles north of the Wildlife RSA (nesting recorded in 2013, 2019, 2020, 2021, 2022, 2023), in the Santa Ana River; observed foraging 1.7 miles southwest of the Wildlife RSA in Haster Basin Recreation Area (eBird 2024); and 2.1 miles north of the Wildlife RSA in the Santa Ana River, which is similar to Least Tern, but these observations are very rare. This species is therefore not expected.
Yellow Warbler *Setophaga petechia*	Inhabits riparian vegetation close to water along streams and wet meadows, but favors second growth and edges, so not as vulnerable to habitat loss as some warblers. In the west, breeds in streamside thickets. Found in bushes, swamp edges, streams, and gardens. Common trees include willows, alders, and cottonwoods.	Nesting	FED: — CA: SSC (nesting)	**Moderate.** Riparian vegetation and bushes sufficient to support this species were observed within the Wildlife RSA and noted in the San Gabriel River. Willows and ornamental trees provide “edge” habitat for this species at the Rio Hondo spreading grounds. Ornamental landscaping associated with developed areas, especially city parks, throughout the Wildlife RSA provide habitat for Yellow Warblers. Observed within the Wildlife RSA (eBird 2024) at the Los Angeles River and E Olympic Blvd, in the San Gabriel River (2016), at Neff Park (2023), in Fullerton (2014, 2015, 2018, 2019, 2020, 2021, 2023), and in Anaheim (2010) with an additional over 400 observations in the Supplemental RSA. Observations associated with parks include Twin Lakes Recreational Park, Hiltscher Park, Ralph B. Clark Regional Park, Fullerton Community Gardens, Henry Boissenranc Park, La Mirada Creek Park, Bell Gardens Park, City Terrace Park, Augustus Hawkins Nature Park, Hazard Park, Lincoln Park, Grand Park, Vista Hermosa Park, Buena Vista Meadows, Rose Hill Park/Ernest E. Debs Regional Park, and Rio de Los Angeles State Park; drainages (La Mirada Creek, San Gabriel River, Santiago Creek, Santa Ana River, Fullerton Creek, Rio Hondo and spreading grounds, Los Angeles River); and reservoirs/lakes (Echo Lake and Ivanhoe Reservoir).

Species	Habitat and Distribution	Blooming Period or Animal Activity	Status Designations	Occurrence Probability in Los Angeles to Anaheim Project Section
California Least Tern *Sternula antillarum browni*	Breeding visitor that nests colonially along the immediate coast of Southern California and can forage for fish upstream of coastal rivers. Nests on open sandy beaches, sandbars, unvegetated islands, and deposited materials along the coasts of oceans, bays, inland rivers, large lakes, and reservoirs. Least terns usually choose nest sites in open expanses of light-colored sand, dirt, or dried mud close to a lagoon or estuary with a dependable food supply (USFWS 1985). Fledglings accompanied by adults are often observed at freshwater, shallow water, and estuarine marshes prior to migrating south. California Least Terns have not been observed eating anything but fish (USFWS 1985).	Nesting (April to August)	FED: END (nesting colony) CA: END, FP (nesting colony)	**Low.** No potential nesting habitat was observed within the Wildlife RSA (no open sandy areas such as sandbars, unvegetated islands, or deposited materials along inland rivers adjacent to a lagoon, estuary, or similar). The nearest coastal nesting colony is at the Port of Los Angeles. According to eBird (2024) and CNDDB (CDFW 2024a), observations were recorded in Anaheim Coves Park/Burris Basin 1.7 miles north of the Wildlife RSA (CNDDB nesting observed in 2004, 2008, 2011, 2012, 2013, 2014, 2015, 2016, 2018; and nesting was recorded in 2013, 2018, 2019, 2020, 2021, 2022, and 2023) (eBird 2024). Inland nesting colonies were recorded at Santa Ana River Lakes (2013) 1.3 miles north of the Wildlife RSA (eBird 2024) and Anaheim Lake in 2016 (CDFW 2024a) and 2023 (eBird 2024) (southeast corner of east Orangethorpe Ave and Miller St in Anaheim, 3.4 miles east). There are numerous recent known observations (eBird 2024) at Haster Basin Recreation Area 1.9 miles southwest of the Wildlife RSA. In most cases, the birds arrive from the west, forage, and return to the east, presumably nesting in Burris Basin to the east but arriving to forage in Haster Basin, traveling through the Wildlife BSA on this path. No USFWS critical habitat has been designated for this species (USFWS 2023a). The conclusion that transient California Least Terns may be observed in the Wildlife RSA is based on the presence of California Least Terns in the Supplemental RSA with a connection through the Santa Ana River that traverses the Wildlife RSA from Burris Basin to Haster Basin.
Least Bell's Vireo *Vireo bellii pusillus*	Least Bell's Vireo is a summer resident of Southern California in shrubby riparian vegetation with such riparian-associated species as willows, mule fat, and mesquite in cottonwood-willow forests, southern willow scrub, sycamore alluvial woodland, oak woodlands, and mule fat scrub (USFWS 1998b). Although Least Bell's Vireo is usually found in habitat dominated by willows, the plant species composition does not seem to be as important as habitat structure. Essential habitat structure requirements include the presence of dense cover within 3 to 6 feet of the ground, because this is the area where nesting usually occurs, and a dense, stratified canopy for foraging (USFWS 1998b). Breeding occurs in diverse woodlands along watercourses in low, dense growth, especially in second-growth scrub and streamside thickets (USFWS 1998b), but also in chaparral, woodland edges, or scrub oaks in the vicinity of water or in dry riverbeds. Occurs at elevations of 0 to 7,000 feet. Least Bell's Vireos use adjacent upland habitats for foraging and, if floodwaters inundate riparian habitat, Least Bell's Vireos may nest in adjacent nonriparian habitat (USFWS 1998b). Loss of breeding habitat and brood parasitism by the nest parasite brown-headed cowbird (*Molothrus ater*) are threats to this species and have led to the decline of Least Bell's Vireo (USFWS 1998b).	Year-round	FED: END CA: END	**Low.** This species is not expected to breed within the Wildlife RSA because of the absence of suitable low, dense, riparian habitat, although it may occur within watercourses as a transient between higher-quality riparian habitat areas. Historical observations were recorded within the Supplemental RSA in 1895, 1897, 1899, 1900, and 1913. One observation was associated with the Coyote Hills Golf Course in Fullerton in 2011. Another recent occurrence is from the Whittier Narrows Recreational Area, which is 3.8 miles upstream of where the project crosses the Rio Hondo (CDFW 2024a). It is also known in Santiago Creek. USFWS critical habitat was established for Least Bell's Vireo in 1994, but no Least Bell's Vireo critical habitat is present within the Supplemental RSA. Observations (eBird 2024) of Least Bell's Vireo within the Supplemental RSA include the San Gabriel River (approximately 1.8 miles north of the Wildlife RSA); a city park associated with three golf courses and the Rio Hondo (about 2.7 miles south of the Wildlife RSA); Hart Park (about 2.4 miles southeast of the Wildlife RSA), near Steelhead Park about 1.9 miles north of the Wildlife RSA in the vegetated portion of the Los Angeles River; the Rio de Los Angeles State Park about 2.8 miles north of the Wildlife RSA; and breeding Least Bell's Vireos at Burris Basin 1.5 miles north of the Wildlife RSA along the Santa Ana River and further up the Santa Ana River at Lincoln Ave and Gassen St (2.5 miles to the north) and Tustin Ave (2.6 miles to the north) (eBird 2024). Recent observations within the Supplemental RSA of Least Bell's Vireo led to the conclusion that Least Bell's Vireo transients may be observed in the Wildlife RSA.
MAMMALS				
Pallid bat *Antrozous pallidus*	Gregarious and often roosts in colonies. Summer maternity colonies are within warm rock crevices, abandoned mines, caves, hollow trees, and in cavern-like building features (e.g., attics), and disband between August and October. Relatively inactive during the winter and are not known to migrate. Roosts in rock crevices, tree hollows, mines, caves, and a variety of anthropogenic structures, including vacant and occupied buildings.	Spring through fall	FED: — CA: SSC	**Low.** Two older assumed extirpated occurrences (1932) documented in the El Monte area, 7.0 miles northeast of the Wildlife RSA (CDFW 2024a). This species may occasionally forage above the open water associated with the Wildlife RSA, such as at the Raymond Retarding Basins, San Gabriel River, Rio Hondo and spreading grounds, and Los Angeles River. The species also has a low potential to use adjacent bridges or buildings as roosting sites. Observed in Orange County (Miner and Stokes 2005) in the late 1990s and in Puente Hills in 2004 (Remington 2006) just over 3.0 miles east of the Wildlife RSA.

Species	Habitat and Distribution	Blooming Period or Animal Activity	Status Designations	Occurrence Probability in Los Angeles to Anaheim Project Section
Mexican long-tongued bat *Choeronycteris mexicana*	Occurs within scrub, forest, desert, grassland, and woodland areas and roosts near entrances to caves, rock crevices, and buildings. This bat feeds on pollen and nectar, specializes in agaves and columnar cactus, and has been known to visit hummingbird feeders. The southern part of the south coast ecoregion represents the northwestern edge of the distribution of this species. Roosts consist of caves and mines for most of its range; however, in California this species has never been documented in native habitats but instead has been found in residential areas, with roosts in garages, sheds, porches, and other structures. This species has been observed in Los Angeles, Orange, and Ventura Counties. It is often seen in fall and winter but is not known/expected to breed in California. This is an uncommon to rare species but appears to have a relatively stable population in the ecoregion. This species is difficult to detect acoustically and is most often detected through public contact investigations.	Year-round	FED: — CA: SSC	**Low.** One presumed extirpated occurrence documented in 1995, 3.5 miles southwest of the Wildlife RSA in Orange (CDFW 2024a). This species is rare and when found in Southern California is seen in residential areas. Mexican long-tongued bats may be present associated with residential nectar sources such as agave, cactus, or hummingbird feeders, and may roost in the fall and winter in garages, sheds, porches, and other structures. In natural systems, this is a cave-roosting species, so it would likely roost only in bridges with cave-like structures. This species is not expected to breed in the Wildlife RSA.
Townsend's big-eared bat *Corynorhinus townsendii*	Found throughout California in a wide variety of habitats, often in rocky situations where caves or abandoned mine tunnels are available. May occasionally inhabit old buildings ("artificial" caves). Roosts in the open, hanging from walls and ceilings. May roost under bridges if bridge designs include cavities that resemble caves. Extremely sensitive to human disturbance. Open water is an important for both drinking and feeding for this species, so a perennial water source is important. Females form maternity groups in the spring in caves and shelters. Maternal roosts form between March and June with pups born between May and July.	Maternal roosts active from March through July	FED: — CA: SSC	**Low.** Could be present in abandoned buildings, large hollowed-out concrete areas in bridges, or other areas with open roosts. Historically, there are no observations in the Los Angeles Basin, but this may be because of the difficulty in detecting this species using acoustic methods and mist netting.
Western mastiff bat *Eumops perotis californicus*	Lives in rocky areas and cliff faces in Southern California and Arizona south to Mexico. Roosts in cliff crevices and buildings. Feeds mostly on moths, crickets, grasshoppers, and other insects (Siders 2005).	Year-round	FED: — CA: SSC	**Low.** Occurrences have been documented 1.0 mile west of the Wildlife RSA in Orange (data date 1989), within the Wildlife RSA in Anaheim (data date 1990), and less than 1.0 mile west of the Wildlife RSA in Hollywood, Los Angeles (data date 1990, CDFW 2024a), along with a record from 1987 with an exact location unknown. This last occurrence was documented in Azusa, which is approximately 8.0 miles northeast of the Wildlife RSA (CDFW 2024a). This species may occasionally forage within the open water in the Wildlife RSA, such as at the Raymond Retarding Basins, San Gabriel River, Rio Hondo and spreading grounds, and Los Angeles River. This species also has a low potential to use bridges or buildings as roosting sites.
Western red bat *Lasiurus frantzii*	Solitary, migratory bat that is linked to mature and intact sycamore and cottonwood riparian vegetation. This species roosts in foliage and a range of tree options for roosting is important. Individuals have been detected in urban Orange and San Diego Counties roosting in ornamental trees. There is evidence of this species breeding in Southern California (Remington and Cooper 2009).	Spring and fall	FED: — CA: SSC	**Low.** This species is known in Griffith Park (Remington and Cooper 2009) approximately 6.0 miles north of the Wildlife RSA. There is evidence of this species roosting in the Los Angeles River in this area. Parks are adjacent (with ornamental trees that could provide roost sites) to the Los Angeles River near Griffith Park. However, habitat quality diminishes greatly south of Spring St associated with the Los Angeles River. It is also known in the western Puente Hills, approximately 3.0 miles east of the Wildlife RSA, 1.0 mile from the San Gabriel River, and 2.0 miles from the Rio Hondo and spreading grounds. It is known in six canyons in the Puente Hills (Remington 2006). Ornamental vegetation, especially if sycamores and cottonwoods are present, provides habitat for this species.
Western yellow bat *Lasiurus xanthinus*	A noncolonial species often associated with water features (e.g., stock tanks, ponds, streams, rivers) in open grassy areas and scrub, as well as canyon and riparian habitats. Usually roosts in trees, hanging from the underside of a leaf, and is commonly found in the skirt of dead fronds in palm trees. Does not hibernate.	Year-round	FED: — CA: SSC	**Moderate.** Observed in spring and fall in the Puente Hills (Remington 2006) approximately 3.0 miles from the Wildlife RSA and 1.0 mile from the San Gabriel River. This species may occasionally forage within the open water in the Wildlife RSA, such as at the Raymond Retarding Basins, San Gabriel River, Rio Hondo and spreading grounds, and Los Angeles River. The species also has a moderate potential to use adjacent trees for roosting, particularly palms. Open water and palms were both observed in the Wildlife RSA.
South coast marsh vole *Microtus californicus stephensi*	This species is found in tidal marshes in Southern California.	Resident	FED: — CA: SSC	**Not Expected.** Tidal marshes are absent from the Wildlife RSA, so south cost marsh vole is not expected. CNDDB database records are from Culvert City and Seal Beach Wildlife Refuge in Long Beach (CDFW 2024a).

Species	Habitat and Distribution	Blooming Period or Animal Activity	Status Designations	Occurrence Probability in Los Angeles to Anaheim Project Section
San Diego desert woodrat *Neotoma lepida intermedia*	San Diego desert woodrats are found in shrub and desert habitats, often with cactus patches and rock outcroppings.	Year-round	FED: — CA: SSC	**Not Expected.** Open shrub habitat with rock outcroppings and cactus patches is not present in the Wildlife RSA. Although this species was captured in 2006 in Griffith Park in 20026 (CDFW 2024a), there is no connection of suitable habitat to this location from the Wildlife RSA.
Pocketed free-tailed bat *Nyctinomops femorosaccus*	A colonial species that roosts primarily in crevices of rugged cliffs, high rocky outcrops, and slopes. This is a far-ranging species and may roost in the foothills and forage over larger areas. It has been found in a variety of vegetation associations, including desert shrub and pine-oak forests. Often associated with open water. The species may also roost in buildings and caves, and under roof tiles.	Year-round	FED: — CA: SSC	**Moderate.** An occurrence has been documented within the Supplemental RSA in Brea (1989; CDFW 2024a). Observed in fall and winter in the Puente Hills approximately 3.0 miles from the Wildlife RSA, 1.0 mile from the San Gabriel River, and 2.0 miles from the Rio Hondo and spreading grounds (Remington 2006). This species may forage within the open water in the Wildlife RSA, such as at the Raymond Retarding Basins, San Gabriel River, Rio Hondo and spreading grounds, and Los Angeles River. The species also has potential to use high bridges within the Los Angeles River or tall buildings as roosting sites.
Big free-tailed bat *Nyctinomops macrotis*	Rare in Southern California. Needs high cliffs or rocky outcrops for roosting sites. Will nest in tree cavities and bridges if sufficiently high to provide lift for flight. Prefers rugged, rocky terrain. Associated with desert, arroyo, and woodland habitats. Roosts in buildings, caves, and holes in trees. Does not likely breed in California. This species may forage far from roost sites (up to 45 miles).	Fall through winter	FED: — CA: SSC	**Low.** One observation in the Supplemental RSA of a female in Los Angeles in 1985 and another possibly extirpated occurrence documented in Azusa, approximately 8.0 miles to the northeast of the Wildlife RSA in 1997 (CDFW 2024a). This species may occasionally forage within the open water in the Wildlife RSA, such as at the Raymond Retarding Basins, San Gabriel River, Rio Hondo and spreading grounds, and Los Angeles River. This species also has a low potential to use high tree cavities, bridges, or buildings as roosting sites. This species forages far from roost sites, so may forage within the watercourses associated with the Wildlife RSA and roost in high cliffs and rocky outcrops in mountains up to 45 miles away.
Pacific pocket mouse *Perognathus longimembris pacificus*	Historically occurred on the coast and up to 2.5 miles inland in Southern California from Marina del Rey to El Segundo in Los Angeles County, and south to near the Mexican border in San Diego County (USFWS 1998a). Found on fine-grained, sandy coastal soils in open coastal sage scrub, coastal strand, coastal dune, and river alluvial habitats where adequate vegetation is found. Not currently found in the Los Angeles Basin; known to occur at the Dana Point Headlands in Orange County and at the Marine Corps Base, Camp Pendleton, in San Diego County (USFWS 1998a).	Breeding April through July	FED: END CA: SSC	**Not Expected. The** Wildlife RSA occurs outside of the current range of the species because no Pacific pocket mice are known to occur in Los Angeles County and are only known to occur at the Dana Point Headlands in Orange County. No USFWS critical habitat has been designated for this species (USFWS 2023a).
Mountain lion *Puma concolor*	This species is found wherever deer are present. Mountain lions tend to select home ranges with rugged terrain, naturally barren areas, chaparral, coastal sage scrub, riparian areas, woodland, and grassland, and avoid areas with agriculture, desert, roads, and urban areas. Known in the Santa Monica Mountains, the Chino Hills, the Santa Ana Mountains, the eastern Peninsular range, the Transverse Ranges, and the San Bernardino Mountains.	Year-round	FED: — CA: Southern California and central coast evolutionarily significant unit CAN	**Low.** Mountain lions may occur in drainages such as the San Gabriel River and the Rio Hondo and spreading grounds or in stormwater control channels opportunistically or to navigate to other suitable habitat areas. Habitat loss and fragmentation in the Los Angeles Basin caused by the presence of roads and the pressures of urbanization have decreased mountain lion population sizes. Mountain lions require large home ranges (anywhere from 100 square kilometers to 750 square kilometers) with relatively undisturbed habitat with connectivity to other habitat. Vehicle strikes, depredation kills, and intraspecific mortality (male aggression with other males, infanticide) are the main causes of mortality in the Central Coast and Southern California populations. The Supplemental RSA has a high risk of vehicle mortality for mountain lions and a high risk for human/mountain lion conflict. For these reasons, it is likely that, if present, mountain lions would be at a very low population level.
Southern California saltmarsh shrew *Sorex ornatus salicornicus*	This species is found in coastal marshes in Los Angeles, Orange, and Ventura Counties. Requires dense vegetation and woody debris for cover.	Resident	FED: — CA: SSC	**Not Expected.** This species is not expected because there is no coastal marsh within the Wildlife RSA. The nearest CNDDB record to the Wildlife RSA is at the Seal Beach Naval Weapons Station and it is presumed extirpated (data date 1968, CDFW 2024a).
American badger *Taxidea taxus*	Uncommon resident found throughout most of the state. Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.	Resident	FED: — CA: SSC	**Not Expected.** Species requires intact natural upland vegetation communities, which are absent from the Wildlife RSA. One record near Los Angeles Union Station, but with no element date, presumably historical; another database record is from Puente Hills in 2006 (CDFW 2024a).
DEPLETED NATURAL VEGETATION COMMUNITIES (SPECIAL-STATUS NATURAL COMMUNITIES)				
California walnut woodland			CNDDB	**Not Expected.** Absent from the Supplemental RSA; database records are from Walnut Canyon southeast of Anaheim, Fern Canyon Griffith Park, Puente Hills, and Fullerton.

Species	Habitat and Distribution	Blooming Period or Animal Activity	Status Designations	Occurrence Probability in Los Angeles to Anaheim Project Section
Southern California arroyo chub/Santa Ana sucker stream			CNDDB	**Not Expected.** Present within the Supplemental RSA at the very eastern end of the Santa Ana River (western terminus near N Glassell St). The Seven Oaks Dam in the Santa Ana River precludes the presence of Santa Ana suckers within the Wildlife RSA. Arroyo chubs are present in the Santa Ana River tributaries, between Riverside and the Orange County line, and would not be found in the Wildlife RSA.
Southern coast live oak riparian forest			CNDDB	**Not Expected.** Absent from Supplemental RSA; nearest CNDDB record is in Weir Canyon and tributaries, southwest of the Santa Ana Mountains.
Southern coastal salt marsh			CNDDB	**Not Expected.** Absent from Supplemental RSA. Nearest CNDDB record is at Seal Beach Naval Weapons Station.
Southern cottonwood-willow riparian forest			CNDDB	**Not Expected.** Absent from Supplemental RSA; nearest CNDDB record is from 1988 northeast of RSA and is believed to no longer exist.
Southern sycamore alder riparian woodland			CNDDB	**Not Expected.** Absent from Supplemental RSA; nearest CNDDB record is Brush Canyon in Griffith Park.
Southern willow scrub			CNDDB	**Not Expected.** Absent from Supplemental RSA.
Walnut forest			CNDDB	**Not Expected.** Absent from Supplemental RSA. Nearest CNDDB record at Arroyo Seco Park, Los Angeles.

Sources: CDFW 2024a, 2024b; eBird 2024; CNPS 2024; USFWS 2020, 2023a

Federal Classifications
- BCC: Birds of Conservation Concern designated by USFWS (USFWS 2021a)
- BGEPA: Protected under the Bald and Golden Eagle Protection Act
- END: Endangered
- PR THR: Proposed Threatened
- THR: Threatened

California: State Classifications
- CAN: Candidate
- END: Endangered
- FP: Fully Protected
- SSC: California Species of Special Concern
- THR: Threatened

California Rare Plant Ranking (CRPR)
- 1A: Plants presumed extirpated in California and rare or extinct elsewhere
- 1B: Plants rare, threatened, or endangered in California and elsewhere
- 2A: Plants presumed to be extirpated in California, but more common elsewhere
- 2B: Plants rare, threatened, or endangered in California, but more common elsewhere
- 3: Plants for which more information is needed
- 4: Plants of limited distribution
  - 0.1: Seriously threatened in California (high degree/immediacy of threat)
  - 0.2: Fairly threatened in California (moderate degree/immediacy of threat)
  - 0.3: Not very threatened in California (low degree/immediacy of threats or no current threats known)

[1] CRPR level 4 plant species

ARTIC = Anaheim Regional Transportation Intermodal Center; CA = California; CDFW = California Department of Fish and Wildlife; CESA = California Endangered Species Act; CNDDB = California Natural Diversity Database; DPS = distinct population segment; FED = federal; I = Interstate; RSA = resource study area; USFWS = U.S. Fish and Wildlife Service

References

Calflora. 2024. Calflora: Information on California plants for education, research and conservation, with data contributed by public and private institutions and individuals [web application]. Berkeley, California: The Calflora Database [a nonprofit organization]. https://www.calflora.org/ (accessed January 2024).

California Department of Fish and Wildlife (CDFW). Biogeographic Data Branch. 2017. Evaluation of the Petition from the Center for Biological Diversity to List the Foothill Yellow-legged Frog (*Rana boylii*) as Threatened Under the California Endangered Species Act: Report to the Fish and Game Commission. State of California Natural Resources Agency Department of Fish and Wildlife. April.

———. 2024a. California Natural Diversity Database (CNDDB). Commercial version dated February 28, 2016. Biogeographic Data Branch, Sacramento, CA. (Database query conducted July 18, 2016, February 24, 2017, and April 15, 2017, September 19, 2018, September 28, 2018, April 3, 2020, December 21, 2023, January 24, 2024, September 12, 2024).

———. 2024b. CNDDB. State and Federally Listed Endangered, Threatened, and Rare Plants of California. Updated January 2024, 19 pp.

———. 2024c. CNDDB. Special Animals List. Periodic publication. Special Animals List. Updated July 2024, 110 pp.

———. 2024d. Report to the California Fish and Game Commission. California Endangered Species Act Status Review for Southern California Steelhead (*Oncorhynchus mykiss*). California Department of Fish and Wildlife. 1416 Ninth Street, Sacramento, CA 95814, Sacramento CA 95814. 186 pp., with appendices. January. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=219813&inline.

———. 2024e. Fish and Game Commission: Western Burrowing Owl Becomes CESA Candidate; Wildlife Prosecutor of the Year Named; Waterfowlers Hall of Fame Inductees Recognized. News Archive. October 15, 2024. https://wildlife.ca.gov/News/Archive/fish-and-game-commission-western-burrowing-owl-becomes-cesa-candidate-wildlife-prosecutor-of-the-year-named-waterfowlers-hall-of-fame-inductees-recognized (accessed October 2024).

California Native Plant Society (CNPS), Rare Plant Program. 2024. Rare Plant Inventory (online edition, v9-5). www.rareplants.cnps.org (accessed July 2016, September 2018, April 2020, January 2024).

eBird. 2024. eBird: An Online Database of Bird Distribution and Abundance (web application). eBird, Ithaca, New York. www.ebird.org (accessed January, September, and October 2024).

Haas, C. D., A. R. Backlin, C. J. Rochester, and R. N. Fisher. 2002. *Monitoring Reptiles and Amphibians at Long-Term Biodiversity Monitoring Stations: The Puente-Chino Hills*. United States Geological Survey Final Report. 43 pp.

Mihai, C., and S. Stefanovic. 2012. *Cuscuta obtusiflora* var. *glandulosa*., in Jepson Flora Project (eds.) Jepson eFlora. https://ucjeps.berkeley.edu/eflora/eflora_display.php?tid=57201 (accessed January 2024).

Miner, K. L., and D. C. Stokes. 2005. *Bats in the South Coast Ecoregion: Status, Conservation Issues, and Research Needs.* U.S. Department of Agriculture, Forest Service, General Technical Report PSW-GTR-195. 211–227.

Remington, S. 2006. *Bat Surveys of the Puente Hills (Whittier Hills, Hacienda Heights, La Habra Heights, and Rowland Heights), Los Angeles County, California, June 2005–May 2006. Final Report.* The Puente Hills Landfill Native Habitat Preservation Authority. July.

Remington, S., and D. S. Cooper. 2009. *Bat Survey of Griffith Park, Los Angeles, California, Draft Report.* Los Angeles Department of Recreation and Parks.

Siders, M. S. 2005. *Eumpos perotis* Western Mastiff Bat. Western Bat Working Group Species Account. www.wbwg.org/speciesinfo/species_accounts/molossidae/eupe.pdf (accessed September 2016).

Stebbins, Robert C. 2003. *A Field Guide to Western Reptiles and Amphibians*. 3rd Edition. Houghton Mifflin Company.

U.S. Fish and Wildlife Service (USFWS). 1985. Recovery Plan for the California Least Tern, *Sterna antillarum browni*. U.S. Fish and Wildlife Service, Portland, Oregon, 112 pp.

———. 1998a. Draft recovery plan for the least Bell's vireo. Portland, Oregon. 139 pp.

———. 1998b. Pacific Pocket Mouse (*Perognathus longimembris pacificus*) Recovery Plan. Portland, Oregon. 112 pp.

———. 2011. *Rorippa gambelii* [*Nasturtium gambelii*] (Gambel's watercress) 5-Year Review: Summary and Evaluation. Ventura, California. September.

———. 2020. *Official Species List, California High Speed Rail System: Los Angeles to Anaheim Project Section*. Provided by Carlsbad Fish and Wildlife Office. Consultation Code: 08EAR00-2017-SLI-0849. April.

———. 2021a. *Birds of Conservation Concern 2021: Migratory Bird Program*. Falls Church, VA. 47 pp. https://www.fws.gov/sites/default/files/documents/birds-of-conservation-concern-2021.pdf (accessed January 2024).

———. 2021b. *Federal Register*: Endangered and Threatened Wildlife and Plants; Foothill Yellow-Legged Frog; Threatened Status with Section 4(d) Rule for Two Distinct Population Segments and Endangered Status for Two Distinct Population Segments. A Proposed Rule by the Fish and Wildlife Service. December. https://www.federalregister.gov/documents/2021/12/28/2021-27512/endangered-and-threatened-wildlife-and-plants-foothill-yellow-legged-frog-threatened-status-with.

———. 2023a. *List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project*. Provided by Carlsbad Fish and Wildlife Office. Project code: 2024-0029208. December.

———. 2023b. *Federal Register*: Endangered and Threatened Wildlife and Plants; Threatened Status With Section 4(d) Rule for the Northern and Southern Distinct Population Segments of the Western Spadefoot. [Docket No. FWS-R8-ES-2023-0095: FF09E2100 FXES1111090FEDR 234]. December. https://www.federalregister.gov/documents/2023/12/05/2023-26579/endangered-and-threatened-wildlife-and-plants-threatened-status-with-section-4d-rule-for-the.

———. 2024. List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project. Project Code: 2024-0029208. *Project Name: California High Speed Rail System: Los Angeles to Anaheim Project Section*. Provided by Carlsbad Fish and Wildlife Office. December.

APPENDIX B: U.S. FISH AND WILDLIFE SERVICE OFFICIAL SPECIES LIST

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: 12/18/2024 20:22:29 UTC
Project Code: 2024-0029208
Project Name: California High Speed Rail Authority - Los Angeles to Anaheim Project Section

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, intentional or unintentional, 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.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. 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: 2024-0029208

Project Name: California High Speed Rail Authority - Los Angeles to Anaheim Project Section

Project Type: Railroad - New Construction

Project Description: The Proposed Action is the HSR Project Alternative (i.e., the building and operation of the Los Angeles to Anaheim Project Section of the HSR system, a high-speed passenger rail service). The project section would extend approximately 30 miles, between LAUS in Los Angeles and ARTIC in Anaheim. This narrow, existing railroad corridor is constrained by the surrounding urban environment and other existing rail operators in the area, including trains operated by the National Railroad Passenger Corporation (Amtrak), Metrolink (governed by the Southern California Regional Rail Authority), the Union Pacific Railroad (UPRR), and BNSF Railway (BNSF).

The Project as shown here includes a 3 mile buffer surrounding the proposed project alignment.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@33.931766992577906,-118.06163224232685,14z



Counties: Los Angeles and Orange counties, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 14 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[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

---

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

MAMMALS

NAME	STATUS
Pacific Pocket Mouse *Perognathus longimembris pacificus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8080	Endangered

BIRDS

NAME	STATUS
California Least Tern *Sternula antillarum browni* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8104	Endangered
Coastal California Gnatcatcher *Polioptila californica californica* There is **final** critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo *Vireo bellii pusillus* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher *Empidonax traillii extimus* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered
Western Snowy Plover *Charadrius nivosus nivosus* Population: Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8035	Threatened

REPTILES

NAME	STATUS
Southwestern Pond Turtle *Actinemys pallida* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4768	Proposed Threatened

AMPHIBIANS

NAME	STATUS
Western Spadefoot *Spea hammondii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5425	Proposed Threatened

FISHES

NAME	STATUS
Santa Ana Sucker *Catostomus santaanae* Population: 3 CA river basins There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3785	Threatened

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

FLOWERING PLANTS

NAME	STATUS
Nevin's Barberry *Berberis nevinii* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8025	Endangered
Salt Marsh Bird's-beak *Cordylanthus maritimus ssp. maritimus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6447	Endangered
Slender-horned Spineflower *Dodecahema leptoceras* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4007	Endangered
Ventura Marsh Milk-vetch *Astragalus pycnostachyus var. lanosissimus* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1160	Endangered

CRITICAL HABITATS

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

NAME	STATUS
Coastal California Gnatcatcher *Polioptila californica californica* https://ecos.fws.gov/ecp/species/8178#crithab	Final

IPAC USER CONTACT INFORMATION

Agency: Federal Railroad Administration
Name: Shelly Dayman
Address: 525 B Street, Suite 1700
City: San Diego
State: CA
Zip: 92101
Email shelly.dayman@icf.com
Phone: 6198200768

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: December 20, 2023
Project Code: 2024-0029208
Project Name: California High Speed Rail Authority - Los Angeles to Anaheim Project Section

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 IPaC by completing the same process used to receive the enclosed list.

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

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

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

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, intentional or unintentional, 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 Migratory Bird Permit | What We Do | U.S. Fish & Wildlife Service (fws.gov).

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. 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: 2024-0029208

Project Name: California High Speed Rail Authority - Los Angeles to Anaheim Project Section

Project Type: Railroad - New Construction

Project Description: The Proposed Action is the HSR Project Alternative (i.e., the building and operation of the Los Angeles to Anaheim Project Section of the HSR system, a high-speed passenger rail service). The project section would extend approximately 30 miles, between LAUS in Los Angeles and ARTIC in Anaheim. This narrow, existing railroad corridor is constrained by the surrounding urban environment and other existing rail operators in the area, including trains operated by the National Railroad Passenger Corporation (Amtrak), Metrolink (governed by the Southern California Regional Rail Authority), the Union Pacific Railroad (UPRR), and BNSF Railway (BNSF).

The Project as shown here includes a 3 mile buffer surrounding the proposed project alignment.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@33.93185219254915,-118.06182892842037,14z



Counties: Los Angeles and Orange counties, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 13 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[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

---

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

MAMMALS

NAME	STATUS
Pacific Pocket Mouse *Perognathus longimembris pacificus*	Endangered

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/8080

BIRDS

NAME	STATUS
California Least Tern *Sterna antillarum browni* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8104	Endangered
Coastal California Gnatcatcher *Polioptila californica californica* There is **final** critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo *Vireo bellii pusillus* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher *Empidonax traillii extimus* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered
Western Snowy Plover *Charadrius nivosus nivosus* Population: Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8035	Threatened

REPTILES

NAME	STATUS
Southwestern Pond Turtle *Actinemys pallida* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4768	Proposed Threatened

FISHES

NAME	STATUS
Santa Ana Sucker *Catostomus santaanae* Population: 3 CA river basins There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3785	Threatened

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

FLOWERING PLANTS

NAME	STATUS
Nevin's Barberry *Berberis nevinii* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8025	Endangered
Salt Marsh Bird's-beak *Cordylanthus maritimus ssp. maritimus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6447	Endangered
Slender-horned Spineflower *Dodecahema leptoceras* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4007	Endangered
Ventura Marsh Milk-vetch *Astragalus pycnostachyus var. lanosissimus* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1160	Endangered

CRITICAL HABITATS

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

NAME	STATUS
Coastal California Gnatcatcher *Polioptila californica californica* https://ecos.fws.gov/ecp/species/8178#crithab	Final

IPAC USER CONTACT INFORMATION

Agency: Federal Railroad Administration
Name: Shelly Dayman
Address: 525 B Street, Suite 1700
City: San Diego
State: CA
Zip: 92101
Email shelly.dayman@icf.com
Phone: 6198200768

United States Department of the Interior

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

In Reply Refer To: October 20, 2021
Consultation Code: 08ECAR00-2017-SLI-0849
Event Code: 08ECAR00-2022-E-00170
Project Name: California High Speed Rail Authority - Los Angeles to Anaheim Project Section

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

To Whom It May Concern:

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

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

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

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

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

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

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

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

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

Attachment(s):

- Official Species List

Official Species List

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

This species list is provided by:

Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
(760) 431-9440

Project Summary

Consultation Code: 08ECAR00-2017-SLI-0849
Event Code: Some(08ECAR00-2022-E-00170)
Project Name: California High Speed Rail Authority - Los Angeles to Anaheim Project Section
Project Type: TRANSPORTATION
Project Description: The Los Angeles to Anaheim Project Section of the California High Speed Rail System would extend approximately 30 miles, starting at Los Angeles Union Station (LAUS) south to the Anaheim Regional Transportation Intermodal Center (ARTIC) in Anaheim. This corridor runs through a narrow and constrained urban environment, with other existing rail operators in the area, including trains operated by the National Railroad Passenger Corporation (Amtrak), Metrolink (governed by the Southern California Regional Rail Authority, the Union Pacific Railroad, and BNSF Railway.

The project section is approximately 30 miles long and travels through the cities of Los Angeles, Vernon, Bell, Commerce, Montebello, Pico Rivera, Santa Fe Springs, Norwalk, La Mirada, Buena Park, Fullerton, and Anaheim. The project's alignment would share the existing LOSSAN Corridor with the existing rail operators. The Authority adopted a strategy of sharing the existing corridor and blending HSR with existing passenger rail systems on shared infrastructure (referred to as blended operations) to accelerate and broaden benefits, improve efficiency, minimize community effects, and reduce construction costs.

Within the existing rail corridor, the Los Angeles County Metropolitan Transportation Authority (Metro) owns the railroad right-of-way from LAUS to Redondo Junction, BNSF owns the railroad right-of-way from Redondo Junction to Fullerton Junction, and the Orange County Transportation Authority owns the railroad right-of-way from Fullerton Junction to the endpoint at ARTIC. The Southern California Regional Rail Authority operates the Metrolink commuter passenger rail service in the corridor, Amtrak provides inter-city passenger service, and BNSF operates freight trains throughout this corridor.

The Project as shown here includes a 3 mile buffer surrounding the proposed project alignment.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@33.931766992577906,-118.06163224232685,14z



Counties: Los Angeles and Orange counties, California

Endangered Species Act Species

There is a total of 10 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[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

---

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

Mammals

NAME	STATUS
Pacific Pocket Mouse *Perognathus longimembris pacificus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8080	Endangered

Birds

NAME	STATUS
California Least Tern *Sterna antillarum browni* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8104	Endangered
Coastal California Gnatcatcher *Polioptila californica californica* There is **final** critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo *Vireo bellii pusillus* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered
Western Snowy Plover *Charadrius nivosus nivosus* Population: Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/8035	Threatened

Fishes

NAME	STATUS
Santa Ana Sucker *Catostomus santaanae* Population: 3 CA river basins There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3785	Threatened

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Flowering Plants

NAME	STATUS
Nevin's Barberry *Berberis nevinii* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/8025	Endangered
Salt Marsh Bird's-beak *Cordylanthus maritimus ssp. maritimus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6447	Endangered
Ventura Marsh Milk-vetch *Astragalus pycnostachyus var. lanosissimus* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/1160	Endangered

Critical habitats

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

NAME	STATUS
Coastal California Gnatcatcher *Polioptila californica californica* https://ecos.fws.gov/ecp/species/8178#crithab	Final

United States Department of the Interior

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

In Reply Refer To: February 26, 2021
Consultation Code: 08ECAR00-2017-SLI-0849
Event Code: 08ECAR00-2021-E-01474
Project Name: California High Speed Rail Authority - Los Angeles to Anaheim Project Section

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

To Whom It May Concern:

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

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

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

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

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

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

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

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

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

Attachment(s):

- Official Species List

Official Species List

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

This species list is provided by:

Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
(760) 431-9440

Project Summary

Consultation Code: 08ECAR00-2017-SLI-0849
Event Code: 08ECAR00-2021-E-01474
Project Name: California High Speed Rail Authority - Los Angeles to Anaheim Project Section
Project Type: TRANSPORTATION
Project Description: The Los Angeles to Anaheim Project Section of the California High Speed Rail System would extend approximately 30 miles, starting at Los Angeles Union Station (LAUS) south to the Anaheim Regional Transportation Intermodal Center (ARTIC) in Anaheim. This corridor runs through a narrow and constrained urban environment, with other existing rail operators in the area, including trains operated by the National Railroad Passenger Corporation (Amtrak), Metrolink (governed by the Southern California Regional Rail Authority, the Union Pacific Railroad, and BNSF Railway.

The project section is approximately 30 miles long and travels through the cities of Los Angeles, Vernon, Bell, Commerce, Montebello, Pico Rivera, Santa Fe Springs, Norwalk, La Mirada, Buena Park, Fullerton, and Anaheim. The project's alignment would share the existing LOSSAN Corridor with the existing rail operators. The Authority adopted a strategy of sharing the existing corridor and blending HSR with existing passenger rail systems on shared infrastructure (referred to as blended operations) to accelerate and broaden benefits, improve efficiency, minimize community effects, and reduce construction costs.

Within the existing rail corridor, the Los Angeles County Metropolitan Transportation Authority (Metro) owns the railroad right-of-way from LAUS to Redondo Junction, BNSF owns the railroad right-of-way from Redondo Junction to Fullerton Junction, and the Orange County Transportation Authority owns the railroad right-of-way from Fullerton Junction to the endpoint at ARTIC. The Southern California Regional Rail Authority operates the Metrolink commuter passenger rail service in the corridor, Amtrak provides inter-city passenger service, and BNSF operates freight trains throughout this corridor.

The Project as shown here includes a 3 mile buffer surrounding the proposed project alignment.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@33.931766992577906,-118.06163224232685,14z



Counties: Los Angeles and Orange counties, California

Endangered Species Act Species

There is a total of 9 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[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

---

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

Mammals

NAME	STATUS
Pacific Pocket Mouse *Perognathus longimembris pacificus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8080	Endangered

Birds

NAME	STATUS
California Least Tern *Sterna antillarum browni* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8104	Endangered
Coastal California Gnatcatcher *Polioptila californica californica* There is **final** critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo *Vireo bellii pusillus* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered
Western Snowy Plover *Charadrius nivosus nivosus* Population: Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/8035	Threatened

Fishes

NAME	STATUS
Santa Ana Sucker *Catostomus santaanae* Population: 3 CA river basins There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3785	Threatened

Flowering Plants

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Critical habitats

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

NAME	STATUS
Coastal California Gnatcatcher *Polioptila californica californica* https://ecos.fws.gov/ecp/species/8178#crithab	Final

United States Department of the Interior

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Phone: (760) 431-9440 Fax: (760) 431-5901
http://www.fws.gov/carlsbad/

In Reply Refer To: April 01, 2020
Consultation Code: 08ECAR00-2017-SLI-0849
Event Code: 08ECAR00-2020-E-02066
Project Name: California High Speed Rail Authority - Los Angeles to Anaheim Project Section

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

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Carlsbad, CA 92008-7385
(760) 431-9440

Project Summary

Consultation Code: 08ECAR00-2017-SLI-0849

Event Code: 08ECAR00-2020-E-02066

Project Name: California High Speed Rail Authority - Los Angeles to Anaheim Project Section

Project Type: TRANSPORTATION

Project Description: The Los Angeles to Anaheim Project Section of the California High Speed Rail System would extend approximately 30 miles, starting at Los Angeles Union Station (LAUS) south to the Anaheim Regional Transportation Intermodal Center (ARTIC) in Anaheim. This corridor runs through a narrow and constrained urban environment, with other existing rail operators in the area, including trains operated by the National Railroad Passenger Corporation (Amtrak), Metrolink (governed by the Southern California Regional Rail Authority, the Union Pacific Railroad, and BNSF Railway.

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The Project as shown here includes a 3 mile buffer surrounding the proposed project alignment.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/33.931766992577906N118.06163224232685W



Counties: Los Angeles, CA | Orange, CA

Endangered Species Act Species

There is a total of 9 threatened, endangered, or candidate species on this species list.

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Mammals

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Birds

NAME	STATUS
California Least Tern *Sterna antillarum browni* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8104	Endangered
Coastal California Gnatcatcher *Polioptila californica californica* There is **final** critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened
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Western Snowy Plover *Charadrius nivosus nivosus* Population: Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8035	Threatened

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NAME	STATUS
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Flowering Plants

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Critical habitats

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NAME	STATUS
Coastal California Gnatcatcher *Polioptila californica californica* https://ecos.fws.gov/ecp/species/8178#crithab	Final

United States Department of the Interior

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http://www.fws.gov/carlsbad/

In Reply Refer To: September 25, 2018
Consultation Code: 08ECAR00-2017-SLI-0849
Event Code: 08ECAR00-2018-E-03887
Project Name: California High Speed Rail Authority - Los Angeles to Anaheim Project Section

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

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2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
(760) 431-9440

Project Summary

Consultation Code: 08ECAR00-2017-SLI-0849

Event Code: 08ECAR00-2018-E-03887

Project Name: California High Speed Rail Authority - Los Angeles to Anaheim Project Section

Project Type: TRANSPORTATION

Project Description: The Los Angeles to Anaheim Project Section of the California High Speed Rail System would extend approximately 30 miles, starting at Los Angeles Union Station (LAUS) south to the Anaheim Regional Transportation Intermodal Center (ARTIC) in Anaheim. This corridor runs through a narrow and constrained urban environment, with other existing rail operators in the area, including trains operated by the National Railroad Passenger Corporation (Amtrak), Metrolink (governed by the Southern California Regional Rail Authority, the Union Pacific Railroad, and BNSF Railway.

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The Project as shown here includes a 3 mile buffer surrounding the proposed project alignment.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/33.931766992577906N118.06163224232685W



Counties: Los Angeles, CA | Orange, CA

Endangered Species Act Species

There is a total of 9 threatened, endangered, or candidate species on this species list.

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California Least Tern *Sterna antillarum browni* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8104	Endangered
Coastal California Gnatcatcher *Polioptila californica californica* There is **final** critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo *Vireo bellii pusillus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered
Western Snowy Plover *Charadrius nivosus nivosus* Population: Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8035	Threatened

Fishes

NAME	STATUS
Santa Ana Sucker *Catostomus santaanae* Population: 3 CA river basins There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3785	Threatened

Flowering Plants

NAME	STATUS
Nevin's Barberry *Berberis nevinii* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8025	Endangered
Salt Marsh Bird's-beak *Cordylanthus maritimus ssp. maritimus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6447	Endangered
Ventura Marsh Milk-vetch *Astragalus pycnostachyus var. lanosissimus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1160	Endangered

Critical habitats

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

NAME	STATUS
Coastal California Gnatcatcher *Polioptila californica californica* https://ecos.fws.gov/ecp/species/8178#crithab	Final

United States Department of the Interior

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

In Reply Refer To: May 11, 2017
Consultation Code: 08ECAR00-2017-SLI-0849
Event Code: 08ECAR00-2017-E-01787
Project Name: California High Speed Rail Authority - Los Angeles to Anaheim Project Section

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

To Whom It May Concern:

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

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

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

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the

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

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

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

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

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

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

Attachment(s):

- Official Species List

Official Species List

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

This species list is provided by:

Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
(760) 431-9440

Project Summary

Consultation Code: 08ECAR00-2017-SLI-0849

Event Code: 08ECAR00-2017-E-01787

Project Name: California High Speed Rail Authority - Los Angeles to Anaheim Project Section

Project Type: TRANSPORTATION

Project Description: The Los Angeles to Anaheim Project Section of the California High Speed Rail System would extend approximately 30 miles, starting at Los Angeles Union Station (LAUS) south to the Anaheim Regional Transportation Intermodal Center (ARTIC) in Anaheim. This corridor runs through a narrow and constrained urban environment, with other existing rail operators in the area, including trains operated by the National Railroad Passenger Corporation (Amtrak), Metrolink (governed by the Southern California Regional Rail Authority, the Union Pacific Railroad, and BNSF Railway.

The project section is approximately 30 miles long and travels through the cities of Los Angeles, Vernon, Bell, Commerce, Montebello, Pico Rivera, Santa Fe Springs, Norwalk, La Mirada, Buena Park, Fullerton, and Anaheim. The project's alignment would share the existing LOSSAN Corridor with the existing rail operators. The Authority adopted a strategy of sharing the existing corridor and blending HSR with existing passenger rail systems on shared infrastructure (referred to as blended operations) to accelerate and broaden benefits, improve efficiency, minimize community effects, and reduce construction costs.

Within the existing rail corridor, the Los Angeles County Metropolitan Transportation Authority (Metro) owns the railroad right-of-way from LAUS to Redondo Junction, BNSF owns the railroad right-of-way from Redondo Junction to Fullerton Junction, and the Orange County Transportation Authority owns the railroad right-of-way from Fullerton Junction to the endpoint at ARTIC. The Southern California Regional Rail Authority operates the Metrolink commuter passenger rail service in the corridor, Amtrak provides inter-city passenger service, and BNSF operates freight trains throughout this corridor.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/33.931766992577906N118.06163224232685W



Counties: Los Angeles, CA | Orange, CA

Endangered Species Act Species

There is a total of 9 threatened, endangered, or candidate species on your 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. See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area. Please contact the designated FWS office if you have questions.

Mammals

NAME	STATUS
Pacific Pocket Mouse *(Perognathus longimembris pacificus)*	Endangered

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/8080

Birds

NAME	STATUS
California Least Tern *(Sterna antillarum browni)*	Endangered
No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8104	
Coastal California Gnatcatcher *(Polioptila californica californica)*	Threatened
There is a **final** critical habitat designated for this species. Your location overlaps the designated critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8178	
Least Bell's Vireo *(Vireo bellii pusillus)*	Endangered
There is a **final** critical habitat designated for this species. Your location is outside the designated critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5945	
Western Snowy Plover *(Charadrius alexandrinus nivosus)*	Threatened
Population: Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) There is a **final** critical habitat designated for this species. Your location is outside the designated critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8035	

Fishes

NAME	STATUS
Santa Ana Sucker *(Catostomus santaanae)*	Threatened
Population: 3 CA river basins There is a **final** critical habitat designated for this species. Your location is outside the designated critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3785	

Flowering Plants

NAME	STATUS
Nevin's Barberry *(Berberis nevinii)* There is a **final** critical habitat designated for this species. Your location is outside the designated critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8025	Endangered
Salt Marsh Bird's-beak *(Cordylanthus maritimus ssp. maritimus)* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6447	Endangered
Ventura Marsh Milk-vetch *(Astragalus pycnostachyus var. lanosissimus)* There is a **final** critical habitat designated for this species. Your location is outside the designated critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1160	Endangered

Critical habitats

There is 1 critical habitat wholly or partially within your project area.

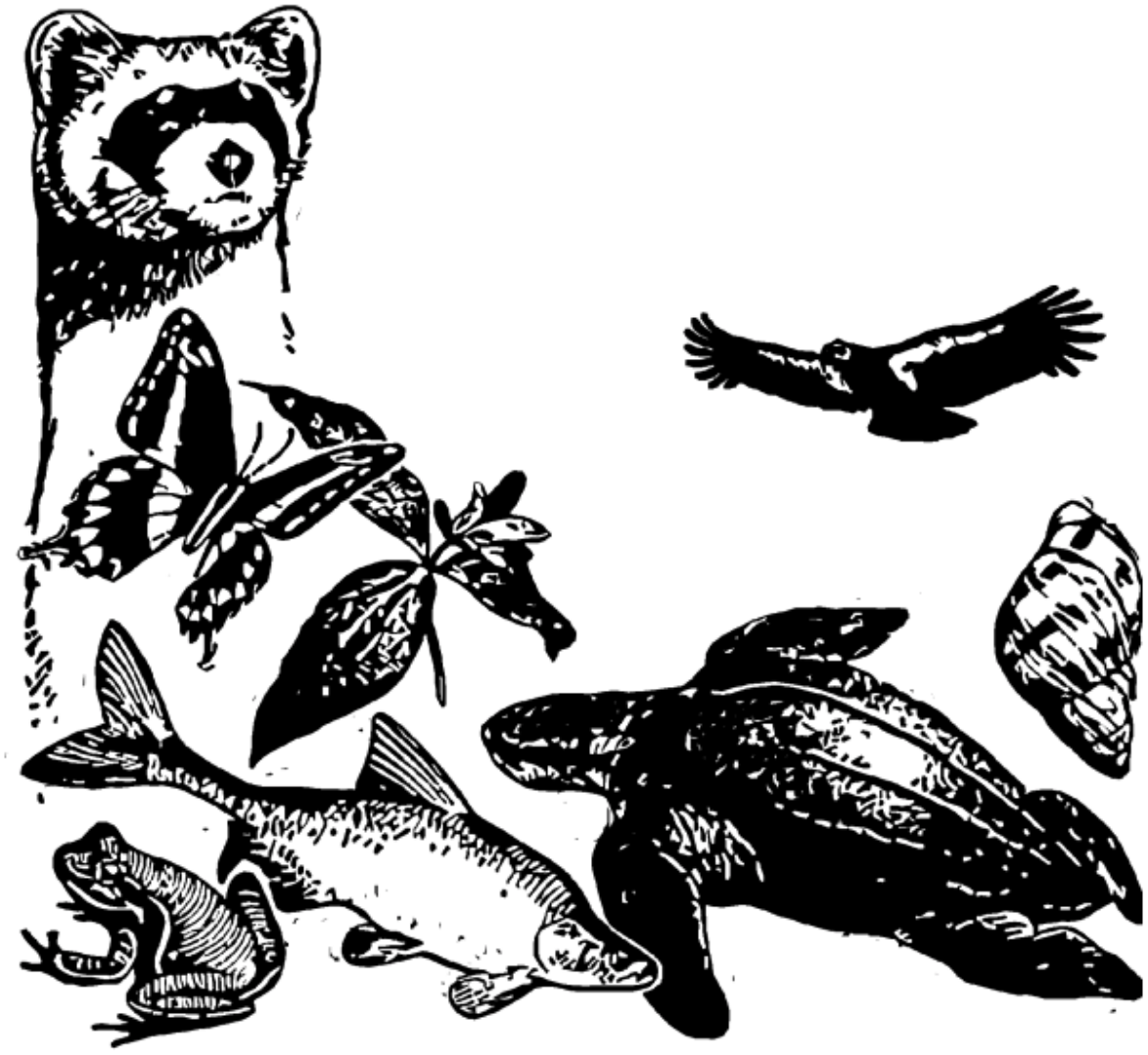
NAME	STATUS
Coastal California Gnatcatcher *(Polioptila californica californica)*	Final designated

U.S. Fish & Wildlife Service

IPaC Trust Resources Report

Generated July 18, 2016 05:05 PM MDT, IPaC v3.0.8

This report is for informational purposes only and should not be used for planning or analyzing project level impacts. For project reviews that require U.S. Fish & Wildlife Service review or concurrence, please return to the IPaC website and request an official species list from the Regulatory Documents page.



IPaC - Information for Planning and Conservation (https://ecos.fws.gov/ipac/): A project planning tool to help streamline the U.S. Fish & Wildlife Service environmental review process.

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U.S. Fish & Wildlife Service

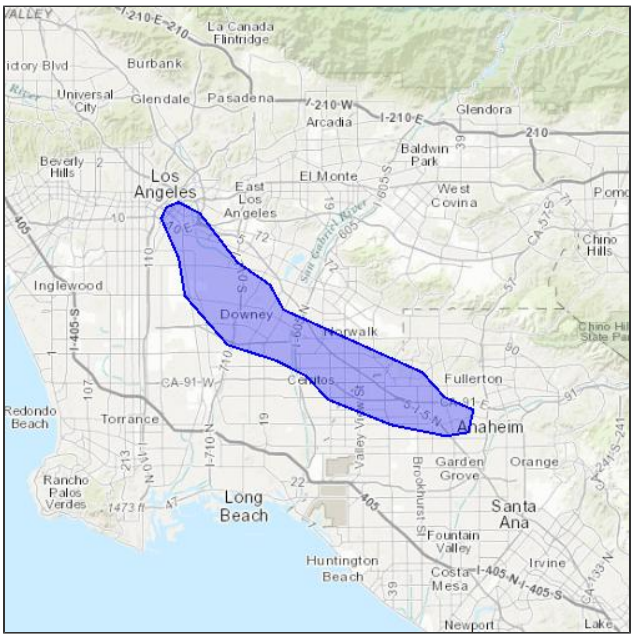
IPaC Trust Resources Report

LOCATION

Los Angeles and Orange counties, California

IPAC LINK

https://ecos.fws.gov/ipac/project/3KIR7-3VHVZ-CAPGX-26P4F-XE4CYA



U.S. Fish & Wildlife Service Contact Information

Trust resources in this location are managed by:

Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
(760) 431-9440

Endangered Species

Proposed, candidate, threatened, and endangered species are managed by the Endangered Species Program of the U.S. Fish & Wildlife Service.

This USFWS trust resource report is for informational purposes only and should not be used for planning or analyzing project level impacts.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list from the Regulatory Documents section.

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 either from the Regulatory Documents section in IPaC or from the local field office directly.

The list of species below are those that may occur or could potentially be affected by activities in this location:

Birds

California Least Tern Sterna antillarum browni — Endangered

CRITICAL HABITAT
No critical habitat has been designated for this species.
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B03X

Coastal California Gnatcatcher Polioptila californica californica — Threatened

CRITICAL HABITAT
There is **final** critical habitat designated for this species.
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B08X

Least Bell's Vireo Vireo bellii pusillus — Endangered

CRITICAL HABITAT
There is **final** critical habitat designated for this species.
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B067

Western Snowy Plover Charadrius alexandrinus nivosus — Threatened

CRITICAL HABITAT
There is **final** critical habitat designated for this species.
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B07C

Flowering Plants

Salt Marsh Bird's-beak Cordylanthus maritimus ssp. maritimus — Endangered

CRITICAL HABITAT

No critical habitat has been designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=Q1US

Ventura Marsh Milk-vetch Astragalus pycnostachyus var. lanosissimus — Endangered

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=Q076

Mammals

Pacific Pocket Mouse Perognathus longimembris pacificus — Endangered

CRITICAL HABITAT

No critical habitat has been designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=A0BY

Critical Habitats

There are no critical habitats in this location

Migratory Birds

Birds are protected by the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act.

Any activity that results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish & Wildlife Service.[1] There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures.

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1. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Additional information can be found using the following links:

- Birds of Conservation Concern
  http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Conservation measures for birds
  http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Year-round bird occurrence data
  http://www.birdscanada.org/birdmon/default/datasummaries.jsp

The following species of migratory birds could potentially be affected by activities in this location:

Allen's Hummingbird Selasphorus sasin — Bird of conservation concern
Season: Breeding
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0LI

Bald Eagle Haliaeetus leucocephalus — Bird of conservation concern
Season: Wintering
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B008

Bell's Vireo Vireo bellii — Bird of conservation concern
Season: Breeding
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JX

Black Oystercatcher Haematopus bachmani — Bird of conservation concern
Season: Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0KJ

Brewer's Sparrow Spizella breweri — Bird of conservation concern
Season: Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HA

Burrowing Owl Athene cunicularia — Bird of conservation concern
Season: Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0NC

Cactus Wren Campylorhynchus brunneicapillus — Bird of conservation concern
Season: Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0FZ

Costa's Hummingbird Calypte costae — Bird of conservation concern
Season: Breeding
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JE

Fox Sparrow Passerella iliaca — Bird of conservation concern
Season: Wintering

Lawrence's Goldfinch Carduelis lawrencei — Bird of conservation concern
Season: Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0J8

Least Bittern Ixobrychus exilis
Season: Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B092

Lesser Yellowlegs Tringa flavipes — Bird of conservation concern
Season: Wintering
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0MD

Lewis's Woodpecker Melanerpes lewis — Bird of conservation concern
Season: Wintering
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HQ

Long-billed Curlew Numenius americanus — Bird of conservation concern
Season: Wintering
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B06S

Marbled Godwit Limosa fedoa — Bird of conservation concern
Season: Wintering
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JL

Mountain Plover Charadrius montanus — Bird of conservation concern
Season: Wintering
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B078

Nuttall's Woodpecker Picoides nuttallii — Bird of conservation concern
Season: Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HT

Oak Titmouse Baeolophus inornatus — Bird of conservation concern
Season: Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0MJ

Olive-sided Flycatcher Contopus cooperi — Bird of conservation concern
Season: Breeding
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0AN

Peregrine Falcon Falco peregrinus — Bird of conservation concern
Season: Wintering
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0FU

Red-crowned Parrot Amazona viridigenalis — Bird of conservation concern
Season: Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0GO

Rufous-crowned Sparrow Aimophila ruficeps — Bird of conservation concern
Season: Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0MX

Short-billed Dowitcher Limnodromus griseus — Bird of conservation concern
Season: Wintering
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JK

Short-eared Owl Asio flammeus — Bird of conservation concern
Season: Wintering
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HD

Snowy Plover Charadrius alexandrinus — Bird of conservation concern
Season: Breeding

Tricolored Blackbird Agelaius tricolor — Bird of conservation concern
Season: Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B06P

Western Grebe aechmophorus occidentalis — Bird of conservation concern
Season: Wintering
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0EA

Whimbrel Numenius phaeopus — Bird of conservation concern
Season: Wintering
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JN

Yellow Warbler dendroica petechia ssp. brewsteri — Bird of conservation concern
Season: Breeding
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0EN

Red Knot Calidris canutus ssp. roselaari — Bird of conservation concern
Season: Wintering
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0G6

Wildlife refuges and fish hatcheries

There are no refuges or fish hatcheries in this location

Wetlands in the National Wetlands Inventory

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.

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 tuberficid 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 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.

This location overlaps all or part of the following wetlands:

Freshwater Emergent Wetland

PEM1Cx

Freshwater Forested/shrub Wetland

PFOA

PSSCx

Freshwater Pond

PUBHh
PUBHx
PUBKx
PUSAx
PUSCx

Riverine

R2UBHx
R2USCr
R4SBA
R4SBAr
R4SBAx
R4SBC
R4SBCr
R4SBCx
R5UBF
R5UBFx

A full description for each wetland code can be found at the National Wetlands Inventory website: http://107.20.228.18/decoders/wetlands.aspx

From: NMFSWCRCA Specieslist - NOAA Service Account
To: Dayman, Shelly
Subject: Re: California High Speed Rail Authority, Los Angeles to Anaheim Project Section
Date: Friday, June 5, 2020 1:36:11 PM

Receipt of this message confirms that NMFS has received your email to nmfswcrca.specieslist@noaa.gov. If you are a federal agency (or representative) and have followed the steps outlined on the California Species List Tools web page (http://www.westcoast.fisheries.noaa.gov/maps_data/california_species_list_tools.html), you have generated an official Endangered Species Act species list.

Messages sent to this email address are not responded to directly. For project specific questions, please contact your local NMFS office.

Northern California/Klamath (Arcata) 707-822-7201

North-Central Coast (Santa Rosa) 707-387-0737

Southern California (Long Beach) 562-980-4000

California Central Valley (Sacramento) 916-930-3600

From: Dayman, Shelly
To: "nmfswcrca.specieslist@noaa.gov"
Subject: California High Speed Rail Authority, Los Angeles to Anaheim Project Section
Date: Friday, June 5, 2020 1:35:00 PM
Attachments: image002.png

Quad Name **Anaheim**

Quad Number **33117-G8**

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 **La Habra**
Quad Number **33117-H8**

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 **Orange**

Quad Number **33117-G7**

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 **Los Alamitos**

Quad Number **33118-G1**

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 - **X**
Coastal Pelagics EFH - **X**
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 - **X**

Quad Name **Whittier**
Quad Number **33118-H1**

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 **El Monte**
Quad Number **34118-A1**

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 **South Gate**

Quad Number **33118-H2**

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 **Los Angeles**
Quad Number **34118-A2**

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 **Hollywood**
Quad Number **34118-A3**

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 -

The California High-Speed Rail Authority (Authority) is responsible for planning, designing, building and operating the first high-speed passenger rail service in the nation. The California High-Speed Rail (HSR) System will connect the megaregions of the state, contribute to economic development and a cleaner environment, create jobs, and preserve agricultural and protected lands. When completed, it will run from San Francisco to the Los Angeles basin in under three hours at speeds capable of exceeding 200 miles per hour. The California HSR System will eventually extend to Sacramento and San Diego, totaling 800 miles with up to 24 stations. In addition, the Authority is working with regional partners to implement a statewide rail modernization plan that will invest billions of dollars in local and regional rail lines to meet the state's 21st century transportation needs.

The Authority plans to implement the California HSR System in two phases. Phase 1 would connect San Francisco to Los Angeles and Anaheim via the Pacheco Pass and the Central Valley. Phase 2 would connect from the Central Valley to Sacramento, and another extension would connect Los Angeles to San Diego.

The Los Angeles to Anaheim Project Section is approximately 30 miles in length and travels through a developed and constrained urban environment, within and adjacent to existing rail operations. The starting and ending points of the Los Angeles to Anaheim Project Section include Los Angeles Union Station (LAUS) in the north and the Anaheim Regional Transportation Intermodal Center (ARTIC) in the south.

The Los Angeles to Anaheim Project Section travels through the cities of Los Angeles, Vernon, Bell, Commerce, Montebello, Pico Rivera, Santa Fe Springs, Norwalk, La Mirada, Buena Park, Fullerton, and Anaheim. The project's alignment would share the existing LOSSAN rail corridor with the existing rail operators. The Authority adopted a strategy of sharing the existing corridor and blending HSR with existing rail systems on shared infrastructure (referred to as "blended operations"[1]) to accelerate and broaden benefits, improve efficiency, minimize community impacts, and reduce construction costs.

Southern California Regional Office

California High-Speed Rail Authority
355 S. Grand Avenue, Suite 2050
Los Angeles, CA 90071
(213) 457-8420
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ICF 50 YEARS 1969 – 2019

[1] California High-Speed Rail Business Plans (http://www.hsr.ca.gov/About/Business_Plans/) suggest blended railroad systems and operations. These terms refer to integrating the HSR System with existing intercity, and commuter and regional rail systems through coordinated infrastructure (blended systems) and scheduling, ticketing, and other means (blended operations).

APPENDIX C: CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE RAREFIND CALIFORNIA NATURAL DIVERSITY DATABASE (CNDDB) QUERY SUMMARY

Multiple Occurrences per Page

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Hollywood (3411813) OR Los Angeles (3411812) OR South Gate (3311882) OR El Monte (3411811) OR Whittier (3311881) OR Los Alamitos (3311871) OR La Habra (3311788) OR Anaheim (3311778) OR Orange (3311777))

Spea hammondii **Element Code:** AAABF02020

western spadefoot

Listing Status:	**Federal:**	Proposed Threatened	**CNDDB Element Ranks:**	**Global:**	G2G3
	State:	None		**State:**	S3S4
	Other:	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened			
Habitat:	**General:**	OCCURS PRIMARILY IN GRASSLAND HABITATS, BUT CAN BE FOUND IN VALLEY-FOOTHILL HARDWOOD WOODLANDS.			
	Micro:	VERNAL POOLS ARE ESSENTIAL FOR BREEDING AND EGG-LAYING.			

Occurrence No.	128	**Map Index:** 38309	**EO Index:** 33316	**Element Last Seen:**	2005-05-18
Occ. Rank:	Good		**Presence:** Presumed Extant	**Site Last Seen:**	2005-05-18
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2019-11-12

Quad Summary: La Habra (3311788), Whittier (3311881)

County Summary: Los Angeles

Lat/Long:	33.98396 / -118.00209	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3760829 E407439	**Elevation (ft):**	1100
PLSS:	T02S, R11W, Sec. 23, NE (S)	**Acres:**	0.0

Location: 0.5 MILE SOUTH OF WORKMAN HILL, TURNBULL CANYON OPEN SPACE, WHITTIER.

Detailed Location: BORDERING SKYLINE #2 MOTORWAY, WHICH PASSES THROUGH THE NORTHERN PART OF THE SITE.

Ecological: HABITAT CONSISTS OF SOME TEMPORARY PONDS WITHIN GRAZED NON-NATIVE GRASSLAND; SOME RUSSIAN THISTLE PRESENT.

General: 2 ADULTS OBSERVED ON 18 FEB 1998. 4 ADULTS CAUGHT IN PITFALL TRAPS BETWEEN 1 APR AND 18 MAY 2005.

Owner/Manager: CITY OF WHITTIER

Occurrence No.	845	**Map Index:** B2473	**EO Index:** 114402	**Element Last Seen:**	1952-03-01
Occ. Rank:	None		**Presence:** Possibly Extirpated	**Site Last Seen:**	1952-03-01
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2019-03-06

Quad Summary: Anaheim (3311778)

County Summary: Orange

Lat/Long:	33.75917 / -117.98966	**Accuracy:**	2/5 mile
UTM:	Zone-11 N3735893 E408348	**Elevation (ft):**	45
PLSS:	T05S, R11W, Sec. 12, NW (S)	**Acres:**	280.0

Location: VICINITY OF HWY 39 AT WESTMINSTER BLVD, WESTMINSTER.

Detailed Location:

Ecological: 1950S AERIAL IMAGERY SHOWS AREA WAS MIX OF AGRICULTURAL AND URBAN DEVELOPMENT. AREA NOW COMPLETELY DEVELOPED.

General: JUVENILE COLLECTED ON 1 MAR 1952.

Owner/Manager: UNKNOWN

Occurrence No.	1045	**Map Index:**	B3946	**EO Index:**	116860	**Element Last Seen:**	1967-04-16
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1967-04-16
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2019-09-16

Quad Summary:	Los Alamitos (3311871)
County Summary:	Los Angeles

Lat/Long:	33.7699 / -118.11784	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3737205 E396490	**Elevation (ft):**	21
PLSS:	T05S, R12W, Sec. 3, SE (S)	**Acres:**	70.0

Location:	PACIFIC COAST HWY (HWY 1) AT E COLORADO ST, ALAMITOS HEIGHTS, EAST LONG BEACH.
Detailed Location:	
Ecological:	CAD67S0001 NOTED THERE WERE PILES OF WOOD ALL AROUND THE AREA, AND PONDS AROUND OIL WELLS. LAND HAS BEEN CONVERTED TO HOUSING DEVELOPMENTS SINCE TIME OF COLLECTION, POSSIBLY EXTIRPATED.
General:	2 COLLECTED IN APR 1967.
Owner/Manager:	UNKNOWN

Occurrence No.	1049	**Map Index:**	B3953	**EO Index:**	116866	**Element Last Seen:**	1956-05-02
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1956-05-02
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2019-09-16

Quad Summary:	Los Alamitos (3311871), Whittier (3311881), South Gate (3311882)
County Summary:	Los Angeles

Lat/Long:	33.88792 / -118.11662	**Accuracy:**	1 mile
UTM:	Zone-11 N3750290 E396745	**Elevation (ft):**	76
PLSS:	T03S, R12W, Sec. 27 (S)	**Acres:**	1987.0

Location:	VICINITY OF BELLFLOWER
Detailed Location:	
Ecological:	AREA HEAVILY DEVELOPED, SPECIES LIKELY EXTIRPATED FROM VICINITY.
General:	1 COLLECTED ON 2 MAY 1956.
Owner/Manager:	UNKNOWN

Occurrence No.	1050	**Map Index:**	B3955	**EO Index:**	116869	**Element Last Seen:**	1978-XX-XX
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1978-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2019-09-16

Quad Summary:	La Habra (3311788)
County Summary:	Los Angeles, Orange

Lat/Long:	33.89632 / -117.98725	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3751099 E408717	**Elevation (ft):**	151
PLSS:	T03S, R11W, Sec. 24, NW (S)	**Acres:**	70.0

Location:	ROSECRANS AVE AND BEACH BLVD INTERSECTION, LA MIRADA.
Detailed Location:	
Ecological:	LIKELY COLLECTED FROM THE EAST SIDE OF BEACH BLVD; THIS AREA WAS UNDEVELOPED, BUT APPARENTLY OIL EXTRACTION IN 1968 AERIAL. AREA HAS BEEN HEAVILY DEVELOPED, LIKELY EXTIRPATED FROM SITE.
General:	LARVAE COLLECTED IN 1978.
Owner/Manager:	UNKNOWN

Occurrence No.	1051	**Map Index:**	B3957	**EO Index:**	116872	**Element Last Seen:**	1963-09-30
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1963-09-30
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2019-09-16

Quad Summary: El Monte (3411811), Los Angeles (3411812)

County Summary: Los Angeles

Lat/Long:	34.01638 / -118.11133	**Accuracy:**	1 mile
UTM:	Zone-11 N3764529 E397388	**Elevation (ft):**	207
PLSS:	T02S, R12W, Sec. 11 (S)	**Acres:**	1987.0

Location: VICINITY OF MONTEBELLO

Detailed Location: GIVEN LOCALITY: "MONTIBELLO," EXACT LOCATION UNKNOWN. POSSIBLY FOUND ALONG RIO HONDO.

Ecological: AREA HAS BEEN HEAVILY DEVELOPED, LIKELY EXTIRPATED FROM SITE.

General: 1 COLLECTED ON 30 SEP 1963.

Owner/Manager: UNKNOWN

Occurrence No.	1084	**Map Index:**	B4017	**EO Index:**	116933	**Element Last Seen:**	1998-03-10
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2010-04-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2019-09-24

Quad Summary: Whittier (3311881)

County Summary: Los Angeles

Lat/Long:	33.97128 / -118.00914	**Accuracy:**	80 meters
UTM:	Zone-11 N3759431 E406775	**Elevation (ft):**	545
PLSS:	T02S, R11W, Sec. 26, NW (S)	**Acres:**	5.0

Location: 0.2 AIR MILE NE OF INTERSECTION OF LINDA VISTA DRIVE AND CALMOSA AVENUE, PUENTE HILLS, WHITTIER.

Detailed Location: MAPPED TO COORDINATES PROVIDED.

Ecological: SEASONAL POND IN COASTAL SAGE SCRUB. SURROUNDING LAND USED FOR OIL EXTRACTION AND HABITAT PRESERVE.

General: ONE FOUND ON 10 MAR 1998. NONE FOUND DURING FOCUSED SURVEYS FOR SPADEFOOT IN FEB AND APR 2010.

Owner/Manager: PUENTE HILLS LANDFILL NHPA

Occurrence No.	1363	**Map Index:**	A5271	**EO Index:**	118160	**Element Last Seen:**	1921-04-XX
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1921-04-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-03-03

Quad Summary: Hollywood (3411813)

County Summary: Los Angeles

Lat/Long:	34.08656 / -118.29332	**Accuracy:**	2/5 mile
UTM:	Zone-11 N3772508 E380682	**Elevation (ft):**	307
PLSS:	T01S, R14W, Sec. 13, NE (S)	**Acres:**	280.0

Location: LOS ANGELES CITY COLLEGE.

Detailed Location: GIVEN COLLECTION LOCALITY "GROUNDS OF SOUTHERN BRANCH, UNIVERSITY OF CALIFORNIA, LOS ANGELES," WHICH WAS LOCATED AT PRESENT DAY LOS ANGELES CITY COLLEGE IN 1921.

Ecological: AREA HAS BEEN HEAVILY DEVELOPED SINCE TIME OF COLLECTION, LIKELY EXTIRPATED.

General: LARVAE COLLECTED IN APR 1921.

Owner/Manager: UNKNOWN

Occurrence No.	1368	**Map Index:** A9129	**EO Index:**	118169	**Element Last Seen:**	1921-05-03
Occ. Rank:	Poor		**Presence:**	Presumed Extant	**Site Last Seen:**	1921-05-03
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:**	2020-03-05

Quad Summary: Los Angeles (3411812)

County Summary: Los Angeles

Lat/Long:	34.10515 / -118.1881	**Accuracy:**	non-specific area
UTM:	Zone-11 N3774452 E390414	**Elevation (ft):**	468
PLSS:	T01S, R13W, Sec. 12 (S)	**Acres:**	279.0

Location: ARROYO SECO, EAST TRIBUTARY OF LOS ANGELES RIVER, LOS ANGELES.

Detailed Location: GIVEN LOCATION "ARROYO SECO, LOS ANGELES," EXACT LOCATION UNKNOWN.

Ecological: BASED ON HISTORIC AERIALS FROM 1920S & 1930S, THERE WAS MODERATE DEVELOPMENT AT THE TIME OF THIS COLLECTION, BUT ARROYO SECO STILL HAD A SEMI-NATURAL WATERCOURSE PATTERN WITH OPEN SPACE UPLANDS. NOW CONCRETE LINED CANAL FROM I-210 SOUTH.

General: METAMORPHOSING LARVA DETECTED ON 3 MAY 1921.

Owner/Manager: UNKNOWN

Ardea herodias

Element Code: ABNGA04010

great blue heron

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G5
	State:	None		**State:**	S4
	Other:	CDF_S-Sensitive, IUCN_LC-Least Concern			
Habitat:	**General:**	COLONIAL NESTER IN TALL TREES, CLIFFSIDES, AND SEQUESTERED SPOTS ON MARSHES.			
	Micro:	ROOKERY SITES IN CLOSE PROXIMITY TO FORAGING AREAS: MARSHES, LAKE MARGINS, TIDE-FLATS, RIVERS AND STREAMS, WET MEADOWS.			

Occurrence No.	70	**Map Index:** 54473	**EO Index:**	54473	**Element Last Seen:**	2004-02-14
Occ. Rank:	Fair		**Presence:**	Presumed Extant	**Site Last Seen:**	2004-02-14
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:**	2004-02-25

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.86490 / -117.84362	**Accuracy:**	80 meters
UTM:	Zone-11 N3747496 E421969	**Elevation (ft):**	250
PLSS:	T03S, R09W, Sec. 32 (S)	**Acres:**	0.0

Location: BETWEEN ANAHEIM LAKE AND TUSTIN AVENUE, NORTH OF MIRALOMA AVENUE, ON THE EAST SIDE OF ANAHEIM LAKE, ANAHEIM.

Detailed Location: ATLAS OF BREEDING BIRDS (S. GALLAGHER, 1997) INDICATES NESTS IN EUCALYPTUS TREES; THESE NESTS IN PINE TREES MAY BE A NEW LOCATION, SHIFTED LOCATION, OR AN EXPANSION.

Ecological: NESTS ARE LOCATED IN A WINDROW OF LARGE, ORNAMENTAL PINE TREES; SURROUNDED BY BARE GROUND, ROADWAYS, AND COMMERCIAL DEVELOPMENT.

General: A MINIMUM OF 42 ADULTS OBSERVED NESTING ON 14 FEB 2004.

Owner/Manager: ORA COUNTY WATER DISTRICT

Elanus leucurus

Element Code: ABNKC06010

white-tailed kite

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G5
	State:	None		**State:**	S3S4
	Other:	BLM_S-Sensitive, CDFW_FP-Fully Protected, IUCN_LC-Least Concern			
Habitat:	**General:**				

	ROLLING FOOTHILLS AND VALLEY MARGINS WITH SCATTERED OAKS AND RIVER BOTTOMLANDS OR MARSHES NEXT TO DECIDUOUS WOODLAND.
Micro:	OPEN GRASSLANDS, MEADOWS, OR MARSHES FOR FORAGING CLOSE TO ISOLATED, DENSE-TOPPED TREES FOR NESTING AND PERCHING.

Occurrence No.	120	**Map Index:**	76200	**EO Index:**	77182	**Element Last Seen:**	2009-05-09
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2009-05-09
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2009-08-11

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.84432 / -117.79653	**Accuracy:**	non-specific area
UTM:	Zone-11 N3745180 E426307	**Elevation (ft):**	420
PLSS:	T04S, R09W, Sec. 11, NW (S)	**Acres:**	32.0

Location:	VICINITY OF E WESTRIDGE RD AT S WESTRIDGE CIRCLE, JUST SOUTH OF PELANCONI PARK, PERALTA HILLS, ANAHEIM.
Detailed Location:	MAPPED TO PROVIDED COORDINATES. 2009 NEST (SOUTH FEATURE) ALONG E NOHL RANCH RD; 2008 NEST (NORTH FEATURE) NEAR PELANCONI PARK. TERRITORY ID OR-065, LOCATION = "NOEL RANCH RD - DONELDAS."
Ecological:	NEST TREES WERE DESCRIBED AS "PINES."
General:	IN 2008 3 CHICKS WERE BANDED, BUT ONE ENDED UP GROUNDED BY CROWS AND MAY HAVE DIED. IN 2009 3 CHICKS WERE BANDED AT THE NEST ON 9 MAY.
Owner/Manager:	PVT

Occurrence No.	122	**Map Index:**	76204	**EO Index:**	77184	**Element Last Seen:**	2008-XX-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2008-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2009-08-11

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.80320 / -117.75772	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3740593 E429864	**Elevation (ft):**	560
PLSS:	T04S, R08W, Sec. 19, S (S)	**Acres:**	0.0

Location:	ALONG WEIR CANYON RD (DIRT) AND 0.4 MI S OF BM 588 AT THE SOUTH END OF WEIR CYN, 0.4 MI N OF ORANGE CITY ZOO, ORANGE.
Detailed Location:	VICINITY OF VILLA PARK DAM (FILLED); NOW BARHAM RANCH, COUNTY OF ORANGE. MAPPED TO PROVIDED COORDINATES. TERRITORY ID OR-026, LOCATION "IRVINE PARK FLOODPLAIN."
Ecological:	NEST IN LIVE OAK.
General:	2-3 CHICKS WERE OBSERVED IN ACTIVE NEST THAT FLEDGED IN 2008. NEST SITE WAS INACTIVE IN 2009.
Owner/Manager:	ORA COUNTY

Occurrence No.	136	**Map Index:**	76258	**EO Index:**	77234	**Element Last Seen:**	2009-XX-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2009-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2009-08-13

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.78083 / -117.77055	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3738122 E428657	**Elevation (ft):**	650
PLSS:	T04S, R09W, Sec. 36, E (S)	**Acres:**	0.0

Location:	0.5 MI W OF THE PETERS CANYON RESERVOIR INTAKE TOWER, NEAR BRIER LN & HIGHCLIFF DR, SANTA ANNA.
Detailed Location:	MAPPED TO PROVIDED COORDINATES. HOWEVER, THE COORDINATES PUT THE NEST LOCATION IN NEIGHBORHOOD BACK YARD; COORDINATES -117 46 03, 33 46 52 (N83) SEEM TO MATCH DESCRIPTION BETTER. TERRITORY ID OR-069, LOCATION "PETERS CANYON PARK."
Ecological:	NEST IN PINE.
General:	NEST CONFIRMED ACTIVE IN 2009 WITH 4 CHICKS THAT SUCCESSFULLY FLEDGED.
Owner/Manager:	PVT

Occurrence No.	138	**Map Index:**	76257	**EO Index:**	77236	**Element Last Seen:**	2009-05-14
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2009-05-14
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2009-08-13

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.84822 / -117.76789	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3745592 E428960	**Elevation (ft):**	605
PLSS:	T04S, R09W, Sec. 01, SE (S)	**Acres:**	0.0

Location:	1.4 MI ESE OF SR 91 (RIVERSIDE FWY) AT SR 90 (S IMPERIAL HWY), BETWEEN E VIA ARBOLES & E VIA ESTRADA, ANAHEIM.
Detailed Location:	MAPPED TO PROVIDED COORDINATES. TERRITORY ID OR-064, LOCATION "ANAHEIM HILLS."
Ecological:	NEST IN PINE. SAVED FROM URBAN TREE TRIMMERS.
General:	3 CHICKS BANDED AT THE NEST ON 14 MAY 2009 AND LATER WERE OBSERVED TO HAVE FLEDGED.
Owner/Manager:	PVT

Accipiter cooperii

Element Code: ABNKC12040

Cooper's hawk

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G5
	State:	None		**State:**	S4
	Other:	CDFW_WL-Watch List, IUCN_LC-Least Concern			
Habitat:	**General:**	WOODLAND, CHIEFLY OF OPEN, INTERRUPTED OR MARGINAL TYPE.			
	Micro:	NEST SITES MAINLY IN RIPARIAN GROWTHS OF DECIDUOUS TREES, AS IN CANYON BOTTOMS ON RIVER FLOOD-PLAINS; ALSO, LIVE OAKS.			

Occurrence No.	96	**Map Index:** 56408	**EO Index:** 56424	**Element Last Seen:**	2002-02-20
Occ. Rank:	Excellent		**Presence:** Presumed Extant	**Site Last Seen:**	2002-02-20
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2004-08-17

Quad Summary: Black Star Canyon (3311776), Orange (3311777)

County Summary: Orange

Lat/Long:	33.85522 / -117.74973	**Accuracy:**	2/5 mile
UTM:	Zone-11 N3746356 E430645	**Elevation (ft):**	680
PLSS:	T04S, R08W, Sec. 06 (S)	**Acres:**	0.0

Location: AREA 0.8 MILE DIRECTLY NORTH OF WALNUT CANYON RESERVOIR, ANAHEIM HILLS.

Detailed Location: NEST TREE IS ABOVE A HORSE TRAIL. LOCATION GIVEN AS HOLLOW OAK ROAD, DEER CANYON PARK, ANAHEIM HILLS - AREA MAPPED IS E HOLLOW OAK ROAD.

Ecological: HABITAT CONSISTS OF OAK WOODLAND, RIPARIAN AND CSS. HORSEBACK RIDING TRAIL IN AREA. THIS AREA IS ALSO USED BY HIKERS.

General: 2 ADULTS UTILIZE THIS AREA FOR FORAGING AND BREEDING.

Owner/Manager: CITY OF ANAHEIM

Buteo swainsoni

Element Code: ABNKC19070

Swainson's hawk

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G5
	State:	Threatened		**State:**	S4
	Other:	BLM_S-Sensitive, IUCN_LC-Least Concern			
Habitat:	**General:**	BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, AND AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.			
	Micro:	REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.			

Occurrence No.	2540	**Map Index:**	54944	**EO Index:**	91454	**Element Last Seen:**	1880-04-10
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1880-04-10
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2013-10-22

Quad Summary:	El Monte (3411811)
County Summary:	Los Angeles

Lat/Long:	34.09227 / -118.10543	**Accuracy:**	1 mile
UTM:	Zone-11 N3772938 E398023	**Elevation (ft):**	375
PLSS:	T01S, R12W, Sec. 11 (S)	**Acres:**	0.0

Location:	SAN GABRIEL.
Detailed Location:	MAPPED GENERALLY TO SAN GABRIEL, PER SPECIMEN LOCALITY. EXACT COLLECTION LOCATION UNKNOWN.
Ecological:	NEST 40' UP IN FORKED TOP OF AN OAK. THE BREEDING POPULATION OF THE TRANSVERSE RANGES REGION IS GENERALLY CONSIDERED TO BE EXTIRPATED.
General:	INGERSOLL COLLECTED 3 EGGS ON 10 APR 1880 AND SHOT THE FEMALE HAWK AS IT LEFT THE NEST.
Owner/Manager:	UNKNOWN

Occurrence No.	2569	**Map Index:**	90422	**EO Index:**	91535	**Element Last Seen:**	1888-05-16
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1888-05-16
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2013-10-22

Quad Summary:	Anaheim (3311778)
County Summary:	Orange

Lat/Long:	33.83450 / -117.91170	**Accuracy:**	1 mile
UTM:	Zone-11 N3744180 E415641	**Elevation (ft):**	150
PLSS:	T04S, R10W, Sec. 10 (S)	**Acres:**	0.0

Location:	ANAHEIM.
Detailed Location:	MAPPED GENERALLY TO GIVEN LOCALITY "ANAHEIM," USING HISTORICAL TOPO MAP FOR REFERENCE. EXACT COLLECTION LOCATION UNKNOWN.
Ecological:	BREEDING POPULATION GENERALLY CONSIDERED EXTIRPATED FROM THE TRANSVERSE RANGES REGION.
General:	1 EGG COLLECTED ON 16 MAY 1888.
Owner/Manager:	UNKNOWN

Occurrence No.	2801	**Map Index:**	B3667	**EO Index:**	116580	**Element Last Seen:**	2019-07-30
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2019-07-30
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2019-08-09

Quad Summary: Los Alamitos (3311871)

County Summary: Orange

Lat/Long:	33.77248 / -118.0603	**Accuracy:**	80 meters
UTM:	Zone-11 N3737434 E401821	**Elevation (ft):**	18
PLSS:	T05S, R11W, Sec. 5, NW (S)	**Acres:**	5.0

Location: ABOUT 0.1 MILES SOUTH OF I-405, ABOUT 0.8 MILES ESE OF SEAL BEACH BLVD (LOS ALAMITOS BLVD) AT I-405, SEAL BEACH NWS.

Detailed Location:

Ecological: NEST IN A PERUVIAN PEPERWOOD TREE SURROUNDED BY AGRICULTURE FIELDS.

General: A PAIR WAS OBSERVED NEARBY IN JUN-JUL 2018, BUT NO NEST FOUND. NEST DISCOVERED ON 15 JUL 2019. ADULT MALE AND 2 NESTLINGS BANDED ON 29 & 30 JUL 2019. THIS IS THE FIRST KNOWN NEST IN ORANGE COUNTY SINCE 1888.

Owner/Manager: DOD-SEAL BEACH NWS

Buteo regalis

Element Code: ABNKC19120

ferruginous hawk

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G4
	State:	None		**State:**	S3S4
	Other:	CDFW_WL-Watch List, IUCN_LC-Least Concern			
Habitat:	**General:**	OPEN GRASSLANDS, SAGEBRUSH FLATS, DESERT SCRUB, LOW FOOTHILLS AND FRINGES OF PINYON AND JUNIPER HABITATS.			
	Micro:	EATS MOSTLY LAGOMORPHS, GROUND SQUIRRELS, AND MICE. POPULATION TRENDS MAY FOLLOW LAGOMORPH POPULATION CYCLES.			

Occurrence No.	15	**Map Index:**	65995	**EO Index:**	66074	**Element Last Seen:**	1997-11-28
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	1997-11-28
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2006-08-23

Quad Summary: Los Alamitos (3311871)

County Summary: Orange

Lat/Long:	33.78352 / -118.06261	**Accuracy:**	3/5 mile
UTM:	Zone-11 N3738661 E401619	**Elevation (ft):**	20
PLSS:	T04S, R11W, Sec. 32 (S)	**Acres:**	0.0

Location: SOUTH OF LOS ALAMITOS, LOS ALAMITOS ARMED FORCES RESERVE CENTER. NORTH OF I-405 & EAST OF LOS ALAMITOS BLVD.

Detailed Location: MAPPED ACCORDING TO MAP ATTACHED TO SOURCE.

Ecological: RUDERAL, LOW GROWING VEGETATION ON FLAT AREA SURROUNDING AIR FIELD. VEGETATIVE COMMUNITY NOT DETERMINED AS ACCESS IS RESTRICTED.

General: WINTERING SITE. 2 IMMATURE INDIVIDUALS OBSERVED OVER 30 MINUTE PERIOD ON 28 NOV 1997 FORAGING/FEEDING IN AREA.

Owner/Manager: DOD

Falco peregrinus anatum **Element Code:** ABNKD06071

American peregrine falcon

Listing Status:	**Federal:**	Delisted	**CNDDB Element Ranks:**	**Global:**	G4T4
	State:	Delisted		**State:**	S3S4
	Other:	CDF_S-Sensitive			
Habitat:	**General:**	NEAR WETLANDS, LAKES, RIVERS, OR OTHER WATER; ON CLIFFS, BANKS, DUNES, MOUNDS; ALSO, HUMAN-MADE STRUCTURES.			
	Micro:	NEST CONSISTS OF A SCRAPE OR A DEPRESSION OR LEDGE IN AN OPEN SITE.			

*** SENSITIVE ***

Occurrence No.	45	**Map Index:**	A0522	**EO Index:**	102084	**Element Last Seen:**	2015-04-01
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2015-04-01
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2016-06-14

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:		**Accuracy:**	80 meters
UTM:		**Elevation (ft):**	161
PLSS:		**Acres:**	5.0

Location: *SENSITIVE* LOCATION INFORMATION SUPPRESSED.

Detailed Location: PLEASE CONTACT THE CALIFORNIA NATURAL DIVERSITY DATABASE, CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, FOR MORE INFORMATION: (916) 322-2493

Ecological: NESTS AT TOP OF BUILDING, IN INACCESSIBLE LOCATION WELL-PROTECTED FROM THE SUN AND WEATHER.

General:

Owner/Manager:

Coturnicops noveboracensis **Element Code:** ABNME01010

yellow rail

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G4
	State:	None		**State:**	S2
	Other:	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive, USFWS_BCC-Birds of Conservation Concern			
Habitat:	**General:**	SUMMER RESIDENT IN EASTERN SIERRA NEVADA IN MONO COUNTY.			
	Micro:	FRESHWATER MARSHLANDS.			

Occurrence No.	24	**Map Index:** A5271	**EO Index:**	106994	**Element Last Seen:** 1952-10-15
Occ. Rank:	Unknown		**Presence:**	Presumed Extant	**Site Last Seen:** 1952-10-15
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:** 2017-07-12

Quad Summary: Hollywood (3411813)

County Summary: Los Angeles

Lat/Long:	34.08656 / -118.29332	**Accuracy:**	2/5 mile
UTM:	Zone-11 N3772508 E380682	**Elevation (ft):**	307
PLSS:	T01S, R14W, Sec. 13, NE (S)	**Acres:**	280.0

Location: LOS ANGELES CITY COLLEGE.

Detailed Location: MAPPED TO PROVIDED SPECIMEN LOCALITY.

Ecological:

General: 1 COLLECTED 15 OCT 1952. RECORDED AS "BADLY EMACIATED;" LIKELY FOUND INJURED OR EXHAUSTED LIKE OTHER SPECIMENS COLLECTED IN URBAN AREAS OF SOUTHERN CALIFORNIA.

Owner/Manager: UNKNOWN

Laterallus jamaicensis coturniculus

Element Code: ABNME03041

California black rail

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G3T1
	State:	Threatened		**State:**	S2
	Other:	BLM_S-Sensitive, CDFW_FP-Fully Protected, IUCN_EN-Endangered			
Habitat:	**General:**	INHABITS FRESHWATER MARSHES, WET MEADOWS AND SHALLOW MARGINS OF SALTWATER MARSHES BORDERING LARGER BAYS.			
	Micro:	NEEDS WATER DEPTHS OF ABOUT 1 INCH THAT DO NOT FLUCTUATE DURING THE YEAR AND DENSE VEGETATION FOR NESTING HABITAT.			

Occurrence No.	67	**Map Index:** A3934	**EO Index:** 105595	**Element Last Seen:**	1986-12-12
Occ. Rank:	Unknown		**Presence:** Presumed Extant	**Site Last Seen:**	1986-12-12
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2017-03-13

Quad Summary:	Tustin (3311767), Newport Beach (3311768), Orange (3311777), Anaheim (3311778)
County Summary:	Orange

Lat/Long:	33.7903 / -117.8618	**Accuracy:**	5 miles
UTM:	Zone-11 N3739239 E420218	**Elevation (ft):**	170
PLSS:	T04S, R09W, Sec. 30 (S)	**Acres:**	49683.0

Location:	ORANGE.
Detailed Location:	LOCATION DESCRIBED ONLY AS "NEAR ORAGE." EXACT LOCATION UNKNOWN. MAPPED GENERALLY TO AREA NEAR TOWN OF ORANGE BASED ON HISTORIC USGS TOPO MAP (SANTA ANA 1896, 1:62500).
Ecological:	BIRD POSSIBLY OCCUPIED THE SANTA ANA RIVER AND SANTIAGO CREEK. THIS OCCURRENCE IS LIKELY NOT REPRESENTATIVE OF A BREEDING POPULATION.
General:	1 RAIL COLLECTED ON 12 DEC 1896 BY E. DAVIS; THIS RAIL MAY HAVE BEEN A MIGRATING INDIVIDUAL.
Owner/Manager:	UNKNOWN

Sternula antillarum browni

Element Code: ABNNM08103

California least tern

Listing Status:	**Federal:**	Endangered	**CNDDB Element Ranks:**	**Global:**	G4T2T3Q
	State:	Endangered		**State:**	S2
	Other:	CDFW_FP-Fully Protected			
Habitat:	**General:**	NESTS ALONG THE COAST FROM SAN FRANCISCO BAY SOUTH TO NORTHERN BAJA CALIFORNIA.			
	Micro:	COLONIAL BREEDER ON BARE OR SPARSELY VEGETATED, FLAT SUBSTRATES: SAND BEACHES, ALKALI FLATS, LAND FILLS, OR PAVED AREAS.			

Occurrence No.	15	**Map Index:**	02226	**EO Index:**	25697	**Element Last Seen:**	1980-XX-XX
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1981-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1998-11-23

Quad Summary:	Los Alamitos (3311871)
County Summary:	Los Angeles

Lat/Long:	33.75416 / -118.10587	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3735447 E397579	**Elevation (ft):**	10
PLSS:	T05S, R12W, Sec. 11, NW (S)	**Acres:**	0.0

Location:	EAST OF PACIFIC COAST HWY BETWEEN N BANK OF THE SAN GABRIEL RIVER & "THE MARKETPLACE". FILL AREA.
Detailed Location:	
Ecological:	HABITAT IS LANDFILL OF HARD CLAY COVERED WITH SEVERAL INCHES OF FINE DUST.
General:	SITE WAS USED CONTINUOUSLY BETWEEN 1971 AND 1980 BY 35-65 PAIRS WITH 0-70 YOUNG FLEDGED. SITE WAS LOST IN 1981 TO EXPANSION OF "THE MARKET PLACE."
Owner/Manager:	UNKNOWN

Occurrence No.	66	**Map Index:**	02216	**EO Index:**	25655	**Element Last Seen:**	1986-XX-XX
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1988-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1998-11-23

Quad Summary:	Los Alamitos (3311871)
County Summary:	Los Angeles

Lat/Long:	33.76057 / -118.11836	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3736170 E396430	**Elevation (ft):**	
PLSS:	T05S, R12W, Sec. 10 (S)	**Acres:**	0.0

Location:	COSTA DEL SOL. CONSTRUCTION SITE EAST SIDE & ADJACENT TO MARINE STADIUM IN LONG BEACH.
Detailed Location:	
Ecological:	
General:	1982: 23 PR NESTED ON RECTANGULAR, BULKHEADED, GRAVEL-COVERED BAY. 1983: 25 PR, 14 FLEDGED; 1984, 5 PR, 7 FLEDGED; 1985: 33 PR, 3 FLEDGED (HEAVY PREDATION BY KESTREL); 1986: 4 PR, 0 FLEDGED. AREA NOT USED IN 1987 OR 1988.
Owner/Manager:	PVT

Occurrence No.	87	**Map Index:**	B0188	**EO Index:**	112045	**Element Last Seen:**	2018-05-27
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2018-05-27
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2018-08-07

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.82376 / -117.86984	**Accuracy:**	80 meters
UTM:	Zone-11 N3742955 E419505	**Elevation (ft):**	176
PLSS:	T04S, R09W, Sec. 18, SW (S)	**Acres:**	5.0

Location:	BURRIS BASIN (=ANAHEIM COVES PARK), WEST SIDE OF THE SANTA ANA RIVER BETWEEN LINCOLN AVE AND E BALL RD, ANAHEIM.
Detailed Location:	MAPPED CENTERED ON COORDINATES GIVEN IN 2015 DATABASE.
Ecological:	TERNS OBSERVED HERE SINCE THE 1990S, NESTING SINCE 2004. 2.4AC ISLAND CREATED IN ARTIFICIAL GROUNDWATER RECHARGE BASIN IN PUBLIC PARK AS MITIGATION FOR CALIFORNIA LEAST TERN. PREVIOUSLY A SAND MINING PIT. SURROUNDED BY URBAN DEVELOPMENT.
General:	3 PAIRS, 2 FLEDGLINGS OBSERVED IN 2004. 13-14 PAIRS, 12 FLEDGLINGS IN 2011. 12 NESTS OBS IN 2012. #PAIRS/#FLEDGLINGS/YEAR: 4/2/2008, 23/1/2013, 18/10/2014, 23/3/2015, 10/0/2016. AT LEAST 3 ADULTS & POSSIBLE NEST EXCHANGE OBS ON 27 MAY 2018.
Owner/Manager:	ORA COUNTY, CITY OF ANAHEIM

Occurrence No.	88	**Map Index:**	B0256	**EO Index:**	112116	**Element Last Seen:**	1904-06-16
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1904-06-16
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2018-08-06

Quad Summary:	Seal Beach (3311861), Los Alamitos (3311871)
County Summary:	Los Angeles, Orange

Lat/Long:	33.73584 / -118.10022	**Accuracy:**	1 mile
UTM:	Zone-11 N3733410 E398081	**Elevation (ft):**	9
PLSS:	T05S, R12W, Sec. 14 (S)	**Acres:**	1987.0

Location:	VICINITY OF SEAL BEACH (ANAHEIM LANDING).
Detailed Location:	A HISTORIC OCCURRENCE BASED ON MUSEUM SPECIMENS FROM LOCALITIES "SEAL BEACH," "ANAHEIM LANDING," OR SIMILAR.
Ecological:	NO RECORDS OF NESTING IN THIS VICINITY SINCE THE 1904 COLLECTION. PRESUMABLY THIS SITE IS NO LONGER SUITABLE FOR NESTING. HOWEVER, THE NEARBY MITIGATION SITE IN UPPER ANAHEIM BAY (OCC #59) CURRENTLY SUPPORTS NESTING TERNS.
General:	COLLECTED IN 1887, 1888, 1890 & 1904.
Owner/Manager:	UNKNOWN

Occurrence No.	89	**Map Index:**	B0264	**EO Index:**	112123	**Element Last Seen:**	2016-06-29
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2016-06-29
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2018-08-06

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.86496 / -117.84744	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3747506 E421616	**Elevation (ft):**	204
PLSS:	T03S, R09W, Sec. 32, SW (S)	**Acres:**	70.0

Location: ANAHEIM LAKE, AT THE SE CORNER OF E ORANGETHORPE AVE AND MILLER ST IN ANAHEIM.

Detailed Location: LOCATION GIVEN ONLY AS ANAHEIM LAKE, FOUND IN GOOGLE EARTH & GNIS. EXACT NEST SITE LOCATION UNKNOWN.

Ecological: A NEW NESTING SITE IN 2016.

General: 4 ACTIVE NESTS OBSERVED IN 2016; 2 OF 6 EGGS HATCHED BUT NONE FLEDGED.

Owner/Manager: UNKNOWN

Coccyzus americanus occidentalis

Element Code: ABNRB02022

western yellow-billed cuckoo

Listing Status:	**Federal:**	Threatened	**CNDDB Element Ranks:**	**Global:**	G5T2T3
	State:	Endangered		**State:**	S1
	Other:	BLM_S-Sensitive, USFS_S-Sensitive			
Habitat:	**General:**	RIPARIAN FOREST NESTER, ALONG THE BROAD, LOWER FLOOD-BOTTOMS OF LARGER RIVER SYSTEMS.			
	Micro:	NESTS IN RIPARIAN JUNGLES OF WILLOW, OFTEN MIXED WITH COTTONWOODS, WITH LOWER STORY OF BLACKBERRY, NETTLES, OR WILD GRAPE.			

Occurrence No.	72	**Map Index:**	02238	**EO Index:**	13009	**Element Last Seen:**	1912-06-22
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1912-06-22
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-05-11

Quad Summary: Los Alamitos (3311871), Whittier (3311881)

County Summary: Los Angeles

Lat/Long:	33.86494 / -118.10442	**Accuracy:**	non-specific area
UTM:	Zone-11 N3747729 E397845	**Elevation (ft):**	60
PLSS:	T03S, R12W, Sec. 35, W (S)	**Acres:**	106.1

Location: SAN GABRIEL RIVER NEAR ARTESIA.

Detailed Location: 1899: DETECTIONS "ALONG NEW RIVER" IN LAX; THIS IS OLD NAME FOR THE SAN GABRIEL RIVER AFTER IT CHANGED COURSE IN THE FLOODS OF 1867. 1912: LOCALITY GIVEN AS "ARTESIA, LOS ANGELES CO." EXACT COLLECTION/DETECTION LOCATIONS UNKNOWN.

Ecological: 1899: NESTS IN WILLOWS. 1912: "NEST ANOTHER LOOSE AFFAIR MADE OF WILLOW TWIGS WITH A LINING OF WILLOW LEAVES AND A LITTLE STRAW... IN THE TOPMOST BRANCHES OF A WILLOW THIRTY FEET FROM THE GROUND. BIRD ON THE NEST."

General: "HISTORICALLY FAIRLY COMMON AND NESTING." 3 NESTS COLLECTED JUN-JUL 1889. 3 EGGS COLLECTED ON 22 JUN 1912.

Owner/Manager: PVT

Occurrence No.	73	**Map Index:**	25594	**EO Index:**	5430	**Element Last Seen:**	1951-05-XX
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	2011-07-11
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-05-14

Quad Summary: Baldwin Park (3411718), El Monte (3411811)

County Summary: Los Angeles

Lat/Long:	34.04985 / -118.00937	**Accuracy:**	non-specific area
UTM:	Zone-11 N3768143 E406839	**Elevation (ft):**	275
PLSS:	T01S, R11W, Sec. 26 (S)	**Acres:**	1932.0

Location: SAN GABRIEL RIVER, NEAR EL MONTE.

Detailed Location: SPECIMEN LOCALITIES GIVEN AS "EL MONTE." AUDUBON FIELD NOTES GIVES LOCATION AS "SAN GABRIEL WILDLIFE SANCTUARY," NOW KNOWN AS WHITTIER NARROWS NATURE CENTER/RECREATION AREA. MAPPED TO INCLUDE RIVER FROM EL MONTE TO WHITTIER NARROWS.

Ecological:

General: ADULT BIRDS COLLECTED IN AUG 1897, MAY 1911, AND JUL 1929. NESTING REPORTED IN 1949 AND 1951 (AUDUBON FIELD NOTES, CITED IN GAINES 1977). NONE DETECTED DURING RIPARIAN BIRD SURVEYS IN VICINITY OF EL MONTE & WHITTIER NARROWS, 2010 & 2011.

Owner/Manager: UNKNOWN

Occurrence No.	199	**Map Index:**	66320	**EO Index:**	97002	**Element Last Seen:**	1918-07-10
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1918-07-10
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-04-10

Quad Summary: Tustin (3311767), Newport Beach (3311768), Orange (3311777), Anaheim (3311778)

County Summary: Orange

Lat/Long:	33.74572 / -117.86785	**Accuracy:**	1 mile
UTM:	Zone-11 N3734300 E419616	**Elevation (ft):**	120
PLSS:	T05S, R09W, Sec. 18 (S)	**Acres:**	0.0

Location: VICINITY OF SANTA ANA.

Detailed Location: MAPPED GENERALLY TO GIVEN COLLECTION LOCALITY, "NEAR SANTA ANA, ORANGE CO. CAL."

Ecological: ORIGINAL COLLECTION CARD READS: "NEST SITUATED 7 FEET UP IN APPLE TREE IN ORCHARD. COMPOSED OF STICKS AND LEAVES. VERY FRAIL AND SHALLOW."

General: DESCRIBED AS "NOT COMMON" IN THIS AREA; SET OF 3 EGGS COLLECTED BY ORCHARD WORKER AND DELIVERED TO EDWARDS ON 10 JUL 1918.

Owner/Manager: UNKNOWN

Occurrence No.	204	**Map Index:**	01965	**EO Index:**	97029	**Element Last Seen:**	1910-07-24
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1910-07-24
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-06-03

Quad Summary: South Gate (3311882)

County Summary: Los Angeles

Lat/Long:	33.90327 / -118.22273	**Accuracy:**	1 mile
UTM:	Zone-11 N3752103 E386952	**Elevation (ft):**	70
PLSS:	T03S, R13W, Sec. 15 (S)	**Acres:**	0.0

Location: VICINITY OF COMPTON.

Detailed Location: EXACT COLLECTION LOCATIONS UNKNOWN, MAPPED GENERALLY TO GIVEN LOCALITY, "NEAR COMPTON."

Ecological: NEST MADE OF "FINE STICKS, LINED WITH ROOTLETS," FOUND "IN WILLOW BUSH."

General: 3 EGGS COLLECTED 14 JUL 1907. 2 EGGS COLLECTED ON 24 JUL 1910.

Owner/Manager: UNKNOWN

Occurrence No.	206	**Map Index:**	90422	**EO Index:**	97128	**Element Last Seen:**	19XX-XX-XX
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	19XX-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-04-28

Quad Summary: Anaheim (3311778)

County Summary: Orange

Lat/Long:	33.83450 / -117.91170	**Accuracy:**	1 mile
UTM:	Zone-11 N3744180 E415641	**Elevation (ft):**	150
PLSS:	T04S, R10W, Sec. 10 (S)	**Acres:**	0.0

Location: ANAHEIM.

Detailed Location: MAPPED GENERALLY TO GIVEN LOCALITY "ANAHEIM," USING HISTORICAL TOPO MAP FOR REFERENCE. EXACT COLLECTION LOCATION UNKNOWN.

Ecological:

General: 1 EGG COLLECTED ON UNKNOWN DATE IN THE 1920S OR 1930S.

Owner/Manager: UNKNOWN

Athene cunicularia

Element Code: ABNSB10010

burrowing owl

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G4
	State:	Candidate Endangered		**State:**	S2
	Other:	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern			
Habitat:	**General:**	OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS, AND SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.			
	Micro:	SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.			

Occurrence No.	64	**Map Index:**	81330	**EO Index:**	82304	**Element Last Seen:**	1983-XX-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1983-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2011-04-11

Quad Summary:	Seal Beach (3311861), Los Alamitos (3311871)
County Summary:	Orange

Lat/Long:	33.74486 / -118.05502	**Accuracy:**	1 mile
UTM:	Zone-11 N3734367 E402278	**Elevation (ft):**	10
PLSS:	T05S, R11W, Sec. 17 (S)	**Acres:**	0.0

Location:	SEAL BEACH NAVAL WEAPONS STATION, WEAPONS BUNKERS.
Detailed Location:	LOCATION DESCRIBED AS "SEAL BEACH NAVAL WEAPONS DEPOT (WEAPONS BUNKERS)." MAPPED TO AREA THAT LOOKS LIKE BUNKERS IN AIR PHOTOS.
Ecological:	
General:	+10 PAIRS OBSERVED IN AREA IN 1977. REPORTED OCCUPIED BY BURROWING OWLS IN 1983. PERSONAL COMMUNICATION FROM CAMERON BARROWS TO BRENDA JOHNSON.
Owner/Manager:	DOD-SEAL BEACH NWS

Occurrence No.	571	**Map Index:**	51258	**EO Index:**	51258	**Element Last Seen:**	1921-05-05
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1921-05-05
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2003-05-09

Quad Summary:	South Gate (3311882), Inglewood (3311883), Los Angeles (3411812), Hollywood (3411813), Pasadena (3411822), Burbank (3411823)
County Summary:	Los Angeles

Lat/Long:	34.05366 / -118.24549	**Accuracy:**	5 miles
UTM:	Zone-11 N3768805 E385050	**Elevation (ft):**	280
PLSS:	T01S, R13W, Sec. 28 (S)	**Acres:**	0.0

Location:	HERMON HILLS, LOS ANGELES.
Detailed Location:	UNABLE TO FIND ANY REFERENCE TO "HERMON HILLS". NO OTHER LOCATION INFORMATION GIVEN. MAPPED AS A 5 MILE RADIUS CIRCLE AT THE LAT/ LONG COORDINATES GIVEN IN MVZ RECORDS (MAX ERROR DISTANCE GIVEN AS 40 MILES).
Ecological:	
General:	MVZ EGG SET #3843 COLLECTED 28 APR 1919 BY ALDEN H. MILLER. MVZ EGG SET #3844 COLLECTED 5 MAY 1921 BY ALDEN H. MILLER.
Owner/Manager:	UNKNOWN

Occurrence No.	1291	**Map Index:** 79624	**EO Index:**	80618	**Element Last Seen:**	2010-01-14
Occ. Rank:	Good		**Presence:**	Presumed Extant	**Site Last Seen:**	2010-02-16
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:**	2010-08-16

Quad Summary: Whittier (3311881)

County Summary: Los Angeles

Lat/Long:	33.99837 / -118.04064	**Accuracy:**	80 meters
UTM:	Zone-11 N3762463 E403894	**Elevation (ft):**	790
PLSS:	T02S, R11W, Sec. 16, NW (S)	**Acres:**	0.0

Location: 0.2 MI ENE OF HOOVER RESERVOIR AND SOUTH OF SYCAMORE CANYON, HELLMAN WILDERNESS PARK, WHITTIER.

Detailed Location: ALONG E SIDE OF UNIMPROVED ROAD (RIDGE FIRE RD/SKYLINE DR). MAPPED TO PROVIDED COORDINATES.

Ecological: BURROW FOUND IN EROSION GULLY ALONG TRAIL SURROUNDED BY NON-NATIVE ANNUAL GRASSLAND. AREA IS LOCATED IN A DISKED FUEL MODIFICATION ZONE. SURROUNDING LAND IS A PRESERVE.

General: 1 ADULT OBSERVED ON 14 JAN 2010. OWLS WERE NOT OBSERVED DURING FOLLOW UP VISIT ON 16 FEB 2010. EXTENSIVE EROSION OF BURROW AREA HAD OCCURRED AT SITE.

Owner/Manager: CITY OF WHITTIER

Occurrence No.	1846	**Map Index:** 82198	**EO Index:**	83204	**Element Last Seen:**	1981-XX-XX
Occ. Rank:	Unknown		**Presence:**	Presumed Extant	**Site Last Seen:**	1983-XX-XX
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:**	2011-04-13

Quad Summary: Seal Beach (3311861), Los Alamitos (3311871)

County Summary: Los Angeles, Orange

Lat/Long:	33.75008 / -118.08939	**Accuracy:**	3/5 mile
UTM:	Zone-11 N3734979 E399100	**Elevation (ft):**	10
PLSS:	T05S, R12W, Sec. 12 (S)	**Acres:**	0.0

Location: VICINITY OF SEAL BEACH BLVD AND HERON POINTE/FORRESTAL LANE, NEAR SEAL BEACH.

Detailed Location: LOCATION DESCRIBED AS "IN SEAL BEACH, OFF SEAL BEACH BLVD. (WEST SIDE), S OF ROCKWLL CORP [NOW BOEING, CORNER OF SEAL BEACH BLVD & WESTMINISTER AVE]. EXACT LOCATION UNKNOWN.

Ecological:

General: 5 TO 8 PAIRS WERE KNOWN FROM THIS LOCATION IN 1980-1981. PERSONAL COMMUNICATION FROM CAMERON BARROWS TO BRENDA JOHNSON.

Owner/Manager: PVT

Empidonax traillii extimus

Element Code: ABPAE33043

southwestern willow flycatcher

Listing Status:	**Federal:**	Endangered	**CNDDB Element Ranks:**	**Global:**	G5T2
	State:	Endangered		**State:**	S3
	Other:				
Habitat:	**General:**	RIPARIAN WOODLANDS IN SOUTHERN CALIFORNIA.			
	Micro:				

Occurrence No.	42	**Map Index:**	01965	**EO Index:**	59152	**Element Last Seen:**	1895-06-29
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1895-06-29
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2005-01-04

Quad Summary:	South Gate (3311882)
County Summary:	Los Angeles

Lat/Long:	33.90327 / -118.22273	**Accuracy:**	1 mile
UTM:	Zone-11 N3752103 E386952	**Elevation (ft):**	
PLSS:	T03S, R13W, Sec. 15 (S)	**Acres:**	0.0

Location:	COMPTON.
Detailed Location:	NO OTHER LOCATION INFORMATION GIVEN, MAPPED IN THE GENERAL VICINITY OF COMPTON & THE LAT-LONG COORDINATES GIVEN BY MVZ. LOCATION UNCERTAINTY GIVEN AS 1.5 MILES.
Ecological:	
General:	MVZ #649, NEST PLUS EGGS, COLLECTED 29 JUN 1895 BY W. B. JUDSON.
Owner/Manager:	UNKNOWN

Occurrence No.	43	**Map Index:**	51258	**EO Index:**	59153	**Element Last Seen:**	1894-05-20
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1894-05-20
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2005-01-05

Quad Summary:	South Gate (3311882), Inglewood (3311883), Los Angeles (3411812), Hollywood (3411813), Pasadena (3411822), Burbank (3411823)
County Summary:	Los Angeles

Lat/Long:	34.05366 / -118.24549	**Accuracy:**	5 miles
UTM:	Zone-11 N3768805 E385050	**Elevation (ft):**	280
PLSS:	T01S, R13W, Sec. 28 (S)	**Acres:**	0.0

Location:	LOS ANGELES.
Detailed Location:	NO OTHER LOCATION INFORMATION GIVEN, MAPPED IN THE GENERAL VICINITY OF LOS ANGELES.
Ecological:	
General:	MVZ #2205 (EGG SET), COLLECTED 20 MAY 1894 BY R. H. ROBERTSON. MVZ #136340 (STUDY SKIN) COLLECTED JUNE 1852 BY G. A. MCCALL.
Owner/Manager:	UNKNOWN

Occurrence No.	44	**Map Index:**	39017	**EO Index:**	59154	**Element Last Seen:**	1906-09-14
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1906-09-14
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2005-01-04

Quad Summary:	El Monte (3411811), Los Angeles (3411812), Mt. Wilson (3411821), Pasadena (3411822)
County Summary:	Los Angeles

Lat/Long:	34.15159 / -118.15084	**Accuracy:**	5 miles
UTM:	Zone-11 N3779562 E393908	**Elevation (ft):**	
PLSS:	T01N, R12W, Sec. 21 (S)	**Acres:**	0.0

Location:	PASADENA.
Detailed Location:	EXACT LOCATION NOT KNOWN; SITE MAPPED IN GENERAL AREA OF PASADENA. 1905 & 1906 RECORDS FROM "PASADENA, ARROYO SECO"
Ecological:	
General:	MVZ #13047 (EGG SET) COLLECTED 10 JUN 1893 BY R. ARNOLD. MVZ #33366-33374 (7 MALE & 2 FEMALE STUDY SKINS) COLLECTED BETWEEN 28 MAY 1895 & 6 AUG 1900 BY J. GRINNELL. MVZ #12434 & 33380 (MALE STUDY SKINS) COLLECTED 12 SEP 1905 & 14 SEP 1906.
Owner/Manager:	UNKNOWN

Riparia riparia

Element Code: ABPAU08010

bank swallow

Listing Status: **Federal:** None — **CNDDB Element Ranks:** **Global:** G5
State: Threatened — **State:** S3
Other: BLM_S-Sensitive, IUCN_LC-Least Concern

Habitat: **General:** COLONIAL NESTER; NESTS PRIMARILY IN RIPARIAN AND OTHER LOWLAND HABITATS WEST OF THE DESERT.
Micro: REQUIRES VERTICAL BANKS/CLIFFS WITH FINE-TEXTURED/SANDY SOILS NEAR STREAMS, RIVERS, LAKES, OCEAN TO DIG NESTING HOLE.

Occurrence No.	105	**Map Index:**	84246	**EO Index:**	85270	**Element Last Seen:**	1894-07-04
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1894-07-04
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2011-11-10

Quad Summary: El Monte (3411811), Los Angeles (3411812), Mt. Wilson (3411821), Pasadena (3411822)
County Summary: Los Angeles

Lat/Long:	34.07395 / -118.16318	**Accuracy:**	5 miles
UTM:	Zone-11 N3770966 E392673	**Elevation (ft):**	
PLSS:	T01S, R12W, Sec. 20 (S)	**Acres:**	0.0

Location: VICINITY OF ALHAMBRA.
Detailed Location: LOCATION STATED AS "ALHAMBRA." EXACT LOCATION UNKNOWN. MAPPED TO THE AREA OF ALHAMBRA INCLUDING PORTIONS OF ARROYO SECO, LOS ANGELES RIVER, AND ALHAMBRA WASH.
Ecological: NEST OF STICKS AND GRASS LINED WITH OAK LEAVES, HAY, PEPPER TREE LEAVES AND HORSE HAIR, PLACED IN A BANK 1.5 FEET FROM MOUTH OF HOLE.
General: WFVZ EGG SET (3 EGGS) COLLECTED BY C. H. RICHARSON, JR. ON 21 MAY 1902. CONSIDERED EXTIRPATED AS A BREEDER IN SOUTHERN CALIFORNIA (SCH92).
Owner/Manager: UNKNOWN

Occurrence No.	110	**Map Index:**	84245	**EO Index:**	85267	**Element Last Seen:**	1894-07-04
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1894-07-04
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2011-11-10

Quad Summary: La Habra (3311788), Whittier (3311881), Baldwin Park (3411718), El Monte (3411811)
County Summary: Los Angeles, Orange

Lat/Long:	33.96833 / -118.02832	**Accuracy:**	5 miles
UTM:	Zone-11 N3759121 E404999	**Elevation (ft):**	
PLSS:	T02S, R11W, Sec. 27 (S)	**Acres:**	0.0

Location: VICINITY OF WHITTIER.
Detailed Location: LOCATION STATED AS "NEAR WHITTIER, CAL...IN RIVER BANK." EXACT LOCATION UNKNOWN. MAPPED TO THE AREA OF WHITTIER THAT ENCOMPASSES PORTIONS OF SAN GABRIEL RIVER, RIO HONDO, SAN JOSE CREEK, AND COYOTE CREEK.
Ecological:
General: WFVZ EGG SET COLLECTED BY G. WILLETT ON 4 JUL 1894. CONSIDERED EXTIRPATED AS A BREEDER IN SOUTHERN CALIFORNIA (SCH92).
Owner/Manager: UNKNOWN

Campylorhynchus brunneicapillus sandiegensis

Element Code: ABPBG02095

coastal cactus wren

Listing Status: **Federal:** None — **CNDDB Element Ranks:** **Global:** G5T3Q
State: None — **State:** S2
Other: CDFW_SSC-Species of Special Concern, USFS_S-Sensitive, USFWS_BCC-Birds of Conservation Concern

Habitat:	**General:**	SOUTHERN CALIFORNIA COASTAL SAGE SCRUB.
	Micro:	WRENS REQUIRE TALL OPUNTIA CACTUS FOR NESTING AND ROOSTING.

Occurrence No.	112	**Map Index:**	21562	**EO Index:**	11722	**Element Last Seen:**	1998-04-22
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	1998-04-22
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2008-05-15

Quad Summary:	La Habra (3311788)
County Summary:	Los Angeles, Orange

Lat/Long:	33.90434 / -117.95728	**Accuracy:**	non-specific area
UTM:	Zone-11 N3751961 E411496	**Elevation (ft):**	500
PLSS:	T03S, R10W, Sec. 17 (S)	**Acres:**	742.4

Location:	WEST COYOTE HILLS, ONE MILE WEST OF LAGUNA LAKE, LA HABRA.
Detailed Location:	SIGHTINGS WERE ON SOUTH-FACING SLOPES, SOME STEEP, IN DENSE STANDS OF CACTUS.
Ecological:	LOW HILLS OF COASTAL SAGE SCRUB & SOUTHERN CACTUS SCRUB, DOMINATED BY OPUNTIA (LITTORALIS?), ARTEMISIA CALIFRONICA, ERIOGONUM FASCICULATUM, & SAMBUCUS MEXICANUS. HABITAT SOMEWHAT DISTURBED BUT IN RELATIVELY GOOD CONDITION DUE TO FENCING.
General:	PAIRS & INDIVIDUALS OBS; SITE PROBABLY SUPPORTS AT LEAST 15 PAIRS. SITE IS SURROUNDED BY DEVELOPMENT, BUT FENCING HAS GREATLY ENHANCED WILDLIFE VALUE. MAR-APR '98: UNKNOWN NUMBER OBS DURING QUINO SURVEY. CALIFORNIA GNATCATCHER IN VICINITY.
Owner/Manager:	PVT-CHEVRON

Occurrence No.	115	**Map Index:**	20435	**EO Index:**	20052	**Element Last Seen:**	1992-02-03
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	1992-02-03
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1992-03-25

Quad Summary:	Tustin (3311767), Orange (3311777)
County Summary:	Orange

Lat/Long:	33.74967 / -117.77548	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3734670 E428175	**Elevation (ft):**	300
PLSS:	T05S, R09W, Sec. 12, W (S)	**Acres:**	0.0

Location:	LOMAS DE SANTIAGO, 1 MI EAST OF RED HILL, EAST OF TUSTIN.
Detailed Location:	
Ecological:	HABITAT IS A GENTLE TO STEEP, SOUTH-FACING SLOPE VEGETATED BY SOUTHERN CACTUS SCRUB AND COASTAL SAGE SCRUB IN MOSAIC WITH MIXED CHAPARRAL AND INTRODUCED EUCALYPTUS FOREST; DOMINATED BY OPUNTIA, ERIOGONUM FASCICULATUM, ARTEMISIA CALIFORNICA.
General:	4 BIRDS, 9 NESTS, AND 2 RELIC NESTS OBSERVED.
Owner/Manager:	PVT-IRVINE CO

Occurrence No.	165	**Map Index:**	52956	**EO Index:**	52958	**Element Last Seen:**	2000-05-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2000-05-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2003-10-20

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.86342 / -117.75747	**Accuracy:**	non-specific area
UTM:	Zone-11 N3747271 E429936	**Elevation (ft):**	500
PLSS:	T03S, R08W, Sec. 31 (S)	**Acres:**	82.6

Location:	SOUTH & EAST OF SANTA ANA CANYON ROAD, 2 MILES NE OF INTERSECTION OF RIVERSIDE FWY & IMPERIAL HWY, ESE OF YORBA LINDA.
Detailed Location:	
Ecological:	OSPREY, WHITE-TAILED KITE, SHARP-SHINNED HAWK, COOPER'S HAWK ALSO OBSERVED IN VICINITY.
General:	UNKNOWN NUMBER OBSERVED DURING CALIFORNIA GNATCATCHER SURVEYS CONDUCTED BETWEEN 13 APRIL AND 18 MAY 2000.
Owner/Manager:	UNKNOWN

Occurrence No.	166	**Map Index:**	21657	**EO Index:**	53116	**Element Last Seen:**	2002-03-15
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2002-03-15
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2003-10-30

Quad Summary:	La Habra (3311788)
County Summary:	Orange

Lat/Long:	33.89499 / -117.90272	**Accuracy:**	non-specific area
UTM:	Zone-11 N3750879 E416532	**Elevation (ft):**	400
PLSS:	T03S, R10W, Sec. 23 (S)	**Acres:**	329.0

Location:	COYOTE HILLS EAST, JUST SE OF THE JUNCTION OF BASTANCHURY ROAD AND BREA BLVD, BETWEEN HARBOR BLVD AND HWY 57, FULLERTON.
Detailed Location:	
Ecological:	HABITAT CONSISTS OF NATURAL COASTAL SAGE SCRUB (DOMINATED BY ARTEMISIA CALIFORNICA & IN SOME PLACES OPUNTIA LITTORALIS) & REVEGETATED CSS (DOMINATED BY ENCELIA CALIFORNICA, ARTEMISIA CALIFORNICA, RRIOGONUM FASCICULATUM, SALVIA MELLIFERA).
General:	UNKNOWN NUMBER OBSERVED DURING CALIFORNIA GNATCATCHER SURVEYS CONDUCTED 2-16 MAY 2001 AND 21 FEB-15 MAR 2002. EAST COYOTE HILLS INCLUDES A GOLF COURSE, OIL FACILITIES, RESIDENTIAL (276 ACRES) AND OPEN SPACE (120 ACRES).
Owner/Manager:	PVT

Occurrence No.	181	**Map Index:**	53627	**EO Index:**	53627	**Element Last Seen:**	2001-11-16
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2001-11-16
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2003-12-18

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.79633 / -117.79001	**Accuracy:**	4/5 mile
UTM:	Zone-11 N3739854 E426868	**Elevation (ft):**	600
PLSS:	T04S, R09W, Sec. 26 (S)	**Acres:**	0.0

Location: EL MODENA/PANORAMA HEIGHTS (INC SANTIAGO OAKS REGIONAL PARK), S OF SANTIAGO CYN RD & E OF SANTIAGO BLVD, EAST EL MODENA.

Detailed Location: EL MODENA SITE: W OF CANNON STREET, E OF SANTIAGO BLVD, N OF E AVENIDA PALMAR & S OF N LINDA VISTA STREET. PANORAMA HEIGHTS SITE: E OF CANNON STREET & W OF N MORADA DRIVE. ADDITIONAL SITE S OF CHAPMAN AVE.

Ecological: HABITAT CONSISTS OF DISTURBED HIGH QUALITY COASTAL SAGE SCRUB AND SOUTHERN CACTUS SCRUB. SLOPES ARE MODERATELY STEEP TO STEEP. SITE IS SURROUNDED BY DEVELOPMENT.

General: UNKNOWN NUMBER OBSERVED DURING CALIFORNIA GNATCATCHER SURVEYS CONDUCTED 31 AUG - 16 NOV 2001.

Owner/Manager: UNKNOWN

Occurrence No.	182	**Map Index:**	53630	**EO Index:**	53630	**Element Last Seen:**	2001-10-12
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2001-10-12
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2003-12-18

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.84230 / -117.76377	**Accuracy:**	3/5 mile
UTM:	Zone-11 N3744933 E429336	**Elevation (ft):**	600
PLSS:	T04S, R08W, Sec. 07 (S)	**Acres:**	0.0

Location: ANAHEIM HILLS GOLF COURSE; WALNUT CANYON, SOUTH OF SANTA ANA CANYON ROAD AND NORTH OF ROBBERS PEAK, SE YORBA LINDA.

Detailed Location: TRI-CANYON PARCEL, ANAHEIM HILLS GOLF COURSE.

Ecological: HIGH QUALITY TO HIGHLY DISTURBED COASTAL SAGE SCRUB, BACCHARIS SCRUB & SOUTHERN CACTUS SCRUB LOCATED ON MODERATELY STEEP TO STEEP SLOPES. HABITAT IS PATCHY, DISJUNCT. SURROUNDED BY DEVELOPMENT EXCEPT FOR TWO SMALL AREAS ON SW & SE SIDES.

General: FEATHERS COLLECTED FROM 5 NESTS ON 17 JUL 1994. UNKNOWN NUMBER OBSERVED DURING CALIFORNIA GNATCATCHER SURVEYS CONDUCTED 30 AUG - 12 OCT 2001. TRI-CANYON PARCEL CAWR SEEM WELL BUT POP WILL NEVER BE LARGE BECAUSE AREA IS SMALL (1994).

Owner/Manager: UNKNOWN, CITY OF ANAHEIM

Polioptila californica californica

Element Code: ABPBJ08081

coastal California gnatcatcher

Listing Status:	**Federal:**	Threatened	**CNDDB Element Ranks:**	**Global:**	G4G5T3Q
	State:	None		**State:**	S2
	Other:	CDFW_SSC-Species of Special Concern			
Habitat:	**General:**	OBLIGATE, PERMANENT RESIDENT OF COASTAL SAGE SCRUB BELOW 2500 FT IN SOUTHERN CALIFORNIA.			
	Micro:	LOW, COASTAL SAGE SCRUB IN ARID WASHES, ON MESAS AND SLOPES. NOT ALL AREAS CLASSIFIED AS COASTAL SAGE SCRUB ARE OCCUPIED.			

Occurrence No.	35	**Map Index:**	01722	**EO Index:**	25112	**Element Last Seen:**	1980-XX-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1980-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1989-08-10

Quad Summary:	Inglewood (3311883), Venice (3311884), Hollywood (3411813), Beverly Hills (3411814)
County Summary:	Los Angeles

Lat/Long:	33.99055 / -118.38285	**Accuracy:**	1 mile
UTM:	Zone-11 N3761970 E372277	**Elevation (ft):**	200
PLSS:	T02S, R14W, Sec. 18, SE (S)	**Acres:**	0.0

Location:	BALDWIN HILLS, VICINITY CULVER CITY.
Detailed Location:	
Ecological:	HABITAT IS COASTAL SAGE SCRUB, DOMINATED BY ARTEMISIA CALIFRONICA, ERIOGONUM FASCICULATUM, AND SALVIA MELLIFERA.
General:	ONE INDIVIDUAL OBSERVED; 1-3 PAIRS ESTIMATED.
Owner/Manager:	UNKNOWN

Occurrence No.	195	**Map Index:**	17756	**EO Index:**	10083	**Element Last Seen:**	2017-06-30
Occ. Rank:	Fair			**Presence:**	Presumed Extant	**Site Last Seen:**	2017-06-30
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-02-12

Quad Summary:	Yorba Linda (3311787), La Habra (3311788)
County Summary:	Orange

Lat/Long:	33.93201 / -117.86837	**Accuracy:**	non-specific area
UTM:	Zone-11 N3754957 E419743	**Elevation (ft):**	676
PLSS:	T03S, R09W, Sec. 6 (S)	**Acres:**	910.0

Location:	TONNER HILLS, FROM 0.6 MI SW TO 1.6 MI SE OF THE INTERSECTION OF SR 57 & TONNER CANYON RD, N OF BREA.
Detailed Location:	KNOWN AS BREA HIGHLANDS IN 1999 & TONNER HILLS PROJECT SITE IN 2001. 1991 DETECTIONS WERE EAST OF SR-57. ONLY REVEGETATION AREA, WEST OF SR-57, WAS SURVEYED IN 2004. OVER HALF THE OCCURRENCE IS LIKELY EXTIRPATED DUE TO DEVELOPMENT.
Ecological:	1999-2001: COASTAL SAGE SCRUB FRAGMENTED BY OIL FIELDS. 2004: 14 AC OF REVEGETATED CSS. 2005: BOUGHT BY SHEA HOMES. 2013: NOW IN 449-AC CITY-HELD CONSERVATION EASEMENT; S PORTION WAS DEVELOPED. 2016: HOUSING DEVELOPMENT WITHIN EASEMENT.
General:	AT LEAST 3 OBSERVED IN 1991. UP TO 18 PAIRS OBS, 1999. AT LEAST 16 PAIRS, 2001. AT LEAST 1 FAMILY GROUP INCLUDING 3 FLEDGLINGS, 2004. UP TO 16 PAIRS, 2005. AT LEAST 9 PAIRS, 2013. UP TO 17 PAIRS & 28 JUVENILES, 2016. 19 DETECTIONS, 2017.
Owner/Manager:	PVT-UNION OIL, TORCH OP CO

Occurrence No.	254	**Map Index:**	20709	**EO Index:**	3991	**Element Last Seen:**	1991-06-06
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1991-06-06
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-03-15

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.80057 / -117.76709	**Accuracy:**	80 meters
UTM:	Zone-11 N3740308 E428995	**Elevation (ft):**	630
PLSS:	T04S, R09W, Sec. 25, NE (S)	**Acres:**	5.0

Location:	JUST NE OF SANTIAGO CANYON RD AT NEWPORT BLVD, VICINITY OF N END OF HILLSDALE DR, W OF IRVINE REGIONAL PARK, ORANGE.
Detailed Location:	MAPPED ACCORDING TO PROVIDED MAP.
Ecological:	1991: SEEN IN HIGH QUALITY COASTAL SAGE SCRUB BETWEEN SANTIAGO CYN RD & REG PARK BOUNDARY; IN 1994 AERIAL IMAGE THIS IS DEVELOPED (HILLSDALE DR).
General:	ON 6 JUN 1991 A FAMILY W/ RECENTLY-FLEDGED YOUNG WAS OBSERVED WEST OF IRVINE REGIONAL PARK, BUT SITE NOW DEVELOPED.
Owner/Manager:	UNKNOWN

Occurrence No.	261	**Map Index:**	71328	**EO Index:**	7955	**Element Last Seen:**	2019-07-25
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2019-07-25
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-01-25

Quad Summary:	La Habra (3311788)
County Summary:	Los Angeles, Orange

Lat/Long:	33.90278 / -117.96178	**Accuracy:**	non-specific area
UTM:	Zone-11 N3751793 E411079	**Elevation (ft):**	475
PLSS:	T03S, R10W, Sec. 19 (S)	**Acres:**	657.0

Location:	WEST COYOTE HILLS OIL FIELDS, N OF ROSECRANS AVE BETWEEN HWY 39 & S EUCLID ST, CITY OF FULLERTON (LA HABRA).
Detailed Location:	SPECIMENS COLLECTED FROM "LA HABRA, MURPHY OIL LEASE," AND "MURPHY COYOTE HILLS" ATTRIBUTED HERE.
Ecological:	LOW HILLS COVERED BY COASTAL SAGE SCRUB DOMINATED BY ARTEMISIA CALIFORNICA, OPUNTIA SP (LITTORALIS?), ERIOGONUM FASCICULATUM, & SAMBUCUS MEXICANUS; OCCASIONAL BACCHARIS PILULARIS & MIMULUS AURANTIACUS. SCATTERED MIXED CHAPARRAL.
General:	COLLECTED, 1940 & '41. '92: 3 PRS & 5 SINGLES; SITE MAY SUPPORT MORE. '94: 40 PRS. '98: 48 PRS. '04: 60 PAIRS. '09: 54 PRS, 2 SINGLES. '12: 2 TERR. '13: 2 PRS, 1 LONE MALE. '14: 1 PR, 4 JUV. '16: 68 PRS, 2 JUV, 18 INDIV. '19: 1 PR, 1 INDIV.
Owner/Manager:	PVT-CHEVRON, CITY OF FULLERTON

Occurrence No.	264	**Map Index:**	20436	**EO Index:**	20056	**Element Last Seen:**	1992-02-03
Occ. Rank:	Poor			**Presence:**	Presumed Extant	**Site Last Seen:**	1992-02-03
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2010-08-04

Quad Summary:	Tustin (3311767), Orange (3311777)
County Summary:	Orange

Lat/Long:	33.74744 / -117.77631	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3734423 E428096	**Elevation (ft):**	300
PLSS:	T05S, R09W, Sec. 12, SW (S)	**Acres:**	0.0

Location:	LOMAS DE SANTIAGO, 1 MI EAST OF RED HILL, EAST OF TUSTIN.
Detailed Location:	CALIFORNIA GNATCATCHERS FOUND ALONG A GENTLE, SOUTH-FACING SLOPE.
Ecological:	3 FEB 1992: HABITAT IS MOSAIC OF COASTAL SAGE SCRUB, SOUTHERN CACTUS SCRUB, ANNUAL GRASSLAND, & INTRODUCED EUCALYPTUS FOREST. OVER 50% OF HABITAT IS GRADED BUT NOT YET BUILT ON. 2009 AERIAL PHOTOS SHOW THAT MOST OF SITE IS DEVELOPED.
General:	3 FEB 1992: 5 ADULTS OBSERVED FORAGING.
Owner/Manager:	PVT-IRVINE CO

Occurrence No.	278	**Map Index:**	71317	**EO Index:**	29664	**Element Last Seen:**	2020-07-07
Occ. Rank:	Fair			**Presence:**	Presumed Extant	**Site Last Seen:**	2020-07-07
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-06-21

Quad Summary:	La Habra (3311788)
County Summary:	Orange

Lat/Long:	33.89518 / -117.90215	**Accuracy:**	non-specific area
UTM:	Zone-11 N3750900 E416584	**Elevation (ft):**	400
PLSS:	T03S, R10W, Sec. 23 (S)	**Acres:**	374.0

Location:	COYOTE HILLS GOLF COURSE, COYOTE HILLS EAST, SE OF BASTANCHURY RD & BREA BLVD, BETWEEN HARBOR BLVD & HWY 57, FULLERTON.
Detailed Location:	NORTHERN-MOST EXTANT POP IN ORANGE CO. 1.5-2.0 MI FROM NEXT NEAREST POP. 10 BREED PAIRS MONITORED W/IN AN AREA OF 110 ACRES, WITH A MEAN BREEDING TERRITORY SIZE OF 2.9 ACRES (1991). SIGNIFICANT HABITAT LOSS SINCE 1990S DUE TO DEVELOPMENT.
Ecological:	NATURAL & REVEGETATED COASTAL SAGE SCRUB DOMINATED BY ARTEMISIA CALIFORNICA; ALSO ERIOGONUM FASCICULATUM, MIMULUS CARDINALIS, LOTUS SCOPARIUS, SAMBUCUS MEXICANA & HETEROMELES ARBUTIFOLIA. AIR PHOTOS: 1995 PARTS GRADED, 2003 PARTS DEVELOPED.
General:	BANDED/MONITORED, 1991. 4 OF 10 NESTS PARASITIZED (0 FLDGD); OTHERS FLDGD 14. '95: 38 BRDS. '01:22PR, 2MALES, 34 JUV. '02:31PR, 4MALES. '06:1PR. '07: 26PR, 7 INDIV. '08:27PR, 5MALES. '12:18PR. '13:20PR. '18:14PR. '19:16 PR. '20:12PR, 29JUV.
Owner/Manager:	PVT

Occurrence No.	497	**Map Index:**	28598	**EO Index:**	29889	**Element Last Seen:**	2012-08-24
Occ. Rank:	Excellent			**Presence:**	Presumed Extant	**Site Last Seen:**	2012-08-24
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-02-26

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.87234 / -117.814	**Accuracy:**	non-specific area
UTM:	Zone-11 N3748299 E424716	**Elevation (ft):**	295
PLSS:	T03S, R09W, Sec. 34, NW (S)	**Acres:**	25.0

Location:	SOUTHWEST MARGIN OF YORBA LINDA RESERVOIR, YORBA LINDA.
Detailed Location:	
Ecological:	REMNANT COASTAL SAGE SCRUB SURROUNDED BY SEASONALLY DISTURBED RUDERAL LAND.
General:	1 ADULT MALE OBSERVED ON 17 NOV 1996 FLYING FROM A PATCH OF COASTAL SAGE SCRUB TO THE FLOOR OF THE RESERVOIR. DETECTED ON 23 AUG 2008. 1 ADULT MALE AND FEMALE OBSERVED ON 24 AUG 2012.
Owner/Manager:	UNKNOWN

Occurrence No.	563	**Map Index:**	47072	**EO Index:**	47072	**Element Last Seen:**	2001-06-15
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2001-06-15
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2008-06-12

Quad Summary:	La Habra (3311788)
County Summary:	Orange

Lat/Long:	33.93940 / -117.89756	**Accuracy:**	80 meters
UTM:	Zone-11 N3755800 E417051	**Elevation (ft):**	540
PLSS:	T03S, R10W, Sec. 02, NE (S)	**Acres:**	0.0

Location:	NORTH EDGE OF BREA; 0.45 MILE SOUTH OF LOS ANGELES/ORANGE COUNTY LINE & 0.4 MILE WEST OF SR 57.
Detailed Location:	AT THE NORTH END OF PONDEROSA AVE. MAPPED ACCORDING TO PROVIDED MAP. SITE NAME: BREA CANON ESTATES.
Ecological:	HABITAT CONSISTS OF SAGEBRUSH SCRUB AND SOUTERN CACTUS SCRUB/BUCKWHEAT SCRUB. COASTAL CACTUS WREN OBSERVED IN VICINTIY.
General:	ONE PAIR OBSERVED AT VARIOUS LOCATIONS BETWEEN 11 MAY 2001 AND 15 JUN 2001. FLEDGLINGS ALSO OBSERVED WITHIN SURVEYED AREA. AREA IS WITHIN THE BOUNDARY FOR CRITICAL HABITAT.
Owner/Manager:	UNKNOWN

Occurrence No.	627	**Map Index:**	50350	**EO Index:**	50350	**Element Last Seen:**	2018-06-06
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2018-06-06
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-03-12

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.79849 / -117.79487	**Accuracy:**	non-specific area
UTM:	Zone-11 N3740097 E426421	**Elevation (ft):**	600
PLSS:	T04S, R09W, Sec. 26, W (S)	**Acres:**	143.0

Location: SANTIAGO OAKS REGIONAL PARK, WEST OF CANNON STREET, EAST EL MODENA (UNICORP. ORA).

Detailed Location:

Ecological: HABITAT CONSISTED OF HIGH QUALITY TO HIGHLY DISTURBED COASTAL SAGE SCRUB AND SOUTHERN CACTUS SCRUB. SITE IS RELATIVELY FLAT TO ROCKY AND STEEP. AREA IS SURROUNDED BY DEVELOPMENT.

General: 1994: 11 PRS & 1 SINGLE. 2001: 5 PRS & 9 SINGLES @ 14 LOCALES IN EL MODENA OPEN SPACE ON 31 AUG, 7 SEP, & 16 NOV. 2 AD OBS 10 DEC. 2002: 1 PAIR W/3 CHICKS. 2011: 2 AD. DETECTED IN 2008 & 2013. 2018: 5 PRS (2 W/FLEDGLINGS), 2 MALES.

Owner/Manager: ORA COUNTY-SANTIAGO OAKS RP

Occurrence No.	782	**Map Index:**	52896	**EO Index:**	52896	**Element Last Seen:**	2001-07-25
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2001-07-25
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2003-10-14

Quad Summary: Black Star Canyon (3311776), Orange (3311777)

County Summary: Orange

Lat/Long:	33.77157 / -117.75013	**Accuracy:**	non-specific area
UTM:	Zone-11 N3737081 E430541	**Elevation (ft):**	1000
PLSS:	T05S, R08W, Sec. 06, NE (S)	**Acres:**	71.8

Location: NORTH PORTION OF LOMA RIDGE, 0.6 MILE EAST OF PETERS CANYON AND 1.5 MILES WSW OF SANTIAGO RESERVOIR.

Detailed Location: MAPPED ACCORDING TO LOCATIONS SHOWN ON PROJECT MAP. UTM ALSO PROVIDED, BUT DATUM WAS NOT SPECIFIED. UTM COORDINATES MAPPED AS NAD 27 FALL WITHIN OCCURRENCE BOUNDARY.

Ecological: SURVEYS CONDUCTED IN SUITABLE COASTAL SAGE SCRUB. NORTH AREA IS PROPOSED FOR PRESERVATION.

General: 1 PAIR OBSERVED ON 27 APR 2001 AND 1 PAIR OBSERVED ON 28 JUN 2001. 1 PAIR AND 2 JUVENILES OBSERVED ON 25 JUL 2001. PROTOCOL AND NON-PROTOCOL SURVEYS WERE CONDUCTED AT THIS SITE.

Owner/Manager: UNKNOWN

Occurrence No.	790	**Map Index:**	52960	**EO Index:**	52960	**Element Last Seen:**	2016-08-04
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2016-08-04
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-03-01

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.86320 / -117.75663	**Accuracy:**	non-specific area
UTM:	Zone-11 N3747245 E430013	**Elevation (ft):**	500
PLSS:	T03S, R08W, Sec. 31 (S)	**Acres:**	146.0

Location: DEER CANYON PARK, S & E OF SANTA ANA CANYON RD, 2 MILES ENE OF IMPERIAL HWY AT RIVERSIDE FWY, NEAR YORBA LINDA.

Detailed Location: 1994: THROUGHOUT AREA. 1999: S PORTION (SEC 6). 2000: THROUGHOUT AREA. 2001: NE PORTION OF AREA. 2002 & 2005: MIDDLE PORTION OF AREA.

Ecological: HABITAT CONSISTED OF COASTAL SAGE SCRUB DOMINATED BY ARTEMISIA CALIFORNICA AND SALVIA MELLIFERA. FORAGING OBS (DURING 1 SURVEY) IN DISTURBED CSS W/WEEDY SPECIES. OSPREY, WHITE-TAILED KITE, SHARP-SHINNED HAWK, COOPER'S HAWK IN VICINITY.

General: 1994: 5 PARIS. 1999: AT LEAST 4 PAIRS. 2000: 3 PAIRS (POSSIBLY 2-3 PRS +), 27 APR-18 MAY. 2001: 2 PAIRS, 31 MAY-28 JUN. APR 2002: 4 PAIRS. 2005: 1 PAIR WITH 3 JUVENILES. 2016: 2 PAIRS AND JUVENILES.

Owner/Manager: CITY OF ANAHEIM

Occurrence No.	791	**Map Index:**	52963	**EO Index:**	52963	**Element Last Seen:**	2001-10-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2001-10-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-03-01

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.83928 / -117.77261	**Accuracy:**	specific area
UTM:	Zone-11 N3744604 E428515	**Elevation (ft):**	600
PLSS:	T04S, R09W, Sec. 12, E (S)	**Acres:**	34.0

Location: ANAHEIM HILLS GOLF COURSE, 1.4 MILES SE OF INTERSECTION OF RIVERSIDE FWY & IMPERIAL HIGHWAY, SOUTH OF YORBA LINDA.

Detailed Location: SOUTH OF GOLF COURSE, ON SOUTH SIDE OF E NOHL RANCH RD.

Ecological: SUITABLE HABITAT ON PROJECT SITE CONSISTS OF HIGH QUALITY TO HIGHLY DISTURBED COASTAL SAGE SCRUB, BACCHARIS SCRUB AND SOUTHERN CACTUS SCRUB. AVAILABLE HABITAT SIMILAR (~5% LOSS) IN 1994 & 2007 AERIAL IMAGES.

General: 1994: 5 PAIRS OBS DURING SURVEYS BETWEEN 10 MAR AND 1 APR. 2001: OBS AT 3 LOCALES ON SURVEYS ON 30 AUG, 5 & 12 OCT; 5 PRS & 3 INDIV TOTAL WERE OBS IN 6 OF 11 PATCHES OF SUITABLE HAB SURVEYED DURING PERIOD (OCC 791-794).

Owner/Manager: PVT

Occurrence No.	792	**Map Index:**	52968	**EO Index:**	52968	**Element Last Seen:**	2001-10-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2001-10-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-03-01

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.84367 / -117.76976	**Accuracy:**	non-specific area
UTM:	Zone-11 N3745089 E428783	**Elevation (ft):**	600
PLSS:	T04S, R09W, Sec. 12, NE (S)	**Acres:**	24.0

Location:	ANAHEIM HILLS GOLF COURSE (WALNUT CANYON), 1.4 MILES SE OF X-ING OF RIVERSIDE FWY & IMPERIAL HIGHWAY, S OF YORBA LINDA.
Detailed Location:	NW PORTION OF GOLF COURSE, NORTH OF E NOHL RANCH ROAD.
Ecological:	SUITABLE HABITAT ON PROJECT SITE CONSISTS OF HIGH QUALITY TO HIGHLY DISTURBED COASTAL SAGE SCRUB, BACCHARIS SCRUB AND SOUTHERN CACTUS SCRUB. AVAILABLE HABITAT SIMILAR IN 1994 & 2007 AERIAL IMAGES.
General:	1994: 2 PAIRS OBS DURING SURVEYS BETWEEN 10 MAR AND 1 APR. 2001: OBS AT 1 LOCALE ON SURVEYS ON 30 AUG, 5 & 12 OCT; 5 PRS & 3 INDIV TOTAL WERE OBS IN 6 OF 11 PATCHES OF SUITABLE HAB SURVEYED DURING PERIOD (OCC 791-794).
Owner/Manager:	PVT

Occurrence No.	793	**Map Index:**	52970	**EO Index:**	52970	**Element Last Seen:**	2001-10-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2001-10-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-03-01

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.84517 / -117.76051	**Accuracy:**	non-specific area
UTM:	Zone-11 N3745250 E429639	**Elevation (ft):**	675
PLSS:	T04S, R08W, Sec. 07, N (S)	**Acres:**	52.0

Location:	ANAHEIM HILLS GOLF COURSE (WALNUT CYN), 1.4 MILES SE OF X-ING OF RIVERSIDE FWY & IMPERIAL HWY, SOUTH OF YORBA LINDA.
Detailed Location:	NE PORTION OF GOLF COURSE.
Ecological:	SUITABLE HABITAT ON PROJECT SITE CONSISTS OF HIGH QUALITY TO HIGHLY DISTURBED COASTAL SAGE SCRUB, BACCHARIS SCRUB AND SOUTHERN CACTUS SCRUB. AVAILABLE HABITAT SIMILAR IN 1994 & 2007 AERIAL IMAGES.
General:	1994: 5 PAIRS DETECTED DURING SURVEYS BETWEEN 10 MAR AND 1 APR 1994. 2001: OBS AT 3 LOCALES ON SURVEYS ON 30 AUG, 5 & 12 OCT; 5 PRS & 3 INDIV TOTAL WERE OBS IN 6 OF 11 PATCHES OF SUITABLE HAB SURVEYED DURING PERIOD (OCC 791-794).
Owner/Manager:	PVT

Occurrence No.	794	**Map Index:**	52973	**EO Index:**	52973	**Element Last Seen:**	2001-10-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2001-10-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-03-01

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.83967 / -117.75463	**Accuracy:**	specific area
UTM:	Zone-11 N3744635 E430179	**Elevation (ft):**	700
PLSS:	T04S, R08W, Sec. 07, E (S)	**Acres:**	12.0

Location:	ANAHEIM HILLS GOLF COURSE, 1.4 MILES SE OF INTERSECTION OF RIVERSIDE FWY & IMPERIAL HIGHWAY, SOUTH OF YORBA LINDA.
Detailed Location:	SE PORTION OF GOLF COURSE, NEAR WALNUT CANYON RD.
Ecological:	SUITABLE HABITAT ON PROJECT SITE CONSISTS OF HIGH QUALITY TO HIGHLY DISTURBED COASTAL SAGE SCRUB, BACCHARIS SCRUB AND SOUTHERN CACTUS SCRUB. AVAILABLE HABITAT SIMILAR IN 1994 & 2007 AERIAL IMAGES.
General:	1994: 2 PAIRS OBS DURING SURVEYS BETWEEN 10 MAR AND 1 APR. 2001: OBS AT 1 LOCALE ON SURVEYS ON 30 AUG, 5 & 12 OCT; 5 PRS & 3 INDIV TOTAL WERE OBS IN 6 OF 11 PATCHES OF SUITABLE HAB SURVEYED DURING PERIOD (OCC 791-794).
Owner/Manager:	PVT

Occurrence No.	795	**Map Index:**	71448	**EO Index:**	52996	**Element Last Seen:**	2002-03-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2002-03-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-03-02

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.83224 / -117.77422	**Accuracy:**	specific area
UTM:	Zone-11 N3743825 E428362	**Elevation (ft):**	985
PLSS:	T04S, R09W, Sec. 12 (S)	**Acres:**	28.0

Location:	1.8 MILES SE OF RIVERSIDE FWY AT IMPERIAL HWY, & 1 MILE WNW OF ROBBERS PEAK, ALONG THE BOUNDARY OF ANAHEIM & ORANGE.
Detailed Location:	MAPPED TO GIVEN MAP. SITE NAMES SERRANO HEIGHTS ('97, SOUTHWEST) & SERRANO HTS OFFSITE FUEL MODIFICATION ZONE ('01, EAST). 2001 LCOATIONS: S OF PERIDOT PL (A), S OF CORAL CIR (B), E OF CORAL CIR (C), E OF AMBER LN (D).
Ecological:	HABITAT CONSISTED OF COASTAL SAGE SCRUB, NON-NATIVE GRASSES, DIEGAN COASTAL SAGE SCRUB, CHAPARRAL, AND NATIVE GRASSES.
General:	'97: 3 PAIRS OBS DURING SURVEYS BETWEEN 11 FEB AND 4 MAR. '01: 1 PR 4 OCT AT A, 1 OBS 4 OCT AT C, 1 PR 19 OCT AT B, 1 HEARD 1 NOV & 1 OBS 15 NOV NEAR A & B, 1 HEARD E OF AMBER LN DATE UKN; 10 SURVEYS BTWN 4 OCT 01 - 11 MAR 02.
Owner/Manager:	UNKNOWN

Occurrence No.	796	**Map Index:**	53006	**EO Index:**	53006	**Element Last Seen:**	2017-06-28
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2017-06-28
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-03-15

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.78809 / -117.78445	**Accuracy:**	non-specific area
UTM:	Zone-11 N3738937 E427376	**Elevation (ft):**	700
PLSS:	T04S, R09W, Sec. 35 (S)	**Acres:**	81.0

Location:	SOUTH SIDE OF CHAPMAN AVE & NORTHWEST OF THE ORANGE CORP BDY LINE, ALONG THE BOUDRY OF ORANGE & SANTA ANA.
Detailed Location:	MAPPED WITH RESPECT TO PROVIDED MAP (2001). SITE NAMES PANARAMA HEIGHTS (S) & ORANGE PARK ACRES (SWEETWATER ENV.), RESPECTIVELY.
Ecological:	HABITAT CONSISTED OF FRAGMENTED, DISTURBED TO HIGH QUALITY COASTAL SAGE & SOUTHERN CACTUS SCRUB, SURROUNDED BY DEVELOPMENT (2001). DEVELOPMENT, APPARENT IN 1994 & 2007 AERIAL IMAGES, MAY HAVE EXTIRPATED PARTS OF THIS OCCURRENCE.
General:	1994: 14 PAIRS. 2001: 5 DETECTION LOCALES IN PANARAMA HGTS (S) OF 6 DETECTION LOCALES FOR PANARAMA HGTS (N&S) TOTALLING 1 PR & 4 SINGLES ON SURVEYS 14 SEP & 9 NOV (SEE ALSO OCC #902). 2017: 5 PAIRS AND 1 FAMILY GROUP.
Owner/Manager:	UNKNOWN

Occurrence No.	797	**Map Index:**	53012	**EO Index:**	53012	**Element Last Seen:**	2000-04-13
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2000-04-13
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-03-01

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.85075 / -117.75538	**Accuracy:**	non-specific area
UTM:	Zone-11 N3745864 E430119	**Elevation (ft):**	680
PLSS:	T04S, R08W, Sec. 06, SE (S)	**Acres:**	29.0

Location:	NORTH OF WALNUT CANYON AND 2 MILES EAST OF THE INTERSECTION OF IMPERIAL HIGHWAY AND SR 91, SE OF YORBA LINDA.
Detailed Location:	NNE OF CANYON RIM RD AT FAIRMONT BLVD, & SE OF S COUNTRY HILL ROAD (MOHLER PL). PULLSITE P14 FOR SOUTHERN CALIF EDISON L.A.-SAN DIEGO FIBERLINK PROJECT. SITE NAMES DEER CYN PARK PRESERVE & ANAHEIM HILLS.
Ecological:	HABITAT CONSISTED OF COASTAL SAGE SCRUB DOMINATED BY COASTAL SAGE BRUSH. AVAILABLE HABITAT SIMILAR BETWEEN 1994 & 2007 AERIAL IMAGES.
General:	3 PAIRS OBSERVED BETWEEN 10 MAR AND 1 APR 1994. 2 SINGLE BIRDS OBSERVED ON ON 29 SEP 1999. 1 PAIR OBSERVED ON 13 APR 2000.
Owner/Manager:	UNKNOWN

Occurrence No.	798	**Map Index:**	53018	**EO Index:**	53018	**Element Last Seen:**	2020-05-25
Occ. Rank:	Excellent			**Presence:**	Presumed Extant	**Site Last Seen:**	2020-05-25
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-06-23

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.8345 / -117.79062	**Accuracy:**	non-specific area
UTM:	Zone-11 N3744087 E426846	**Elevation (ft):**	963
PLSS:	T04S, R09W, Sec. 11, SE (S)	**Acres:**	128.0

Location:	PERALTA HILLS, 1.5 MILES DIRECLTY SOUTH OF THE INTERSECTION OF IMPERIAL HIGHWAY AND SR 91, NE VILLA PARK.
Detailed Location:	PULLSITE P15 FOR THE SOUTHERN CALIFORNIA EDISON LOS ANGELES-SAN DIEGO FIBERLINK PROJECT.
Ecological:	HABITAT CONSISTED OF COASTAL SAGE SCRUB DOMINATED BY LAUREL SUMAC. CSS DOMINATED BY CALIFORNIA SAGEBRUSH AND FLAT-TOPPED BUCKWHEAT, NON-NATIVE GRASSLAND ALSO IN AREA.
General:	1 PAIR DETECTED DURING SURVEYS BETWEEN 10 MAR AND 1 APR 1994. 1 PAIR OBSERVED ON 6 JUN 2000. 2 PAIRS (1 WITH 3 FLEDGLINGS) DETECTED DURING SURVEYS BETWEEN 19 JUN AND 6 OCT 2015. 7 PAIRS AND 4 JUVENILES OBSERVED DURING 6 SURVEYS IN 2020.
Owner/Manager:	UNKNOWN

Occurrence No.	823	**Map Index:**	53461	**EO Index:**	53461	**Element Last Seen:**	2018-02-01
Occ. Rank:	Fair			**Presence:**	Presumed Extant	**Site Last Seen:**	2018-02-01
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-10-06

Quad Summary:	El Monte (3411811)
County Summary:	Los Angeles

Lat/Long:	34.03171 / -118.04671	**Accuracy:**	non-specific area
UTM:	Zone-11 N3766166 E403372	**Elevation (ft):**	223
PLSS:	T02S, R11W, Sec. 4, NW (S)	**Acres:**	63.0

Location:	ADJACENT TO WHITTIER NARROWS REC AREA (ALONG SAN GABRIEL RIVER), 0.5 MI WNW JUNCTION OF PECK RD & I-605, SOUTH EL MONTE.
Detailed Location:	ADJACENT TO SAND MINING OPERATION.
Ecological:	HABITAT CONSISTED OF MARGINAL QUALITY COASTAL SAGE SCRUB.
General:	1 HEARD ON 17 NOV 2000. 3 DETECTED ON 9 AUG 2011. 1 ADULT FEMALE OBSERVED FORAGING AND CALLING ON 1 FEB 2018.
Owner/Manager:	USACE

Occurrence No.	855	**Map Index:**	70364	**EO Index:**	71254	**Element Last Seen:**	2007-08-14
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2007-08-14
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-12-16

Quad Summary: La Habra (3311788)

County Summary: Los Angeles

Lat/Long:	33.98602 / -117.92991	**Accuracy:**	specific area
UTM:	Zone-11 N3760995 E414108	**Elevation (ft):**	605
PLSS:	T02S, R10W, Sec. 21, NE (S)	**Acres:**	14.0

Location: SCHABARUM PARK, 0.4 MILE ESE OF THE INTERSECTION OF COLIMA ROAD AND SOUTH AZUSA AVENUE, ROWLAND HEIGHTS.

Detailed Location: THERE ARE KNOWN POPULATIONS TO THE SE (AERA PROPERTY) & SW (PHLNHA RESTORATION AREAS E OF COLIMA DR). CACTUS WREN OCCURRED HERE, W/ SEVERAL PAIRS IN 98. MAPPED TO COORDINATES & MAP PROVIDED. SITE NAME E. SAN GABRIEL VALLEY LIBRARY PROJECT.

Ecological: HABITAT CONSISTED OF AN EAST-FACING SLOPE BISSECTED BY SHORT, DRY DRAINAGES. SLOPE COVERED WITH LUSH COASTAL SAGE SCRUB, DOMINATED BY ARTEMISIA CALIFORNICA, WITH SCATTERED PATCHES OF OPUNTIA LITTORALIS AND EMERGENT SAMBUCUS MEXICANA.

General: 1 DETECTED ON 14 AUG 2002. 2 DETECTED ON 11 SEP AND 25 SEP 2002. 2 DETECTED ON 14 AUG 2007, WHEN THEIR MEWING CALL WAS HEARD & WERE SEEN AT CLOSE RANGE; BOTH WERE FEMALE-TYPE PLUMAGE, POSSIBLY JUV'S.

Owner/Manager: LAX COUNTY

Occurrence No.	869	**Map Index:**	71267	**EO Index:**	72171	**Element Last Seen:**	2016-02-26
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2016-02-26
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-10-05

Quad Summary: El Monte (3411811)

County Summary: Los Angeles

Lat/Long:	34.03021 / -118.08514	**Accuracy:**	specific area
UTM:	Zone-11 N3766036 E399823	**Elevation (ft):**	362
PLSS:	T02S, R12W, Sec. 1, N (S)	**Acres:**	549.0

Location: MONTEBELLO HILLS OIL FIELD, 1 MI SW OF STATE HWY 60 & STATE HWY 19 (ROSEMEAD BLVD), MONTEBELLO.

Detailed Location:

Ecological: COASTAL SAGE SCRUB HABITAT. ACTIVE OIL PRODUCTION SITE SINCE EARLY 1900S. INCREASE IN GNATCATCHERS ATTRIBUTED TO HABITAT CREATION AND ENHANCEMENT EFFORTS SINCE 2006 AND COWBIRD TRAPPING.

General: 1 PAIR DETECTED ON 12 APR 2000. 33 PAIRS IN 2002. 66 PAIRS IN 2005. AT LEAST 9 INDIVIUDALS IN 2007. 2 ADULTS IN 2009. DETECTED IN 2010 AND 2011. 117 PAIRS IN 2010. 213 PAIRS IN 2013. 126 PAIRS IN 2014. 104 PAIRS IN 2015. 88 PAIRS IN 2016.

Owner/Manager: PVT

Occurrence No.	870	**Map Index:**	71268	**EO Index:**	72173	**Element Last Seen:**	2018-08-10
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2018-08-10
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-10-13

Quad Summary: El Monte (3411811)

County Summary: Los Angeles

Lat/Long:	34.00314 / -118.04607	**Accuracy:**	non-specific area
UTM:	Zone-11 N3762997 E403399	**Elevation (ft):**	428
PLSS:	T02S, R11W, Sec. 16, NE (S)	**Acres:**	20.0

Location: SYCAMORE CANYON, 0.9 MI EAST OF INTERSTATE 605 & BEVERLY BLVD, WHITTIER.

Detailed Location: MAPPED TO INCLUDE PROVIDED COORDINATES AND MAPS. SITE NAME: PUENTE HILLS LANDFILL NATIVE HABITAT PRESERVATION AUTHORITY.

Ecological: OPEN SPACE PRESERVE W/RECREATION TRAIL. HIGH-QUALITY SAGEBRUSH SCRUB W/ENCELIA, BACCHARIS, & MARAH MACROCARPA, & RIPARIAN ALONG SYCAMORE CREEK, ADJACENT TO RESIDENTIAL. SOME NOISE FROM OIL OPERATION DOWNSTREAM.

General: PAIR WITH TWO YOUNG OBSERVED MAR-JUN 2005. 1 HEARD ON 14 SEP 2005. 1 DETECTED ON 1 NOV 2007. DETECTED IN 2012. BREEDING PAIR OBSERVED ON 1 MAR 2017. 1 MALE OBSERVED ON 10 AUG 2018.

Owner/Manager: PUENTE HILLS LANDFILL NHPA

Occurrence No.	884	**Map Index:**	71292	**EO Index:**	72193	**Element Last Seen:**	2012-05-07
Occ. Rank:	Fair			**Presence:**	Presumed Extant	**Site Last Seen:**	2012-05-07
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-10-15

Quad Summary: Whittier (3311881)

County Summary: Los Angeles

Lat/Long:	33.98352 / -118.01301	**Accuracy:**	non-specific area
UTM:	Zone-11 N3760791 E406431	**Elevation (ft):**	886
PLSS:	T02S, R11W, Sec. 22, NE (S)	**Acres:**	24.0

Location: NORTH EDGE OF WORSHAM LANDFILL, 0.3 MI EAST OF CANYON DR. & SOUTH OF WORSHAM CREEK, WHITTIER.

Detailed Location: ATTRIBUTED 1945 SPECIMEN COLLECTED NEAR WHITTIER IN DENSE CHAPARRAL THICKET ON STEEP HILLSIDE; EXACT LOCATION UNKNOWN.

Ecological: COASTAL SAGE SCRUB AND CHAPARRAL. ALONG BOUNDARY OF HABITAT PRESERVE AND ACTIVE LANDFILL OPERATION.

General: COLLECTED FROM THE VICNITY IN 1945. 1 DETECTED ON 31 AUG 2005. 1 SINGLE MALE DETECTED ON 14 JUN 2010. 2 DETECTED ON 4 MAY 2011. 1 PAIR OBSERVED ON 7 MAY 2012.

Owner/Manager: CITY OF WHITTIER

Occurrence No.	885	**Map Index:**	71293	**EO Index:**	72195	**Element Last Seen:**	2005-07-28
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2005-07-28
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-10-16

Quad Summary:	La Habra (3311788)
County Summary:	Los Angeles

Lat/Long:	33.98416 / -117.99775	**Accuracy:**	80 meters
UTM:	Zone-11 N3760848 E407840	**Elevation (ft):**	1100
PLSS:	T02S, R11W, Sec. 23, NE (S)	**Acres:**	0.0

Location:	ALONG SKYLINE FIRE RD 2, N OF LA CANADA VERDE CREEK, 0.25 MI W OF CANAL POINT & BELLE RIVER, WHITTIER (HACIENDA HTS).
Detailed Location:	SOUTHEAST CORNER OF ROSE HILLS. WITHIN TURNBULL CANYON OPEN SPACE (SPECIAL DISTRICT).
Ecological:	PATCHES OF HIGH QUALITY SAGEBRUSH SCRUB.
General:	1 ADULT (PROBABLY FEMALE) HEARD CALLING ON 26 JUL AND 28 JUL 2005.
Owner/Manager:	HABITAT AUTHORITY

Occurrence No.	886	**Map Index:**	71294	**EO Index:**	72196	**Element Last Seen:**	2017-07-13
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2017-07-13
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-12-16

Quad Summary:	La Habra (3311788)
County Summary:	Los Angeles

Lat/Long:	33.97162 / -117.98145	**Accuracy:**	non-specific area
UTM:	Zone-11 N3759444 E409334	**Elevation (ft):**	899
PLSS:	T02S, R11W, Sec. 25, NE (S)	**Acres:**	98.0

Location:	EAST OF COLIMA RD, NORTH OF ARROYO SAN MIGUEL, AND SOUTH OF SKYLINE DRIVE, PUENTE HILLS, WHITTIER.
Detailed Location:	1999: LA HABRA HEIGHTS SITE. 2002: FORMER UNOCAL PROPERTY. 2005: PUENTE HILLS LANDFILL NATIVE HABITAT PRESERVATION AUTHORITY SITE. MAPPED TO INCLUDE PROVIDED COORDINATES, SHAPEFILE POINTS, AND MAPPED LOCATIONS.
Ecological:	2002: FORMER OIL/NATURAL GAS FIELD, NOW OPEN SPACE; GNATCATCHERS FOUND MAINLY IN SAGE SCRUB PATCHES WITHIN ARROYOS. 2005: PRESERVE SURROUNDED BY RESIDENTIAL AREAS. 2017: COASTAL SAGE SCRUB & RUDERAL HABITAT.
General:	DETECTED IN APR 1997 AND ON 24 SEP 1999. 6, INCLUDING 2 PAIRS, DETECTED IN 2002. UP TO 8 DETECTED 15 FEB & 6 ON 14 APR 2005. 2 PAIRS, INCLUDING 1 BUILDING A NEST, & 1 ADULT MALE OBSERVED ON 27 MAR; 1 JUVENILE ON 13 JUL 2017.
Owner/Manager:	PUENTE HILLS LANDFILL NHPA

Occurrence No.	887	**Map Index:**	71300	**EO Index:**	72203	**Element Last Seen:**	2005-08-02
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2005-08-02
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-12-15

Quad Summary:	La Habra (3311788)
County Summary:	Los Angeles

Lat/Long:	33.95532 / -117.92508	**Accuracy:**	80 meters
UTM:	Zone-11 N3757587 E414524	**Elevation (ft):**	840
PLSS:	T02S, R10W, Sec. 34, NW (S)	**Acres:**	0.0

Location:	0.1 MILE NORTH OF FULLERTON RD AND HARBOR BLVD, PUENTE HILLS, LA HABRA.
Detailed Location:	MAPPED TO PROVIDED MAP. SITE NAME: USE AREA 8, PUENTE HILLS LANDFILL NATIVE HABITAT PRESERVATION AUTHORITY (POWDER CANYON OPEN SPACE).
Ecological:	
General:	1 IMMATURE INDIVIDUAL SEEN AND HEARD ON 2 AUG 2005.
Owner/Manager:	PUENTE HILLS LANDFILL NHPA

Occurrence No.	888	**Map Index:**	71302	**EO Index:**	72205	**Element Last Seen:**	2013-06-14
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2013-06-14
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-12-15

Quad Summary:	La Habra (3311788)
County Summary:	Los Angeles

Lat/Long:	33.9548 / -117.91721	**Accuracy:**	specific area
UTM:	Zone-11 N3757524 E415252	**Elevation (ft):**	996
PLSS:	T02S, R10W, Sec. 34, N (S)	**Acres:**	19.0

Location:	0.2 MILE SOUTH OF DORSET CT & WELLINGTON LN, EAST OF HARBOR BLVD, OIL FIELD SITE IN PUENTE HILLS, ROWLAND HEIGHTS.
Detailed Location:	MAPPED ACCORDING TO MAP AND COORDINATES PROVIDED. SITE NAME: AREA MASTER PLANNED COMMUNITY PROJECT SITE.
Ecological:	COASTAL SAGE SCRUB HABITAT DOMINATED BY CALIFORNIA SAGEBRUSH AND FRAGMENTED FROM ACCESS ROADS. AREA HAS BEEN HISTORICALLY AND CONTINOUSLY ALTERED BY OIL EXTRACTION ACTIVITIES AND CATTLE GRAZING OVER MANY DECADES.
General:	1 PAIR OBSERVED BETWEEN 26 APR AND 22 JUN 2004. 2 JUVENILES OBSERVED FORAGING TOGETHER ON 18 JUN 2010. 1 PAIR OBSERVED IN COURTSHIP ON 14 JUN 2013.
Owner/Manager:	UNKNOWN

Occurrence No.	889	**Map Index:**	71304	**EO Index:**	72206	**Element Last Seen:**	2013-06-14
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2013-06-14
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-12-16

Quad Summary:	La Habra (3311788)
County Summary:	Los Angeles, Orange

Lat/Long:	33.9509 / -117.90864	**Accuracy:**	non-specific area
UTM:	Zone-11 N3757083 E416039	**Elevation (ft):**	940
PLSS:	T02S, R10W, Sec. 34 (S)	**Acres:**	146.0

Location:	0.3 MI S OF NORWICH PL & DARTMOUTH, 0.5 MI N OF NORTHWOOD AVE & OAKCREST AVE, PUENTE HILLS OIL FIELD, ROWLAND HEIGHTS.
Detailed Location:	MAPPED TO PROVIDED MAPS AND COORDINATES. SITE NAMES: PUENTE/TONNER CANYON PROPERTY, AND AREA MASTER PLANNED COMMUNITY PROJECT SITE.
Ecological:	COASTAL SAGE SCRUB HABITAT DOMINATED BY CALIFORNIA SAGEBRUSH AND FRAGMENTED FROM ACCESS ROADS. AREA HAS BEEN HISTORICALLY AND CONTINOUSLY ALTERED BY OIL EXTRACTION ACTIVITIES AND CATTLE GRAZING OVER MANY DECADES.
General:	3 PAIRS DETECTED IN MAR 1998. 3 PAIRS DETECTED BETWEEN 26 APR AND 22 JUN 2004. 4 PAIRS WITH JUVENILES AND 1 LONE JUVENILE DETECTED IN 2010. 3 SINGLE INDIVIDUALS AND 5 PAIRS NESTING OR WITH JUVENILES DETECTED BETWEEN 17 MAY AND 14 JUN 2013.
Owner/Manager:	UNKNOWN

Occurrence No.	890	**Map Index:**	71306	**EO Index:**	72209	**Element Last Seen:**	1998-03-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1998-03-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-12-16

Quad Summary:	La Habra (3311788)
County Summary:	Los Angeles

Lat/Long:	33.95245 / -117.89603	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3757246 E417205	**Elevation (ft):**	1090
PLSS:	T02S, R10W, Sec. 35, SE (S)	**Acres:**	0.0

Location:	0.25 MILE SOUTH OF VANTAGE POINTE DR, OIL FIELD IN PUENTE HILLS, ROWLAND HEIGHTS.
Detailed Location:	MAPPED ACCORDING TO PROVIDED MAP OF CAGN TERRITORIES. SITE NAME: PUENTE/TONNER CANYON PROPERTY.
Ecological:	DIEGAN SAGE SCRUB HABITAT DOMINATED BY CALIFORNIA SAGEBRUSH. SITE USE INCLUDES OIL DRILLING OPERATIONS AND HEAVY CATTLE GRAZING.
General:	1 PAIR OBSERVED AND TERRITORY IDENTIFIED IN MAR 1998.
Owner/Manager:	UNKNOWN

Occurrence No.	896	**Map Index:**	71422	**EO Index:**	72319	**Element Last Seen:**	1994-04-01
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1994-04-01
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-03-01

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.85246 / -117.77174	**Accuracy:**	specific area
UTM:	Zone-11 N3746065 E428607	**Elevation (ft):**	400
PLSS:	T04S, R09W, Sec. 01, SE (S)	**Acres:**	10.0

Location: 0.3 MILE SOUTH OF SANTA ANA CANYON RD AT FAIRMONT BLVD, NEAR TRAIL DR, ANAHEIM.

Detailed Location: SITE NAME ANAHEIM HILLS.

Ecological: SMALL PATCHES OF HABITAT STILL EXISTING IN AERIAL IMAGES FROM 1994, 1999, & 2007, BUT SURROUNDED BY HOUSING DEVELOPMENT.

General: 1 PAIR AND 1 SINGLE BIRD DETECTED BETWEEN 10 MAR AND 1 APR 1994.

Owner/Manager: UNKNOWN

Occurrence No.	897	**Map Index:**	71430	**EO Index:**	72327	**Element Last Seen:**	1994-04-01
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1994-04-01
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-03-01

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.84022 / -117.77849	**Accuracy:**	specific area
UTM:	Zone-11 N3744713 E427972	**Elevation (ft):**	600
PLSS:	T04S, R09W, Sec. 12, NW (S)	**Acres:**	10.0

Location: JUST SOUTH & EAST OF ANAHEIM HILLS RD, NEAR WALNUT CANYON, ANAHEIM.

Detailed Location: SITE NAME ANAHEIM HILLS.

Ecological: LIMITED HABITAT SURROUNDED BY DEVELOPMENT. AVAILABLE HABITAT SIMILAR BETWEEN 1994 & 2007 AERIAL IMAGES.

General: 2 PAIRS DETECTED DURING SURVEYS BETWEEN 10 MAR AND 1 APR 1994.

Owner/Manager: UNKNOWN

Occurrence No.	899	**Map Index:**	71434	**EO Index:**	72332	**Element Last Seen:**	1994-04-01
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1994-04-01
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-03-01

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.83531 / -117.77822	**Accuracy:**	specific area
UTM:	Zone-11 N3744169 E427993	**Elevation (ft):**	750
PLSS:	T04S, R09W, Sec. 12, SW (S)	**Acres:**	10.0

Location: ALONG STAGE COACH RD AT TRAILBLAZER CT, ANAHEIM.

Detailed Location: SITE NAME ANAHEIM HILLS.

Ecological: AVAILABLE HABITAT SIMILAR BETWEEN MID 1994 & 2007 AERIAL IMAGES.

General: 2 PAIRS DETECTED DURING SURVEYS BETWEEN 10 MAR AND 1 APR 1994 BY G. ROGERS ET. AL. (SWEETWATER ENVIRONMENTAL).

Owner/Manager: UNKNOWN

Occurrence No.	900	**Map Index:**	71457	**EO Index:**	72356	**Element Last Seen:**	2003-06-27
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2003-06-27
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-03-15

Quad Summary:	Black Star Canyon (3311776), Orange (3311777)
County Summary:	Orange

Lat/Long:	33.82659 / -117.75287	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3743184 E430331	**Elevation (ft):**	1000
PLSS:	T04S, R08W, Sec. 18, NW (S)	**Acres:**	0.0

Location:	IMMEDIATELY EAST OF ROBBERS PEAK, & WEST OF WEIR CANYON, ALONG ANAHEIM & ORANGE BOUNDARY.
Detailed Location:	AT S POINT PREMIER (COURT). SITE NAMES BARHAM RANCH (1999) & ROBBERS PEAK SUBDIVISION - TT 16545 (2003).
Ecological:	SAGEBRUSH-BUCKWHEAT SCRUB DOMINATED BY CALIFORNIA SAGEBRUSH AND CALIFORNIA BUCKWHEAT. HABITAT APPEARS SIMILAR BETWEEN 1994 & 2020 AERIAL IMAGES.
General:	1 PAIR DETECTED BETWEEN 21 JUN AND 8 JUL 1999. 1 PAIR WITH NEST DETECTED BETWEEN 19 MAY AND 27 JUN 2003.
Owner/Manager:	UNKNOWN

Occurrence No.	901	**Map Index:**	71461	**EO Index:**	72357	**Element Last Seen:**	2020-06-24
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2020-06-24
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-02-25

Quad Summary:	Black Star Canyon (3311776), Orange (3311777)
County Summary:	Orange

Lat/Long:	33.81472 / -117.75886	**Accuracy:**	specific area
UTM:	Zone-11 N3741872 E429768	**Elevation (ft):**	821
PLSS:	T04S, R08W, Sec. 19, N (S)	**Acres:**	126.0

Location:	SANTIAGO OAKS REGIONAL PARK, NORTHWEST OF WEIR CANYON, 0.8 MILE SOUTH OF ROBBERS PEAK, ORANGE.
Detailed Location:	MAPPED ACCORDING TO PROVIDED MAPS AND COORDINATES.
Ecological:	HABITAT APPEARS TO BE CONTIGUOUS AND SIMILAR EXTANT IN AERIAL IMAGES FROM 1994 & 2007.
General:	7 INDIVIDUALS AND 8 PAIRS DETECTED BETWEEN 21 JUN AND 8 JUL 1999. 1 ADULT FEMALE AND 1 MALE DETECTED ON 3 MAY 2002. DETECTED ON 21 MAR AND 12 APR 2016. NONE DETECTED ON 22 APR 2016. DETECTED BETWEEN 15 MAR AND 24 JUN 2020.
Owner/Manager:	ORA COUNTY

Occurrence No.	902	**Map Index:**	71467	**EO Index:**	72364	**Element Last Seen:**	2001-11-09
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2001-11-09
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-03-02

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.80193 / -117.79054	**Accuracy:**	non-specific area
UTM:	Zone-11 N3740476 E426824	**Elevation (ft):**	600
PLSS:	T04S, R09W, Sec. 26 (S)	**Acres:**	69.0

Location:	EAST SIDE OF CANNON STREET, & NORTH OF CHAPMAN AVE, EL MODENA OR ORANGE PARK ACRES (UNICORP. ORA).
Detailed Location:	MAPPED WITH RESPECT TO PROVIDED MAP. 2001 & 1994 SURVEY SITE NAMES PANARAMA HEIGHTS (N) & ORANGE PARK ACRES (SWEETWATER ENV.), RESPECTIVELY
Ecological:	HABITAT CONSISTS OF DISTURBED TO HIGH QUALITY COASTAL SAGE & SOUTHERN CACTUS SCRUB, SURROUNDED BY DEVELOPMENT (2001). DEVELOPMENT, APPARENT IN 1994, 2000, & 2007 AERIAL IMAGES, MAY HAVE EXTIRPATED PARTS OF THIS OCCURRENCE.
General:	1994: 8 PRS & 1 SINGLE DETECTED DURING SURVEYS BETWEEN 9 MAR AND APR 3. 2001: 1 DETECTION LOCALE IN PANARAMA HGTS (N) OF 6 DETECTION LOCALES FOR PANARAMA HGTS (N&S) TOTALLING 1 PR & 4 SINGLES ON SURVEYS 14 SEP & 9 NOV (SEE ALSO OCC #796).
Owner/Manager:	UNKNOWN

Occurrence No.	903	**Map Index:**	71483	**EO Index:**	72365	**Element Last Seen:**	2009-04-24
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2009-04-24
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-03-11

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.78295 / -117.79160	**Accuracy:**	specific area
UTM:	Zone-11 N3738372 E426710	**Elevation (ft):**	500
PLSS:	T04S, R09W, Sec. 35, NE (S)	**Acres:**	12.0

Location:	PANORAMA HEIGHTS, EAST OF CRAWFORD CYN RD, AT THE END OF GREENWALD LN, SANTA ANA.
Detailed Location:	MAPPED TO PROVIDED MAPS; SITE NAMES ORANGE PARK ACRES AND CRAWFORD CANYON.
Ecological:	FRAGMENTED HABITAT BETWEEN RESIDENTIAL DEVELOPMENTS. AERIAL PHOTOS SHOW SIMILIAR HABITAT AVAILABILITY IN 1994 AND 2009 AERIAL PHOTOS. FOUNTAIN GRASS INFESTING SOME AREAS.
General:	2 PAIRS DETECTED DURING SURVEYS BETWEEN 9 MAR AND 3 APRIL 1994. DETECTED ON 24 APR 2009.
Owner/Manager:	UNKNOWN

Occurrence No.	904	**Map Index:**	71484	**EO Index:**	72382	**Element Last Seen:**	2009-05-01
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2009-05-01
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-03-11

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.78052 / -117.78542	**Accuracy:**	80 meters
UTM:	Zone-11 N3738098 E427280	**Elevation (ft):**	550
PLSS:	T04S, R09W, Sec. 35, SE (S)	**Acres:**	0.0

Location: PANORAMA HEIGHTS, EAST OF CRAWFORD CYN RD, AT THE END OF DANIGER RD, SANTA ANA.

Detailed Location: MAPPED WITH RESPECT TO ONE 80 M FWS POLYGONS; SITE NAME ORANGE PARK ACRES.

Ecological: FRAGMENTED HABITAT BETWEEN RESIDENTIAL DEVELOPMENTS. AERIAL PHOTOS SHOW SIMILIAR HABITAT AVAILABILITY IN 1994 AND 2009 AERIAL PHOTOS. FOUNTAIN GRASS INFESTING SOME AREAS.

General: 1 PAIR DETECTED DURING SURVEYS BETWEEN 9 MAR AND 3 APRIL 1994. DETECTED ON 1 MAY 2009.

Owner/Manager: UNKNOWN

Occurrence No.	905	**Map Index:**	71485	**EO Index:**	72384	**Element Last Seen:**	2004-07-01
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2004-07-01
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-03-12

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.75892 / -117.75911	**Accuracy:**	80 meters
UTM:	Zone-11 N3735685 E429699	**Elevation (ft):**	450
PLSS:	T05S, R08W, Sec. 07, NW (S)	**Acres:**	0.0

Location: JUST EAST OF EASTERN TRANSPORTATION CORRIDOR 261, EAST OF LEMON HEIGHTS, LOMAS DE SANTIAGO, IRVINE.

Detailed Location: SITE NAME IRVINE COMMUNITY DEVELOPMENT COMPANY PLANNING AREA 1 PROJECT.

Ecological: HABITAT APPEARS TO BE SMALL PATCH OF COAST SAGE SCRUB OR SIMILAR HABITAT SURROUNDED BY A TREE FARM IN 2004 AERIAL IMAGE. THE SAME SMALL PATCH OF HABITAT IS PRESENT IN 2007 AERIALS, BUT MUCH OF THE AREA IS GRADED, PROBABLY FOR DEVELOPMENT.

General: 1 PAIR DETECTED BY P. LEMONS (DUDEK & ASSOCIATES) ON 1 JUL 2004.

Owner/Manager: UNKNOWN

Occurrence No.	906	**Map Index:**	71530	**EO Index:**	72400	**Element Last Seen:**	2021-01-27
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2021-01-27
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-03-15

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.77142 / -117.76355	**Accuracy:**	non-specific area
UTM:	Zone-11 N3737074 E429299	**Elevation (ft):**	456
PLSS:	T05S, R08W, Sec. 6, NW (S)	**Acres:**	314.0

Location:	PETERS CANYON REGION PARK, NEAR JAMBOREE RD AT PIONEER RD, IN TUSTIN ALONG SANTA ANA & IRVINE BOUNDARIES.
Detailed Location:	MAPPED TO 215 POINT LOCATIONS FROM NROC DIGITAL LAYER, SITE #3, PETERS CANYON. CAGN AND CACW SURVEYS FROM 1999-2004.
Ecological:	COASTAL SAGE SCRUB DOMINATED BY CALIFORNIA SAGEBRUSH (ARTEMISIA CALIFORNICA) WITH DEERWEED, COASTAL PRICKLY-PEAR, AND BLACK SAGE. OPEN SPACE SURROUNDED BY DEVELOPMENT. SITE DISTURBED BY TRAILS.
General:	'99: 14 OBS. '00: 43 OBS. '01: 66 OBS. '02: 40 OBS. '03: 27OBS. '04: 25 OBS. DETECTED, '08. '12: 3 AD, 1 PR W/JUVS. '13: 3 AD, 7 TERR. '14: 1 PR W/3 JUV. '15: 3 PR. '16: 14 PRS. '17: 1PR, 1 AD. '19: 1 PR, 1 UNK. '20: 1 PR, 2 UNK. '21: 1 AD.
Owner/Manager:	ORA COUNTY-PARKS & REC

Occurrence No.	914	**Map Index:**	71548	**EO Index:**	72443	**Element Last Seen:**	2020-06-24
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2020-06-24
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-02-26

Quad Summary:	Black Star Canyon (3311776), Orange (3311777)
County Summary:	Orange

Lat/Long:	33.78975 / -117.75191	**Accuracy:**	non-specific area
UTM:	Zone-11 N3739098 E430390	**Elevation (ft):**	700
PLSS:	T04S, R08W, Sec. 30 (S)	**Acres:**	286.0

Location:	NE OF EASTERN TRANSPORTATION CORRIDOR 241, E OF JAMBOREE RD & ALONG BOTH SIDES OF SANTIAGO CYN RD. ORANGE.
Detailed Location:	S OF IRVINE REG PARK. 2000: 3 PROPOSED BORING LOCATIONS. '01: THROUGHOUT POLYGON. SITE NAMES SANTIAGO HILLS AND EASTERN TRANSPORTATION CORRIDOR.
Ecological:	HABITAT: 2000: MEDIUM TO HIGH QUALITY COASTAL SAGE SCRUB PROVIDING ADEQUATE NESTING & FORAGING AREAS, SURROUNDED BY GRASSLAND. 2001: PROJECT SITE VEGETATED W/ CSS, RUDERAL GRASSLAND, & CHAPARRAL. 2003: FLOOD PLAIN.
General:	2000: 3 PRS & 2 MALES DETECTED ON SURVEYS DATED 26 MAR, 2 & 8 APR. 2001: ASSUME 13 TERRITORIES DUE TO 6 PRS, 7 TERR MALES, & 5 GROUPS OF JUV ON SURVEYS 12-13-19-20-21 JUN. 2015: 1 PAIR. 2016: 1 PAIR AND 2 INDIVIDUALS. DETECTED IN 2020.
Owner/Manager:	PVT, UNKNOWN

Occurrence No.	915	**Map Index:**	71553	**EO Index:**	72448	**Element Last Seen:**	2013-05-15
Occ. Rank:	Fair			**Presence:**	Presumed Extant	**Site Last Seen:**	2013-05-15
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-03-12

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.77986 / -117.75603	**Accuracy:**	specific area
UTM:	Zone-11 N3738004 E430001	**Elevation (ft):**	654
PLSS:	T04S, R08W, Sec. 31, SE (S)	**Acres:**	43.0

Location: BETWEEN JAQMBOREE RD & EASTERN TRANSPORTATION CORRIDOR 261 JUST E OF PETERS CANYON RESERVOIR, N OF LOMA RIDGE, ORANGE.

Detailed Location: 2000: JUST NE OF SERVICE RD TO FILTRATION PLANT. 2001: THROUGHOUT MAIN POLYGON. 2013: SOUTHEAST OF HWY 261. SITES SANTIAGO HILLS, EASTERN TRANSPORTATION CORRIDOR, & PETER'S CANYON REGIONAL PARK.

Ecological: HABITAT: 2000: MEDIUM TO HIGH QUALITY COASTAL SAGE SCRUB PROVIDING ADEQUATE NESTING & FORAGING AREAS, SURROUNDED BY GRASSLAND. 2001: PROJECT SITE VEGETATED W/ CSS, RUDERAL GRASSLAND, & CHAPARRAL.

General: 2000: 1 MALE DETECTED ON ALL SURVEYS DATED 26 MAR, 2 & 8 APR. 2001: 4 TERRITORIAL MALES DETECTED ON SURVEYS 12-13-19-20-21 JUN. 2013: 1 PAIRR DETECTED ON 15 MAY.

Owner/Manager: ORA COUNTY-PETER'S CYN RP, UNK

Occurrence No.	958	**Map Index:**	A8125	**EO Index:**	109909	**Element Last Seen:**	2017-04-11
Occ. Rank:	Excellent			**Presence:**	Presumed Extant	**Site Last Seen:**	2017-04-11
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2018-01-18

Quad Summary: Whittier (3311881)

County Summary: Los Angeles

Lat/Long:	33.99781 / -118.03584	**Accuracy:**	80 meters
UTM:	Zone-11 N3762397 E404338	**Elevation (ft):**	911
PLSS:	T02S, R11W, Sec. 16, SE (S)	**Acres:**	5.0

Location: HELLMAN PARK, ABOUT 0.2 MILES NE OF CARINTHIA DR AT BROOKMEAD DR AND 1.7 MILES SE OF I-605 AT BEVERLY BLVD IN WHITTIER.

Detailed Location: MAPPED TO PROVIDED COORDINATES.

Ecological: SUITABLE NESTING HABITAT IN COASTAL SAGE SCRUB DOMINATED BY OPUNTIA LITTORALIS, ERIOGONUM FASCICULATUM, MALOSMA LAURINA AND SAMBUCUS NIGRA, ON OPEN SPACE PRESERVE SURROUNDED BY RESIDENTIAL DEVELOPMENT.

General: TERRITORIAL MALE SEEN AND HEARD ON 11 APR 2017; IT APPEARED TO BE INTERACTING WITH AN UNSEEN FEMALE (PERHAPS ON NEST).

Owner/Manager: PUENTE HILLS NHPA

Occurrence No.	962	**Map Index:**	B2190	**EO Index:**	114105	**Element Last Seen:**	2017-06-29
Occ. Rank:	Poor			**Presence:**	Presumed Extant	**Site Last Seen:**	2017-06-29
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-10-06

Quad Summary:	El Monte (3411811)
County Summary:	Los Angeles

Lat/Long:	34.03741 / -118.10542	**Accuracy:**	specific area
UTM:	Zone-11 N3766855 E397960	**Elevation (ft):**	390
PLSS:	T01S, R12W, Sec. 35 (S)	**Acres:**	101.0

Location:	N SIDE OF SR 60 FROM ABOUT 0.1-1.1 MI W OF PARAMOUNT BLVD OVERPASS, & S SIDE OF SR 60, 1.1 MI WSW OF THE OVERPASS, L.A.
Detailed Location:	AREA NORTH OF HIGHWAY KNOWN AS MESA 500KV SUBSTATION SITE. AREA SOUTH OF HIGHWAY KNOWN AS OIL LANDFILL SITE. OCCURRENCE IS BISECTED BY HIGHWAYS AND SURROUNDED BY DEVELOPMENT.
Ecological:	REMNANT PATCH OF MULEFAT SCRUB SURROUNDED BY DISTURBED AND DEVELOPED LAND.
General:	32 OBSERVATIONS IN 2010. AT LEAST 2 PAIRS, 3 JUVENILES, AND NEST OBSERVED, 73 OBSERVATIONS IN 2011. UP TO 3 PAIRS AND 8 FLEDGLINGS OBSERVED IN 2015. AT LEAST 3 PAIRS & 8 FLEDGLINGS OBSERVED 27 MAR - 29 JUN 2017.
Owner/Manager:	PVT-SCE

Occurrence No.	966	**Map Index:**	B3141	**EO Index:**	115060	**Element Last Seen:**	2017-07-11
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2017-07-11
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-10-15

Quad Summary:	La Habra (3311788), Whittier (3311881)
County Summary:	Los Angeles

Lat/Long:	33.96702 / -118.00148	**Accuracy:**	specific area
UTM:	Zone-11 N3758951 E407478	**Elevation (ft):**	576
PLSS:	T02S, R11W, Sec. 26 (S)	**Acres:**	25.0

Location:	PUENTE HILLS, ABOUT 0.4 MI NE-0.8 MI NW OF COLIMA RD AT MAR VISTA ST & 0.6-1.4 MI SE OF SUMMIT DR AT NONA LN, WHITTIER.
Detailed Location:	MAPPED TO PROVIDED COORDINATES AND MAPPED LOCATIONS AS A 4-PART POLYGON. WITHIN ARROYO PESCADERO PRESERVE, EXCEPT FOR OBSERVATION EAST OF COLIMA RD, ON ARROYO SAN MIGUEL OPEN SPACE (CITY OF WHITTIER).
Ecological:	COASTAL SAGE SCRUB DOMINATED BY SAGEBRUSH, BUCKWHEAT, & LAUREL SUMAC ON PRESERVED LAND. NONNATIVE GRASSLAND, RUDERAL, EUCALYPTUS & ORNAMENTALS ALSO IN AREA. 2017: SITE SHOWED EVIDENCE OF PAST GRADING, W/ THICK FOUNTAIN GRASS IN SOME AREAS.
General:	1 OBSERVED 9 & 10 JUN 2008. 1 DISPERSING JUVENILE OBSERVED 29 JUN 2009. 1 DISPERSING JUVENILE OBSERVED ON 23 MAY & 2 ON 11 JUL 2017.
Owner/Manager:	PUENTE HILLS LANDFILL NHPA

Occurrence No.	1013	**Map Index:**	B6219	**EO Index:**	119266	**Element Last Seen:**	2014-11-07
Occ. Rank:	Fair			**Presence:**	Presumed Extant	**Site Last Seen:**	2014-11-07
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-10-01

Quad Summary: Hollywood (3411813), Beverly Hills (3411814)

County Summary: Los Angeles

Lat/Long:	34.01333 / -118.37783	**Accuracy:**	specific area
UTM:	Zone-11 N3764490 E372775	**Elevation (ft):**	276
PLSS:	T02S, R14W, Sec. 8, NW (S)	**Acres:**	17.0

Location: KENNETH HAHN STATE RECREATION AREA, NORTH END OF BALDWIN HILLS.

Detailed Location: MAPPED ACCORDING TO MAP PROVIDED.

Ecological: CALIFORNIA SAGEBRUSH-BUCKWHEAT SCRUB/DISTURBED VEGETATION. BALDWIN HILLS PRIMARILY USED FOR ACTIVE RECREATION, HABITAT RESTORATION/PRESERVATION, AND OIL AND GAS PRODUCTION.

General: 2 JUVENILES OBSERVED ON 26 SEP, 2 JUVENILES ON 24 OCT, AND 3 JUVENILES ON 7 NOV 2014.

Owner/Manager: LAX COUNTY

Occurrence No.	1014	**Map Index:**	B6220	**EO Index:**	119267	**Element Last Seen:**	1904-06-05
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1904-06-05
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-10-01

Quad Summary: Los Angeles (3411812), Pasadena (3411822)

County Summary: Los Angeles

Lat/Long:	34.11262 / -118.19901	**Accuracy:**	1 mile
UTM:	Zone-11 N3775292 E389418	**Elevation (ft):**	574
PLSS:	T01S, R13W, Sec. 1 (S)	**Acres:**	1987.0

Location: VICINITY OF HIGHLAND PARK, LOS ANGELES.

Detailed Location: ATTRIBUTED 1904 SPECIMEN AND 1884 RECORD WITH LOCALITY ONLY GIVEN AS LOS ANGELES.

Ecological:

General: OBSERVED BY COLONEL N. S. GOSS ON 6 MAR 1884. 2 COLLECTED ON 24 JAN 1896. EGG SET COLLECTED ON 5 JUN 1904. AREA HAS BEEN HEAVILY DEVELOPED; POSSIBLY EXTIRPATED.

Owner/Manager: UNKNOWN

Occurrence No.	1015	**Map Index:**	34599	**EO Index:**	119268	**Element Last Seen:**	1906-12-29
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1906-12-29
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-10-01

Quad Summary: El Monte (3411811)

County Summary: Los Angeles

Lat/Long:	34.07405 / -118.03901	**Accuracy:**	1 mile
UTM:	Zone-11 N3770853 E404131	**Elevation (ft):**	300
PLSS:	T01S, R11W, Sec. 21 (S)	**Acres:**	0.0

Location: VICINITY OF EL MONTE

Detailed Location:

Ecological:

General: 1 FEMALE COLLECTED ON 29 DEC 1906. AREA IS HEAVILY DEVELOPED; LIKELY EXTIRPATED.

Owner/Manager: UNKNOWN

Occurrence No.	1016	**Map Index:**	B6221	**EO Index:**	119269	**Element Last Seen:**	2015-05-26
Occ. Rank:	Fair			**Presence:**	Presumed Extant	**Site Last Seen:**	2015-05-26
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-10-05

Quad Summary:	El Monte (3411811)
County Summary:	Los Angeles

Lat/Long:	34.01695 / -118.0175	**Accuracy:**	non-specific area
UTM:	Zone-11 N3764502 E406053	**Elevation (ft):**	1054
PLSS:	T02S, R11W, Sec. 10, NE (S)	**Acres:**	65.0

Location:	S OF PUENTE LANDFILL, 1.3 MILES SE OF I-605 AND HWY 60 INTERCHANGE, PUENTE HILLS, WHITTIER.
Detailed Location:	
Ecological:	HIGH QUALITY COASTAL SAGE SCRUB. SITE WITHIN TRANSMISSION RIGHT-OF-WAY AND LOCATED ADJACENT TO CEMETERY LANDS AND PUENTE LANDFILL.
General:	1 FEMALE OBSERVED IN 2007. 3 ADULTS AND 2 JUVENILES OBSERVED IN 2009. 1 ADULT OBSERVED IN 2010. BREEDING PAIRS, JUVENILES, AND NEST OBSERVED IN 2011. 3 MALES, 2 FEMALE, 2 JUVENILES, AND NEST OBSERVED IN 2012. NEST FOUND ON 26 MAY 2015.
Owner/Manager:	PVT

Occurrence No.	1017	**Map Index:**	B6227	**EO Index:**	119272	**Element Last Seen:**	2012-06-07
Occ. Rank:	Fair			**Presence:**	Presumed Extant	**Site Last Seen:**	2012-06-07
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-10-13

Quad Summary:	El Monte (3411811)
County Summary:	Los Angeles

Lat/Long:	34.02349 / -118.02794	**Accuracy:**	non-specific area
UTM:	Zone-11 N3765237 E405097	**Elevation (ft):**	524
PLSS:	T02S, R11W, Sec. 3, SW (S)	**Acres:**	77.0

Location:	JUST NORTHEAST OF RIO HONDO COLLEGE, 0.7 MILE SOUTH OF I-605 AND HWY 60 INTERCHANGE, PUENTE HILLS, WHITTIER.
Detailed Location:	
Ecological:	REVEGETATED AND NATURALLY GROWING COASTAL SAGE SCRUB. SITE IS WITHIN TRANSMISSION RIGHT-OF-WAY AND ADJACENT TO PUENTE LANDFILL, RIO HONDO COLLEGE, AND ROSE HILL CEMETARY.
General:	NONE DETECTED IN 2006. 1 HEARD CALLING IN RESPONSE TO CALL-PLAYBACK ON 14 JUN 2010. ADULTS AND JUVENILES DETECTED IN 2011. ADULTS AND JUVENILES DETECTED, AND 1 PAIR OBSERVED FEEDING FLEDGLING BETWEEN 4 JUN AND 7 JUN 2012.
Owner/Manager:	UNKNOWN

Occurrence No.	1034	**Map Index:**	B6276	**EO Index:**	119328	**Element Last Seen:**	2011-05-30
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2011-05-30
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-01-04

Quad Summary:	Whittier (3311881)
County Summary:	Los Angeles

Lat/Long:	33.99821 / -118.00409	**Accuracy:**	specific area
UTM:	Zone-11 N3762412 E407270	**Elevation (ft):**	1155
PLSS:	T02S, R11W, Sec. 14, NW (S)	**Acres:**	8.0

Location:	0.5 MILE NORTH OF WORKMAN HILL, PUENTE HILLS, WEST OF HACIENDA HEIGHTS AND ABOUT 14 MILES ESE OF DOWNTOWN LOS ANGELES.
Detailed Location:	
Ecological:	
General:	1 EACH DETECTED AT 3 POINT COUNT SURVEY LOCATIONS LESS THAN 100 METERS APART ON 30 MAY 2011; UNCLEAR IF SAME INDIVIDUAL DETECTED MULTIPLE TIMES. ICF DATABASE CODES FOR EACH RECORD INDICATE "TERRITORIAL" "FEMALE."
Owner/Manager:	HABITAT AUTHORITY, UNKNOWN

Occurrence No.	1035	**Map Index:**	B6279	**EO Index:**	119331	**Element Last Seen:**	2007-10-30
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2007-10-30
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-10-14

Quad Summary:	Whittier (3311881)
County Summary:	Los Angeles

Lat/Long:	33.99118 / -118.00337	**Accuracy:**	80 meters
UTM:	Zone-11 N3761631 E407329	**Elevation (ft):**	1317
PLSS:	T02S, R11W, Sec. 14, SW (S)	**Acres:**	5.0

Location:	JUST E OF WORKMAN HILL, TURNBULL CANYON OPEN SPACE, W OF HACIENDA HEIGHTS AND ABOUT 14 MILES ESE OF DOWNTOWN LOS ANGELES
Detailed Location:	
Ecological:	PATCHES OF COASTAL SAGE SCRUB WITH INTERVENING AREAS OF NON-NATIVE GRASSLAND.
General:	1 PAIR OBSERVED ON 5 SEP AND 30 OCT 2007.
Owner/Manager:	HABITAT AUTHORITY

Occurrence No.	1036	**Map Index:**	B6284	**EO Index:**	119335	**Element Last Seen:**	2010-05-24
Occ. Rank:	Fair			**Presence:**	Presumed Extant	**Site Last Seen:**	2010-05-24
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-10-15

Quad Summary: Whittier (3311881)

County Summary: Los Angeles

Lat/Long:	33.97877 / -118.00582	**Accuracy:**	80 meters
UTM:	Zone-11 N3760258 E407090	**Elevation (ft):**	580
PLSS:	T02S, R11W, Sec. 23, SW (S)	**Acres:**	5.0

Location: LA CANADA VERDE CREEK, 0.8 MILE SOUTH OF WORKMAN HILL, ARROYO PESCADERO, EAST OF WHITTIER.

Detailed Location:

Ecological: COASTAL SAGE SCRUB/CHAPARRAL RIPARIAN. MANAGED BY THE PUENTE HILLS PRESERVATION AUTHORITY (=HABITAT AUTHORITY), A JOINT POWERS PUBLIC AGENCY.

General: A MALE RESPONDED TO PLAYBACK ON 3 MAY 2010. PAIR WITH 2 JUVENILES OBSERVED ON 24 MAY 2010.

Owner/Manager: HABITAT AUTHORITY

Occurrence No.	1039	**Map Index:**	B6707	**EO Index:**	119767	**Element Last Seen:**	2009-06-18
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2009-06-18
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-12-14

Quad Summary: La Habra (3311788)

County Summary: Los Angeles

Lat/Long:	33.97368 / -117.92691	**Accuracy:**	80 meters
UTM:	Zone-11 N3759625 E414374	**Elevation (ft):**	1090
PLSS:	T02S, R10W, Sec. 28, NE (S)	**Acres:**	5.0

Location: 0.8 MILE WNW OF FULLERTON RD AT PATHFINDER RD, PETER F SCHABARUM REGIONAL COUNTY PARK, ROWLAND HEIGHTS.

Detailed Location: POWDER CANYON SURVEY AREA. MAPPED TO PROVIDED MAP. SITE LOCATED ALONG SCHABARUM EXTENSTION TRAIL.

Ecological: DENSE COASTAL SAGE SCRUB AND CHAPARRAL, INTERSEPERSED WITH AREAS OF NON-NATIVE GRASSLAND AND OAK STANDS. COUNTY PARK LAND WITH RECREATIONAL USE.

General: FEMALE DETECTED BETWEEN 13 MAY AND 18 JUN 2009

Owner/Manager: LAX COUNTY

Occurrence No.	1041	**Map Index:**	B6711	**EO Index:**	119771	**Element Last Seen:**	2011-06-01
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2011-06-01
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-12-14

Quad Summary: La Habra (3311788)

County Summary: Los Angeles

Lat/Long:	33.97125 / -117.95679	**Accuracy:**	specific area
UTM:	Zone-11 N3759381 E411611	**Elevation (ft):**	1240
PLSS:	T02S, R10W, Sec. 29, NW (S)	**Acres:**	6.0

Location: 0.25 MILE SOUTH OF PUNTA DEL ESTE DR AT CASCO CT, WEST OF POWDER CANYON OPEN SPACE, SOUTH OF HACIENDA HEIGHTS.

Detailed Location:

Ecological: COASTAL SAGE SCRUB.

General: 3 DETECTIONS ON 1 JUN 2011.

Owner/Manager: UNKNOWN

Occurrence No.	1042	**Map Index:**	B6738	**EO Index:**	119800	**Element Last Seen:**	2013-06-21
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2013-06-21
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-12-17

Quad Summary:	La Habra (3311788)
County Summary:	Los Angeles, Orange

Lat/Long:	33.9468 / -117.89114	**Accuracy:**	80 meters
UTM:	Zone-11 N3756615 E417652	**Elevation (ft):**	771
PLSS:	T02S, R10W, Sec. 35, SE (S)	**Acres:**	5.0

Location:	0.9 MILE NORTHWEST OF BREA BLVD AT TONNER CANYON RD, PUENTE HILLS, NORTH OF BREA.
Detailed Location:	MAPPED TO COORDINATES AND LOCATION ON PROVIDED MAP.
Ecological:	COASTAL SAGE SCRUB HABITAT DOMINATED BY CALIFORNIA SAGEBRUSH AND FRAGMENTED FROM ACCESS ROADS. AREA HAS BEEN HISTORICALLY AND CONTINOUSLY ALTERED BY OIL EXTRACTION ACTIVITIES AND CATTLE GRAZING OVER MANY DECADES.
General:	1 FEMALE & 1 JUVENILE OBSERVED FORAGING AND 2 INDIVIDUALS (PRESUMABLY A MALE AND SECOND JUVENILE) HEARD CALLING NEARBY ON 11 JUN 2010. 1 BIRD HEARD CALLING ON 21 JUN 2013.
Owner/Manager:	PVT

Occurrence No.	1043	**Map Index:**	B6739	**EO Index:**	119802	**Element Last Seen:**	2013-06-21
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2013-06-21
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-12-17

Quad Summary:	La Habra (3311788)
County Summary:	Los Angeles, Orange

Lat/Long:	33.94658 / -117.88652	**Accuracy:**	specific area
UTM:	Zone-11 N3756587 E418079	**Elevation (ft):**	771
PLSS:	T03S, R10W, Sec. 1, NW (S)	**Acres:**	12.0

Location:	0.6 MILE NORTHWEST OF BREA BLVD AT TONNER CANYON RD, PUENTE HILLS, NORTH OF BREA.
Detailed Location:	MAPPED TO COORDINATES AND LOCATION ON PROVIDED MAP.
Ecological:	COASTAL SAGE SCRUB HABITAT DOMINATED BY CALIFORNIA SAGEBRUSH AND FRAGMENTED FROM ACCESS ROADS. AREA HAS BEEN HISTORICALLY AND CONTINOUSLY ALTERED BY OIL EXTRACTION ACTIVITIES AND CATTLE GRAZING OVER MANY DECADES.
General:	1 DISPERSING JUVENILE OBSERVED IN 2010. 1 INDIVIDUAL OBSERVED ON 21 JUN 2013; BELIEVED TO BE A DISPERSING JUVENILE.
Owner/Manager:	PVT

Occurrence No.	1044	**Map Index:**	B6741	**EO Index:**	119803	**Element Last Seen:**	2013-05-24
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2013-05-24
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-12-17

Quad Summary:	La Habra (3311788)
County Summary:	Los Angeles, Orange

Lat/Long:	33.94471 / -117.88031	**Accuracy:**	specific area
UTM:	Zone-11 N3756375 E418651	**Elevation (ft):**	662
PLSS:	T03S, R10W, Sec. 1, NE (S)	**Acres:**	16.0

Location:	0.27 MILE NORTH OF BREA BLVD AT TONNER CANYON RD, PUENTE HILLS, NORTH OF BREA.
Detailed Location:	MAPPED TO COORDINATES AND LOCATION ON PROVIDED MAP.
Ecological:	COASTAL SAGE SCRUB HABITAT DOMINATED BY CALIFORNIA SAGEBRUSH AND FRAGMENTED FROM ACCESS ROADS. AREA HAS BEEN HISTORICALLY AND CONTINOUSLY ALTERED BY OIL EXTRACTION ACTIVITIES AND CATTLE GRAZING OVER MANY DECADES.
General:	1 PAIR WITH 3 JUVENILES OBSERVED FORAGING ON 21 MAY, AND PAIR DETECTED AGAIN ON JUN 25 2010. 1 PAIR NEST BUILDING AND 1 SINGLE BIRD (SUSPECTED UNPAIRED MALE) OBSERVED ON 17 MAY AND 24 MAY 2013.
Owner/Manager:	PVT

Occurrence No.	1047	**Map Index:**	B6886	**EO Index:**	119954	**Element Last Seen:**	2015-07-24
Occ. Rank:	Excellent			**Presence:**	Presumed Extant	**Site Last Seen:**	2015-07-24
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-01-22

Quad Summary:	La Habra (3311788)
County Summary:	Orange

Lat/Long:	33.89301 / -117.92458	**Accuracy:**	specific area
UTM:	Zone-11 N3750678 E414508	**Elevation (ft):**	249
PLSS:	T03S, R10W, Sec. 22, SW (S)	**Acres:**	10.0

Location:	JUST SOUTHEAST OF N HARBOR BLVD AND W BASTANCHURRY RD INTERSECTION, BREA DAM PARK, FULLERTON.
Detailed Location:	
Ecological:	RIPARIAN FOREST ASSOCIATED WITH BREA CREEK AND COASTAL SAGE SCRUB. OPEN SPACE SURROUNDED BY DEVELOPMENT.
General:	1 BREEDING PAIR AND 4 FLEDGLINGS OBSERVED BETWEEN 24 APR AND 24 JUL 2015.
Owner/Manager:	CITY OF FULLERTON

Occurrence No.	1048	**Map Index:**	B6891	**EO Index:**	119961	**Element Last Seen:**	2013-06-28
Occ. Rank:	Poor			**Presence:**	Presumed Extant	**Site Last Seen:**	2013-06-28
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-01-25

Quad Summary:	La Habra (3311788)
County Summary:	Orange

Lat/Long:	33.9137 / -117.96364	**Accuracy:**	specific area
UTM:	Zone-11 N3753005 E410918	**Elevation (ft):**	284
PLSS:	T03S, R10W, Sec. 18, NE (S)	**Acres:**	10.0

Location:	WESTRIDGE GOLF CLUB, 0.4 MILE SOUTHEAST OF S BEACH BLVD AND IMPERIAL HWY INTERSECTION, LA HABRA.
Detailed Location:	
Ecological:	GOLF COURSE WITH INTERMIXED PATCHES OF COASTAL SAGE SCRUB AND RIPARIAN HABITAT.
General:	1 PAIR OBSERVED ON 8 DEC 2009. 1 LONE MALE OBSERVED ON 21 JUN AND 28 JUN 2013.
Owner/Manager:	UNKNOWN

Occurrence No.	1090	**Map Index:**	B7024	**EO Index:**	120087	**Element Last Seen:**	1999-07-08
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1999-07-08
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-02-22

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.82668 / -117.76446	**Accuracy:**	80 meters
UTM:	Zone-11 N3743202 E429260	**Elevation (ft):**	802
PLSS:	T04S, R08W, Sec. 18, NW (S)	**Acres:**	5.0

Location:	JUST SOUTH OF FRED BARRERA PARK, 0.5 MILE WEST OF ROBBERS PEAK, ORANGE.
Detailed Location:	
Ecological:	MIXED COASTAL SAGE SCRUB AND CHAPARRAL VEGETATION. SURROUNDED BY OPEN SPACE PRESERVE TO THE SOUTH AND DEVELOPMENT TO THE NORTH.
General:	1 INDIVIDUAL DETECTED DURING PROTOCOL CAGN SURVEYS BETWEEN 21 JUN AND 8 JUL 1999.
Owner/Manager:	UNKNOWN

Occurrence No.	1097	**Map Index:**	B7071	**EO Index:**	120136	**Element Last Seen:**	2020-06-01
Occ. Rank:	Fair			**Presence:**	Presumed Extant	**Site Last Seen:**	2020-06-01
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-03-15

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.8062 / -117.80607	**Accuracy:**	non-specific area
UTM:	Zone-11 N3740960 E425391	**Elevation (ft):**	272
PLSS:	T04S, R09W, Sec. 22, SE (S)	**Acres:**	382.0

Location:	NORTH OF E BOND AVE AND SOUTHWEST OF CANNON ST, SANTIAGO CREEK RECHARGE BASIN, VILLA PARK, ORANGE.
Detailed Location:	
Ecological:	DISTURBED COASTAL SAGE SCRUB/RUDERAL. SITE USE INCLUDES GROUNDWATER RECHARGE BASINS, BACKFILL AND MATERIALS RECYCLING, AND WAS HISTORICALLY USED FOR MINING OPERATIONS. SURROUNDED BY RESIDENTIAL DEVELOPMENT.
General:	2009: 1 PR. 2011: 13 AD & 8 TERR. DETECTED IN 2012. 2013: 15 AD & 10 TERR. 2014: 1 PR, 11 AD & 10 TERR. 2016: 2 FAMILY GRPS. 2017: 18 AD & 12 TERR. 2018: 2 FAMILY GRPS, 1 PR, & 12 INDIV. 2020: 8 PRS.
Owner/Manager:	UNKNOWN

Occurrence No.	1098	**Map Index:**	B7096	**EO Index:**	120163	**Element Last Seen:**	1994-04-03
Occ. Rank:	Fair			**Presence:**	Presumed Extant	**Site Last Seen:**	1994-04-03
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-03-16

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.80371 / -117.76981	**Accuracy:**	specific area
UTM:	Zone-11 N3740658 E428746	**Elevation (ft):**	629
PLSS:	T04S, R09W, Sec. 24, SE (S)	**Acres:**	17.0

Location:	ALONG E SANTIAGO CANYON RD AT E AMAPOLA AVE INTERSECTION, WEST OF HOLY SEPULCHER CEMETERY, ORANGE.
Detailed Location:	MAPPED ACCORDING TO PROVIDED MAP.
Ecological:	PATCH OF OPEN SPACE SURROUNDED BY DEVELOPMENT, ROADS, AND CEMETERY. AVAILABLE HABITAT APPEARS SIMILAR IN 1994 & 2020 AERIAL IMAGES, BUT SANTIAGO RD REALIGNED.
General:	3 PAIRS WERE DETECTED BETWEEN 9 MAR AND 3 APR 1994.
Owner/Manager:	UNKNOWN

Occurrence No.	1099	**Map Index:**	B7097	**EO Index:**	120164	**Element Last Seen:**	2020-07-08
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2020-07-08
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-03-09

Quad Summary:	Black Star Canyon (3311776), Orange (3311777)
County Summary:	Orange

Lat/Long:	33.80358 / -117.76438	**Accuracy:**	non-specific area
UTM:	Zone-11 N3740640 E429248	**Elevation (ft):**	516
PLSS:	T04S, R08W, Sec. 19, SW (S)	**Acres:**	257.0

Location:	ALONG WEST BOUNDARY OF SANTIAGO OAKS REGIONAL PARK, EAST OF E SANTIAGO CANYON RD, ORANGE.
Detailed Location:	
Ecological:	OPEN SPACE ADJACENT TO RESIDENTIAL DEVELOPMENT.
General:	2 ADULTS, 2002. 1 PAIR WITH YOUNG, 2003. DETECTED, 2008. 2 MALES, 2011. 5 TERRITORIES, 2012. 2 PAIRS (1 W/FLEDGLINGS), 2013. DETECTED IN 2016. 2 JUVENILES AND 5 ADULTS, 2017. 2 INDIVIDUALS, 2018. 5 INDIV, 2019. 3 INDIV, 2020.
Owner/Manager:	ORA COUNTY

Occurrence No.	1100	**Map Index:**	B7098	**EO Index:**	120165	**Element Last Seen:**	2013-06-03
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2013-06-03
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-03-09

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.80639 / -117.75657	**Accuracy:**	specific area
UTM:	Zone-11 N3740947 E429974	**Elevation (ft):**	590
PLSS:	T04S, R08W, Sec. 19, S (S)	**Acres:**	19.0

Location:	0.7 MILE NORTH OF E SANTIAGO CANYON RD AND JAMBOREE RD INTERSECTION, IRVINE RANCH OPEN SPACE.
Detailed Location:	
Ecological:	MODERATE TO HIGH QUALITY COASTAL SAGE SCRUB. SITE WITHIN YOUTH WILDERNESS CAMP PROJECT, DEVELOPED IN 2006.
General:	1 PAIR WITH TWO UNSUCCESSFUL NEST ATTEMPTS DETECTED IN 2003. DETECTED ON 3 JUN 2013.
Owner/Manager:	ORA COUNTY, PVT

Occurrence No.	1103	**Map Index:**	B7119	**EO Index:**	120187	**Element Last Seen:**	2012-06-19
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2012-06-19
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-03-12

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.76738 / -117.75941	**Accuracy:**	specific area
UTM:	Zone-11 N3736623 E429679	**Elevation (ft):**	515
PLSS:	T05S, R08W, Sec. 6, NW (S)	**Acres:**	16.0

Location: BETWEEN JAMBOREE RD AND HWY 261, 1 MILE SOUTHWEST OF HWY 261 AND 241 INTERCHANGE, TUSTIN.

Detailed Location:

Ecological: COASTAL SAGE SCRUB REVEGETATION MITIGATION SITES ALONG HWY 261.

General: 2 MALES AND 2 INDIVIDUALS DETECTED ON 19 APR AND 2 PAIRS (1 WITH YOUNG) ON19 JUN 2012.

Owner/Manager: CALTRANS

Occurrence No.	1104	**Map Index:**	B7121	**EO Index:**	120189	**Element Last Seen:**	1900-03-18
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1900-03-18
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-03-15

Quad Summary: Orange (3311777), Anaheim (3311778), Yorba Linda (3311787), La Habra (3311788)

County Summary: Orange

Lat/Long:	33.87066 / -117.86622	**Accuracy:**	1 mile
UTM:	Zone-11 N3748153 E419884	**Elevation (ft):**	261
PLSS:	T03S, R09W, Sec. 31 (S)	**Acres:**	1987.0

Location: VICINITY OF PLACENTIA

Detailed Location:

Ecological:

General: EGGS COLLECTED ON 18 MAR 1900. AREA HAS BEEN DEVELOPED SINCE TIME OF COLLECTION, LIKELY EXTIRPATED.

Owner/Manager: UNKNOWN

Vireo bellii pusillus

Element Code: ABPBW01114

least Bell's vireo

Listing Status:	**Federal:**	Endangered	**CNDDB Element Ranks:**	**Global:**	G5T2
	State:	Endangered		**State:**	S3
	Other:				
Habitat:	**General:**	SUMMER RESIDENT OF SOUTHERN CALIFORNIA IN LOW RIPARIAN IN VICINITY OF WATER OR IN DRY RIVER BOTTOMS; BELOW 2000 FT.			
	Micro:	NESTS PLACED ALONG MARGINS OF BUSHES OR ON TWIGS PROJECTING INTO PATHWAYS, USUALLY WILLOW, BACCHARIS, MESQUITE.			

Occurrence No.	148	**Map Index:**	20301	**EO Index:**	23976	**Element Last Seen:**	2011-09-09
Occ. Rank:	Excellent			**Presence:**	Presumed Extant	**Site Last Seen:**	2011-09-09
Occ. Type:	Natural/Native occurrence			**Trend:**	Increasing	**Record Last Updated:**	2012-10-22

Quad Summary:	El Monte (3411811)
County Summary:	Los Angeles

Lat/Long:	34.02648 / -118.05972	**Accuracy:**	non-specific area
UTM:	Zone-11 N3765598 E402164	**Elevation (ft):**	200
PLSS:	T02S, R11W, Sec. 05 (S)	**Acres:**	647.0

Location:	VICINITY OF WHITTIER NARROWS RECREATION AREA AND NATURE CENTER (WNRA), ALONG THE SAN GABRIEL RIVER AND RIO HONDO.
Detailed Location:	1985, 1999, 2001, 2002 AT 20-AC POND IN WNRA, & NEAR RIO HONDO (RH) IN 2001. 2002, 2003, 2005, 2007: RIVER SURVEYED, BEVERLY BVD TO WHITTIER NARROWS DAM. 2007, 2009-11: RH & WNRA SURVEY SITES ADDED; MISSION CRK (E TRIB OF RH) ADDED POST 09.
Ecological:	RIO HONDO: MATURE MULTI-STORY RIPARIAN. MISSION CRK: MORE INTACT, DENSER HABITAT. WNRA: RIPARIAN SCRUB W/SCATTERED MATURE HABITAT. DOMINANTS: COTTONWOOD, WILLOW, ELDERBERRY, MULEFAT; LATTER 3 FOR NESTING. MANY PUBLIC TRAILS. BHCO TRAPPING.
General:	1 NEST 1985. 1 TERR '86. 4+ BREEDERS '99. 1 PR 2001. 1 PR, 1 FLEDGE '02. 1 MALE '03. 1 PR W/ 3 FAILED NESTS, & 1 MALE W/ 2 FLEDGE '05. 7-9 TERR, 1 FLEDGE '07. 6 PRS, 1 FLEDGE '09. 13 PRS W/ FLEDGLINGS '10. 13-21 NESTS W/ 7-15 FLEDGE '11.
Owner/Manager:	DOD-COE

Occurrence No.	223	**Map Index:**	53035	**EO Index:**	53035	**Element Last Seen:**	2017-04-19
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2017-04-19
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2018-10-04

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.77289 / -117.7643	**Accuracy:**	non-specific area
UTM:	Zone-11 N3737238 E429231	**Elevation (ft):**	422
PLSS:	T05S, R08W, Sec. 6 (S)	**Acres:**	232.0

Location:	PETERS CANYON, FROM PETER'S CANYON RESERVOIR TO LEMON HEIGHTS, JUST NE OF RED HILL, NORTH TUSTIN.
Detailed Location:	SITE REFERRED TO AS "PETER'S CANYON." HIGHEST CONCENTRATION APPEAR TO BE NEAR PETER'S CANYON RESERVOIR NEAR JABOREE RD. MAPPED TO EXTENT OF 2005-2017 SURVEY SITE EXTENDING UPSTREAM (SW) TO VICINITY LOWER LAKE DR. TERR = TERRITORIES.
Ecological:	HIGH QUALITY SOUTHERN BLACK WILLOW FOREST DOMINATED BY BLACK WILLOW WITH HIGH PERCENTAGE OF CANOPY COVER. OTHER OVERSTORY SPECIES INCLUDED ARROYO WILLOW; MID AND UNDERSTORY INCLUDE SANDBAR WILLOW, MULEFAT, NETTLE, MUGWORT, & CA BLACKBERRY.
General:	2001-2002: NESTING & JUVENIELS OBSERVED. 2005-2006: 2 PAIRS (P)/2 FLEDGLINGS (F). 2007: 1P/2F. 2008-2009: 5-8 TERRITORIES. 2010: 5P/1F. 2011: 3P/2F. 2012: 2P/0F. 2013:2P/2F. 2014: 11P/7F. 2015:4P/6F. 2016: 11P/6F. 2017: 8P/9F.
Owner/Manager:	ORA COUNTY-PARKS & REC

Occurrence No.	347	**Map Index:**	86908	**EO Index:**	87860	**Element Last Seen:**	1914-05-24
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1914-05-24
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2012-10-11

Quad Summary:	Los Angeles (3411812), Hollywood (3411813), Pasadena (3411822), Burbank (3411823)
County Summary:	Los Angeles

Lat/Long:	34.13651 / -118.25781	**Accuracy:**	non-specific area
UTM:	Zone-11 N3778006 E384026	**Elevation (ft):**	55
PLSS:	T01N, R13W, Sec. 32 (S)	**Acres:**	3496.0

Location:	GLENDALE AND TROPICO (HISTORIC).
Detailed Location:	LOCALITIES: "NEAR GLENDALE" & "TROPICO." MVZ COORDINATES (2 MI ERROR) AT GLENDALE. TROPICO ANNEXED BY GLENDALE, 1918. MAPPED GENERALLY TO GLENDALE & VICINITY OF TROPICO ON 1894 TOPO. MAY HAVE BEEN COLLECTED FROM THE LOS ANGELS RIVER JUST W.
Ecological:	EGGS COLLECTED FROM NEST 4 FEET HIGH IN A COTTONWOOD TREE IN 1914.
General:	3 EGGS COLLECTED ON 21 MAY 1891 BY C. S. HAINES. 3 LEAST BELL'S VIREO EGGS AND 1 COWBIRD EGG COLLECTED ON 24 MAY 1914 BY C. O. REIS.
Owner/Manager:	UNKNOWN

Occurrence No.	350	**Map Index:**	34599	**EO Index:**	87865	**Element Last Seen:**	1923-05-19
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1923-05-19
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2012-10-11

Quad Summary:	El Monte (3411811)
County Summary:	Los Angeles

Lat/Long:	34.07405 / -118.03901	**Accuracy:**	1 mile
UTM:	Zone-11 N3770853 E404131	**Elevation (ft):**	280
PLSS:	T01S, R11W, Sec. 21 (S)	**Acres:**	0.0

Location:	EL MONTE.
Detailed Location:	LOCATION STATED AS "EL MONTE." MAPPED GENERALLY TO THE AREA OF EL MONTE AND MVZ COORDINATES WITH A 2.8 MILE ERROR. NEST MAY HAVE BEEN DISCOVERED ALONG RIO HONDO JUST EAST OF DOWNTOWN EL MONTE.
Ecological:	"NEST: IN AN ALDER SAPPLING IN A DENSE STAND OF WILLOWS. NEST PENDANT, MADE OF GRASSES, LEAVES, FIBRE AND SPIDER EGG CASES. NEST 2.5 FEET UP. MALE SANG BESIDE THE NEST CONTINUALLY." 1923 TOPO SHOWS RIO HONDO WITH A BROADER, NATURAL COURSE.
General:	NEST, 4 LEAST BELL'S VIREO EGGS, AND 1 COWBIRD EGG COLLECTED BY A. H. MILLER ON 19 MAY 1923. RIO HONDO IS NOW A 100 FOOT CONCRETE LINED CANAL.
Owner/Manager:	UNKNOWN

Occurrence No.	351	**Map Index:**	86988	**EO Index:**	87953	**Element Last Seen:**	2011-08-18
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2011-08-18
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2012-10-19

Quad Summary: El Monte (3411811)

County Summary: Los Angeles

Lat/Long:	34.04167 / -118.01953	**Accuracy:**	non-specific area
UTM:	Zone-11 N3767245 E405892	**Elevation (ft):**	240
PLSS:	T01S, R11W, Sec. 34 (S)	**Acres:**	79.0

Location: SAN GABRIEL RIVER NEAR CONFLUENCE OF SAN JOSE CEEK DIVERSION CHANNEL & AVOCADO CREEK, N OF HWY 60 AT I-605, EL MONTE.

Detailed Location: 2003, '05, '07 PROTOCOL SURVEYS ALONG RIVER FROM E THIENES AVE TO I-10. SAN JOSE CRK PROPER (D/S, BELOW HWY 60) SURVEYED IN '07 & '09 W/ NEGATIVE RESULTS. '10, '11 PROTOCOL SURVEYS ALONG RIVER FROM SAN JOSE CK (CHANNEL) TO VALLEY BLVD.

Ecological: RIPARIAN HABITAT W/SURFACE WATER THROUGH SPRING & SUMMER, VARIABLE FLOW FROM U/S DAMS. WILLOW DOMINANT IN OVERSTORY, DENSE UNDERSTORY OF MULEFAT & WEEDS INCL. SHORT-POD MUSTARD. SOME EUCALYPTUS. NEST IN DENSE MULEFAT/WILLOW THICKET (2011).

General: 1 PAIR & 1 MALE REPORTEDLY DETECTED IN 2002. 0 DET IN 2003 & 2005. 3 TERRITORIAL MALES: 1 MALE W/ FAILED NEST & 2ND NEST FATE UNKNOWN; OTHER MALES UNPAIRED, 2007. 4-6 TERR MALES, 1 W/ FLEDGLINGS, 2010. 5 TERR MALES, 4 W/ FLEDGLINGS, 2011.

Owner/Manager: LAX COUNTY FLOOD CONTROL

Occurrence No.	352	**Map Index:**	86989	**EO Index:**	87954	**Element Last Seen:**	2011-07-22
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2011-07-22
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2012-10-19

Quad Summary: El Monte (3411811)

County Summary: Los Angeles

Lat/Long:	34.01052 / -118.01707	**Accuracy:**	non-specific area
UTM:	Zone-11 N3763788 E406085	**Elevation (ft):**	900
PLSS:	T02S, R11W, Sec. 10 (S)	**Acres:**	132.0

Location: ROSE HILL CEMETERY, ABOUT 1.2 MI W OF S 7TH AVE AT LOS ROBLES AVE & 1 MI SE OF RIO HONDO COMMUNITY COLLEGE.

Detailed Location: ADJACENT TO TEHACHAPI RENEWABLE TRANSMISSION PROJECT (TRTP) SEGMENT 8. FIRST SURVEYED IN 2010 AFTER INCIDENTAL DETECTION OF LEAST BELL'S VIREO (LBVI) AT SITE 26 APR 2010. PROTOCOL SURVEYS CONDUCTED IN 2011 IN CONJUNCTION WITH TRTP ACTIVITY.

Ecological: NATIVE RIPARIAN SCRUB & CROP REMNANTS. 2010: OCCUPIED HABITAT ALONG A 0.4-MILE SEGMENT OF DRAINAGE DITCH, LBVI OBSERVED FORAGING IN CULTIVATED FIELDS. 2011: EXPANDED HABITAT: AG LANDS FALLOW, COLONIZED BY MULEFAT. SOME ELDERBERRY & WILLOW.

General: 12 DETECTIONS INCLUDING JUVENILES & 1 PAIR WITH 2 FLEDGLINGS, 26 APR - JUL 29 2010; SITE PRESUMED TO SUPPORT 1 PAIR IN 2010. 5 TERRITORIAL MALES (4 CONFIRMED WITH FLEDGLINGS) & 1 PAIR ON NEST WITH 2 YOUNG, 14 APR - 8 AUG 2011.

Owner/Manager: PVT

Occurrence No.	354	**Map Index:**	90024	**EO Index:**	91035	**Element Last Seen:**	2017-XX-XX
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2017-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2018-09-27

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.80648 / -117.76294	**Accuracy:**	non-specific area
UTM:	Zone-11 N3740961 E429384	**Elevation (ft):**	519
PLSS:	T04S, R08W, Sec. 19, SW (S)	**Acres:**	262.0

Location: SANTIAGO CREEK NEAR MOUTH OF WEIR CANYON, JUST S OF VILLA PARK DAM, ESE OF VILLA PARK.

Detailed Location: SITE REFERRED TO AS "IRVINE REGIONAL PARK." MAPPED GENERALLY TO LOCATION DESCRIPTION, 2003-2004 MAPS AND 2009-2010 COORDINATES. TERRITORIAL MALES WERE DETECTED EACH YEAR BETWEEN 2003-2017 IN ADDITION TO CONFIRMED PAIRS AND FLEDGLINGS.

Ecological: HABITAT DOMINATED BY SALIX SP. AND BRASSICA SP. INTENTIONAL FIRE(S) IN 2004 AFFECTED 5 LBVI PAIR TERRITORIES.

General: 2003: 4 PAIRS (P)/10 FLEDGLINGS (F) DETECTED. 04: 8P/8F. 05: 6P/6F. 06: 3P/3F. 07: 6P/2F. 08: 15P/15F. 09: 9P/17F. 2010: 14P/18F. 2011: 9P/7F. 2012: 5P/5F. 2013: 8P/10F. 2014: 9P/12F. 2015: 1P/2F. 2016: 1P/0F. 2017: 1P/0F.

Owner/Manager: ORA COUNTY-BARHAM RANCH

Occurrence No.	355	**Map Index:**	90028	**EO Index:**	91041	**Element Last Seen:**	2017-XX-XX
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2017-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2018-09-27

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.81773 / -117.78212	**Accuracy:**	non-specific area
UTM:	Zone-11 N3742222 E427617	**Elevation (ft):**	360
PLSS:	T04S, R09W, Sec. 14 (S)	**Acres:**	96.0

Location: ALONG SANTIAGO CREEK FROM CANNON ST TO EASTERN END OF E HIDDEN OAKS LN, JUST E OF CITY OF VILLA PARK.

Detailed Location: MAPPED TO ENTIRE SURVEY SITE FOR 2005-2014 (SAW11R0001/SAW14D0001). SITER REFERRED TO AS "SANTIAGO CREEK AT CANNON RD."

Ecological: HABITAT APPEARED FAIRLY DEGRADED WITH VISIBLE GRAVEL PITS AND SURROUNDING URBAN DEVELOPMENT (AERIAL PHOTOS 1994-2013).

General: 2005: 2 TERRITORIES (T), 1 PAIR (P), 1 FLEDGLING (F). 2006: 3 T. 2007: 4 T. 2008: 2 T. 2009: 3 T. 2010: 1 P. 2011: 3 T. 2012: 0 DETECTED. 2013: 2 P. 2014: 2 T. 2015: 2 T/1 P. 2016: 4 T. 2017: 4 T/1 P.

Owner/Manager: UNKNOWN

Occurrence No.	368	**Map Index:**	90044	**EO Index:**	91056	**Element Last Seen:**	2014-07-11
Occ. Rank:	Poor			**Presence:**	Presumed Extant	**Site Last Seen:**	2015-07-27
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2018-09-26

Quad Summary: Orange (3311777), Yorba Linda (3311787)

County Summary: Orange

Lat/Long:	33.87367 / -117.81277	**Accuracy:**	non-specific area
UTM:	Zone-11 N3748446 E424829	**Elevation (ft):**	300
PLSS:	T03S, R09W, Sec. 27, SW (S)	**Acres:**	49.0

Location: YORBA LINDA RESERVOIR/LAKE BED, BETWEEN LAKEVIEW AVE AND HIGHWAY 90, SOUTH OF BUENA VISTA AVE.

Detailed Location: SITE REFERRED TO AS "YORBA LINDA DRY LAKE BED PARK." MAPPED TO EXTENT OF PARK.

Ecological: DOMINANT PLANT SPECIES WAS BACCHARIS SALICIFOLIA (2009).

General: 1 TERRITORY DETECTED IN 2007. 0 DETECTED IN 2008. 1 TERRITORY & 1 PAIR DETECTED IN 2009. 1 TERRITORY, 1 PAIR, & 1 FLEDGLING DETECTED IN 2010. 1 TERRITORY DETECTED IN 2011. 1 TERRITORY DETECTED ON 11 JUL 2014. 1 MALE HEARD ON 27 JUL 2015.

Owner/Manager: UNKNOWN

Occurrence No.	369	**Map Index:**	71317	**EO Index:**	91060	**Element Last Seen:**	2013-XX-XX
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2013-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2018-10-04

Quad Summary: La Habra (3311788)

County Summary: Orange

Lat/Long:	33.89518 / -117.90215	**Accuracy:**	non-specific area
UTM:	Zone-11 N3750900 E416584	**Elevation (ft):**	300
PLSS:	T03S, R10W, Sec. 23 (S)	**Acres:**	374.0

Location: COYOTE HILLS GOLF COURSE, COYOTE HILLS EAST, SE OF BASTANCHURY RD & BREA BLVD, BETWEEN HARBOR BLVD & HWY 57, FULLERTON.

Detailed Location: SITE REFERRED TO AS "COYOTE HILLS EAST PRESERVE-FULLERTON." PRESERVE IS INTERMIXED WITH THE COYOTE HILLS GOLF COURSE AND IS FOR THE MOST PART INACCESSIBLE TO THE PUBLIC EXCEPT WHILE GOLFING. MAPPED TO ENTIRETY OF GOLF COURSE.

Ecological: DOMINANT PLANT SPECIES WAS SALIX SP. NOT SURVEYED IN 2014, 2015, 2016, OR 2017.

General: 1 TERRITORY & 1 PAIR DETECTED IN 2007. 4 TERRITORIES, 4 PAIRS, & 6 FLEDGLINGS IN 2008. 3 TERRITORIES, 3 PAIRS, & 5 FLEDGLINGS IN 2009. 3 TERRITORIES, 3 PAIRS, & 3 FLEDGLINGS IN 2010. 4 TERRITORIES IN 2011. 2 TERRITORIES IN 2012 & 2013.

Owner/Manager: PVT

Occurrence No.	553	**Map Index:**	91978	**EO Index:**	93052	**Element Last Seen:**	2013-07-29
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2013-07-29
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2014-04-03

Quad Summary:	El Monte (3411811)
County Summary:	Los Angeles

Lat/Long:	34.10249 / -118.01462	**Accuracy:**	specific area
UTM:	Zone-11 N3773985 E406412	**Elevation (ft):**	300
PLSS:	T01S, R11W, Sec. 10, NE (S)	**Acres:**	7.0

Location:	SANTA ANITA WASH, CENTER OF PECK ROAD PARK, ABOUT 1 MILE SE OF LIVE OAK AVE & SANTA ANITA AVE INTERSECTION, N EL MONTE.
Detailed Location:	MAPPED TO PROVIDED COORDINATES. LOCATION DESCRIPTION WAS "AT MOUTH OF SANTA ANITA WASH." NESTS LOCATED ON NORTH BANK OF FLOOD CONTROL BASIN ON EAST SIDE OF ARCADIA GOLF COURSE.
Ecological:	SOUTHERN WILLOW SCRUB DOMINATED BY BLACK WILLOW (AVERAGE 30 FT TALL), STINGING NETTLE, AND JIMSON WEED. HABITAT AT THE MOUTH OF SANTA ANITA WASH CAUGHT ON FIRE DURING WEEKEND OF 19-21 JUL 2013; MOST OF HABITAT WAS DESTROYED.
General:	2 PAIRS DETECTED BETWEEN 13 MAY-29 JUL 2013; 1 PAIR OBSERVED FEEDING AT LEAST 1 FLEDGLING, OTHER PAIR HAD POSSIBLE NEST BUT WAS NOT CONFIRMED. AREA EXPERIENCED A FIRE IN JUL, BOTH PAIRS RELOCATED TO SAWPIT WASH (VICINITY OF OCC. 554).
Owner/Manager:	LAX COUNTY

Occurrence No.	554	**Map Index:**	91979	**EO Index:**	93053	**Element Last Seen:**	2013-07-29
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2013-07-29
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2014-04-03

Quad Summary:	El Monte (3411811)
County Summary:	Los Angeles

Lat/Long:	34.10590 / -118.01011	**Accuracy:**	80 meters
UTM:	Zone-11 N3774358 E406832	**Elevation (ft):**	300
PLSS:	T01S, R11W, Sec. 11, NW (S)	**Acres:**	0.0

Location:	SAWPIT WASH, ABOUT 0.25 MILE NNW OF PECK RD AND CLARK ST INTERSECTION, NORTH EL MONTE.
Detailed Location:	MAPPED TO PROVIDED COORDINATES. LOCATION DESCRIPTION WAS "MOUTH OF SAWPIT WASH (NORTHEAST REGION OF BASIN) IN PECK ROAD." NEST LOCATED AT THE NE CORNER OF FLOOD CONTROL BASIN.
Ecological:	SOUTHERN WILLOW SCRUB DOMINATED BY BLACK WILLOW (AVERAGE 30 FT TALL), STINGING NETTLE, AND JIMSON WEED. HABITAT AT THE MOUTH OF SANTA ANITA WASH CAUGHT ON FIRE DURING WEEKEND OF 19-21 JUL 2013; MOST OF HABITAT WAS DESTROYED.
General:	1 PAIR DETECTED BETWEEN 13 MAY-29 JUL 2013; PAIR OBSERVED FEEDING AT LEAST 1 FLEDGLING. PAIRS FROM OCC. 553 APPEARED TO HAVE RELOCATED TO THIS AREA AFTER A FIRE BETWEEN 19-21 JUL.
Owner/Manager:	LAX COUNTY

Occurrence No.	555	**Map Index:**	91980	**EO Index:**	93054	**Element Last Seen:**	1893-06-12
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1893-06-12
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2014-04-04

Quad Summary:	Hollywood (3411813)
County Summary:	Los Angeles

Lat/Long:	34.10640 / -118.33020	**Accuracy:**	1 mile
UTM:	Zone-11 N3774752 E377307	**Elevation (ft):**	500
PLSS:	T01S, R14W, Sec. 03 (S)	**Acres:**	0.0

Location:	VICINITY OF HOLLYWOOD AT SOUTHERN END OF CAHUENGA PASS, NW LOS ANGELES.
Detailed Location:	EXACT LOCATION UNK. MAPPED GENERALLY TO INCLUDE SOUTHERN PORTION OF CAHUENGA PASS NEAR HOLLYWOOD. PROVIDED LOCATION DESCRIPTION WAS "CANYON IN CAHUENGA VALLEY." LOCATION OF CAHUENGA VALLEY AS PRESENT DAY HOLLYWOOD.
Ecological:	MOST OF THE AREA HAS BEEN DEVELOPED (AERIAL IMAGERY 1989-2013). SMALL PATCHES OF WOODLAND VISIBLE THROUGH AERIAL IMAGERY, PRIMARILY ALONG THE PERIMETER OF HOLLYWOOD RESERVOIR.
General:	UNKNOWN NUMBER OF EGGS COLLECTED ON 13 JUN 1893 BY G.F. MORCOM (WFVZ #115576).
Owner/Manager:	UNKNOWN

Occurrence No.	556	**Map Index:**	91981	**EO Index:**	93055	**Element Last Seen:**	1898-06-15
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1898-06-15
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2014-04-04

Quad Summary:	Los Angeles (3411812), Pasadena (3411822)
County Summary:	Los Angeles

Lat/Long:	34.11370 / -118.18820	**Accuracy:**	1 mile
UTM:	Zone-11 N3775400 E390415	**Elevation (ft):**	500
PLSS:	T01S, R13W, Sec. 01 (S)	**Acres:**	0.0

Location:	VICINITY OF HIGHLAND PARK AND GARVANZA, SOUTHEAST OF EAGLE ROCK, LOS ANGELES.
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED GENERALLY TO PROVIDED LOCATION DESCRIPTION OF "HIGHLAND PARK, GARVANZA." FEATURE INCLUDES BOTH LOCATIONS AND PART OF ARROYO SECO.
Ecological:	AERIAL IMAGERY (1994-2013) SHOWS THAT MAJORITY OF THE AREA HAS BEEN DEVELOPED. PORTIONS OF ARROYO SECO UNDEVELOPED BUT MUCH OF IT IS CHANNELIZED.
General:	UNKNOWN NUMBER OF EGGS COLLECTED ON 15 JUN 1898 BY V.W. OWEN (WFVZ #122062).
Owner/Manager:	UNKNOWN, CITY OF LOS ANGELES

Occurrence No.	557	**Map Index:**	91982	**EO Index:**	93056	**Element Last Seen:**	1897-06-03
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1897-06-03
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2014-04-04

Quad Summary:	Los Angeles (3411812), Hollywood (3411813)
County Summary:	Los Angeles

Lat/Long:	34.08830 / -118.23700	**Accuracy:**	1 mile
UTM:	Zone-11 N3772637 E385879	**Elevation (ft):**	600
PLSS:	T01S, R13W, Sec. 15 (S)	**Acres:**	0.0

Location:	VICINITY OF ELYSIAN PARK, ABOUT 1.75 MILES NE OF HWY 101 AND I-10 INTERCHANGE, LOS ANGELES.
Detailed Location:	LOCATION DESCRIPTION FOR 1895 COLLECTIONS WAS "ELESYIAN PARK, LOS ANGELES." LOCATION DESCRIPTION FOR 1897 COLLECTION WAS "BANKS OF THE LOS ANGELES RIVER," EXACT LOCATION WAS UNKNOWN AND WAS MAPPED TO PORTION OF THE RIVER NEAR ELYSIAN PARK.
Ecological:	MAJORITY OF AREA HAS BEEN DEVELOPED. LOS ANGELES RIVER IS HEAVILY CHANNELIZED. OCCURRENCE IS LIKELY EXTIRPATED.
General:	UNKNOWN NUMBER OF EGGS COLLECTED ON 20 MAY & 12 JUN 1895 BY A. HUNGER (WFVZ #115579 & 115580) AND ON 3 JUN 1897 BY G.F. MORCOM (WFVZ #115584).
Owner/Manager:	UNKNOWN

Occurrence No.	558	**Map Index:**	47943	**EO Index:**	93057	**Element Last Seen:**	1913-05-20
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1913-05-20
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2014-04-10

Quad Summary:	Los Angeles (3411812), Hollywood (3411813)
County Summary:	Los Angeles

Lat/Long:	34.05223 / -118.24369	**Accuracy:**	1 mile
UTM:	Zone-11 N3768645 E385214	**Elevation (ft):**	300
PLSS:	T01S, R13W, Sec. 28 (S)	**Acres:**	0.0

Location:	LOS ANGELES.
Detailed Location:	EXACT LOCATION UNKNOWN. PROVIDED LOCATION DESCRIPTION WAS "LOS ANGELES." MAPPED GENERALLY TO POPULATED PLACE GNIS POINT OF "LOS ANGELES." AREA IS HEAVILY DEVELOPED, OCC. IS LIKELY EXTIRPATED. ONLY COUNTY WAS PROVIDED FOR 1913 DETECTION.
Ecological:	
General:	UNKNOWN NUMBER OF EGGS COLLECTED ON 20 APR AND 6 & 17 JUN 1898 BY R.H. ROBERTSON & G.F. MORCOM (WFVZ #115583, 115585, 115586). 3 NEWLY HATCHED YOUNG OBS ON 1 APR 1900. UNK NUMBER OF EGGS COLLECTED ON 20 MAY 1913 BY G. SNYDER (WFVZ #121989).
Owner/Manager:	CITY OF LOS ANGELES, UNK

Occurrence No.	561	**Map Index:**	91988	**EO Index:**	93062	**Element Last Seen:**	1895-05-23
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1895-05-23
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2014-04-07

Quad Summary: South Gate (3311882), Inglewood (3311883)

County Summary: Los Angeles

Lat/Long:	33.97502 / -118.25006	**Accuracy:**	1 mile
UTM:	Zone-11 N3760090 E384522	**Elevation (ft):**	150
PLSS:	T02S, R13W, Sec. 21 (S)	**Acres:**	0.0

Location: FLORENCE, WEST OF HUNTINGTON PARK.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED GENERALLY AS BEST GUESS TO PROVIDED LOCATION DESCRIPTION OF "FLORENCE" IN LOS ANGELES COUNTY. MORE SPECIFICALLY, MAPPED TO FLORENCE POST OFFICE.

Ecological: MAJORITY OF AREA HAS BEEN DEVELOPED (AERIAL PHOTOS 1994-2013), LEAST BELL'S VIREO IS PROBABLY LOCALLY EXTIRPATED.

General: UNKNOWN NUMBER OF EGGS COLLECTED ON 23 MAY 1895 BY V.W. OWEN (WFVZ #115592).

Owner/Manager: UNKNOWN

Occurrence No.	564	**Map Index:**	92014	**EO Index:**	93086	**Element Last Seen:**	1900-06-10
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1900-06-10
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2014-04-08

Quad Summary: Los Alamitos (3311871), Whittier (3311881)

County Summary: Los Angeles, Orange

Lat/Long:	33.86630 / -118.04591	**Accuracy:**	1 mile
UTM:	Zone-11 N3747824 E403259	**Elevation (ft):**	50
PLSS:	T03S, R11W, Sec. 33 (S)	**Acres:**	0.0

Location: CERRITOS.

Detailed Location: PROVIDED LOCATION DESCRIPTION WAS SIMPLY "CERRITOS." EXACT LOCATION UNKNOWN. MAPPED GENERALLY TO CERRITOS POST OFFICE. AREA HEAVILY DEVELOPED (AERIAL PHOTOS 1994-2013), OCCURRENCE IS LIKELY EXTIRPATED. SEE NOTE BELOW.

Ecological: 1896 & 1902 USGS TOPOS DON'T SHOW CERRITOS 2 MI E OF ARTESIA. INSTEAD, CERRITOS IS LOCATED ALONG THE SOUTHERN PACIFIC RR & COMPTON CREEK AT THE SE FOOT OF DOMEINGUES HILL(S), VICINITY OF ELFTMAN ABOUT 8 MI W (ALSO COMPLETELY DEVELOPED).

General: UNKNOWN NUMBER OF EGGS COLLECTED ON 5 MAY 1895 (WFVZ #115573), 27 MAY 1900 (WFVZ #115574), AND 10 JUN 1900 (WFVZ #115575).

Owner/Manager: UNKNOWN

Occurrence No.	566	**Map Index:**	92022	**EO Index:**	93097	**Element Last Seen:**	1899-05-07
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1899-05-07
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2014-04-09

Quad Summary:	Whittier (3311881)
County Summary:	Los Angeles

Lat/Long:	33.98050 / -118.03520	**Accuracy:**	1 mile
UTM:	Zone-11 N3760477 E404377	**Elevation (ft):**	370
PLSS:	T02S, R11W, Sec. 21 (S)	**Acres:**	0.0

Location:	WHITTIER.
Detailed Location:	PROVIDED LOCATION DESCRIPTION WAS SIMPLY "WHITTIER" AND "NEAR WHITTIER. MAPPED GENERALLY AS BEST GUESS TO WHITTIER POST OFFICE." POSSIBLE COLLECTION LOCATION MAY HAVE BEEN THE SAN GABRIEL RIVER WEST OF WHITTIER.
Ecological:	APR NEST WAS CONSTRUCTED IN A WILLOW, 3 FEET FROM GROUND, AND SUSPENDED FROM A SMAL TWIG. INCUBATION CLASSIFIED AS "SLIGHT." AREA HAS BEEN HEAVILY DEVELOPED (1994-2013 AERIAL PHOTOS) AND THIS OCCURRENCE HAS BEEN LIKELY LOCALLY EXTIRPATED.
General:	UNKNOWN NUMBER OF EGGS COLLECTED ON 30 APR AND 7 MAY 1899 (WFVZ #11417 & 115578).
Owner/Manager:	UNKNOWN

Occurrence No.	600	**Map Index:**	B0576	**EO Index:**	112442	**Element Last Seen:**	2014-06-10
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2014-06-10
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2018-09-06

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.81085 / -117.80237	**Accuracy:**	specific area
UTM:	Zone-11 N3741473 E425738	**Elevation (ft):**	272
PLSS:	T04S, R09W, Sec. 22, NE (S)	**Acres:**	13.0

Location:	ALONG SANTIAGO CREEK, JUST N OF VILLA PARK RD, 0.6 MI SW OF CANNON ST AT TAFT AVE, NE OF ORANGE.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	
General:	2 TERRITORIES DETECTED ON 10 JUN 2014.
Owner/Manager:	UNKNOWN

Occurrence No.	601	**Map Index:**	B0578	**EO Index:**	112443	**Element Last Seen:**	2014-05-05
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2014-05-05
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2018-10-05

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.80501 / -117.81123	**Accuracy:**	non-specific area
UTM:	Zone-11 N3740832 E424913	**Elevation (ft):**	272
PLSS:	T04S, R09W, Sec. 22, SW (S)	**Acres:**	17.0

Location: ALONG SANTIAGO CREEK, ABOUT 0.4 MI NE OF PROSPECT ST AT BOND AVE, NE OF ORANGE.

Detailed Location: MAPPED ACCORDING TO THE PROVIDED COORDINATES AND SHAPEFILE OF SURVEYED AREA.

Ecological:

General: NOT SURVEYED IN 2010. 2 TERRITORIES, 1 PAIR, AND 1 FLEDGLINGS IN 2011. 1 TERRITORY DETECTED IN 2012. 1 TERRITORY DETECTED IN 2013. 1 TERRITORY DETECTED ON 5 MAY 2014.

Owner/Manager: UNKNOWN

Setophaga petechia

Element Code: ABPBX03010

yellow warbler

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G5
	State:	None		**State:**	S3
	Other:	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern			
Habitat:	**General:**	RIPARIAN PLANT ASSOCIATIONS IN CLOSE PROXIMITY TO WATER. ALSO NESTS IN MONTANE SHRUBBERY IN OPEN CONIFER FORESTS IN CASCADES AND SIERRA NEVADA.			
	Micro:	FREQUENTLY FOUND NESTING AND FORAGING IN WILLOW SHRUBS AND THICKETS, AND IN OTHER RIPARIAN PLANTS INCLUDING COTTONWOODS, SYCAMORES, ASH, AND ALDERS.			

Occurrence No.	109	**Map Index:**	90044	**EO Index:**	102952	**Element Last Seen:**	2013-06-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2013-06-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2016-08-08

Quad Summary: Orange (3311777), Yorba Linda (3311787)

County Summary: Orange

Lat/Long:	33.87367 / -117.81277	**Accuracy:**	non-specific area
UTM:	Zone-11 N3748446 E424829	**Elevation (ft):**	300
PLSS:	T03S, R09W, Sec. 27, SW (S)	**Acres:**	49.0

Location: YORBA LINDA RESERVOIR/LAKE BED, BETWEEN LAKEVIEW AVE AND HIGHWAY 90, SOUTH OF BUENA VISTA AVE.

Detailed Location: YORBA LINDA LAKEBED PARK.

Ecological: RIPARIAN HABITAT. APPEARS TO HAVE BEEN A LAKE AT ONE TIME, BUT HAS DRIED UP, SUCCESSION HAS TAKEN OVER, AND THE SITE APPEARS TO BE FILLED WITH RIPARIAN VEGETATION.

General: 3 TERRITORIES DETECTED IN 2008. 4 TERRITORIES DETECTED IN 2013.

Owner/Manager: UNKNOWN

Icteria virens

Element Code: ABPBX24010

yellow-breasted chat

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G5
	State:	None		**State:**	S4
	Other:	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern			
Habitat:	**General:**	SUMMER RESIDENT; INHABITS RIPARIAN THICKETS OF WILLOW AND OTHER BRUSHY TANGLES NEAR WATERCOURSES.			

Micro:	NESTS IN LOW, DENSE RIPARIAN, CONSISTING OF WILLOW, BLACKBERRY, WILD GRAPE; FORAGES AND NESTS WITHIN 10 FT OF GROUND.

Occurrence No.	86	**Map Index:**	21657	**EO Index:**	53117	**Element Last Seen:**	2001-05-16
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2001-05-16
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2003-10-30

Quad Summary:	La Habra (3311788)
County Summary:	Orange

Lat/Long:	33.89499 / -117.90272	**Accuracy:**	non-specific area
UTM:	Zone-11 N3750879 E416532	**Elevation (ft):**	400
PLSS:	T03S, R10W, Sec. 23 (S)	**Acres:**	329.0

Location:	COYOTE HILLS EAST, JUST SE OF THE JUNCTION OF BASTANCHURY ROAD AND BREA BLVD, BETWEEN HARBOR BLVD AND HWY 57, FULLERTON.
Detailed Location:	
Ecological:	HABITAT CONSISTS OF NATURAL & REVEGETATED COASTAL SAGE SCRUB DOMINATED MAINLY BY ARTEMISIA CALIFORNICA.
General:	UNKNOWN NUMBER OBSERVED DURING CALIFORNIA GNATCATCHER SURVEYS CONDUCTED 2-16 MAY 2001. EAST COYOTE HILLS INCLUDES A GOLF COURSE, OIL FACILITIES, RESIDENTIAL (276 ACRES) AND OPEN SPACE (120 ACRES).
Owner/Manager:	PVT

Occurrence No.	109	**Map Index:**	90044	**EO Index:**	102915	**Element Last Seen:**	2008-07-11
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2008-07-11
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2016-07-28

Quad Summary:	Orange (3311777), Yorba Linda (3311787)
County Summary:	Orange

Lat/Long:	33.87367 / -117.81277	**Accuracy:**	non-specific area
UTM:	Zone-11 N3748446 E424829	**Elevation (ft):**	300
PLSS:	T03S, R09W, Sec. 27, SW (S)	**Acres:**	49.0

Location:	YORBA LINDA LAKEBED PARK.
Detailed Location:	MAPPED GENERALLY TO INCLUDE START- AND ENDPOINTS OF SURVEYS GIVEN IN SANTA ANA WATERSHED ASSOCIATION 2012 DATASET, SITE NAME "YORBA LINDA LAKEBED PARK," EXACT DETECTION LOCATIONS UNKNOWN.
Ecological:	RIPARIAN HABITAT. APPEARS TO HAVE BEEN A LAKE AT ONE TIME, BUT HAS DRIED UP, SUCCESSION HAS TAKEN OVER, AND THE SITE APPEARS TO BE FILLED WITH RIPARIAN VEGETATION.
General:	1 TERRITORY IDENTIFED BY BIOLOGISTS CONDUCTING LEAST BELL'S VIREO SURVEYS ON 11 JUL 2008; 2 TERRITORIES IDENTIFIED APR-JUN 2013 (DATASETS "[ASSUME] MALE IS EXHIBITING TERRITORIAL BEHAVIOR...OR OTHER BREEDING BEHAVIOR DOCUMENTED").
Owner/Manager:	UNKNOWN

Occurrence No.	119	**Map Index:**	B3143	**EO Index:**	115062	**Element Last Seen:**	2017-07-04
Occ. Rank:	Excellent			**Presence:**	Presumed Extant	**Site Last Seen:**	2017-07-04
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2019-06-06

Quad Summary: El Monte (3411811)

County Summary: Los Angeles

Lat/Long:	34.00174 / -118.04284	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3762839 E403696	**Elevation (ft):**	440
PLSS:	T02S, R11W, Sec. 16, NW (S)	**Acres:**	18.0

Location: S SIDE OF SYCAMORE CYN RD, 0.8 MI ESE OF THE BEVERLY BLVD JCT & 1.6 MI NE OF I-605 AT CA-72, SYCAMORE CANYON OPEN SPACE.

Detailed Location: MAPPED TO PROVIDED COORDINATES.

Ecological: RIPARIAN HABITAT DOMINATED BY WILLOWS AND SYCAMORES IN CANYON BOTTOM ON HABITAT PRESERVE.

General: 2 ADULTS HEARD SINGING AND SEEN ON 4 JUL 2017 DURING GNATCATCHER SURVEYS, PRESUMED TO BE ON TERRITORY.

Owner/Manager: PUENTE HILLS LANDFILL NHPA

Aimophila ruficeps canescens

Element Code: ABPBX91091

southern California rufous-crowned sparrow

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G5T3
	State:	None		**State:**	S4
	Other:	CDFW_WL-Watch List			
Habitat:	**General:**	RESIDENT IN SOUTHERN CALIFORNIA COASTAL SAGE SCRUB AND SPARSE MIXED CHAPARRAL.			
	Micro:	FREQUENTS RELATIVELY STEEP, OFTEN ROCKY HILLSIDES WITH GRASS AND FORB PATCHES.			

Occurrence No.	122	**Map Index:**	52956	**EO Index:**	52959	**Element Last Seen:**	2000-05-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2000-05-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2003-10-20

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.86342 / -117.75747	**Accuracy:**	non-specific area
UTM:	Zone-11 N3747271 E429936	**Elevation (ft):**	500
PLSS:	T03S, R08W, Sec. 31 (S)	**Acres:**	82.6

Location: SOUTH & EAST OF SANTA ANA CANYON ROAD, 2 MILES NE OF INTERSECTION OF RIVERSIDE FWY & IMPERIAL HWY, ESE OF YORBA LINDA.

Detailed Location:

Ecological: OSPREY, WHITE-TAILED KITE, SHARP-SHINNED HAWK, COOPER'S HAWK ALSO OBSERVED IN VICINITY.

General: UNKNOWN NUMBER OBSERVED DURING CALIFORNIA GNATCATCHER SURVEYS CONDUCTED BETWEEN 13 APRIL AND 18 MAY 2000.

Owner/Manager: UNKNOWN

Occurrence No.	205	**Map Index:**	A0448	**EO Index:**	102009	**Element Last Seen:**	2014-10-30
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2014-10-30
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2016-06-30

Quad Summary:	Hollywood (3411813)
County Summary:	Los Angeles

Lat/Long:	34.11525 / -118.33468	**Accuracy:**	80 meters
UTM:	Zone-11 N3775739 E376908	**Elevation (ft):**	693
PLSS:	T01S, R14W, Sec. 3, NW (S)	**Acres:**	5.0

Location:	EAST SIDE OF HWY 101 ABOUT 0.1 MILES NE OF THE PILGRIMAGE BRIDGE & 0.25 MILES SW OF THE MULHOLLAND DAM, N OF HOLLYWOOD.
Detailed Location:	MAPPED TO PROVIDED COORDINATES.
Ecological:	STEEP SLOPES WITH ERIOGONUM FASCICULATUM & SCATTERED CHAPARRAL SCRUB AND DENSE PATCHES OF NON-NATIVE GRASSES AND ROCK OUTCROPS. SPECIES FORAGES WIDELY ON WEST-FACING RIDGE EAST OF FORD AMPHITHEATER.
General:	ADULT WITH YOUNG-OF-YEAR HEARD AND SEEN DURING SURVEYS 3 JUL - 30 OCT 2014.
Owner/Manager:	LAX COUNTY

Occurrence No.	211	**Map Index:**	A1381	**EO Index:**	102955	**Element Last Seen:**	2005-04-19
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2005-04-19
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2016-08-08

Quad Summary:	Yorba Linda (3311787), La Habra (3311788)
County Summary:	Orange

Lat/Long:	33.93004 / -117.87109	**Accuracy:**	2/5 mile
UTM:	Zone-11 N3754740 E419490	**Elevation (ft):**	600
PLSS:	T03S, R09W, Sec. 7 (S)	**Acres:**	280.0

Location:	TONNER HILLS, BETWEEN 0.25 - 1.0 MILES NE OF HWY 57 AT E LAMBERT RD, BREA.
Detailed Location:	EXACT DETECTION LOCATIONS NOT GIVEN. LOCATION DESCRIBED AS "STEEP SLOPES IN THE WESTERN PORTION OF THE [PROJECT] SITE THAT OCCUR EAST OF THE 57 FREEWAY"
Ecological:	COASTAL SAGE SCRUB, COYOTE BRUSH, AND SOUTHERN CACTUS SCRUB SURROUNDED BY DEVELOPMENT.
General:	DETECTED DURING GNATCATCHER SURVEYS, MAR-APR 2005, SURVEYORS CONCLUDED THAT "THIS SPECIES LIKELY NESTS IN THESE AREAS."
Owner/Manager:	PVT

Passerculus sandwichensis beldingi **Element Code:** ABPBX99015

Belding's savannah sparrow

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G5T3
	State:	Endangered		**State:**	S3
	Other:	USFWS_BCC-Birds of Conservation Concern			
Habitat:	**General:**	INHABITS COASTAL SALT MARSHES, FROM SANTA BARBARA SOUTH THROUGH SAN DIEGO COUNTY.			
	Micro:	NESTS IN SALICORNIA ON AND ABOUT MARGINS OF TIDAL FLATS.			

Occurrence No.	8 **Map Index:** 02224	**EO Index:**	24653	**Element Last Seen:**	2008-XX-XX
Occ. Rank:	Unknown	**Presence:**	Presumed Extant	**Site Last Seen:**	2008-XX-XX
Occ. Type:	Natural/Native occurrence	**Trend:**	Increasing	**Record Last Updated:**	2018-08-08

Quad Summary: Los Alamitos (3311871)

County Summary: Los Angeles

Lat/Long:	33.76478 / -118.10811	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3736627 E397384	**Elevation (ft):**	5
PLSS:	T05S, R12W, Sec. 11 (S)	**Acres:**	0.0

Location: LOS CERRITOS MARSH, SOUTH OF CERRITOS CHANNEL & WEST OF STUDEBAKER ROAD, LONG BEACH.

Detailed Location: BELDINGS CLUSTERED IN THE HIGHER ELEVATION AREA IN THE CENTER OF THE TIDALLY INFLUENCED AREA.

Ecological: REMNANT OF ONCE EXTENSIVE ALAMITOS BAY MARSHES. TIDAL INFLUENCE IN 25-30 ACRES. RESTORATION OF ~70 ACRES IS PLANNED (1991) IN CONJUNCTION WITH PROPOSED HOUSING DEVELOPMENT. RESTORATION & MANAGEMENT RESULTED IN HIGH COUNT OF BIRDS IN 2001.

General: NOT SURVEYED IN 1973. 5 PAIRS ESTIMATED IN 1977. 2 PAIRS ESTIMATED IN 1986. 9 PAIRS ESTIMATED IN 1991. 4 PAIRS EST IN 1996. 19 PRS EST IN 2001. PRESENT DURING 2006-2008 PEDESTRIAN DISTURBANCE TOLERANCE STUDIES.

Owner/Manager: UNKNOWN

Ammodramus savannarum **Element Code:** ABPBXA0020

grasshopper sparrow

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G5
	State:	None		**State:**	S3
	Other:	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern			
Habitat:	**General:**	DENSE GRASSLANDS ON ROLLING HILLS, LOWLAND PLAINS, IN VALLEYS AND ON HILLSIDES ON LOWER MOUNTAIN SLOPES.			
	Micro:	FAVORS NATIVE GRASSLANDS WITH A MIX OF GRASSES, FORBS AND SCATTERED SHRUBS. LOOSELY COLONIAL WHEN NESTING.			

Occurrence No.	20	**Map Index:** A1382	**EO Index:**	102956	**Element Last Seen:** 2011-04-22
Occ. Rank:	Unknown		**Presence:**	Presumed Extant	**Site Last Seen:** 2011-04-22
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:** 2016-08-08

Quad Summary: Yorba Linda (3311787), La Habra (3311788)

County Summary: Los Angeles

Lat/Long:	33.96024 / -117.87638	**Accuracy:**	non-specific area
UTM:	Zone-11 N3758094 E419029	**Elevation (ft):**	1111
PLSS:	T02S, R10W, Sec. 36 (S)	**Acres:**	14.0

Location: ABOUT 0.75 MILES SW OF PEPPERDALE DR AT RUDY ST AND 0.9 MILES WNW OF HWY 57 AT S BREA CANYON RD, NORTH OF BREA.

Detailed Location: MAPPED TO PROVIDED SHAPEFILE.

Ecological: MIX OF NON-NATIVE GRASSLAND AND DISTURBED COASTAL SAGE SCRUB.

General: 3 SINGING DETECTED ON 22 APR, 3 HEARD CALLING ON 24 MAY 2011.

Owner/Manager: UNKNOWN

Agelaius tricolor

Element Code: ABPBXB0020

tricolored blackbird

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G1G2
	State:	Threatened		**State:**	S2
	Other:	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_EN-Endangered, USFWS_BCC-Birds of Conservation Concern			
Habitat:	**General:**	HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY AND VICINITY. LARGELY ENDEMIC TO CALIFORNIA.			
	Micro:	REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, AND FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.			

Occurrence No.	276	**Map Index:** 24340	**EO Index:** 6519	**Element Last Seen:**	1999-04-27
Occ. Rank:	Unknown		**Presence:** Presumed Extant	**Site Last Seen:**	1999-04-27
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2016-11-14

Quad Summary: Los Alamitos (3311871)

County Summary: Los Angeles

Lat/Long:	33.81597 / -118.08651	**Accuracy:**	non-specific area
UTM:	Zone-11 N3742282 E399445	**Elevation (ft):**	28
PLSS:	T04S, R12W, Sec. 24 (S)	**Acres:**	531.0

Location: EL DORADO REGIONAL PARK/NATURE CENTER, BETWEEN I-605 & SAN GABRIEL RIVER, S OF CARSON ST, N OF WILLOW ST, LOS ALAMITOS.

Detailed Location: MAPPED TO PROVIDED MAPS & LOCATION DESCRIPTIONS. FEATURE INCLUDES AT LEAST 2 COLONIES. COLONIES SHIFTED THROUGHOUT EL DORADO REGIONAL PARK WITHIN SAME SURVEY YEAR, MAJORITY OF COLONY OCCURRED IN LARGER POND AT N END OF PARK (AREA 3).

Ecological: HABITAT CONSISTED OF SEVERAL LARGE, MAN-MADE LAKES CONTAINING LARGE CLUMPS OF TULES & CATTAILS. PARK MAINTENANCE INCLUDES TRIMMING OF VEGETATION. STARLINGS MAY POSE POSSIBLE COMPETITION TO TRICOLORS. BIRDS MAY USE ADJ GOLF COURSE TO FORAGE.

General: ANECDOTALLY REPORTED AS NESTING FROM 1989-1993. 30-500 BIRDS NESTING/FORAGING APR-JUN 1994. 30-90 BIRDS NESTING APR 1995. 40-100 NESTING BIRDS NESTING APR-JUN 1996. 80-100 BIRDS NESTING IN APR 1997. 20-60 PAIRS NESTING IN APR 1999.

Owner/Manager: CITY OF LONG BEACH

Occurrence No.	775	**Map Index:** 99723	**EO Index:** 101275	**Element Last Seen:**	1989-04-01
Occ. Rank:	Unknown		**Presence:** Presumed Extant	**Site Last Seen:**	2014-04-20
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2016-04-21

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.78216 / -117.76299	**Accuracy:**	non-specific area
UTM:	Zone-11 N3738264 E429359	**Elevation (ft):**	531
PLSS:	T04S, R08W, Sec. 31, W (S)	**Acres:**	95.0

Location: 0.6 MI SE OF CANYON VIEW AVE & NEWPORT BLVD INTXN, 0.7 MI S OF SANTIAGO CANYON RD & JAMBOREE RD INTXN, PETERS CYN RES.

Detailed Location: LOCATION DESCRIBED AS "PETER'S CANYON RESERVOIR (EAST OF CITY OF ORANGE) NEAR THE INTERSECTIONS OF SANTIAGO CANYON ROAD, CHAPMAN AVE, AND NEWPORT AVENUE." COLONY DATA STORED IN THE UC DAVIS TRBL PORTAL; "PETERS CANYON RESERVOIR."

Ecological: LARGE RESERVOIR, DENSELY LINED WITH CATTAIL AND BULRUSH. A LARGE FORAGING AREA NEAR THE RESERVOIR WAS BEING DEVELOPED (BEEDY 1991). INSUFFICIENT FORAGING HABITAT IN 1994. POTENTIALLY SUITABLE CATTAIL MARSH IN 2014.

General: 500-600 PAIRS OBSERVED ON 1 APR 1989 (WILLICK PERS. COMM.); PRESUMED NESTING BUT NOT CONFIRMED. 0 OBSERVED IN 1994, EXACT DATE UNKNOWN. 0 OBSERVED ON 20 APR 2014.

Owner/Manager: ORA COUNTY

Oncorhynchus mykiss irideus pop. 10

Element Code: AFCHA0209J

steelhead - southern California DPS

Listing Status:	**Federal:**	Endangered	**CNDDB Element Ranks:**	**Global:**	G5T1Q
	State:	Candidate Endangered		**State:**	S1
	Other:	AFS_EN-Endangered			
Habitat:	**General:**	FEDERAL LISTING REFERS TO POPULATIONS FROM SANTA MARIA RIVER SOUTH TO SOUTHERN EXTENT OF RANGE (SAN MATEO CREEK IN SAN DIEGO COUNTY).			
	Micro:	SOUTHERN STEELHEAD LIKELY HAVE GREATER PHYSIOLOGICAL TOLERANCES TO WARMER WATER AND MORE VARIABLE CONDITIONS.			

Occurrence No.	18	**Map Index:** B0498	**EO Index:**	112361	**Element Last Seen:**	1950-XX-XX
Occ. Rank:	None		**Presence:**	Possibly Extirpated	**Site Last Seen:**	2013-XX-XX
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:**	2018-09-12

Quad Summary: Alberhill (3311764), Santiago Peak (3311765), El Toro (3311766), Newport Beach (3311768), Lake Mathews (3311774), Corona South (3311775), Black Star Canyon (3311776), Orange (3311777), Anaheim (3311778), Riverside West (3311784), Corona North (3311785), Prado Dam (3311786), Moonridge (3411627), Big Bear Lake (3411628), Yucaipa (3411711), Redlands (3411712), San Bernardino South (3411713), Fontana (3411714), Keller Peak (3411721)

County Summary: Orange, Riverside, San Bernardino

Lat/Long:	33.76767 / -117.89371	**Accuracy:**	non-specific area
UTM:	Zone-11 N3736754 E417243	**Elevation (ft):**	108
PLSS:	T05S, R10W, Sec. 2 (S)	**Acres:**	18320.0

Location: SANTA ANA RIVER AND TRIBUTARIES.

Detailed Location: HISTORIC EXTENT UNKNOWN. MAPPED TO INCLUDE HARDING & COLDWATER CREEKS, TRIBS SUPPORTING TROUT W/ SIGNIFICANT NATIVE ANCESTRY PER 2006 & 2016 DNA STUDIES; & BEAR CK, W/ "REMNANTS OF NATIVE ANCESTRY." PRADO DAM IS IMPASSIBLE BARRIER AT RM 31.

Ecological: LOWER RIVER DEGRADED. STOCKED SINCE THE 1930S. RESIDENT TROUT PERSIST IN UPPER TRIBUTARIES. DNA STUDIES SHOWED THAT TROUT FROM HARDING CANYON (2006 STUDY) & COLDWATER CREEK (2016) RETAINED SIGNIFICANT COASTAL STEELHEAD ANCESTRY.

General: "GOOD" STEELHEAD RUN REPORTED IN 1950. NONE FOUND IN DFG SURVEYS OF MAINSTEM BELOW PRADO DAM, 1951 & '55. STEELHEAD RUN PRESUMED EXTIRPATED BY 1957. RESIDENT TROUT PERSIST IN HEADWATERS (EG. IN 2001, 2009-13) & MAY BE CRITICAL TO RECOVERY.

Owner/Manager: UNKNOWN

Catostomus santaanae

Element Code: AFCJC02190

Santa Ana sucker

Listing Status:	**Federal:**	Threatened	**CNDDB Element Ranks:**	**Global:**	G1
	State:	None		**State:**	S1
	Other:	AFS_TH-Threatened, CDFW_SSC-Species of Special Concern, IUCN_EN-Endangered			
Habitat:	**General:**	ENDEMIC TO LOS ANGELES BASIN SOUTH COASTAL STREAMS.			
	Micro:	HABITAT GENERALISTS, BUT PREFER SAND-RUBBLE-BOULDER BOTTOMS, COOL, CLEAR WATER, AND ALGAE.			

Occurrence No.	14	**Map Index:**	17708	**EO Index:**	11603	**Element Last Seen:**	XXXX-XX-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1991-10-31

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.84262 / -117.76416	**Accuracy:**	non-specific area
UTM:	Zone-11 N3744969 E429300	**Elevation (ft):**	500
PLSS:	T04S, R08W (S)	**Acres:**	28.9

Location:	WALNUT CANYON, BELOW WALNUT CANYON RESERVOIR.
Detailed Location:	
Ecological:	
General:	OBSERVATION BY ROBERT FISHER, UC IRVINE.
Owner/Manager:	UNKNOWN

Occurrence No.	23	**Map Index:**	21422	**EO Index:**	10042	**Element Last Seen:**	2000-09-25
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2000-09-25
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2010-05-10

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.85793 / -117.78823	**Accuracy:**	non-specific area
UTM:	Zone-11 N3746683 E427086	**Elevation (ft):**	280
PLSS:	T04S, R09W, Sec. 02, N (S)	**Acres:**	57.0

Location:	SANTA ANA RIVER, AT IMPERIAL HIGHWAY (SR 90) BRIDGE JUST NORTH OF RIVERSIDE FWY (SR 91) JCT, YORBA LINDA, ORANGE COUNTY.
Detailed Location:	PART OF SANTA ANA RIVER GREENBELT. MAPPED ACCORDING TO T&R AND LOCATION PROVIDED. 1996: SUCKERS WERE RARE IN THIS SECTION OF THE RIVER. 11 FISH/KM FOUND IN JUNE, 0 IN AUGUST, & 11 FISH/KM IN NOVEMBER.
Ecological:	
General:	15 SEP 1987: LACM #44383.001. 1991: CHADWICK & ASSOCSITE #12; 2 COLLECTED. 1995: 3 ADULTS, 50 JUV'S OBS. 1996:1 JUV OBS. 2000: NONE IN 17 SEINE HAULS ON 24 MAR. 10 FISH TRAPPED & RELOCATED NEAR MISSION BLVD BETWEEN 20 -25 SEPT.
Owner/Manager:	ORA COUNTY

Occurrence No.	32	**Map Index:**	52818	**EO Index:**	52818	**Element Last Seen:**	1987-09-08
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1987-09-08
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2003-10-06

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.86524 / -117.77030	**Accuracy:**	non-specific area
UTM:	Zone-11 N3747481 E428751	**Elevation (ft):**	300
PLSS:	T03S, R09W, Sec. 36 (S)	**Acres:**	34.2

Location:	SANTA ANA RIVER, ABOUT 1.25 MILES EAST OF IMPERIAL HWY. YORBA LINDA.
Detailed Location:	FISH COLLECTED NEAR NEAR SALIX AND BACCLARIS GROVES.
Ecological:	
General:	10 COLLECTED 8 SEP 1987 BY ROBERT FISHER (LACM #44378.001).
Owner/Manager:	UNKNOWN

Occurrence No.	33	**Map Index:** 52819	**EO Index:**	52819	**Element Last Seen:**	1987-09-14
Occ. Rank:	Unknown		**Presence:**	Presumed Extant	**Site Last Seen:**	1987-09-14
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:**	2003-10-06

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.85641 / -117.81756	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3746536 E424372	**Elevation (ft):**	260
PLSS:	T04S, R09W, Sec. 04 (S)	**Acres:**	0.0

Location: SANTA ANA RIVER NEAR TAYLOR ST BRIDGE, YORBA LINDA.

Detailed Location: MUSEUM RECORD LOCATION GIVEN AS "NEAR LAKEVIEW & SANTA ANA RIVER"

Ecological:

General: 1 COLLECTED BY ROBERT FISHER 14 SEP 1987 (LACM #44381.001).

Owner/Manager: UNKNOWN

Sorex ornatus salicornicus

Element Code: AMABA01104

southern California saltmarsh shrew

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G5T1?
	State:	None		**State:**	S1
	Other:	CDFW_SSC-Species of Special Concern			
Habitat:	**General:**	COASTAL MARSHES IN LOS ANGELES, ORANGE AND VENTURA COUNTIES.			
	Micro:	REQUIRES DENSE VEGETATION AND WOODY DEBRIS FOR COVER.			

Occurrence No.	2	**Map Index:** 02270	**EO Index:**	59234	**Element Last Seen:**	1968-11-17
Occ. Rank:	Unknown		**Presence:**	Presumed Extant	**Site Last Seen:**	1968-11-17
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:**	2005-01-10

Quad Summary: Seal Beach (3311861), Los Alamitos (3311871)

County Summary: Orange

Lat/Long:	33.73881 / -118.07696	**Accuracy:**	1 mile
UTM:	Zone-11 N3733717 E400239	**Elevation (ft):**	5
PLSS:	T05S, R11W, Sec. 18 (S)	**Acres:**	0.0

Location: SEAL BEACH.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED IN THE GENERAL VICINTY OF SEAL BEACH NAVAL WEAPONS STATION.

Ecological:

General: 1 MALE AND ONE FEMALE COLLECTED 17 NOV 1968 BY K. JOLLIE AT "SEAL BEACH NAVAL WEAPONS STATION, S BOLSA AVE, ALONG MAIN SLOUGH." DEPOSITED AT LACM #67430 & 67341.

Owner/Manager: UNKNOWN

Choeronycteris mexicana **Element Code:** AMACB02010

Mexican long-tongued bat

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G3G4
	State:	None		**State:**	S1
	Other:	CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened			
Habitat:	**General:**	OCCASIONALLY FOUND IN SAN DIEGO COUNTY, WHICH IS ON THE PERIPHERY OF THEIR RANGE.			
	Micro:	FEEDS ON NECTAR AND POLLEN OF NIGHT-BLOOMING SUCCULENTS. ROOSTS IN RELATIVELY WELL-LIT CAVES, AND IN AND AROUND BUILDINGS.			

Occurrence No.	5	**Map Index:** 59737	**EO Index:** 59773	**Element Last Seen:**	1995-11-24
Occ. Rank:	Unknown		**Presence:** Presumed Extant	**Site Last Seen:**	1995-11-24
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2005-01-31

Quad Summary: Tustin (3311767), Orange (3311777)

County Summary: Orange

Lat/Long:	33.74530 / -117.82061	**Accuracy:**	1 mile
UTM:	Zone-11 N3734218 E423991	**Elevation (ft):**	125
PLSS:	T05S, R09W, Sec. 16 (S)	**Acres:**	0.0

Location: TUSTIN.

Detailed Location: EXACT LOCATION UNKNOWN. LOCATION ONLY GIVEN AS "TUSTIN." MAPPED IN THE GENERAL VICINTY OF TUSTIN WITH THE CENTER POINT BEING THE TUSTIN POST OFFICE.

Ecological:

General: ONE MALE COLLECTED 24 NOV 1995 BY D. CONSTANTINE AT "TUSTIN." DEPOSITED AT LACM #94031.

Owner/Manager: UNKNOWN

Myotis yumanensis **Element Code:** AMACC01020

Yuma myotis

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G5
	State:	None		**State:**	S4
	Other:	BLM_S-Sensitive, IUCN_LC-Least Concern			
Habitat:	**General:**	OPTIMAL HABITATS ARE OPEN FORESTS AND WOODLANDS WITH SOURCES OF WATER OVER WHICH TO FEED.			
	Micro:	DISTRIBUTION IS CLOSELY TIED TO BODIES OF WATER. MATERNITY COLONIES IN CAVES, MINES, BUILDINGS OR CREVICES.			

Occurrence No.	62	**Map Index:** 68432	**EO Index:** 68668	**Element Last Seen:**	1998-09-04
Occ. Rank:	Unknown		**Presence:** Presumed Extant	**Site Last Seen:**	1998-09-04
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2007-03-13

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.86861 / -117.76598	**Accuracy:**	specific area
UTM:	Zone-11 N3747852 E429153	**Elevation (ft):**	300
PLSS:	T03S, R08W, Sec. 31 (S)	**Acres:**	8.0

Location: SANTA ANA CANYON.

Detailed Location:

Ecological:

General: 1 FEMALE CAPTURED/RELEASED ON 9 JUL 1997. 1 FEMALE CAPTURED/RELEASED ON 15 JUN, 1 INDIVIDUAL CAPTURED/ESCAPED ON 4 SEP 1998.

Owner/Manager: UNKNOWN

Lasionycteris noctivagans

Element Code: AMACC02010

silver-haired bat

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G3G4
	State:	None		**State:**	S3S4
	Other:	IUCN_LC-Least Concern			
Habitat:	**General:**	PRIMARILY A COASTAL AND MONTANE FOREST DWELLER, FEEDING OVER STREAMS, PONDS AND OPEN BRUSHY AREAS.			
	Micro:	ROOSTS IN HOLLOW TREES, BENEATH EXFOLIATING BARK, ABANDONED WOODPECKER HOLES, AND RARELY UNDER ROCKS. NEEDS DRINKING WATER.			

Occurrence No.	48	**Map Index:**	68564	**EO Index:**	68928	**Element Last Seen:**	1978-02-22
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1978-02-22
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2007-03-20

Quad Summary:	Los Alamitos (3311871)
County Summary:	Los Angeles

Lat/Long:	33.86108 / -118.10436	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3747301 E397845	**Elevation (ft):**	60
PLSS:	T03S, R12W, Sec. 35, SE (S)	**Acres:**	0.0

Location:	BELLFLOWER, ABOUT 1 MILE SSW OF INTERSECTION OF INTERSTATES 605 AND 91.
Detailed Location:	MAPPED ACCORDING LOCATION DESCRIPTION AND LAT/LONG COORDINATES PROVIDED BY MANIS, WITH UNCERTAINTY OF 100 M. LOCALITY GIVEN AS "CERRITOS, 18715 SAN GABRIEL."
Ecological:	
General:	1 FEMALE SPECIMEN (MVZ #181853) COLLECTED BY DENNY G. CONSTANTINE ON 22 FEB 1978.
Owner/Manager:	UNKNOWN

Lasiurus cinereus

Element Code: AMACC05032

hoary bat

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G3G4
	State:	None		**State:**	S4
	Other:	IUCN_LC-Least Concern			
Habitat:	**General:**	PREFERS OPEN HABITATS OR HABITAT MOSAICS, WITH ACCESS TO TREES FOR COVER AND OPEN AREAS OR HABITAT EDGES FOR FEEDING.			
	Micro:	ROOSTS IN DENSE FOLIAGE OF MEDIUM TO LARGE TREES. FEEDS PRIMARILY ON MOTHS. REQUIRES WATER.			

Occurrence No.	49	**Map Index:**	66305	**EO Index:**	68808	**Element Last Seen:**	1928-05-01
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1928-05-01
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2007-03-16

Quad Summary:	Hollywood (3411813)
County Summary:	Los Angeles

Lat/Long:	34.09826 / -118.32682	**Accuracy:**	1 mile
UTM:	Zone-11 N3773845 E377608	**Elevation (ft):**	
PLSS:	T01S, R14W, Sec. 10 (S)	**Acres:**	0.0

Location:	HOLLYWOOD.
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED AS BEST ESTIMATE CENTERED AT HOLLYWOOD.
Ecological:	
General:	LACM #9425 COLLECTED BY K.E. STAGER ON 1 MAY 1928.
Owner/Manager:	UNKNOWN

Occurrence No.	51	**Map Index:**	47943	**EO Index:**	68810	**Element Last Seen:**	1942-09-15
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1942-09-15
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2007-03-16

Quad Summary: Los Angeles (3411812), Hollywood (3411813)

County Summary: Los Angeles

Lat/Long:	34.05223 / -118.24369	**Accuracy:**	1 mile
UTM:	Zone-11 N3768645 E385214	**Elevation (ft):**	
PLSS:	T01S, R13W, Sec. 28 (S)	**Acres:**	0.0

Location: LOS ANGELES.

Detailed Location: MAPPED TO INCLUDE LAT/LONG COORDINATES FOR 1904'S COLLECTION WITH NO UNCERTAINTY GIVEN, PROVIDED BY MANIS.

Ecological:

General: 1 MALE SPECIMEN (MVZ #9467) COLLECTED BY HARRY S. SWARTH ON 17 APR 1904. 1 FEMALE SPECIMEN (LACM #9498) COLLECTED BY K.E. STAGER ON 30 NOV 1936. 1 FEMALE SPECIMEN (LACM #8030) COLLECTED BY G. WILLETT 15 SEP 1942. ALL COLL. AT "LOS ANGELES."

Owner/Manager: UNKNOWN

Occurrence No.	52	**Map Index:**	68505	**EO Index:**	68811	**Element Last Seen:**	1992-04-19
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1992-04-19
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2007-03-16

Quad Summary: Hollywood (3411813)

County Summary: Los Angeles

Lat/Long:	34.10960 / -118.27375	**Accuracy:**	non-specific area
UTM:	Zone-11 N3775041 E382519	**Elevation (ft):**	450
PLSS:	T01S, R13W, Sec. 05, SW (S)	**Acres:**	19.0

Location: LOS ANGELES, 3600 BLOCK OF W. MONON STREET.

Detailed Location: BAT COLLECTED AT ANIMAL CONTROL DEPARTMENT, LOS ANGELES ON MANON STREET.

Ecological:

General: 1 FEMALE SPECIMEN (LACM #91120) COLLECTED BY DEPT. OF ANIMAL CONTROL ON 19 APR 1992.

Owner/Manager: UNKNOWN

Occurrence No.	53	**Map Index:**	68506	**EO Index:**	68812	**Element Last Seen:**	1977-05-10
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1977-05-10
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2007-03-16

Quad Summary: Hollywood (3411813)

County Summary: Los Angeles

Lat/Long:	34.09525 / -118.25376	**Accuracy:**	80 meters
UTM:	Zone-11 N3773426 E384343	**Elevation (ft):**	490
PLSS:	T01S, R13W, Sec. 09, SW (S)	**Acres:**	0.0

Location: LOS ANGELES, 2256 ALLESANDRO STREET.

Detailed Location:

Ecological:

General: LACM #70900 COLLECTED BY L.A. LESTER ON 10 MAY 1977.

Owner/Manager: UNKNOWN

Occurrence No.	59	**Map Index:** 54944	**EO Index:**	68818	**Element Last Seen:**	1922-11-28
Occ. Rank:	Unknown		**Presence:**	Presumed Extant	**Site Last Seen:**	1922-11-28
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:**	2007-03-16

Quad Summary: El Monte (3411811)

County Summary: Los Angeles

Lat/Long:	34.09227 / -118.10543	**Accuracy:**	1 mile
UTM:	Zone-11 N3772938 E398023	**Elevation (ft):**	
PLSS:	T01S, R12W, Sec. 11 (S)	**Acres:**	0.0

Location: SAN GABRIEL.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED AS BEST ESTIMATE CENTERED ON SAN GABRIEL.

Ecological:

General: 1 MALE SPECIMEN (CAS #6912) COLLECTED BY J.S. ROWLEY ON 28 NOV 1922.

Owner/Manager: UNKNOWN

Lasiurus xanthinus

Element Code: AMACC05070

western yellow bat

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G4G5
	State:	None		**State:**	S3
	Other:	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern			
Habitat:	**General:**	FOUND IN VALLEY FOOTHILL RIPARIAN, DESERT RIPARIAN, DESERT WASH, AND PALM OASIS HABITATS.			
	Micro:	ROOSTS IN TREES, PARTICULARLY PALMS. FORAGES OVER WATER AND AMONG TREES.			

Occurrence No.	12	**Map Index:** 23781	**EO Index:**	58907	**Element Last Seen:**	1990-10-17
Occ. Rank:	Unknown		**Presence:**	Presumed Extant	**Site Last Seen:**	1990-10-17
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:**	2004-12-21

Quad Summary: Los Alamitos (3311871)

County Summary: Orange

Lat/Long:	33.78367 / -118.02256	**Accuracy:**	1 mile
UTM:	Zone-11 N3738639 E405328	**Elevation (ft):**	35
PLSS:	T04S, R11W (S)	**Acres:**	0.0

Location: GARDEN GROVE.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED IN THE VICINTY OF GARDEN GROVE.

Ecological:

General: 1 FEMALE SPECIMEN COLLECTED 17 OCT 1990 BY D. CONSTANTINE AT "GARDEN GROVE." DEPOSITED AT LACM #93996.

Owner/Manager: UNKNOWN

Antrozous pallidus

Element Code: AMACC10010

pallid bat

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G4
	State:	None		**State:**	S3
	Other:	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive			
Habitat:	**General:**	DESERTS, GRASSLANDS, SHRUBLANDS, WOODLANDS AND FORESTS. MOST COMMON IN OPEN, DRY HABITATS WITH ROCKY AREAS FOR ROOSTING.			
	Micro:	ROOSTS MUST PROTECT BATS FROM HIGH TEMPERATURES. VERY SENSITIVE TO DISTURBANCE OF ROOSTING SITES.			

Occurrence No.	187	**Map Index:**	66533	**EO Index:**	66650	**Element Last Seen:**	1931-05-02
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1931-05-02
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2006-10-02

Quad Summary: El Monte (3411811)

County Summary: Los Angeles

Lat/Long:	34.06926 / -118.07215	**Accuracy:**	1 mile
UTM:	Zone-11 N3770355 E401067	**Elevation (ft):**	260
PLSS:	T01S, R11W, Sec. 19 (S)	**Acres:**	0.0

Location: 2 MI W OF EL MONTE.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED ACCORDING TO THE LAT/LONG COORDINATES GIVEN IN MANIS, WITH UNCERTAINTY OF 1609.344 M. INCLUDES LOCALITY "VALLEY BLVD, 1 MI W EL MONTE."

Ecological:

General: 1 MALE AND 1 FEMALE COLLECTED BY L. LITTLE ON 1 NOV 1930, MVZ #71656-71657. 2 MALES AND 1 FEMALE COLLECTED BY L. LITTLE ON 2 MAY 1931, MVZ #71658-71659 & KU #9418.

Owner/Manager: UNKNOWN

Occurrence No.	192	**Map Index:**	66530	**EO Index:**	66655	**Element Last Seen:**	1971-05-24
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1971-05-24
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2006-10-23

Quad Summary: Hollywood (3411813)

County Summary: Los Angeles

Lat/Long:	34.02318 / -118.28366	**Accuracy:**	non-specific area
UTM:	Zone-11 N3765469 E381485	**Elevation (ft):**	
PLSS:	T02S, R13W, Sec. 06, S (S)	**Acres:**	38.0

Location: LOS ANGELES, USC CAMPUS, HOOVER BLVD.

Detailed Location: MAPPED ALONG HOOVER BLVD IN THE USC CAMPUS AREA.

Ecological:

General: 1 FEMALE SPECIMEN COLLECTED BY L.F. SCHOLT ON 24 MAY 1971, LACM #36789.

Owner/Manager: UNKNOWN

Occurrence No.	197	**Map Index:**	34599	**EO Index:**	66660	**Element Last Seen:**	1932-04-15
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1932-04-15
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2006-10-26

Quad Summary: El Monte (3411811)

County Summary: Los Angeles

Lat/Long:	34.07405 / -118.03901	**Accuracy:**	1 mile
UTM:	Zone-11 N3770853 E404131	**Elevation (ft):**	
PLSS:	T01S, R11W, Sec. 21 (S)	**Acres:**	0.0

Location: EL MONTE.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED IN THE GENERAL VICINITY OF EL MONTE.

Ecological:

General: 1 UNKNOWN SPECIMEN COLLECTED BY J.C. VON BLOEKER 28 FEB 1932, LACM #30719. 2 MALE AND 1 FEMALE SPECIMEN COLLECTED BY L. LITTLE ON 15 APR 1932, LACM #3158-3159, 30736.

Owner/Manager: UNKNOWN

Eumops perotis californicus **Element Code:** AMACD02011

western mastiff bat

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G4G5T4
	State:	None		**State:**	S3S4
	Other:	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern			
Habitat:	**General:**	MANY OPEN, SEMI-ARID TO ARID HABITATS, INCLUDING CONIFER AND DECIDUOUS WOODLANDS, COASTAL SCRUB, GRASSLANDS, CHAPARRAL, ETC.			
	Micro:	ROOSTS IN CREVICES IN CLIFF FACES, HIGH BUILDINGS, TREES AND TUNNELS.			

Occurrence No.	56	**Map Index:** 66298	**EO Index:** 66383	**Element Last Seen:**	1918-07-23
Occ. Rank:	Unknown		**Presence:** Presumed Extant	**Site Last Seen:**	1918-07-23
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2006-09-26

Quad Summary: El Monte (3411811), Los Angeles (3411812)

County Summary: Los Angeles

Lat/Long:	34.09528 / -118.12702	**Accuracy:**	1 mile
UTM:	Zone-11 N3773294 E396035	**Elevation (ft):**	490
PLSS:	T01S, R12W, Sec. 10 (S)	**Acres:**	0.0

Location: ALHAMBRA.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED IN THE GENERAL VICINITY OF CENTRAL ALHAMBRA.

Ecological:

General: UNKNOWN SPECIMENS COLLECTED 14 DEC 1889, 18 OCT 1890, 30 SEP 1907 AND 6 MAY 1918 AND DEPOSITED AT USNM, AMNH, UIMNH AND UCLA, RESPECTIVELY. 1 MALE SPECIMEN COLLECTED BY L.E. WYMAN ON 23 JUL 1918, LACM #420.

Owner/Manager: UNKNOWN

Occurrence No.	62	**Map Index:** 66305	**EO Index:** 66391	**Element Last Seen:**	1991-04-03
Occ. Rank:	Unknown		**Presence:** Presumed Extant	**Site Last Seen:**	1991-04-03
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2006-09-21

Quad Summary: Hollywood (3411813)

County Summary: Los Angeles

Lat/Long:	34.09826 / -118.32682	**Accuracy:**	1 mile
UTM:	Zone-11 N3773845 E377608	**Elevation (ft):**	350
PLSS:	T01S, R14W, Sec. 10 (S)	**Acres:**	0.0

Location: HOLLYWOOD.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED IN THE GENERAL VICINITY OF HOLLYWOOD.

Ecological:

General: 1 FEMALE SPECIMEN COLLECTED BY D.G. CONSTANTINE ON 3 APR 1991, LACM #94011.

Owner/Manager: UNKNOWN

Occurrence No.	64	**Map Index:**	47943	**EO Index:**	66393	**Element Last Seen:**	1990-04-12
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1990-04-12
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2006-11-02

Quad Summary: Los Angeles (3411812), Hollywood (3411813)

County Summary: Los Angeles

Lat/Long:	34.05223 / -118.24369	**Accuracy:**	1 mile
UTM:	Zone-11 N3768645 E385214	**Elevation (ft):**	
PLSS:	T01S, R13W, Sec. 28 (S)	**Acres:**	0.0

Location: LOS ANGELES.

Detailed Location: MAPPED TO LAT/LONG COORD. IN MANIS. 1 COLL. BY HORNUNG, 2 BY ALLEN, 1 BY STAGER, LACM30249, 40124, 30251, MSU MR.766. 1 COLL. 1890/1929, IN AMNH/LACM. 1 COLL. BY SUNDELL 1938, LACM5462. 1 COLL. BY KOHLS 1940, MVZ93781. 2 COLL 1942 IN LACM.

Ecological:

General: 18 COLL BY STAGER 1935-37, 1939, 1942, LACM9357-9358, 9395, 9542-9543, 5987-5988, 8708, 8710-8716, 19538, 8020-8021. 1 COLL 1948, IN SBMNH. 7 COLL BY CONSTANTINE 1905, 1944, 1990, LACM69532, 69555-69559, 94012. 1 COLL BY DHS 1990 LACM95887.

Owner/Manager: UNKNOWN

Occurrence No.	74	**Map Index:**	66318	**EO Index:**	66404	**Element Last Seen:**	1990-03-21
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1990-03-21
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2006-09-21

Quad Summary: Anaheim (3311778), La Habra (3311788), Los Alamitos (3311871), Whittier (3311881)

County Summary: Los Angeles, Orange

Lat/Long:	33.86705 / -117.99820	**Accuracy:**	1 mile
UTM:	Zone-11 N3747863 E407672	**Elevation (ft):**	
PLSS:	T03S, R11W, Sec. 35 (S)	**Acres:**	0.0

Location: BUENA PARK.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED IN THE VICINITY OF BUENA PARK.

Ecological:

General: 1 FEMALE SPECIMEN COLLECTED BY D.G. CONSTANTINE ON 21 MAR 1990, LACM #94013.

Owner/Manager: UNKNOWN

Occurrence No.	75	**Map Index:**	66319	**EO Index:**	66405	**Element Last Seen:**	1989-12-13
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1989-12-13
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2006-09-21

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.78771 / -117.85312	**Accuracy:**	1 mile
UTM:	Zone-11 N3738945 E421019	**Elevation (ft):**	
PLSS:	T04S, R09W, Sec. 31 (S)	**Acres:**	0.0

Location: ORANGE.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED IN THE GENERAL VICINITY OF ORANGE.

Ecological:

General: 1 MALE SPECIMEN COLLECTED BY D.G. CONSTANTINE ON 13 DEC 1989, LACM #94014.

Owner/Manager: UNKNOWN

Occurrence No.	76	**Map Index:**	66320	**EO Index:**	66407	**Element Last Seen:**	1949-08-08
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1949-07-28
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2006-09-26

Quad Summary: Tustin (3311767), Newport Beach (3311768), Orange (3311777), Anaheim (3311778)

County Summary: Orange

Lat/Long:	33.74572 / -117.86785	**Accuracy:**	1 mile
UTM:	Zone-11 N3734300 E419616	**Elevation (ft):**	
PLSS:	T05S, R09W, Sec. 18 (S)	**Acres:**	0.0

Location: SANTA ANA.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED ACCORDING TO LAT/LONG COORDINATES GIVEN IN MANIS, WITH UNCERTAINTY OF 10000 M.

Ecological:

General: 1 FEMALE SPECIMEN COLLECTED BY A. SCHWARTZ AND L.M. WHITELOCH ON 28 JUL 1949, KU #150209. SPECIMEN COLLECTED 8 AUG 1949 AND DEPOSITED AT SBMNH.

Owner/Manager: UNKNOWN

Occurrence No.	194	**Map Index:**	45059	**EO Index:**	69068	**Element Last Seen:**	XXXX-XX-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2007-03-22

Quad Summary: Black Star Canyon (3311776), Orange (3311777), Prado Dam (3311786), Yorba Linda (3311787)

County Summary: Orange

Lat/Long:	33.86989 / -117.75878	**Accuracy:**	1 mile
UTM:	Zone-11 N3747988 E429820	**Elevation (ft):**	
PLSS:	T03S, R08W, Sec. 31 (S)	**Acres:**	0.0

Location: YORBA REGIONAL PARK.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED IN GENERAL VICINITY OF YORBA REGIONAL PARK.

Ecological:

General: INDIVIDUAL(S) DETECTED ACOUSTICALLY.

Owner/Manager: ORA COUNTY, OTHERS

Occurrence No.	196	**Map Index:**	68661	**EO Index:**	69070	**Element Last Seen:**	XXXX-XX-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2007-03-22

Quad Summary: Yorba Linda (3311787), La Habra (3311788)

County Summary: Orange

Lat/Long:	33.90453 / -117.88661	**Accuracy:**	3/5 mile
UTM:	Zone-11 N3751925 E418029	**Elevation (ft):**	300
PLSS:	T03S, R10W, Sec. 13 (S)	**Acres:**	0.0

Location: CRAIG REGIONAL PARK.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED IN GENERAL VICINITY OF CRAIG REGIONAL PARK.

Ecological:

General: INDIVIDUAUL(S) DETECTED ACOUSTICALLY.

Owner/Manager: ORA COUNTY

Nyctinomops femorosaccus **Element Code:** AMACD04010

pocketed free-tailed bat

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G5
	State:	None		**State:**	S3
	Other:	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern			
Habitat:	**General:**	VARIETY OF ARID AREAS IN SOUTHERN CALIFORNIA; PINE-JUNIPER WOODLANDS, DESERT SCRUB, PALM OASIS, DESERT WASH, DESERT RIPARIAN, ETC.			
	Micro:	ROCKY AREAS WITH HIGH CLIFFS.			

Occurrence No.	17	**Map Index:** 68462	**EO Index:** 68718	**Element Last Seen:**	1989-10-31
Occ. Rank:	Unknown		**Presence:** Presumed Extant	**Site Last Seen:**	1989-10-31
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2011-08-18

Quad Summary: La Habra (3311788)

County Summary: Orange

Lat/Long:	33.91662 / -117.90001	**Accuracy:**	4/5 mile
UTM:	Zone-11 N3753275 E416803	**Elevation (ft):**	
PLSS:	T03S, R10W, Sec. 14 (S)	**Acres:**	0.0

Location: BREA.

Detailed Location:

Ecological:

General: 1 MALE SPECIMEN (LACM #94025) COLLECTED AT "BREA" BY DENNY. G. CONSTANTINE ON 31 OCT 1989.

Owner/Manager: UNKNOWN

Nyctinomops macrotis **Element Code:** AMACD04020

big free-tailed bat

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G5
	State:	None		**State:**	S3
	Other:	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern			
Habitat:	**General:**	LOW-LYING ARID AREAS IN SOUTHERN CALIFORNIA.			
	Micro:	NEED HIGH CLIFFS OR ROCKY OUTCROPS FOR ROOSTING SITES. FEEDS PRINCIPALLY ON LARGE MOTHS.			

Occurrence No.	6	**Map Index:** 47943	**EO Index:** 59565	**Element Last Seen:**	1985-10-24
Occ. Rank:	Unknown		**Presence:** Presumed Extant	**Site Last Seen:**	1985-10-24
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2005-01-21

Quad Summary: Los Angeles (3411812), Hollywood (3411813)

County Summary: Los Angeles

Lat/Long:	34.05223 / -118.24369	**Accuracy:**	1 mile
UTM:	Zone-11 N3768645 E385214	**Elevation (ft):**	300
PLSS:	T01S, R13W, Sec. 28 (S)	**Acres:**	0.0

Location: LOS ANGELES.

Detailed Location: EXACT LOCATION UNKNOWN. LOCATION ONLY GIVEN AS "LOS ANGELES [CENTRAL]." MAPPED ACCORDING TO LAT/LONG COORDINATES PROVIDED BY MANIS WITH AN UNCERTAINTY OF 3218 METERS (ABOUT 2 MILES).

Ecological:

General: ONE FEMALE SPECIMEN COLLECTED 24 OCT 1985 BY D. CONSTANTINE AT "LOS ANGELES [CENTRAL]." DEPOSITED AT MVZ #181984.

Owner/Manager: UNKNOWN

Microtus californicus stephensi **Element Code:** AMAFF11035

south coast marsh vole

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G5T2T3
	State:	None		**State:**	S2
	Other:	CDFW_SSC-Species of Special Concern			
Habitat:	**General:**	TIDAL MARSHES IN LOS ANGELES, ORANGE AND SOUTHERN VENTURA COUNTIES.			
	Micro:				

Occurrence No.	2	**Map Index:** 01722	**EO Index:** 58981	**Element Last Seen:**	1957-04-14
Occ. Rank:	Unknown		**Presence:** Presumed Extant	**Site Last Seen:**	1957-04-14
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2004-12-22

Quad Summary: Inglewood (3311883), Venice (3311884), Hollywood (3411813), Beverly Hills (3411814)

County Summary: Los Angeles

Lat/Long:	33.99055 / -118.38285	**Accuracy:**	1 mile
UTM:	Zone-11 N3761970 E372277	**Elevation (ft):**	200
PLSS:	T02S, R14W, Sec. 18 (S)	**Acres:**	0.0

Location: CULVER CITY.

Detailed Location: EXACT LOCATION NOT KNOWN, MAPPED IN THE GENERAL VICINTY OF CULVER CITY & BALDWIN HILLS.

Ecological:

General: 1 M & 8 U SPECIMENS COLLECTED 14, 15 & 26 JUL 1927 BY G. ASHCRAFT AT "CULVER CITY." LACM #21357-21363 & 21365 & FMNH #34420. ALSO FROM "BALDWIN HILLS" 3 F & 2 M COLLECTED 9 & 14 APR 1957 BY C. MCLAUGHLIN. LACM #10336-10341.

Owner/Manager: UNKNOWN

Occurrence No.	5	**Map Index:** 02270	**EO Index:** 58990	**Element Last Seen:**	1988-04-10
Occ. Rank:	Unknown		**Presence:** Presumed Extant	**Site Last Seen:**	1988-04-10
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2004-12-22

Quad Summary: Seal Beach (3311861), Los Alamitos (3311871)

County Summary: Orange

Lat/Long:	33.73881 / -118.07696	**Accuracy:**	1 mile
UTM:	Zone-11 N3733717 E400239	**Elevation (ft):**	5
PLSS:	T05S, R11W, Sec. 18 (S)	**Acres:**	0.0

Location: SEAL BEACH WILDLIFE REFUGE.

Detailed Location: SPECIMEN COLLECTED AT SEAL BEACH REFUGE. SPECIMENS ALSO COLLECTED FROM GENERAL AREA OF ANAHEIM BAY.

Ecological:

General: 1 FEMALE SPECIMEN COLLECTED 10 APR 1988 BY S. GEORGE AT "SEAL BEACH NATIONAL WILDLIFE REFUGE" LACM #89133. 37 SPECIMENS COLLECTED FROM "ANAHEIM BAY" 18-20 MAY 1932 BY J. VON BLOEKER, LACM #3335-3371.

Owner/Manager: UNKNOWN

Taxidea taxus **Element Code:** AMAJF04010

American badger

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G5
	State:	None		**State:**	S3
	Other:	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern			
Habitat:	**General:**	MOST ABUNDANT IN DRIER OPEN STAGES OF MOST SHRUB, FOREST, AND HERBACEOUS HABITATS, WITH FRIABLE SOILS.			
	Micro:	NEEDS SUFFICIENT FOOD, FRIABLE SOILS AND OPEN, UNCULTIVATED GROUND. PREYS ON BURROWING RODENTS. DIGS BURROWS.			

Occurrence No.	291	**Map Index:** 51258	**EO Index:** 57504	**Element Last Seen:**	XXXX-XX-XX
Occ. Rank:	Unknown		**Presence:** Presumed Extant	**Site Last Seen:**	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2005-01-05

Quad Summary: South Gate (3311882), Inglewood (3311883), Los Angeles (3411812), Hollywood (3411813), Pasadena (3411822), Burbank (3411823)

County Summary: Los Angeles

Lat/Long:	34.05366 / -118.24549	**Accuracy:**	5 miles
UTM:	Zone-11 N3768805 E385050	**Elevation (ft):**	280
PLSS:	T01S, R13W, Sec. 28 (S)	**Acres:**	0.0

Location: LOS ANGELES.

Detailed Location: NO OTHER LOCATION INFORMATION GIVEN.

Ecological:

General: 1 COLLECTED, LACM.

Owner/Manager: UNKNOWN

Occurrence No.	394	**Map Index:** 70309	**EO Index:** 71199	**Element Last Seen:**	2006-07-26
Occ. Rank:	Unknown		**Presence:** Presumed Extant	**Site Last Seen:**	2006-07-26
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2007-10-22

Quad Summary: La Habra (3311788)

County Summary: Los Angeles

Lat/Long:	33.97014 / -117.99174	**Accuracy:**	80 meters
UTM:	Zone-11 N3759288 E408380	**Elevation (ft):**	679
PLSS:	T02S, R11W, Sec. 25 (S)	**Acres:**	0.0

Location: COLIMA ROAD WHERE THE ROAD PASSES THROUGH THE PUENTE HILLS.

Detailed Location:

Ecological: COASTAL SAGE SCRUB, NON-NATIVE GRASSLANDS AND SUBURBAN HOUSING.

General: INDIVIDUAL FOUND DEAD ON ROAD.

Owner/Manager: UNKNOWN

Chelonia mydas

Element Code: ARAAA02010

green turtle

Listing Status:	**Federal:**	Threatened	**CNDDB Element Ranks:**	**Global:**	G3
	State:	None		**State:**	S1
	Other:	IUCN_EN-Endangered			
Habitat:	**General:**	MARINE.			
	Micro:	COMPLETELY HERBIVOROUS; NEEDS ADQUATE SUPPLY OF SEAGRASSES AND ALGAE.			

Occurrence No.	2	**Map Index:** 79625	**EO Index:** 80615	**Element Last Seen:**	2014-XX-XX
Occ. Rank:	Fair		**Presence:** Presumed Extant	**Site Last Seen:**	2014-XX-XX
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2016-11-29

Quad Summary: Seal Beach (3311861), Los Alamitos (3311871)

County Summary: Los Angeles, Orange

Lat/Long:	33.76742 / -118.09769	**Accuracy:**	non-specific area
UTM:	Zone-11 N3736910 E398353	**Elevation (ft):**	0
PLSS:	T05S, R12W, Sec. 1 (S)	**Acres:**	1480.0

Location: SAN GABRIEL RIVER FROM I-405 SOUTH TO PACIFIC OCEAN, INCLUDING ALAMITOS & ANAHEIM BAYS, & 7TH ST BASIN (SEAL BEACH NWR).

Detailed Location: SEEN FROM SAN GABRIEL RIVER BIKE TRAIL NEAR WARM WATER DISCHARGING CULVERTS OF LA DEPT OF WATER & POWER'S HAYNES GENERATING STATION ALONG ROCK RIPRAP LINED RIVER CHANNEL. TELEMETRY DETECTIONS FROM AND BETWEEN RIVER AND REFUGE, AND BAYS.

Ecological: LA TIMES DESCRIBED HABITAT AS "...ONE OF S. CALIFORNIA'S MOST ECOLOGICALLY DEGRADED RIVERS" (2008). TELEMETRY RESEARCH FROM 2012-2014 SHOWED THAT JUV GSTS SEEKED THERMAL REFUGIA IN THE RIVER & 7TH STREET BASIN AT SEAL BEACH NWR (+ FORAGING)

General: INCIDENTAL DETECTIONS FROM THE 1980S. SEVERAL INCIDENTAL DETECTIONS IN 2008, 2009, 2010, AND 2014, & NOW REGULAR VOLUNTEER TURTLE WATCH PROGRAM BY AQUARIUM OF THE PACIFIC. CREAR TRACKED MOVEMENTS OF 22 (96% JUV) BETWEEN 2012 - 2014.

Owner/Manager: UNKNOWN, USFWS

Actinemys pallida

Element Code: ARAAD02032

southwestern pond turtle

Listing Status:	**Federal:**	Proposed Threatened	**CNDDB Element Ranks:**	**Global:**	G2G3
	State:	None		**State:**	SNR
	Other:	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable, USFS_S-Sensitive			
Habitat:	**General:**	□			
	Micro:	□			

Occurrence No.	29	**Map Index:**	02267	**EO Index:**	655	**Element Last Seen:**	XXXX-XX-XX
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1987-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1996-03-04

Quad Summary: Los Alamitos (3311871)

County Summary: Los Angeles, Orange

Lat/Long:	33.80449 / -118.08342	**Accuracy:**	non-specific area
UTM:	Zone-11 N3741006 E399717	**Elevation (ft):**	20
PLSS:	T04S, R12W, Sec. 25 (S)	**Acres:**	117.1

Location: VICINITY OF THE CONFLUENCE OF THE SAN GABRIEL RIVER AND COYOTE CREEK, EAST OF CITY LIMITS OF LONG BEACH.

Detailed Location: ONE OBSERVATION FROM THE SAN GABRIEL RIVER AND ONE FROM LOWER COYOTE CREEK NEAR ALAMITOS.

Ecological:

General: MUSEUM COLLECTIONS: MVZ #6711-20 AND LACM #105309. DATES UNKNOWN. BRATTSTROM (1990) CONSIDERS THIS POPULATION EXTIRPATED.

Owner/Manager: UNKNOWN

Occurrence No.	37	**Map Index:**	02268	**EO Index:**	13598	**Element Last Seen:**	1954-05-31
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1987-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1995-10-31

Quad Summary: El Monte (3411811)

County Summary: Los Angeles

Lat/Long:	34.04500 / -118.07424	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3767665 E400846	**Elevation (ft):**	220
PLSS:	T01S, R11W, Sec. 31 (S)	**Acres:**	0.0

Location: ALHAMBRA WASH-RIO HONDO JUNCTION, WHITTIER NARROWS DAM COUNTY PARK RECREATIONAL AREA.

Detailed Location:

Ecological:

General: MUSEUM COLLECTION. LACM #23524, MAY 5, 1954. BRATTSTROM (1990) CONSIDERS THIS POP EXTIRPATED.

Owner/Manager: LAX COUNTY

Occurrence No.	121	**Map Index:**	02314	**EO Index:**	28187	**Element Last Seen:**	1987-XX-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1987-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1995-12-20

Quad Summary: El Monte (3411811)

County Summary: Los Angeles

Lat/Long:	34.03417 / -118.04507	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3766437 E403527	**Elevation (ft):**	
PLSS:	T01S, R11W, Sec. 33 (S)	**Acres:**	0.0

Location: WHITTIER NARROWS NATURE CENTER, SAN GABRIEL RIVER.

Detailed Location:

Ecological:

General: COLLECTED BY MICHAEL LONG IN A SMALL POND IN SEPTEMBER 1976. OBSERVED BY BRATTSTROM AND MESSER DURING APRIL-DECEMBER 1987 FIELD SURVEY; POPULATION SIZE SMALL.

Owner/Manager: UNKNOWN

Occurrence No.	122	**Map Index:**	02375	**EO Index:**	28183	**Element Last Seen:**	1977-10-XX
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1987-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1991-06-12

Quad Summary:	El Monte (3411811)
County Summary:	Los Angeles

Lat/Long:	34.05139 / -118.01006	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3768314 E406777	**Elevation (ft):**	
PLSS:	T01S, R11W, Sec. 26 (S)	**Acres:**	0.0

Location:	SAN GABRIEL RIVER NEAR MTN VIEW HIGH SCHOOL.
Detailed Location:	
Ecological:	
General:	NO OTHER INFO GIVEN. BRATTSTROM (1990) CONSIDERS THIS POP TO BE EXTIRPATED.
Owner/Manager:	UNKNOWN

Occurrence No.	123	**Map Index:**	02217	**EO Index:**	28182	**Element Last Seen:**	1965-03-XX
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1987-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1991-06-12

Quad Summary:	El Monte (3411811)
County Summary:	Los Angeles

Lat/Long:	34.03833 / -118.11424	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3766965 E397145	**Elevation (ft):**	380
PLSS:	T01S, R12W, Sec. 35, SW (S)	**Acres:**	0.0

Location:	MONTEREY PARK; GULLY DRAINAGE AREA S OF ORANGE AVE.
Detailed Location:	
Ecological:	
General:	COLLECTED BY MICHAEL C. LONG. BRATTSTROM (1990) CONSIDERS THIS POP EXTIRPATED.
Owner/Manager:	UNKNOWN

Occurrence No.	232	**Map Index:**	32726	**EO Index:**	1186	**Element Last Seen:**	198X-XX-XX
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	198X-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2010-12-29

Quad Summary:	Los Alamitos (3311871)
County Summary:	Los Angeles, Orange

Lat/Long:	33.87166 / -118.02438	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3748398 E405256	**Elevation (ft):**	48
PLSS:	T03S, R11W, Sec. 34, NW (S)	**Acres:**	0.0

Location:	COYOTE CREEK; 0.5 KM ESE OF ARTESIA BLVD X VALLEY VIEW AVENUE.
Detailed Location:	
Ecological:	2009 AERIAL PHOTOS SHOW THAT COYOTE CREEK IS A CONCRETE LINED TRAPEZOIDAL RIVER/DRAINAGE CANAL SURROUNDED BY DENSE URBAN DEVELOPMENT.
General:	TURTLE OBSERVED; CROSS REFERENCE WITH ROBERT FISHER.
Owner/Manager:	UNKNOWN

Occurrence No.	233	**Map Index:**	32727	**EO Index:**	987	**Element Last Seen:**	198X-XX-XX
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	198X-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2010-12-21

Quad Summary:	Los Alamitos (3311871)
County Summary:	Los Angeles, Orange

Lat/Long:	33.86125 / -118.03993	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3747258 E403806	**Elevation (ft):**	40
PLSS:	T03S, R11W, Sec. 33, SW (S)	**Acres:**	0.0

Location:	COYOTE CREEK WHERE HIGHWAY 91 CROSSES; VICINITY OF COYOTES.
Detailed Location:	
Ecological:	2009 AERIAL PHOTOS SHOW THAT COYOTE CREEK AND ITS TRIBUTARIES ARE ALL CONCRETE LINED TRAPEZOIDAL RIVERS SURROUNDED BY DENSE URBAN DEVELOPMENT.
General:	TURTLE OBSERVED; CROSS REFERENCE WITH ROBERT FISHER.
Owner/Manager:	UNKNOWN

Occurrence No.	235	**Map Index:**	32729	**EO Index:**	988	**Element Last Seen:**	1989-XX-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1989-XX-XX
Occ. Type:	Introduced Back into Native Hab./Range			**Trend:**	Unknown	**Record Last Updated:**	1996-01-18

Quad Summary:	La Habra (3311788)
County Summary:	Orange

Lat/Long:	33.88714 / -117.88340	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3749993 E418310	**Elevation (ft):**	260
PLSS:	T03S, R10W, Sec. 25, NW (S)	**Acres:**	0.0

Location:	FULLERTON, CALIFORNIA STATE UNIVERSITY, ARBORETUM PONDS, NORTHEAST CORNER OF CAMPUS.
Detailed Location:	
Ecological:	PONDS.
General:	POPULATION OF 2 INDIVIDUALS FROM CARBON CANYON SEWAGE PONDS, AND 13 MARKED INDIVIDUALS FROM U.S. MARINE HELICOPTER BASE, TUSTIN (LATTER PUT THERE IN 1989); ARBORETUM PONDS ARE A MITIGATION SITE.
Owner/Manager:	CSU-FULLERTON

Occurrence No.	287	**Map Index:** 40815	**EO Index:**	40815	**Element Last Seen:**	2013-07-24
Occ. Rank:	Fair		**Presence:**	Presumed Extant	**Site Last Seen:**	2013-07-24
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:**	2016-08-02

Quad Summary: La Habra (3311788)

County Summary: Orange

Lat/Long:	33.93890 / -117.87877	**Accuracy:**	specific area
UTM:	Zone-11 N3755729 E418788	**Elevation (ft):**	480
PLSS:	T03S, R10W, Sec. 01 (S)	**Acres:**	9.8

Location: JUNCTION OF BREA CREEK AND CREEK IN TONNER CANYON, JUST WEST OF HIGHWAY 57 AND SOUTH OF BREA BOULEVARD, BREA.

Detailed Location:

Ecological: 1996: CONCRETE POOL 2-3 FT DEEP W/2' HIGH WATERFALL, AT THE JUNCTION OF CROOKED CREEK & TONNER CANYON CREEK; BRANCHES FOR BASKING PRESENT; SURROUNDING VEGETATION INCL. SALIX SPP, POPULUS FREMONTII, & EUCALYPTUS.

General: 2 ADULTS AND 1 JUVENILE OBSERVED 22 APR 1996. 3 ADULTS AND 2 JUVENILES OBSERVED ON 18 MAY 2001. 3 ADULTS AND 1 JUVENILE OBS 23 JUL AND 2 CAUGHT/RELEASED ON 24 JUL 2013.

Owner/Manager: ORA COUNTY FLOOD CONTROL

Anniella stebbinsi

Element Code: ARACC01060

Southern California legless lizard

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G3
	State:	None		**State:**	S3
	Other:	CDFW_SSC-Species of Special Concern, USFS_S-Sensitive			
Habitat:	**General:**	GENERALLY SOUTH OF THE TRANSVERSE RANGE, EXTENDING TO NORTHWESTERN BAJA CALIFORNIA. OCCURS IN SANDY OR LOOSE LOAMY SOILS UNDER SPARSE VEGETATION. DISJUNCT POPULATIONS IN THE TEHACHAPI AND PIUTE MOUNTAINS IN KERN COUNTY.			
	Micro:	VARIETY OF HABITATS; GENERALLY IN MOIST, LOOSE SOIL. THEY PREFER SOILS WITH A HIGH MOISTURE CONTENT.			

Occurrence No.	62	**Map Index:** A9119	**EO Index:**	110953	**Element Last Seen:**	1969-01-29
Occ. Rank:	None		**Presence:**	Extirpated	**Site Last Seen:**	1969-01-29
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:**	2018-04-23

Quad Summary: Los Alamitos (3311871)

County Summary: Los Angeles

Lat/Long:	33.8258 / -118.07153	**Accuracy:**	80 meters
UTM:	Zone-11 N3743358 E400843	**Elevation (ft):**	31
PLSS:	T04S, R11W, Sec. 18, SE (S)	**Acres:**	5.0

Location: NE CORNER OF NORWALK BLVD AT 224TH STREET, HAWAIIAN GARDENS.

Detailed Location: SPECIFIC ADDRESS OF 22314 NORWALK BLVD. PARCEL IS NOW COMPLETELY PAVED OVER AND AN AUTOMOTIVE SHOP.

Ecological: AERIAL IMAGE FROM 1968 SHOWS A DIFFERENT BUILDING ON THE PARCEL, WHICH MAY HAVE BEEN A RESIDENCE WITH A YARD. AERIALS SINCE THE 1990S SHOWS DIFFERENT BUILDINGS AND PARCEL PAVED OVER.

General: ONE COLLECTED ON 29 JAN 1969.

Owner/Manager: PVT

Occurrence No.	64	**Map Index:**	A9121	**EO Index:**	110955	**Element Last Seen:**	1939-05-29
Occ. Rank:	Poor			**Presence:**	Presumed Extant	**Site Last Seen:**	1939-05-29
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2018-04-23

Quad Summary:	South Gate (3311882)
County Summary:	Los Angeles

Lat/Long:	33.95471 / -118.21127	**Accuracy:**	1 mile
UTM:	Zone-11 N3757795 E388079	**Elevation (ft):**	114
PLSS:	T02S, R13W, Sec. 35 (S)	**Acres:**	1987.0

Location:	CITY OF SOUTH GATE, LOS ANGELES COUNTY.
Detailed Location:	MAPPED NON-SPECIFICALLY CENTERED AT THE SOUTH GATE POST OFFICE.
Ecological:	AERIAL IMAGES FROM 1938 SHOW PARTIAL DEVELOPMENT WITH MANY VACANT LOTS BISECTED WITH WALKING PATHS; EXTENSIVE RESIDENTIAL DEVELOPMENT BY THE MID 1950S.
General:	ONE COLLECTED ON 29 MAY 1939.
Owner/Manager:	UNKNOWN

Occurrence No.	65	**Map Index:**	A9127	**EO Index:**	110960	**Element Last Seen:**	1949-06-01
Occ. Rank:	Poor			**Presence:**	Presumed Extant	**Site Last Seen:**	1949-06-01
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2018-05-24

Quad Summary:	El Monte (3411811), Los Angeles (3411812)
County Summary:	Los Angeles

Lat/Long:	34.09719 / -118.12254	**Accuracy:**	1 mile
UTM:	Zone-11 N3773501 E396452	**Elevation (ft):**	473
PLSS:	T01S, R12W, Sec. 10 (S)	**Acres:**	1987.0

Location:	VICINITY OF THE TOWNS OF ALHAMBRA AND SAN GABRIEL, LOS ANGELES COUNTY.
Detailed Location:	MAPPED NON-SPECIFICALLY TO THE GENERAL AREA OF THE CITIES OF ALHAMBRA AND SAN GABRIEL IN THE VICINITY OF THE HISTORIC ALHAMBRA WASH.
Ecological:	AERIAL IMAGES FROM 1928 AND 1938 INDICATE THAT THERE MAY HAVE BEEN SOME OPEN SPACE IN THE VICINITY OF ALHAMBRA WASH NEAR HUNTINGTON DRIVE AND THE WASH NEAR EAST MISSION ROAD NEAR PRESENT DAY ALHAMBRA MUNICIPAL GOLF COURSE.
General:	ONE COLLECTED ON 25 JULY 1932 FROM ALHAMBRA, AND ONE COLLECTED IN JUN 1949 FROM SAN GABRIEL.
Owner/Manager:	UNKNOWN

Occurrence No.	66	**Map Index:**	A9129	**EO Index:**	110963	**Element Last Seen:**	1908-11-11
Occ. Rank:	Poor			**Presence:**	Presumed Extant	**Site Last Seen:**	1908-11-11
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2018-04-23

Quad Summary: Los Angeles (3411812)

County Summary: Los Angeles

Lat/Long:	34.10515 / -118.1881	**Accuracy:**	non-specific area
UTM:	Zone-11 N3774452 E390414	**Elevation (ft):**	468
PLSS:	T01S, R13W, Sec. 12 (S)	**Acres:**	279.0

Location: ARROYO SECO NEAR LOS ANGELES.

Detailed Location: MAPPED GENERALLY TO 3 MI OF ARROYO SECO NORTH OF EAST LOS ANGELES FROM THE LOS ANGELES RIVER NE TO GARVANZA W/ RESPECT TO 1900 TOPO MAPS. L. MILLER ALSO COLLECTED CALIF RED-LEGGED FROGS FROM ARROYO SECO NEAR GARVANZA (AVE 66) IN THE 1920S.

Ecological:

General: ONE COLLECTED FROM ARROYO SECO, LOS ANGELES ON 11 NOV 1908. SPECIMEN EXAMINED BY T. PAPENFUSS IN 2014 AND IDENTIFIED AS NEWLY DESCRIBED SPECIES A. STEBBINSI.

Owner/Manager: CITY OF LOS ANGELES, UNK

Occurrence No.	73	**Map Index:**	66305	**EO Index:**	110975	**Element Last Seen:**	1939-04-XX
Occ. Rank:	Poor			**Presence:**	Presumed Extant	**Site Last Seen:**	1939-04-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2018-04-24

Quad Summary: Hollywood (3411813)

County Summary: Los Angeles

Lat/Long:	34.09826 / -118.32682	**Accuracy:**	1 mile
UTM:	Zone-11 N3773845 E377608	**Elevation (ft):**	350
PLSS:	T01S, R14W, Sec. 10 (S)	**Acres:**	0.0

Location: HOLLYWOOD, LOS ANGELES COUNTY.

Detailed Location: LOCATION WITHIN OR NEAR HOLLYWOOD UNKNOWN.

Ecological:

General: ONE COLLECTED IN APR 1939.

Owner/Manager: UNKNOWN

Occurrence No.	74	**Map Index:**	47943	**EO Index:**	110976	**Element Last Seen:**	1964-06-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1964-06-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2018-05-04

Quad Summary: Los Angeles (3411812), Hollywood (3411813)

County Summary: Los Angeles

Lat/Long:	34.05223 / -118.24369	**Accuracy:**	1 mile
UTM:	Zone-11 N3768645 E385214	**Elevation (ft):**	290
PLSS:	T01S, R13W, Sec. 28 (S)	**Acres:**	0.0

Location: LOS ANGELES.

Detailed Location: EXACT LOCATIONS OF COLLECTIONS WITHIN THE GREATER LOS ANGELES AREA NOT DETAILED. MAPPED GENERALLY TO THE CITY CENTER TO REPRESENT HISTORIC DISTRIBUTION.

Ecological:

General: COLLECTED FROM "LOS ANGELES" IN 1912, 1917, 1941, AND 1964.

Owner/Manager: UNKNOWN

Occurrence No.	75	**Map Index:**	A9140	**EO Index:**	110977	**Element Last Seen:**	1967-06-26
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1967-06-26
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2018-05-02

Quad Summary:	Hollywood (3411813), Burbank (3411823)
County Summary:	Los Angeles

Lat/Long:	34.12484 / -118.29719	**Accuracy:**	3/5 mile
UTM:	Zone-11 N3776757 E380379	**Elevation (ft):**	1007
PLSS:	T01N, R14W, Sec. 36, SE (S)	**Acres:**	776.0

Location:	VICINITY OF VERMONT CANYON ROAD IN GRIFFITH PARK, VICINITY OF MT HOLLYWOOD, EASTERN SANTA MONICA MOUNTAINS, LOS ANGELES.
Detailed Location:	1929 COLLECTION FROM GRIFFITH PARK AT VERMONT AVE. 1965 COLLECTION FROM UNKNOWN LOCATION IN GRIFFITH PARK. MAPPED NON-SPECIFICALLY TO GENERAL AREA OF VERMONT CANYON RD, GRIFFITH PARK. 1967 HOLLYWOOD HILL COLLECTION ATTRIBUTED HERE.
Ecological:	
General:	ONE COLLECTED ON 1 JUN 1929. ONE COLLECTED ON 24 JAN 1965. TWO COLLECTED IN 1967.
Owner/Manager:	CITY OF LOS ANGELES

Occurrence No.	187	**Map Index:**	B0725	**EO Index:**	112594	**Element Last Seen:**	1964-01-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1964-01-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2018-09-19

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.84287 / -117.85448	**Accuracy:**	non-specific area
UTM:	Zone-11 N3745063 E420944	**Elevation (ft):**	209
PLSS:	T04S, R09W, Sec. 7 (S)	**Acres:**	273.0

Location:	ALONG THE SANTA ANA RIVER BED, ABOUT 4.3 MILES SE OF FULLERTON.
Detailed Location:	MAPPED NON-SPECIFICALLY TO THE RIVER BED CLOSEST TO FULLERTON, BETWEEN LINCOLN AVE AND THE TOPEKA & SANTA FE RAIL BRIDGE (N ORANGE OLIVE RD).
Ecological:	1960 AERIALS SHOW THE RIVER LESS MANAGED WITH A MEANDERING PATH WITHIN ITS LEVEES, AND SURROUNDED BY ORCHARDS. 1968 AERIALS SHOW THE RIVER MANAGED WITH (SEDIMENT/RECHARGE) PONDS AND THE SURROUNDING AREA CONVERTED TO RESIDENTIAL HOUSING.
General:	ONE WAS COLLECTED IN JAN 1964.
Owner/Manager:	UNKNOWN

Occurrence No.	188	**Map Index:**	90422	**EO Index:**	112595	**Element Last Seen:**	1916-04-11
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1916-04-11
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2018-09-19

Quad Summary: Anaheim (3311778)

County Summary: Orange

Lat/Long:	33.83450 / -117.91170	**Accuracy:**	1 mile
UTM:	Zone-11 N3744180 E415641	**Elevation (ft):**	150
PLSS:	T04S, R10W, Sec. 10 (S)	**Acres:**	0.0

Location: ANAHEIM.

Detailed Location: MAY HAVE BEEN COLLECTED CLOSER TO THE SANTA ANA RIVER.

Ecological: THE CITY CENTER OF ANAHEIM WAS WELL DEVELOPED BY THE TIME OF THIS COLLECTION, AND WAS SURROUNDED BY ORCHARDS UP UNTIL THE LATE 1960S. THE SURROUNDING AREA HAS BEEN EXTENSIVELY DEVELOPED AND URBANIZED SINCE THE 1970S.

General: 1 COLLECTED ON 11 APR 1916.

Owner/Manager: UNKNOWN

Occurrence No.	406	**Map Index:**	B1732	**EO Index:**	113648	**Element Last Seen:**	2013-03-29
Occ. Rank:	Fair			**Presence:**	Presumed Extant	**Site Last Seen:**	2013-03-29
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2018-12-19

Quad Summary: Los Angeles (3411812)

County Summary: Los Angeles

Lat/Long:	34.10138 / -118.22749	**Accuracy:**	non-specific area
UTM:	Zone-11 N3774077 E386776	**Elevation (ft):**	726
PLSS:	T01S, R13W, Sec. 10, NE (S)	**Acres:**	29.0

Location: VICINITY OF RANDALL COURT, ABOUT 1.3 MILES EAST OF I-5 AT GLENDALE FWY (HWY 2), MOUNT WASHINGTON, LOS ANGELES.

Detailed Location:

Ecological:

General: 1 FOUND, PHOTOGRAPHED, AND RELOCATED TO ELYRIA CANYON PARK ON 12 JUN 2008. 1 FOUND AND PHOTOGRAPHED ON 29 MAR 2013.

Owner/Manager: UNKNOWN

Occurrence No.	407	**Map Index:**	B1737	**EO Index:**	113653	**Element Last Seen:**	2016-07-14
Occ. Rank:	Poor			**Presence:**	Presumed Extant	**Site Last Seen:**	2016-07-14
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2018-12-20

Quad Summary: Los Angeles (3411812)

County Summary: Los Angeles

Lat/Long:	34.10593 / -118.19607	**Accuracy:**	80 meters
UTM:	Zone-11 N3774547 E389680	**Elevation (ft):**	497
PLSS:	T01S, R13W, Sec. 1, S (S)	**Acres:**	5.0

Location: INTERSECTION OF LONGFELLOW ST AND SOUTH AVE 54, HIGHLAND PARK, LOS ANGELES.

Detailed Location:

Ecological: IT APPEARS THIS WAS FOUND IN A YARD OR ALONG THE SIDEWALK; PHOTOS APPEAR TO SHOW A SIDEWALK.

General: 1 FOUND AND PHOTOGRAPHED ON 14 JUL 2016.

Owner/Manager: UNKNOWN

Occurrence No.	423	**Map Index:**	B7658	**EO Index:**	120731	**Element Last Seen:**	2021-07-27
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2021-07-27
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-07-29

Quad Summary:	Los Angeles (3411812)
County Summary:	Los Angeles

Lat/Long:	34.10823 / -118.19187	**Accuracy:**	80 meters
UTM:	Zone-11 N3774797 E390070	**Elevation (ft):**	527
PLSS:	T01S, R13W, Sec. 1, SE (S)	**Acres:**	5.0

Location:	E SIDE OF S AVENUE 57 ABOUT 0.3 MILE N OF ARROYO SECO PKWY, HIGHLAND PARK NEIGHBORHOOD OF LOS ANGELES.
Detailed Location:	MAPPED TO PROVIDED COORDINATES.
Ecological:	IT APPEARS THIS INDIVIDUAL WAS FOUND IN A PRIVATE RESIDENTAL YARD.
General:	1 FOUND AND PHOTOGRAPHED ON 27 JUL 2021.
Owner/Manager:	PVT

Occurrence No.	426	**Map Index:**	B7661	**EO Index:**	120734	**Element Last Seen:**	2019-05-31
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2019-05-31
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-07-29

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.81125 / -117.7894	**Accuracy:**	80 meters
UTM:	Zone-11 N3741508 E426939	**Elevation (ft):**	395
PLSS:	T04S, R09W, Sec. 23, NE (S)	**Acres:**	5.0

Location:	EAST SIDE OF JAMESTOWN WAY NEAR SAN JUAN DR, ORANGE PARK ACRES, CITY OF ORANGE.
Detailed Location:	MAPPED TO PROVIDED COORDINATES. ALONG HORSE TRAIL THAT BORDERS THE RESIDENCES ON THE SOUTH SIDE OF JACK PINE LANE.
Ecological:	SMALL OPEN SPACE AREA SURROUNDED BY RESIDENTIAL DEVELOPMENT. TRANSITION FROM OAK WOODLAND TO SCRUB FEATURING SANDSTONE ROCK OUTCROP AND LOOSE SANDY SOIL.
General:	1 FOUND AND PHOTOGRAPHED ON 31 MAY 2019.
Owner/Manager:	PVT

Phrynosoma blainvillii

Element Code: ARACF12100

coast horned lizard

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G4
	State:	None		**State:**	S4
	Other:	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern			
Habitat:	**General:**	FREQUENTS A WIDE VARIETY OF HABITATS, MOST COMMON IN LOWLANDS ALONG SANDY WASHES WITH SCATTERED LOW BUSHES.			
	Micro:	OPEN AREAS FOR SUNNING, BUSHES FOR COVER, PATCHES OF LOOSE SOIL FOR BURIAL, AND ABUNDANT SUPPLY OF ANTS AND OTHER INSECTS.			

Occurrence No.	49	**Map Index:**	02272	**EO Index:**	28120	**Element Last Seen:**	1954-07-15
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1954-07-15
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2012-11-01

Quad Summary: El Monte (3411811)

County Summary: Los Angeles

Lat/Long:	34.06389 / -118.07257	**Accuracy:**	1 mile
UTM:	Zone-11 N3769758 E401022	**Elevation (ft):**	250
PLSS:	T01S, R11W, Sec. 19 (S)	**Acres:**	0.0

Location: 3 MI SE OF SAN GABRIEL.

Detailed Location: 1954 LOCALITY GIVEN AS "3 MI SE SAN GABRIEL." 1953 TOPO USED TO DETERMINE LOCATION OF SAN GABRIEL CITY CENTER CIRCA 1954.

Ecological: COMPARISON OF 1953 TOPO MAP W/CURRENT TOPO & AERIAL IMAGERY SHOWS THAT REMNANT OPEN SPACE EXTANT IN 1953 WAS REPLACED BY RESIDENTIAL DEVELOPMENT & A GOLF COURSE. HABITAT MAY STILL EXIST IN THE WHITTIER NARROWS REC AREA TO THE SOUTH (2012).

General: LACM #4284 COLLECTED BY F DURHAM ON 19 JUL 1954.

Owner/Manager: UNKNOWN

Occurrence No.	123	**Map Index:**	02256	**EO Index:**	28084	**Element Last Seen:**	1951-XX-XX
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1951-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2006-01-23

Quad Summary: Los Alamitos (3311871)

County Summary: Los Angeles, Orange

Lat/Long:	33.80408 / -118.08731	**Accuracy:**	2/5 mile
UTM:	Zone-11 N3740964 E399356	**Elevation (ft):**	20
PLSS:	T04S, R12W, Sec. 25, SE (S)	**Acres:**	0.0

Location: LONG BEACH, WILLOW STREET BRIDGE OVER SAN GABRIEL RIVER IN CITY PARK.

Detailed Location: MAPPED TO INCLUDE THE BRIDGE OVER THE SAN GABRIEL RIVER AND THE BRIDGE OVER ITS TRIBUTARY, COYOTE CREEK.

Ecological:

General: LACM SPECIMEN #101352. COLLECTED IN 1951 BY M. WOODS.

Owner/Manager: CITY OF LONG BEACH

Occurrence No.	125	**Map Index:**	01791	**EO Index:**	28080	**Element Last Seen:**	1953-XX-XX
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1953-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1995-10-31

Quad Summary: Hollywood (3411813)

County Summary: Los Angeles

Lat/Long:	34.06472 / -118.35729	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3770163 E374747	**Elevation (ft):**	180
PLSS:	T01S, R14W, Sec. 21, SW (S)	**Acres:**	0.0

Location: HANCOCK PARK, LA BREA.

Detailed Location:

Ecological:

General: FOSSIL RECORD OF PHRYNOSOMA RECORDED IN 1953, FROM LA BREA FOSSIL PITS.

Owner/Manager: LAX COUNTY

Occurrence No.	130	**Map Index:**	01965	**EO Index:**	28078	**Element Last Seen:**	1952-04-15
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1952-04-15
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2006-01-23

Quad Summary: South Gate (3311882)
County Summary: Los Angeles

Lat/Long:	33.90327 / -118.22273	**Accuracy:**	1 mile
UTM:	Zone-11 N3752103 E386952	**Elevation (ft):**	70
PLSS:	T03S, R13W, Sec. 15 (S)	**Acres:**	0.0

Location: CITY OF COMPTON.
Detailed Location: 1 RECORD FROM JUNCTION OF ROSECRANS AVE & SANTA FE AVE & 1 RECORD GIVEN ONLY AS "COMPTON".
Ecological:
General: LACM SPECIMENS #101356 COLLECTED 15 APR 1952 & #101357 COLLECTED 15 MAR 1952.
Owner/Manager: UNKNOWN

Occurrence No.	131	**Map Index:**	02327	**EO Index:**	28079	**Element Last Seen:**	1960-04-15
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1960-04-15
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1999-06-10

Quad Summary: El Monte (3411811)
County Summary: Los Angeles

Lat/Long:	34.00165 / -118.03837	**Accuracy:**	non-specific area
UTM:	Zone-11 N3762825 E404108	**Elevation (ft):**	500
PLSS:	T02S, R11W, Sec. 16 (S)	**Acres:**	242.2

Location: SYCAMORE CANYON, WHITTIER.
Detailed Location:
Ecological:
General: CPSU SPECIMEN #3420-22.
Owner/Manager: UNKNOWN

Occurrence No.	151	**Map Index:**	02213	**EO Index:**	28061	**Element Last Seen:**	1957-04-14
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1957-04-14
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2006-01-23

Quad Summary: Los Alamitos (3311871)
County Summary: Los Angeles

Lat/Long:	33.83109 / -118.12146	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3743993 E396228	**Elevation (ft):**	40
PLSS:	T04S, R12W, Sec. 15 (S)	**Acres:**	0.0

Location: 3 MILES NORTH OF LONG BEACH STATE UNIVERSITY AND 100 FT EAST OF BELLFLOWER BLVD, LONG BEACH.
Detailed Location: MAPPED AT HARTWELL PARK.
Ecological:
General: LACM SPECIMEN #101354 COLLECTED 14 APR 1957 BY D. MANGUM.
Owner/Manager: UNKNOWN

Occurrence No.	152	**Map Index:**	02079	**EO Index:**	28063	**Element Last Seen:**	XXXX-XX-XX
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2006-01-23

Quad Summary: South Gate (3311882)
County Summary: Los Angeles

Lat/Long:	33.87862 / -118.20758	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3749353 E388321	**Elevation (ft):**	60
PLSS:	T03S, R13W, Sec. 26 (S)	**Acres:**	0.0

Location: 1 MILE WEST LOS ANGELES RIVER, 200 WEST BLOCK OF EAST 68TH ST, LONG BEACH.
Detailed Location:
Ecological:
General: LACM SPECIMEN #101361; DATE OF COLLECTION NOT GIVEN.
Owner/Manager: UNKNOWN

Occurrence No.	235	**Map Index:**	02287	**EO Index:**	27996	**Element Last Seen:**	XXXX-XX-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1999-06-10

Quad Summary: El Monte (3411811)
County Summary: Los Angeles

Lat/Long:	34.01178 / -118.06480	**Accuracy:**	non-specific area
UTM:	Zone-11 N3763973 E401679	**Elevation (ft):**	200
PLSS:	T02S, R11W, Sec. 07 (S)	**Acres:**	205.9

Location: ALONG THE SAN GABRIEL RIVER, SOUTH OF WHITTIER NARROWS DAM, PICO RIVERA.
Detailed Location:
Ecological:
General: SPECIMEN WAS HOUSED AT WHITTIER NARROWS NATURE CENTER. DATE OF COLLECTION UNKNOWN.
Owner/Manager: PVT

Occurrence No.	236	**Map Index:**	02164	**EO Index:**	27995	**Element Last Seen:**	1974-08-XX
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1974-08-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1995-11-30

Quad Summary: Los Angeles (3411812)
County Summary: Los Angeles

Lat/Long:	34.05278 / -118.14868	**Accuracy:**	1 mile
UTM:	Zone-11 N3768603 E393984	**Elevation (ft):**	500
PLSS:	T01S, R12W, Sec. 28, SW (S)	**Acres:**	0.0

Location: MONTEREY PARK (MONTEREY HILLS), 1 MI SE OF CSULA.
Detailed Location:
Ecological:
General: SPECIMEN HOUSED AT WHITTIER NARROWS NATURE CENTER. COLLECTOR SPECIFIES 1485 AVION DR.
Owner/Manager: UNKNOWN

Occurrence No.	253	**Map Index:**	02248	**EO Index:**	27988	**Element Last Seen:**	1961-05-11
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1961-05-11
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2012-02-23

Quad Summary: Los Alamitos (3311871)

County Summary: Los Angeles, Orange

Lat/Long:	33.77585 / -118.09178	**Accuracy:**	3/5 mile
UTM:	Zone-11 N3737838 E398909	**Elevation (ft):**	10
PLSS:	T05S, R12W, Sec. 01 (S)	**Acres:**	0.0

Location: E SIDE OF SAN GABRIEL RIVER, ABOUT 1 MI E OF CALIFORNIA STATE UNIVERSITY, LONG BEACH.

Detailed Location: MAPPED TO BEST ESTIMATE OF "SAN GABRIEL RIV BY 7TH ST, ORANGE COUNTY" AND "SAN GABRIEL RIV, 1 MI E LBSC CAMPUS."

Ecological:

General: 1 COLLECTED BY U. AOKI ON 21 APR 1951 (LACM #101374). 1 IN SAND COLLECTED BY M.G. O'CONNELL ON 11 MAY 1961 (LACM #101375).

Owner/Manager: UNKNOWN

Occurrence No.	278	**Map Index:**	02237	**EO Index:**	27967	**Element Last Seen:**	1952-05-28
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1952-05-28
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2012-02-23

Quad Summary: Seal Beach (3311861), Los Alamitos (3311871)

County Summary: Los Angeles, Orange

Lat/Long:	33.74423 / -118.10420	**Accuracy:**	3/5 mile
UTM:	Zone-11 N3734344 E397722	**Elevation (ft):**	10
PLSS:	T05S, R12W, Sec. 14 (S)	**Acres:**	0.0

Location: SEAL BEACH AND WEST SEAL BEACH.

Detailed Location: MAPPED TO PROVIDED LOCALITIES OF "SEAL BEACH" AND "W SEAL BEACH."

Ecological:

General: 1 COLLECTED BY J.D. MILNE ON 23 FEB 1952 (LACM #101371). 1 COLLECTED BY R. SHILLING ON 23 FEB 1952 (LACM #101372). 1 COLLECTED BY A. DAVENPORT ON 28 MAY 1952 (LACM #101373).

Owner/Manager: UNKNOWN

Occurrence No.	332	**Map Index:**	20575	**EO Index:**	9764	**Element Last Seen:**	XXXX-XX-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1992-02-20

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.83755 / -117.84743	**Accuracy:**	1 mile
UTM:	Zone-11 N3744467 E421592	**Elevation (ft):**	225
PLSS:	T04S, R09W (S)	**Acres:**	0.0

Location: VICINITY OF OLIVE, ORANGE COUNTY.

Detailed Location:

Ecological:

General: HISTORICAL (PRE-1985) MUSEUM RECORD FROM AMNH.

Owner/Manager: UNKNOWN

Occurrence No.	333	**Map Index:**	20576	**EO Index:**	9761	**Element Last Seen:**	1922-XX-XX
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1922-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2010-12-29

Quad Summary:	Tustin (3311767), Newport Beach (3311768), Orange (3311777), Anaheim (3311778)
County Summary:	Orange

Lat/Long:	33.75954 / -117.86522	**Accuracy:**	1 mile
UTM:	Zone-11 N3735831 E419873	**Elevation (ft):**	135
PLSS:	T05S, R09W (S)	**Acres:**	0.0

Location:	VICINITY OF SANTA ANA, ORANGE COUNTY.
Detailed Location:	
Ecological:	2009 AERIAL IMAGERY SHOWS THAT THIS AREA IS COMPLETELY DEVELOPED.
General:	HISTORICAL SITE; FOUND IN 1922 BY VANDENBURG.
Owner/Manager:	UNKNOWN

Occurrence No.	398	**Map Index:**	25612	**EO Index:**	5748	**Element Last Seen:**	1971-XX-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1971-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1994-03-16

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.82752 / -117.75741	**Accuracy:**	2/5 mile
UTM:	Zone-11 N3743289 E429913	**Elevation (ft):**	1000
PLSS:	T04S, R08W (S)	**Acres:**	0.0

Location:	ROBBERS PEAK, IN THE PERALTA HILLS, SE OF YORBA LINDA.
Detailed Location:	LIZARDS USUALLY FOUND ON THE SANDY, DIRT ROADS.
Ecological:	HABITAT CONSISTS OF COASTAL SAGE SCRUB, DOMINATED BY ERIOGONUM FASCICULATUM.
General:	AS MANY AS 15 LIZARDS OBSERVED, DURING 1965-71.
Owner/Manager:	UNKNOWN

Aspidoscelis hyperythra

Element Code: ARACJ02060

orange-throated whiptail

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G5
	State:	None		**State:**	S2S3
	Other:	CDFW_WL-Watch List, IUCN_LC-Least Concern, USFS_S-Sensitive			
Habitat:	**General:**	INHABITS LOW-ELEVATION COASTAL SCRUB, CHAPARRAL, AND VALLEY-FOOTHILL HARDWOOD HABITATS.			
	Micro:	PREFERS WASHES AND OTHER SANDY AREAS WITH PATCHES OF BRUSH AND ROCKS. PERENNIAL PLANTS NECESSARY FOR ITS MAJOR FOOD: TERMITES.			

Occurrence No.	42	**Map Index:** 02730	**EO Index:** 12280	**Element Last Seen:**	1962-05-19
Occ. Rank:	Unknown		**Presence:** Presumed Extant	**Site Last Seen:**	1962-05-19
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2012-03-05

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.80251 / -117.78061	**Accuracy:**	1 mile
UTM:	Zone-11 N3740532 E427745	**Elevation (ft):**	490
PLSS:	T04S, R09W, Sec. 25 (S)	**Acres:**	0.0

Location: ORANGE PARK ACRES.

Detailed Location: LOCALITY STATED AS "4 MI N SANTIAGO DAM IN ORANGE PARK ACRES IN ORANGE." MAPPED TO ORANGE PARK ACRES, WHICH IS ABOUT 3.5 MI WNW SANTIAGO DAM.

Ecological: MUCH OF THE AREA APPEARS DEVELOPED SINCE 1994 ACCORDING TO AIR PHOTOS. MORE RESEARCH IS NEEDED TO DETERMINE IF THE SPECIES EXISTS IN SUITABLE HABITAT NEARBY.

General: LACM SPECIMEN #99849 COLLECTED BY R.C. ANDERSON ON 19 MAY 1962. ACCORDING TO BRATTSTROM, STILL EXTANT AT OR NEAR THIS SITE IN 1990.

Owner/Manager: UNKNOWN

Occurrence No.	327	**Map Index:** 52956	**EO Index:** 52956	**Element Last Seen:**	2000-05-XX
Occ. Rank:	Unknown		**Presence:** Presumed Extant	**Site Last Seen:**	2000-05-XX
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2003-10-20

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.86342 / -117.75747	**Accuracy:**	non-specific area
UTM:	Zone-11 N3747271 E429936	**Elevation (ft):**	500
PLSS:	T03S, R08W, Sec. 31 (S)	**Acres:**	82.6

Location: SOUTH & EAST OF SANTA ANA CANYON ROAD, 2 MILES NE OF INTERSECTION OF RIVERSIDE FWY & IMPERIAL HWY, ESE OF YORBA LINDA.

Detailed Location:

Ecological: OSPREY, WHITE-TAILED KITE, SHARP-SHINNED HAWK, COOPER'S HAWK ALSO OBSERVED IN VICINITY.

General: UNKNOWN NUMBER OBSERVED DURING CALIFORNIA GNATCATCHER SURVEYS CONDUCTED BETWEEN 13 APRIL AND 18 MAY 2000.

Owner/Manager: UNKNOWN

Aspidoscelis tigris stejnegeri

Element Code: ARACJ02143

coastal whiptail

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G5T5
	State:	None		**State:**	S3
	Other:	CDFW_SSC-Species of Special Concern			
Habitat:	**General:**				

FOUND IN DESERTS AND SEMI-ARID AREAS WITH SPARSE VEGETATION AND OPEN AREAS. ALSO FOUND IN WOODLAND AND RIPARIAN AREAS.

Micro: GROUND MAY BE FIRM SOIL, SANDY, OR ROCKY.

Occurrence No.	106	**Map Index:**	80132	**EO Index:**	81119	**Element Last Seen:**	2000-11-17
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2000-11-17
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2010-09-27

Quad Summary: El Monte (3411811)

County Summary: Los Angeles

Lat/Long:	34.00262 / -118.04351	**Accuracy:**	80 meters
UTM:	Zone-11 N3762937 E403634	**Elevation (ft):**	480
PLSS:	T02S, R11W, Sec. 16, NW (S)	**Acres:**	0.0

Location: ALONG SYCAMORE CANYON RD 0.8 MI E OF WORKMAN MILL RD. SYCAMORE CANYON OPEN SPACE NATIVE HABITAT PRESERVATION AUTHORITY.

Detailed Location: W SIDE OF SYCAMORE CANYON, JUST S OF RESIDENTIAL AREA. MAPPED TO COORDINATES PROVIDED.

Ecological: PROTECTED BY SYCAMORE CANYON OPEN SPACE NATIVE HABITAT PRESERVATION AUTHORITY, WHICH BELONGS TO PUENTE HILLS LANDFILL NHPA. RESIDENTIAL AREAS TO THE NORTH, SOUTH & WEST.

General: 3 INDIVIDUAL WERE OBSERVED BY USGS DURING FIELD WORK FROM 21 APR 1998 TO 17 NOV 2000. SPECIFIC OBSERVATION DATES ARE UNKNOWN.

Owner/Manager: PUENTE HILLS LANDFILL NHPA

Occurrence No.	107	**Map Index:**	80134	**EO Index:**	81120	**Element Last Seen:**	2000-11-17
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2000-11-17
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2010-09-27

Quad Summary: El Monte (3411811)

County Summary: Los Angeles

Lat/Long:	34.00227 / -118.03725	**Accuracy:**	80 meters
UTM:	Zone-11 N3762893 E404212	**Elevation (ft):**	595
PLSS:	T02S, R11W, Sec. 16, N (S)	**Acres:**	0.0

Location: ALONG SYCAMORE CANYON RD, 1 MI E OF WORKMAN MILL RD & 1.2 MI SSW OF RIO HONDO JR COLLEGE.

Detailed Location: CENTER OF SYCAMORE CANYON, ON SE EDGE OF RESIDENCE AREA. MAPPED TO COORDINATES PROVIDED.

Ecological: PROTECTED BY SYCAMORE CANYON OPEN SPACE NATIVE HABITAT PRESERVATION AUTHORITY (PUENTE HILLS LANDFILL NHPA).

General: 1 INDIVIDUAL WAS OBSERVED BY USGS DURING FIELD WORK FROM 21 APR 1998 TO 17 NOV 2000. SPECIFIC OBSERVATION DATE IS UNKNOWN.

Owner/Manager: PUENTE HILLS LANDFILL NHPA

Occurrence No.	108	**Map Index:**	80139	**EO Index:**	81123	**Element Last Seen:**	2000-11-17
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2000-11-17
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2010-09-28

Quad Summary:	Whittier (3311881)
County Summary:	Los Angeles

Lat/Long:	33.99639 / -118.03522	**Accuracy:**	specific area
UTM:	Zone-11 N3762239 E404393	**Elevation (ft):**	845
PLSS:	T02S, R11W, Sec. 16, E (S)	**Acres:**	15.0

Location:	S OF SYCAMORE CYN ABOUT 0.5 MI N OF ORANGE DR AT FRIENDS AVE, JUST S OF RIDGE FIRE RD (AKA, SKYLINE DR). HELLMAN PARK.
Detailed Location:	MAPPED TO COORDINATES PROVIDED.
Ecological:	HELLMAN PARK, CITY OF WHITTER.
General:	2 INDIVIDUAL WERE OBSERVED AT -118.0351, 33.9964, 2 INDIVIDUALS WERE OBSERVED AT -118.0339, 33.9985, 4 INDIVIDUALS WERE OBSERVED AT -118.0310, 33.9980 DURING FIELD WORK FROM 21 APR 98 TO 17 NOV 00. SPECIFIC OBSERVATION DATES ARE UNKNOWN.
Owner/Manager:	CITY OF WHITTIER

Occurrence No.	144	**Map Index:**	B3145	**EO Index:**	115064	**Element Last Seen:**	2017-05-04
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2017-05-04
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2019-05-30

Quad Summary:	Baldwin Park (3411718), El Monte (3411811)
County Summary:	Los Angeles

Lat/Long:	34.00906 / -118.00033	**Accuracy:**	80 meters
UTM:	Zone-11 N3763612 E407630	**Elevation (ft):**	628
PLSS:	T02S, R11W, Sec. 11, SE (S)	**Acres:**	5.0

Location:	HACIENDA HILLS OPEN SPACE, ABOUT 0.4 MI SW OF 7TH AVE AT ORANGE GROVE AVE & 2.3 MI SE OF I-605 AT CA-60, IN HILLGROVE.
Detailed Location:	MAPPED TO PROVIDED COORDINATES. PARK MANAGED BY SANITATION DISTRICTS OF LOS ANGELES COUNTY.
Ecological:	COASTAL SAGE SCRUB ON HABITAT PRESERVE.
General:	1 ADULT OBSERVED ON 4 MAY 2017 DURING GNATCATCHER SURVEY.
Owner/Manager:	LAX COUNTY

Occurrence No.	145	**Map Index:**	B3147	**EO Index:**	115066	**Element Last Seen:**	2017-05-23
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2017-05-23
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2019-05-30

Quad Summary:	Whittier (3311881)
County Summary:	Los Angeles

Lat/Long:	33.97204 / -118.00926	**Accuracy:**	80 meters
UTM:	Zone-11 N3759515 E406765	**Elevation (ft):**	591
PLSS:	T02S, R11W, Sec. 26, NW (S)	**Acres:**	5.0

Location:	ARROYO PESCADERO; ABOUT 0.4 MI NE OF LINDA VISTA DR AT BACON RD & 0.8 MI NW OF COLIMA RD AT MAR VISTA ST, WHITTIER.
Detailed Location:	MAPPED TO PROVIDED COORDINATES. PRESERVE MANAGED BY PUENTE HILLS HABITAT PRESERVATION AUTHORITY.
Ecological:	COASTAL SAGE SCRUB ON PREVIOUSLY GRADED TERRACE. ON PRESERVE ADJACENT TO RESIDENTIAL DEVELOPMENT.
General:	1 ADULT OBSERVED FORAGING ON 23 MAY 2017.
Owner/Manager:	PUENTE HILLS LANDFILL NHPA

Occurrence No.	146	**Map Index:**	B3151	**EO Index:**	115070	**Element Last Seen:**	2017-07-06
Occ. Rank:	Excellent			**Presence:**	Presumed Extant	**Site Last Seen:**	2017-07-06
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2019-05-30

Quad Summary:	Whittier (3311881)
County Summary:	Los Angeles

Lat/Long:	33.99898 / -118.00729	**Accuracy:**	80 meters
UTM:	Zone-11 N3762500 E406976	**Elevation (ft):**	1053
PLSS:	T02S, R11W, Sec. 14, NW (S)	**Acres:**	5.0

Location:	FIRE ROAD, ABOUT 0.4 MI NW OF TURNBULL CYN RD AT SKYLINE DR & 1.1 MI SW OF 7TH AVE AT ORANGE GROVE AVE, TURNBULL CYN OS.
Detailed Location:	MAPPED TO PROVIDED COORDINATES. PRESERVE MANAGED BY PUENTE HILLS HABITAT PRESERVATION AUTHORITY.
Ecological:	TRAIL THROUGH COASTAL SAGE SCRUB ON HABITAT PRESERVE.
General:	3 ADULTS OBSERVED FORAGING ON 6 JUL 2017 DURING GNATCATCHER SURVEYS.
Owner/Manager:	PUENTE HILLS LANDFILL NHPA

Occurrence No.	147	**Map Index:**	B3154	**EO Index:**	115073	**Element Last Seen:**	2017-07-11
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2017-07-11
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2019-05-30

Quad Summary: La Habra (3311788), Whittier (3311881)

County Summary: Los Angeles

Lat/Long:	33.96674 / -118.00045	**Accuracy:**	non-specific area
UTM:	Zone-11 N3758919 E407573	**Elevation (ft):**	609
PLSS:	T02S, R11W, Sec. 26, SE (S)	**Acres:**	13.0

Location: VICINITY OF COLIMA RD, FROM ABOUT 0.3 MILES N TO 0.5 MI NE OF THE MAR VISTA ST INTERSECTION, PUENTE HILLS.

Detailed Location: MAPPED TO PROVIDED COORDINATES. DETECTION WEST OF COLIMA ST ON ARROYO PESCADERO PRESERVE (PUENTE HILLS HABITAT PRESERVATION AUTHORITY), DETECTION EAST OF COLIMA ON ARROYO SAN MIGUEL OPEN SPACE (CITY OF WHITTIER).

Ecological: DIRT ROADS IN COASTAL SAGE SCRUB ON GENTLE TOPOGRAPHY WITHIN HABITAT PRESERVE.

General: 2 ADULTS DETECTED ON 2 JUN & 1 ON 11 JUL 2017; DETECTIONS MADE DURING GNATCATCHER SURVEYS.

Owner/Manager: PUENTE HILLS LANDFILL NHPA

Arizona elegans occidentalis

Element Code: ARADB01017

California glossy snake

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G5T2
	State:	None		**State:**	S2
	Other:	CDFW_SSC-Species of Special Concern			
Habitat:	**General:**	PATCHILY DISTRIBUTED FROM THE EASTERN PORTION OF SAN FRANCISCO BAY, SOUTHERN SAN JOAQUIN VALLEY, AND THE COAST, TRANSVERSE, AND PENINSULAR RANGES, SOUTH TO BAJA CALIFORNIA.			
	Micro:	GENERALIST REPORTED FROM A RANGE OF SCRUB AND GRASSLAND HABITATS, OFTEN WITH LOOSE OR SANDY SOILS.			

Occurrence No.	2	**Map Index:**	66298	**EO Index:**	104842	**Element Last Seen:**	1889-04-12
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1889-04-12
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2017-03-02

Quad Summary: El Monte (3411811), Los Angeles (3411812)

County Summary: Los Angeles

Lat/Long:	34.09528 / -118.12702	**Accuracy:**	1 mile
UTM:	Zone-11 N3773294 E396035	**Elevation (ft):**	490
PLSS:	T01S, R12W, Sec. 10 (S)	**Acres:**	0.0

Location: ALHAMBRA.

Detailed Location: LOCALITY GIVEN AS "ALHAMBRA." MAPPED TO VICINTIY OF ALHAMBRA, EXACT LOCATION UNKNOWN.

Ecological:

General: 1 FEMALE (A PARATYPE) WAS COLLECTED IN THIS VICINITY ON 12 APR 1889.

Owner/Manager: UNKNOWN

Thamnophis sirtalis pop. 1

Element Code: ARADB3613F

south coast gartersnake

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G5T1T2
	State:	None		**State:**	S1S2
	Other:	CDFW_SSC-Species of Special Concern			
Habitat:	**General:**	SOUTHERN CALIFORNIA COASTAL PLAIN FROM VENTURA COUNTY TO SAN DIEGO COUNTY, AND FROM SEA LEVEL TO ABOUT 850 M.			

Micro: MARSH AND UPLAND HABITATS NEAR PERMANENT WATER WITH GOOD STRIPS OF RIPARIAN VEGETATION.

Occurrence No.	17	**Map Index:**	C0845	**EO Index:**	132079	**Element Last Seen:**	1907-XX-XX
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1907-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-08-09

Quad Summary: El Monte (3411811)

County Summary: Los Angeles

Lat/Long:	34.12048 / -118.12245	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3776084 E396489	**Elevation (ft):**	555
PLSS:	T01S, R12W, Sec. 3, NE (S)	**Acres:**	70.0

Location: KEWAN LAKE (NOW LACY PARK), ABOUT 2.25 MILES SSE OF CENTRAL PASADENA.

Detailed Location: MAPPED NON-SPECIFICALLY TO LOCATION OF LAKE ON TOPOS UP TILL THE 1920S AND TO PRESENT DAY LACY PARK. LABELED AS KEWEN LAKE ON EARLIEST TOPOS, THEN WILSON LAKE IN 1920S, AND LACY PARK BY 1950S. LAKE APPEARS FILLED BY 1927, 1938 AERIALS.

Ecological:

General: NOTED AS PRESENT BY J. GRINNELL & H. GRINNELL BEFORE/BY 1907.

Owner/Manager: UNKNOWN

Occurrence No.	18	**Map Index:**	C0848	**EO Index:**	132081	**Element Last Seen:**	1907-XX-XX
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1907-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-08-09

Quad Summary: Hollywood (3411813)

County Summary: Los Angeles

Lat/Long:	34.05881 / -118.27748	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3769413 E382105	**Elevation (ft):**	257
PLSS:	T01S, R13W, Sec. 30, NE (S)	**Acres:**	70.0

Location: WEST LAKE (NOW MACARTHUR PARK), AT 6TH ST AND ALVARADO, LOS ANGELES.

Detailed Location: MAPPED NON-SPECIFICALLY TO WEST LAKE (= MACARTHUR PARK). THE PARK OPENED IN 1890. EVEN BY 1907 THIS WOULD HAVE BEEN CONSIDERED AN URBAN PARK WITH RENTAL BOATS AND CONCERTS IN THE PARK.

Ecological: HISTORIC TOPOS BEFORE 1920 SUGGEST WEST LAKE WAS ON THE WEST BOUNDARY OF THE LOS ANGELES METROPOLITAN AREA, POTENTIALLY STILL CONNECTED TO WETLAND AND CIENEGA HABITAT WEST OF LOS ANGELES. AREA EXTENSIVELY DEVELEOPED IN 1928 AERIALS.

General: NOTED AS PRESENT BY J. GRINNELL & H. GRINNELL BEFORE/BY 1907.

Owner/Manager: UNKNOWN

Occurrence No.	23	**Map Index:**	C0869	**EO Index:**	132100	**Element Last Seen:**	1937-09-06
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1937-09-06
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-08-21

Quad Summary: Inglewood (3311883), Venice (3311884), Hollywood (3411813), Beverly Hills (3411814)

County Summary: Los Angeles

Lat/Long:	34.04091 / -118.38063	**Accuracy:**	specific area
UTM:	Zone-11 N3767552 E372558	**Elevation (ft):**	99
PLSS:	T01S, R14W, Sec. 31 (S)	**Acres:**	32170.0

Location: HISTORIC WETLANDS BETWEEN CITY OF LOS ANGELES AND SANTA MONICA.

Detailed Location: MAPPED NON-SPECIFICALLY AS A 4-MILE RADIUS POLYGON TO REPRESENT HISTORIC RECORDS FROM THE EARLY 1900S WHERE THIS TAXON WAS GENERALLY CONSIDERED COMMON IN THE WETLANDS NEAR LOS ANGELES AND BETWEEN LOS ANGELES AND THE OCEAN.

Ecological: CONSIDERED COMMON IN COASTAL LA CO SLOUGHS IN THE 1920S. HISTORIC WETLAND HABITAT EXISTED BETWEEN PALMS (CULVER CITY) & CIENEGA, & NEAR THE FOOT OF THE SANTA MONICA MTS AT SHERMAN (WEST HOLLYWOOD), HYDROLOGICALLY CONNECTED TO BALLONA MARSH.

General: DOCUMENTED WITHIN 1/2 DAY'S WALK OF LA IN 1913-1915. 1 COLLECTED 13 MAY 1915. 1 CAPTURED BETWEEN LA & THE OCEAN, LATE DEC 1915. 1 COLLECTED IN 1916. 1 CAPTURED FROM SLOUGH NEAR LA BIRTHED 13 YOUNG, 2 JUL 1928. 1 COLLECTED 6 SEP 1937.

Owner/Manager: UNKNOWN

Occurrence No.	45	**Map Index:**	C0972	**EO Index:**	132201	**Element Last Seen:**	1911-04-21
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1911-04-21
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-08-20

Quad Summary: El Monte (3411811), Mt. Wilson (3411821)

County Summary: Los Angeles

Lat/Long:	34.13615 / -118.07325	**Accuracy:**	1 mile
UTM:	Zone-11 N3777772 E401044	**Elevation (ft):**	598
PLSS:	T01N, R11W, Sec. 31 (S)	**Acres:**	1987.0

Location: VICINITY OF EATON WASH AND CHAPMAN WOODS, ABOUT 1.6 MILES W OF SANTA ANITA RACE TRACK, PASADENA.

Detailed Location: VICINITY OF ROSEMEAD BLVD BETWEEN I-210 AND HUNTINGON DR. MAPPED NON-SPECIFICALLY TO TWO CHAPMAN RAIL STOPS ON 1900 TOPO MAP NEAR HISTORIC ALFRED BECK CHAPMAN'S RANCH, NOW KNOWN AS CHAPMAN WOODS NEIGHBORHOOD.

Ecological: HABITAT LIKELY EXISTED ALONG EATON WASH OR ONE OF THE HISTORIC PONDS/LAKES IN THIS AREA.

General: 2 (MALE AND FEMALE) COLLECTED ON 21 APR 1911 AND DEPOSITED AT CAS.

Owner/Manager: PVT

Southern California Arroyo Chub/Santa Ana Sucker Stream

Element Code: CARE2330CA

Southern California Arroyo Chub/Santa Ana Sucker Stream

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	GNR
	State:	None		**State:**	SNR
	Other:				
Habitat:	**General:**				
	Micro:				

Occurrence No.	4	**Map Index:** 25989	**EO Index:**	5026	**Element Last Seen:**	1991-XX-XX
Occ. Rank:	Unknown		**Presence:**	Presumed Extant	**Site Last Seen:**	1991-XX-XX
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:**	1995-12-07

Quad Summary:	Black Star Canyon (3311776), Orange (3311777), Riverside West (3311784), Corona North (3311785), Prado Dam (3311786)
County Summary:	Orange, Riverside, San Bernardino

Lat/Long:	33.91477 / -117.64511	**Accuracy:**	non-specific area
UTM:	Zone-11 N3752893 E440365	**Elevation (ft):**	570
PLSS:	T03S, R07W (S)	**Acres:**	2729.6

Location:	SANTA ANA RIVER & TRIBUTARIES, SAN BERNARDINO, RIVERSIDE & ORANGE COUNTIES.
Detailed Location:	FROM MOUNT RUBIDOUX DOWNSTREAM TO NORTHEASTERN ANAHEIM, INCLUDING TRIBUTARIES CHINO, ALISO AND SUNNYSLOPE CREEKS.
Ecological:	BEST HABITAT FOUND BELOW RIVERSIDE NARROWS WHERE GROUND WATER IS FORCED TO THE SURFACE & FLOWS BECOME MORE PERENNIAL & STABLE. SANTA ANA SUCKERS & ARROYO CHUB ARE THE ONLY NATIVE FISH SPECIES THAT STILL OCCUR.
General:	
Owner/Manager:	PVT, SANTA ANA RIVER GREENBELT

Southern Coastal Salt Marsh

Element Code: CTT52120CA

Southern Coastal Salt Marsh

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G2
	State:	None		**State:**	S2.1
	Other:				
Habitat:	**General:**				
	Micro:				

Occurrence No.	15	**Map Index:** 02224	**EO Index:** 26125	**Element Last Seen:**	1976-XX-XX
Occ. Rank:	Unknown		**Presence:** Presumed Extant	**Site Last Seen:**	1976-XX-XX
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	1998-07-20

Quad Summary: Los Alamitos (3311871)

County Summary: Los Angeles

Lat/Long:	33.76478 / -118.10811	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3736627 E397384	**Elevation (ft):**	
PLSS:	T05S, R12W, Sec. 11, SW (S)	**Acres:**	0.0

Location: NEAR ALAMITOS BAY IN CITY OF LONG BEACH.

Detailed Location: SMALL MARSH (REMNANT OF 2400 HISTORIC MARSH AC, SPETH, 1976).

Ecological:

General: SEE HTTPS://WILDLIFE.CA.GOV/DATA/VEGCAMP/NATURAL-COMMUNITIES TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: UNKNOWN

Southern Coast Live Oak Riparian Forest

Element Code: CTT61310CA

Southern Coast Live Oak Riparian Forest

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G4
	State:	None		**State:**	S4
	Other:				
Habitat:	**General:**				
	Micro:				

Occurrence No.	142	**Map Index:** 02749	**EO Index:** 15915	**Element Last Seen:**	1988-02-10
Occ. Rank:	None		**Presence:** Extirpated	**Site Last Seen:**	1988-02-10
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	1998-08-31

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.84075 / -117.75815	**Accuracy:**	specific area
UTM:	Zone-11 N3744757 E429855	**Elevation (ft):**	540
PLSS:	T04S, R08W, Sec. 07 (S)	**Acres:**	106.8

Location: WALNUT CANYON, FROM WALNUT CANYON RESERVOIR D/S >1 MILE.

Detailed Location: EXTIRPATED PER INTERPRETATION OF 1988 AERIAL PHOTOS.

Ecological: MAPPED BY WIESLANDER SURVEY (1935) AS CLOSED CANOPY QUERCUS AGRIFOLIA AND PLATANUS RACEMOSA. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

General: SEE HTTPS://WILDLIFE.CA.GOV/DATA/VEGCAMP/NATURAL-COMMUNITIES TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: PVT

Occurrence No.	149	**Map Index:** 02789	**EO Index:** 15910	**Element Last Seen:**	1988-06-08
Occ. Rank:	Unknown		**Presence:** Presumed Extant	**Site Last Seen:**	1988-06-08
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	1998-08-31

Quad Summary: Black Star Canyon (3311776), Orange (3311777)

County Summary: Orange

Lat/Long:	33.82507 / -117.74292	**Accuracy:**	non-specific area
UTM:	Zone-11 N3743008 E431251	**Elevation (ft):**	700
PLSS:	T04S, R08W, Sec. 17 (S)	**Acres:**	310.4

Location: WEIR CANYON AND TRIBUTARIES, SW SANTA ANA MTNS.

Detailed Location: EXTANT, 1980, PER INTERPRETATION OF AERIAL PHOTOS.

Ecological: MAPPED BY WIESLANDER SURVEY (1935) AS CLOSED CANOPY QUERCUS AGRIFOLIA AND PLATANUS RACEMOSA.

General: NEEDS FIELD VERIFICATION OF VEGETATION CONDITION, COMPOSITION. SEE HTTPS://WILDLIFE.CA.GOV/DATA/VEGCAMP/NATURAL-COMMUNITIES TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: PVT

Southern Cottonwood Willow Riparian Forest **Element Code:** CTT61330CA

Southern Cottonwood Willow Riparian Forest

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G3
	State:	None		**State:**	S3.2
	Other:				
Habitat:	**General:**				
	Micro:				

Occurrence No.	71	**Map Index:** 02748	**EO Index:**	15780	**Element Last Seen:** 1988-02-10
Occ. Rank:	None		**Presence:**	Extirpated	**Site Last Seen:** 1988-02-10
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:** 1998-07-20

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.86470 / -117.76570	**Accuracy:**	specific area
UTM:	Zone-11 N3747418 E429176	**Elevation (ft):**	300
PLSS:	T03S, R08W, Sec. 31 (S)	**Acres:**	37.2

Location: SOUTHEASTERN SIDE OF SANTA ANA CANYON, SOUTH OF ESPERANZA.

Detailed Location: EXTIRPATED PER INTERPRETATION OF 1988 AERIAL PHOTOS.

Ecological: MAPPED BY WIESLANDER SURVEY (1935) AS CLOSED CANOPY POPULUS FREMONTII & SALIX SPP.

General: SEE HTTPS://WILDLIFE.CA.GOV/DATA/VEGCAMP/NATURAL-COMMUNITIES TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: PVT

Southern Sycamore Alder Riparian Woodland

Element Code: CTT62400CA

Southern Sycamore Alder Riparian Woodland

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G4
	State:	None		**State:**	S4
	Other:				
Habitat:	**General:**				
	Micro:				

Occurrence No.	122	**Map Index:** 01897	**EO Index:**	15436	**Element Last Seen:** 1978-09-19
Occ. Rank:	Unknown		**Presence:**	Presumed Extant	**Site Last Seen:** 1978-09-19
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:** 1998-07-22

Quad Summary: Hollywood (3411813), Burbank (3411823)

County Summary: Los Angeles

Lat/Long:	34.12485 / -118.31341	**Accuracy:**	specific area
UTM:	Zone-11 N3776778 E378883	**Elevation (ft):**	760
PLSS:	T01N, R14W, Sec. 35, E (S)	**Acres:**	94.6

Location: BRUSH CANYON, GRIFFITH PARK, LOS ANGELES.

Detailed Location: PART ON BURBANK QUAD EXTANT 1978 PER INTERPRETATION OF AERIALS; PART ON HOLLYWOOD QUAD NOT COVERED IN 1978 PHOTOS.

Ecological: CLOSED CANOPY QUERCUS AGRIFOLIA & PLATANUS RACEMOSA ACCORDING TO WIESLANDER SURVEY.

General: NEEDS FIELD VERIFICATION. SEE HTTPS://WILDLIFE.CA.GOV/DATA/VEGCAMP/NATURAL-COMMUNITIES TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: CITY OF LOS ANGELES, UNK

California Walnut Woodland

Element Code: CTT71210CA

California Walnut Woodland

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G2
	State:	None		**State:**	S2.1
	Other:				
Habitat:	**General:**				
	Micro:				

Occurrence No.	2	**Map Index:**	02489	**EO Index:**	15091	**Element Last Seen:**	1988-06-08
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1988-06-08
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1998-09-01

Quad Summary:	La Habra (3311788)
County Summary:	Los Angeles

Lat/Long:	33.96199 / -117.91938	**Accuracy:**	specific area
UTM:	Zone-11 N3758322 E415058	**Elevation (ft):**	900
PLSS:	T02S, R10W, Sec. 27 (S)	**Acres:**	131.4

Location:	1.5 MILES SOUTH OF HWY 60 ON FULLERTON ROAD.
Detailed Location:	ON NORTH SLOPE. EXTANT, 1988, PER INTERPRETATION OF AERIAL PHOTOS. ALSO MAPPED BY WIESLANDER SURVEY.
Ecological:	CLOSED CANOPY FOREST. ANNUAL GRASS IN UNDERSTORY. 3 STANDS, ONE W/60% COAST LIVE OAK, 2 W/ 100% WALNUT PER BURKE 1980. CANOPY ABOUT 25% CLOSED PER LITTLE 1984.
General:	SEE HTTPS://WILDLIFE.CA.GOV/DATA/VEGCAMP/NATURAL-COMMUNITIES TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.
Owner/Manager:	UNKNOWN

Occurrence No.	41	**Map Index:**	01960	**EO Index:**	15062	**Element Last Seen:**	1978-09-19
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1978-09-19
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1998-09-01

Quad Summary:	Hollywood (3411813), Burbank (3411823)
County Summary:	Los Angeles

Lat/Long:	34.12836 / -118.28014	**Accuracy:**	specific area
UTM:	Zone-11 N3777128 E381955	**Elevation (ft):**	520
PLSS:	T01N, R13W, Sec. 31 (S)	**Acres:**	102.1

Location:	WEST OF GRIFFITH PARK DRIVE, SE OF FERN CANYON, GRIFFITH PARK, LOS ANGELES.
Detailed Location:	EXTANT 1978 PER INTERPETATION OF AERIAL PHOTOS.
Ecological:	MAPPED BY WIESLANDER SURVEY AS JUGLANS CALIFORNICA AND QUERCUS AGRIFOLIA.
General:	NEEDS FIELD VERIFICATION. SEE HTTPS://WILDLIFE.CA.GOV/DATA/VEGCAMP/NATURAL-COMMUNITIES TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.
Owner/Manager:	CITY OF LOS ANGELES-PARKS DEPT

Occurrence No.	44	**Map Index:**	02732	**EO Index:**	15061	**Element Last Seen:**	1988-02-10
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1988-02-10
Occ. Type:	Natural/Native occurrence			**Trend:**	Decreasing	**Record Last Updated:**	1998-08-31

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.83749 / -117.77632	**Accuracy:**	specific area
UTM:	Zone-11 N3744408 E428171	**Elevation (ft):**	720
PLSS:	T04S, R09W, Sec. 12 (S)	**Acres:**	11.4

Location:	NORTH-FACING SLOPE OF WALNUT CANYON, SE OF ANAHEIM.
Detailed Location:	EXTANT, 1988, BUT BOUNDARY GREATLY REDUCED.
Ecological:	MAPPED BY WIESLANDER SURVEY AS OPEN WOODLAND OF JUGLANS CALIFORNICA AND QUERCUS AGRIFOLIA WITH UNDERSTORY OF ARTEMISIA CALIFORNICA AND SALVIA APIANA.
General:	NEEDS FIELD VERIFICATION OF VEGETATION CONDITION, COMPOSITION. SEE HTTPS://WILDLIFE.CA.GOV/DATA/VEGCAMP/NATURAL-COMMUNITIES TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.
Owner/Manager:	PVT

Occurrence No.	50	**Map Index:**	02532	**EO Index:**	12446	**Element Last Seen:**	1988-06-08
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1988-06-08
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1998-08-31

Quad Summary:	La Habra (3311788)
County Summary:	Los Angeles, Orange

Lat/Long:	33.94972 / -117.88313	**Accuracy:**	specific area
UTM:	Zone-11 N3756932 E418395	**Elevation (ft):**	700
PLSS:	T02S, R10W, Sec. 36 (S)	**Acres:**	136.8

Location:	NORTH OF BREA BLVD, EAST OF ORANGE FREEWAY, EAST END OF SOUTH SIDE PUENTE HILLS.
Detailed Location:	EXTANT, 1988, BUT CANOPY THIN.
Ecological:	MAPPED BY WIESLANDER SURVEY AS CLOSED CANOPY JUGLANS CALIFORNICA.
General:	NEEDS FIELD VERIFICATION OF VEGETATION CONDITION, COMPOSITION. SEE HTTPS://WILDLIFE.CA.GOV/DATA/VEGCAMP/NATURAL-COMMUNITIES TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.
Owner/Manager:	PVT

Occurrence No.	51	**Map Index:**	02490	**EO Index:**	15056	**Element Last Seen:**	1988-06-08
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1988-06-08
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1998-08-31

Quad Summary:	La Habra (3311788)
County Summary:	Los Angeles

Lat/Long:	33.95611 / -117.91691	**Accuracy:**	specific area
UTM:	Zone-11 N3757668 E415280	**Elevation (ft):**	800
PLSS:	T02S, R10W, Sec. 34 (S)	**Acres:**	19.2

Location:	ABOUT 1 MILE SW OF ROWLAND HEIGHTS, WEST SIDE OF FULLERTON ROAD; PUENTE HILLS.
Detailed Location:	EXTANT, 1988, PER INTERPRETATION OF AERIAL PHOTOS.
Ecological:	MAPPED BY WIESLANDER SURVEY AS CLOSED CANOPY JUGLANS CALIFORNICA.
General:	NEEDS FIELD VERIFICATION OF VEGETATION CONDITION, COMPOSITION. SEE HTTPS://WILDLIFE.CA.GOV/DATA/VEGCAMP/NATURAL-COMMUNITIES TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.
Owner/Manager:	PVT

Occurrence No.	52	**Map Index:**	02514	**EO Index:**	15055	**Element Last Seen:**	1988-06-08
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1988-06-08
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1998-08-31

Quad Summary:	La Habra (3311788)
County Summary:	Los Angeles

Lat/Long:	33.96128 / -117.89620	**Accuracy:**	specific area
UTM:	Zone-11 N3758224 E417198	**Elevation (ft):**	1000
PLSS:	T02S, R10W, Sec. 26 (S)	**Acres:**	251.9

Location:	SOUTH & SE OF ROWLAND HEIGHTS & JUST NORTH & EAST OF PUENTE HILLS MILITARY RESERVATION, PUENTE HILLS.
Detailed Location:	EXTANT, 1988, BUT CHANGED AND INCREASED PER INTERPRETATION OF AERIAL PHOTOS.
Ecological:	MAPPED BY WIESLANDER SURVEY AS CLOSED CANOPY JUGLANS CALIFORNICA AND QUERCUS AGRIFOLIA.
General:	NEEDS FIELD VERIFICATION OF VEGETATION CONDITION, COMPOSITION. SEE HTTPS://WILDLIFE.CA.GOV/DATA/VEGCAMP/NATURAL-COMMUNITIES TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.
Owner/Manager:	PVT

Occurrence No.	53	**Map Index:** 02763	**EO Index:**	15054	**Element Last Seen:**	1988-02-10
Occ. Rank:	Unknown		**Presence:**	Presumed Extant	**Site Last Seen:**	1988-02-10
Occ. Type:	Natural/Native occurrence		**Trend:**	Decreasing	**Record Last Updated:**	1998-08-31

Quad Summary: Black Star Canyon (3311776), Orange (3311777)

County Summary: Orange

Lat/Long:	33.83887 / -117.75582	**Accuracy:**	specific area
UTM:	Zone-11 N3744547 E430069	**Elevation (ft):**	680
PLSS:	T04S, R08W, Sec. 07 (S)	**Acres:**	41.4

Location: NORTH-FACING SLOPE OF WALNUT CANYON, SW OF WALNUT CANYON RESERVOIR.

Detailed Location: EXTANT, 1988.

Ecological: MAPPED BY WIESLANDER SURVEY AS OPEN CANOPY JUGLANS CALIFORNICA AND QUERCUS AGRIFOLIA WITH UNDERSTORY OF ARTEMISIA CALIFORNICA.

General: NEEDS FIELD VERIFICATION OF VEGETATION CONDITION, COMPOSITION. SEE HTTPS://WILDLIFE.CA.GOV/DATA/VEGCAMP/NATURAL-COMMUNITIES TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: PVT

Walnut Forest

Element Code: CTT81600CA

Walnut Forest

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G1
	State:	None		**State:**	S1.1
	Other:				
Habitat:	**General:**				
	Micro:				

Occurrence No.	6	**Map Index:** 21003	**EO Index:**	21080	**Element Last Seen:**	1989-05-14
Occ. Rank:	Good		**Presence:**	Presumed Extant	**Site Last Seen:**	1989-05-14
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:**	2007-12-13

Quad Summary: Los Angeles (3411812)

County Summary: Los Angeles

Lat/Long:	34.10022 / -118.19093	**Accuracy:**	specific area
UTM:	Zone-11 N3773908 E390146	**Elevation (ft):**	700
PLSS:	T01S, R13W, Sec. 12 (S)	**Acres:**	66.4

Location: SW END OF ARROYO SECO PARK, AND ADJACENT TO ROSE HILL PARK.

Detailed Location: COVERING THE RIDGE AND SLOPES OF A HILL EXCEPT FOR THE DEEPEST PART OF THE CANYONS.

Ecological: JUGLANS CALIFORNICA DOMINATES (50-60%) W/ ANNUAL GRASSES ON SOUTH-FACING SLOPES. DENSER FOREST MIXED W/ TOYON (15-20%) & COAST LIVE OAK (5%) ON NORTH-FACING SLOPES. CONTIGUOUS HABITAT THROUGHOUT. SMALL MAMMALS USE AREA.

General: LITTLE CURRENT HUMAN ACTIVITY DESPITE URBAN SURROUNDINGS. SEE HTTPS://WILDLIFE.CA.GOV/DATA/VEGCAMP/NATURAL-COMMUNITIES TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: LAX COUNTY

Habroscelimorpha gabbii **Element Code:** IICOL02080

western tidal-flat tiger beetle

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G2G4
	State:	None		**State:**	S1
	Other:				
Habitat:	**General:**	INHABITS ESTUARIES AND MUDFLATS ALONG THE COAST OF SOUTHERN CALIFORNIA.			
	Micro:	GENERALLY FOUND ON DARK-COLORED MUD IN THE LOWER ZONE; OCCASIONALLY FOUND ON DRY SALINE FLATS OF ESTUARIES.			

*** SENSITIVE ***

Occurrence No.	1	**Map Index:**	72493	**EO Index:**	2504	**Element Last Seen:**	1998-07-11
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1998-07-11
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2012-09-14

Quad Summary: Seal Beach (3311861), Los Alamitos (3311871)

County Summary: Orange

Lat/Long:		**Accuracy:**	non-specific area
UTM:		**Elevation (ft):**	10
PLSS:		**Acres:**	1006.0

Location: *SENSITIVE* LOCATION INFORMATION SUPPRESSED.

Detailed Location: PLEASE CONTACT THE CALIFORNIA NATURAL DIVERSITY DATABASE, CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, FOR MORE INFORMATION: (916) 322-2493

Ecological:

General:

Owner/Manager:

Occurrence No.	8	**Map Index:**	60935	**EO Index:**	87727	**Element Last Seen:**	XXXX-XX-XX
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2012-09-19

Quad Summary: Seal Beach (3311861), Los Alamitos (3311871), Long Beach (3311872)

County Summary: Los Angeles

Lat/Long:	33.76188 / -118.16108	**Accuracy:**	non-specific area
UTM:	Zone-11 N3736360 E392475	**Elevation (ft):**	20
PLSS:	T05S, R12W, Sec. 08 (S)	**Acres:**	327.8

Location: LONG BEACH.

Detailed Location: LOCALITY STATED AS "NAPLES" AND "LONG BEACH." MAPPED GENERALLY TO LONG BEACH. EXACT LOCATION UNKNOWN.

Ecological: AIR PHOTOS SUGGEST NAPLES IS FULLY DEVELOPED AND SUITABLE HABITAT SUCH AS ESTUARIES AND MUDFLATS DO NOT EXIST ALONG LONG BEACH (2012).

General: NAGANO (1980) APPEARS TO CITE FALL (1901) FOR "FORMER LOCALITIES." IN 1901, FALL WROTE "...GABBII...LONG BEACH, AUGUST (DAGGETT)."

Owner/Manager: UNKNOWN

Cicindela hirticollis gravida

Element Code: IICOL02101

sandy beach tiger beetle

Listing Status: **Federal:** None
State: None
Other:

CNDDB Element Ranks: **Global:** G5T2
State: S2

Habitat: **General:** INHABITS AREAS ADJACENT TO NON-BRACKISH WATER ALONG THE COAST OF CALIFORNIA FROM SAN FRANCISCO BAY TO NORTHERN MEXICO.

Micro: CLEAN, DRY, LIGHT-COLORED SAND IN THE UPPER ZONE. SUBTERRANEAN LARVAE PREFER MOIST SAND NOT AFFECTED BY WAVE ACTION.

Occurrence No.	15	**Map Index:**	02201	**EO Index:**	22672	**Element Last Seen:**	XXXX-XX-XX
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1979-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2012-09-14

Quad Summary: Los Alamitos (3311871), Long Beach (3311872)
County Summary: Los Angeles

Lat/Long:	33.75578 / -118.12246	**Accuracy:**	non-specific area
UTM:	Zone-11 N3735643 E396045	**Elevation (ft):**	10
PLSS:	T05S, R12W, Sec. 10 (S)	**Acres:**	212.1

Location: NAPLES.
Detailed Location:
Ecological: INHABITED CLEAN, DRY, LIGHT-COLORED SAND IN THE UPPER ZONE.
General: HISTORICAL LOCATION.
Owner/Manager: UNKNOWN

Occurrence No.	33	**Map Index:**	60073	**EO Index:**	60109	**Element Last Seen:**	1945-08-15
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1945-08-15
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2005-02-17

Quad Summary: Seal Beach (3311861), Los Alamitos (3311871), Long Beach (3311872)
County Summary: Los Angeles

Lat/Long:	33.75431 / -118.12182	**Accuracy:**	3/5 mile
UTM:	Zone-11 N3735480 E396101	**Elevation (ft):**	10
PLSS:	T05S, R12W, Sec. 10 (S)	**Acres:**	0.0

Location: ALAMITOS BAY.
Detailed Location:
Ecological:
General: HISTORICAL RECORD.
Owner/Manager: UNKNOWN

Cicindela latesignata

Element Code: IICOL02110

western beach tiger beetle

Listing Status: **Federal:** None
State: None
Other:

CNDDB Element Ranks: **Global:** G2G3
State: S1

Habitat: **General:** MUDFLATS AND BEACHES OF COASTAL ESTUARIES FROM SAN DIEGO COUNTY TO LOS ANGELES COUNTY.

Micro: TYPICALLY INHABIT WET OR DRY SANDY BEACHES AND MUD, SAND, OR SALT FLATS.

Occurrence No.	5	**Map Index:**	60935	**EO Index:**	121049	**Element Last Seen:**	1895-08-XX
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1979-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-12-02

Quad Summary: Seal Beach (3311861), Los Alamitos (3311871), Long Beach (3311872)

County Summary: Los Angeles

Lat/Long:	33.76188 / -118.16108	**Accuracy:**	non-specific area
UTM:	Zone-11 N3736360 E392475	**Elevation (ft):**	20
PLSS:	T05S, R12W, Sec. 08 (S)	**Acres:**	327.8

Location: LONG BEACH.

Detailed Location: MAPPED NON-SPECIFICALLY ALONG THE BEACH WAVE SLOPE NEAR THE TOWN OF LONG BEACH AS THIS BEETLE PREFERS SANDY AREAS.

Ecological:

General: COLLECTED IN THIS AREA IN 1892 AND 1895, WITH OTHER COLLECTIONS SOMETIME BEFORE 1925. NOT FOUND BY NAGANO DURING HIS RESEARCH IN THE 1970S AND CONSIDERED EXTIRPATED.

Owner/Manager: UNKNOWN

Occurrence No.	10	**Map Index:**	B7891	**EO Index:**	121054	**Element Last Seen:**	197X-XX-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	197X-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-11-30

Quad Summary: Seal Beach (3311861), Los Alamitos (3311871)

County Summary: Orange

Lat/Long:	33.73859 / -118.07491	**Accuracy:**	1 mile
UTM:	Zone-11 N3733691 E400429	**Elevation (ft):**	5
PLSS:	T05S, R11W, Sec. 18 (S)	**Acres:**	1987.0

Location: SEAL BEACH NATIONAL WILDLIFE REFUGE.

Detailed Location: MAPPED NON-SPECIFICALLY TO ESTUARINE HABITAT OF SEAL BEACH NWR THAT IS ADJACENT TO SEAL BEACH NWS. THIS APPEARS TO BE THE CORRECT LOCATION FOR THE "SEAL BEACH" REFERENCED BY NAGANO (SEE RUMPP 1979). SURROUNDING ANAHEIM BAY.

Ecological:

General: RUMPP NOTED, "PLENTIFUL WITHIN THE CONFINES OF THE NWS AT SEAL BEACH." LISTED BY NAGANO AS A LOCATION CITING MINNESANG 1980 CSU LONG BEACH THESIS. USFWS NOTED IT AS PRESENT IN 1990 EIR & AS A POTENTIAL SPECIES (2012). NEEDS RESEARCH.

Owner/Manager: USFWS-SEAL BEACH NWR

Occurrence No.	21	**Map Index:**	B7886	**EO Index:**	121066	**Element Last Seen:**	1945-10-21
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1979-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-11-30

Quad Summary: Seal Beach (3311861), Los Alamitos (3311871), Long Beach (3311872)

County Summary: Los Angeles

Lat/Long:	33.76324 / -118.11553	**Accuracy:**	1 mile
UTM:	Zone-11 N3736464 E396696	**Elevation (ft):**	3
PLSS:	T05S, R12W, Sec. 10 (S)	**Acres:**	1987.0

Location: VICINITY OF NAPLES, CITY OF LONG BEACH.

Detailed Location: MAPPED NON-SPECIFICALLY TO THE HISTORIC ESTUARINE HABITAT NEAR NAPLES ON THE NORTH SIDE OF THE SAN GABRIEL RIVER. RUMPP DESCRIBED THIS AREA AS THE SALT FLATS NORTH OF SEAL BEACH AND BARELY WITHIN THE LIMITS OF LOS ANGELES COUNTY.

Ecological: COLLECTED FROM THE EDGES OF DRYER SALT FLATS AND MUD FLATS, SOME FROM WHITE SAND.

General: COLLECTED IN THIS AREA IN 1916, 1939, 1941, 1942, AND 1945. NOT FOUND BY NAGANO DURING HIS RESEARCH IN THE 1970S AND CONSIDERED EXTIRPATED.

Owner/Manager: UNKNOWN

Cicindela senilis frosti

Element Code: IICOL02121

senile tiger beetle

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G2G3T1T3
	State:	None		**State:**	S1
	Other:				
Habitat:	**General:**	INHABITS MARINE SHORELINE, FROM CENTRAL CALIFORNIA COAST SOUTH TO SALT MARSHES OF SAN DIEGO. ALSO FOUND AT LAKE ELSINORE.			
	Micro:	INHABITS DARK-COLORED MUD IN THE LOWER ZONE AND DRIED SALT PANS IN THE UPPER ZONE.			

Occurrence No.	5	**Map Index:**	02237	**EO Index:**	22659	**Element Last Seen:**	XXXX-XX-XX
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1979-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2012-09-14

Quad Summary: Seal Beach (3311861), Los Alamitos (3311871)

County Summary: Los Angeles, Orange

Lat/Long:	33.74423 / -118.10420	**Accuracy:**	3/5 mile
UTM:	Zone-11 N3734344 E397722	**Elevation (ft):**	10
PLSS:	T05S, R12W, Sec. 14 (S)	**Acres:**	0.0

Location: SEAL BEACH.

Detailed Location: THE BEETLE WAS RESTRICTED TO SPECIFIC, HARD-TO-LOCATE AREAS WITHIN THE MARINE SALT MARSH.

Ecological: THE BEETLE'S FLIGHT PERIOD IS BIMODAL - IN EARLY SPRING AND LATE FALL.

General: UNCOMMONLY COLLECTED BECAUSE POPULATIONS NATURALLY EXIST AT VERY LOW LEVELS. HISTORICAL LOCATION.

Owner/Manager: UNKNOWN

Bombus pensylvanicus

Element Code: IIHYM24260

American bumble bee

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G3G4
	State:	None		**State:**	S2
	Other:	IUCN_VU-Vulnerable			
Habitat:	**General:**	□			

Micro: LONG-TONGUED; FORAGES ON A WIDE VARIETY OF FLOWERS INCLUDING VETCHES (VICIA), CLOVERS (TRIFOLIUM), THISTLES (CIRSIUM), SUNFLOWERS (HELIANTHUS), ETC. NESTS ABOVE GROUND UNDER LONG GRASS OR UNDERGROUND. QUEENS OVERWINTER IN ROTTEN WOOD OR UNDERGROUND.

Occurrence No.	152	**Map Index:** B9151	**EO Index:** 124341	**Element Last Seen:**	2020-08-27
Occ. Rank:	Unknown		**Presence:** Presumed Extant	**Site Last Seen:**	2020-08-27
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2023-07-12

Quad Summary: Los Angeles (3411812)

County Summary: Los Angeles

Lat/Long:	34.0692 / -118.22938	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3770510 E386558	**Elevation (ft):**	306
PLSS:	T01S, R13W, Sec. 22 (S)	**Acres:**	70.0

Location: LOS ANGELES STATE HISTORIC PARK, 0.7 MI SE OF DODGER STADIUM, ABOUT 5.7 MI W OF MONTEREY PARK.

Detailed Location: MAPPED TO PROVIDED COORDINATES.

Ecological: INDIVIDUAL SEEN FORAGING ON FLOWERS.

General: 1 ADULT FOUND AND PHOTOGRAPHED ON 27 AUG 2020.

Owner/Manager: DPR-LOS ANGELES SHP

Occurrence No.	158	**Map Index:** B9172	**EO Index:** 125364	**Element Last Seen:**	1975-09-19
Occ. Rank:	Unknown		**Presence:** Presumed Extant	**Site Last Seen:**	1975-09-19
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2023-07-21

Quad Summary: Hollywood (3411813), Burbank (3411823)

County Summary: Los Angeles

Lat/Long:	34.13432 / -118.29463	**Accuracy:**	1 mile
UTM:	Zone-11 N3777806 E380628	**Elevation (ft):**	991
PLSS:	T01N, R14W, Sec. 36 (S)	**Acres:**	1987.0

Location: GRIFFITH PARK WITHIN THE SANTA MONICA MOUNTAINS, BETWEEN I-5 AND US-101.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED NON-SPECIFICALLY TO LOCATION STATED AS "GRIFFITH PARK".

Ecological: GRIFFITH PARK IS OVER 4,210 ACRES OF BOTH NATURAL CHAPPARAL HABITAT AND LANDSCAPED PARK AREAS. PLANT COMMUNITIES INCLUDE COASTAL SAGE SCRUB, OAK AND WALNUT WOODLANDS, AND RIPARIAN VEGETATION.

General: 1 ADULT COLLECTED ON 19 SEP 1975 (LACMENT #1966).

Owner/Manager: CITY OF LOS ANGELES

Occurrence No.	159	**Map Index:**	B6465	**EO Index:**	125367	**Element Last Seen:**	2022-03-23
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2022-03-23
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-07-24

Quad Summary:	Los Angeles (3411812), Pasadena (3411822)
County Summary:	Los Angeles

Lat/Long:	34.12444 / -118.23489	**Accuracy:**	80 meters
UTM:	Zone-11 N3776642 E386124	**Elevation (ft):**	538
PLSS:	T01N, R13W, Sec. 34, SW (S)	**Acres:**	5.0

Location:	VICINITY OF YORK BLVD, BETWEEN RANONS AVE AND AGUILAR WAY, JUST NE OF FOREST LAWN MEMORIAL PARK.
Detailed Location:	MAPPED TO PROVIDED COORDINATES.
Ecological:	INDIVIDUAL OBSERVED FORAGING ON CERCIS OCCIDENTALIS (WESTERN REDBUD) IN NATIVE PLANT GARDEN ON RESIDENTIAL PROPERTY. SURROUNDING AREA IS PRIMARILY RESIDENTIAL WITH FOREST LAWN MEMORIAL PARK TO THE SW.
General:	1 FOUND AND PHOTOGRAPHED WHILE FORAGING ON 23 MAR 2022.
Owner/Manager:	PVT

Occurrence No.	174	**Map Index:**	B9198	**EO Index:**	125396	**Element Last Seen:**	1966-07-05
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1966-07-05
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-07-28

Quad Summary:	Hollywood (3411813), Beverly Hills (3411814), Burbank (3411823), Van Nuys (3411824)
County Summary:	Los Angeles

Lat/Long:	34.12357 / -118.37536	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3776711 E373169	**Elevation (ft):**	1082
PLSS:	T01N, R14W, Sec. 32, SW (S)	**Acres:**	70.0

Location:	MULHOLLAND DR AT LAUREL CANYON BLVD, 1.95 MI W OF CAHUENGA PASS, 2.1 MI SE OF STUDIO CITY.
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED NON-SPECIFICALLY TO LOCATION STATED AS "MULHOLLAND DR & LAUREL CANYON BLVD".
Ecological:	
General:	1 ADULT COLLECTED ON 5 JUL 1966 (LACMENT #1766).
Owner/Manager:	UNKNOWN

Occurrence No.	183	**Map Index:**	97688	**EO Index:**	125407	**Element Last Seen:**	1965-07-21
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1965-07-21
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-07-31

Quad Summary: Anaheim (3311778), La Habra (3311788)

County Summary: Orange

Lat/Long:	33.87040 / -117.92430	**Accuracy:**	1 mile
UTM:	Zone-11 N3748171 E414511	**Elevation (ft):**	150
PLSS:	T03S, R10W, Sec. 34 (S)	**Acres:**	0.0

Location: FULLERTON.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED NON-SPECIFICALLY TO CITY OF FULLERTON.

Ecological: BOMBUS CROTCHII ALSO COLLECTED AT THIS LOCATION.

General: 1 ADULT FEMALE COLLECTED ON 23 JUL 1954. 1 ADULT FEMALE COLLECTED ON 11 AUG 1954. 1 ADULT FEMALE COLLECTED ON 2 JUL 1957. 1 ADULT FEMALE COLLECTED ON 7 MAY 1961. 1 ADULT FEMALE COLLECTED ON 11 JUL 1962. 1 ADULT FEMALE ON 21 JUL 1965.

Owner/Manager: UNKNOWN

Occurrence No.	221	**Map Index:**	54944	**EO Index:**	125558	**Element Last Seen:**	1971-09-17
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1971-09-17
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-08-28

Quad Summary: El Monte (3411811)

County Summary: Los Angeles

Lat/Long:	34.09227 / -118.10543	**Accuracy:**	1 mile
UTM:	Zone-11 N3772938 E398023	**Elevation (ft):**	400
PLSS:	T01S, R12W, Sec. 11 (S)	**Acres:**	0.0

Location: SAN GABRIEL.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED NON-SPECIFICALLY TO THE CITY OF SAN GABRIEL.

Ecological:

General: 1 ADULT FEMALE COLLECTED BY C. GOODPASTURE ON 17 SEP 1971 (BMEC ENT #2414).

Owner/Manager: UNKNOWN

Occurrence No.	222	**Map Index:**	B9341	**EO Index:**	125560	**Element Last Seen:**	2022-08-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2022-08-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-08-30

Quad Summary: El Monte (3411811)

County Summary: Los Angeles

Lat/Long:	34.05359 / -118.09925	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3768642 E398548	**Elevation (ft):**	303
PLSS:	T01S, R12W, Sec. 25, SW (S)	**Acres:**	18.0

Location: JUST NW OF DELLROSE AVE AT REDDING AVE, 0.63 MI ESE OF MONTEREY VISTA SCHOOL, 3 MI W OF SOUTH EL MONTE.

Detailed Location: MAPPED TO PROVIDED COORDINATES.

Ecological: INDIVIDUALS SEEN FORAGING ON FLOWERS IN YARD AT PRIVATE RESIDENCE.

General: 1 ADULT FOUND AND PHOTOGRAPHED ON 18 SEP 2019. 1 ADULT FOUND AND PHOTOGRAPHED IN AUG 2022.

Owner/Manager: PVT

Occurrence No.	223	**Map Index:**	B9343	**EO Index:**	125562	**Element Last Seen:**	2022-09-26
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2022-09-26
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-08-28

Quad Summary:	El Monte (3411811)
County Summary:	Los Angeles

Lat/Long:	34.03592 / -118.10759	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3766691 E397757	**Elevation (ft):**	351
PLSS:	T01S, R12W, Sec. 35, S (S)	**Acres:**	18.0

Location:	JUST SE OF SCE MESA SUBSTATION, 0.25 MI S OF POTRERO GRANDE RD AT GREENWOOD AVE, 1.7 MI E OF BELLA VISTA SCHOOL.
Detailed Location:	MAPPED TO PROVIDED COORDINATES.
Ecological:	INDIVIDUAL SEEN FORAGING ON FLOWERS.
General:	1 ADULT FOUND AND PHOTOGRAPHED ON 26 SEP 2022.
Owner/Manager:	UNKNOWN

Occurrence No.	224	**Map Index:**	B9345	**EO Index:**	125564	**Element Last Seen:**	2019-07-22
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2019-07-22
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-08-28

Quad Summary:	El Monte (3411811)
County Summary:	Los Angeles

Lat/Long:	34.0294 / -118.1039	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3765965 E398090	**Elevation (ft):**	479
PLSS:	T02S, R12W, Sec. 2, NE (S)	**Acres:**	18.0

Location:	W END OF REVERE AVE, 0.15 MI SW OF N MONTEBELLO BLVD AT LIBERTY AVE, 1.3 MI E OF MARIAN SCHOOL.
Detailed Location:	MAPPED TO PROVIDED COORDINATES.
Ecological:	INDIVIDUAL FOUND FORAGING ON FLOWERS IN YARD AT PRIVATE RESIDENCE.
General:	1 ADULT FOUND AND PHOTOGRAPHED ON 22 JUL 2019.
Owner/Manager:	PVT

Occurrence No.	225	**Map Index:**	B9346	**EO Index:**	125565	**Element Last Seen:**	2022-08-16
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2022-08-16
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-08-28

Quad Summary:	Los Angeles (3411812)
County Summary:	Los Angeles

Lat/Long:	34.01352 / -118.13249	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3764233 E395431	**Elevation (ft):**	197
PLSS:	T02S, R12W, Sec. 10, NW (S)	**Acres:**	18.0

Location:	0.25 MI E OF SAYBROOK PARK, 0.9 MI N OF GARFIELD AVE AT WASHINGTON BLVD, 3.3 MI W OF DURFEE SCHOOL.
Detailed Location:	MAPPED TO PROVIDED COORDINATES.
Ecological:	INDIVIDUAL FOUND FORAGING ON FLOWERS.
General:	1 ADULT FOUND AND PHOTOGRAPHED ON 16 AUG 2022.
Owner/Manager:	UNKNOWN

Occurrence No.	227	**Map Index:**	B9353	**EO Index:**	125572	**Element Last Seen:**	2022-07-07
Occ. Rank:	Fair			**Presence:**	Presumed Extant	**Site Last Seen:**	2022-07-07
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-08-31

Quad Summary:	El Monte (3411811)
County Summary:	Los Angeles

Lat/Long:	34.03764 / -118.08954	**Accuracy:**	non-specific area
UTM:	Zone-11 N3766865 E399425	**Elevation (ft):**	300
PLSS:	T01S, R12W, Sec. 36, S (S)	**Acres:**	35.0

Location:	JUST E OF PARAMOUNT BLVD AT CA-60 ON EITHER SIDE OF CA-60, 2.75 MI E OF BELLA VISTA SCHOOL, ABOUT 5.1 MI NW OF WHITTIER.
Detailed Location:	MAPPED AS A TWO PART POLYGON TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUALS SEEN FORAGING ON FLOWERS.
General:	1 ADULT FOUND AND PHOTOGRAPHED ON 7 AUG 2019. 1 ADULT FOUND AND PHOTOGRAPHED ON 4 APR 2020. 1 ADULT FEMALE FOUND AND PHOTOGRAPHED ON 7 JUL 2022.
Owner/Manager:	PVT, UNKNOWN

Occurrence No.	228	**Map Index:**	B9354	**EO Index:**	125573	**Element Last Seen:**	2019-07-03
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2019-07-03
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-08-31

Quad Summary:	El Monte (3411811)
County Summary:	Los Angeles

Lat/Long:	34.02956 / -118.05111	**Accuracy:**	non-specific area
UTM:	Zone-11 N3765932 E402964	**Elevation (ft):**	217
PLSS:	T02S, R11W, Sec. 5, NE (S)	**Acres:**	187.0

Location:	VICINITY OF WHITTIER NARROWS RECREATION AREA AND NATURE CENTER ALONG THE SAN GABRIEL RIVER, 1.2 MI W OF CA-60 AT I-605.
Detailed Location:	MAPPED AS A TWO PART POLYGON TO THE PROVIDED COORDINATES. COLLECTION WITH LOCALITY OF "WHITTIER NARROWS" ALSO ATTRIBUTED TO THIS LOCATION.
Ecological:	2019 INDIVIDUALS SEEN FORAGING ON FLOWERS AND HAD LARGE POLLEN BASKETS. WHITTIER NARROWS RECREATION AREA IS A 1,500-ACRE PARK WITH VARIOUS LAKES, GARDENS, AND OPEN AREAS.
General:	1 ADULT COLLECTED ON 10 MAY 1968 (LACMENT #1769). 1 ADULT FOUND AND PHOTOGRAPHED ON 1 JUN 2019. 1 ADULT FOUND AND PHOTOGRAPHED ON 8 JUN 2019. 1 ADULT FOUND AND PHOTOGRAPHED ON 3 JUL 2019.
Owner/Manager:	USACE

Occurrence No.	233	**Map Index:**	B9359	**EO Index:**	125578	**Element Last Seen:**	2020-05-27
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2020-05-27
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-09-01

Quad Summary:	Black Star Canyon (3311776), Orange (3311777)
County Summary:	Orange

Lat/Long:	33.83699 / -117.75299	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3744337 E430330	**Elevation (ft):**	751
PLSS:	T04S, R08W, Sec. 7, SE (S)	**Acres:**	70.0

Location:	OAK CANYON NATURE CENTER, 0.35 MI W OF E SERRANO AVE AT PARK RIM CIR, 2.5 MI SE OF WOODSBORO ELEMENTARY SCHOOL.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL SEEN FORAGING ON FLOWERS. OAK CANYON NATURE CENTER IS A 58-ACRE PARK CONSISTING OF OAK WOODLAND AND COASTAL SAGE SCRUB HABITAT WITH A YEAR-ROUND STREAM RUNNING THROUGH.
General:	1 ADULT FOUND AND PHOTOGRAPHED ON 27 MAY 2020.
Owner/Manager:	CITY OF ANAHEIM

Occurrence No.	234	**Map Index:**	B9360	**EO Index:**	125579	**Element Last Seen:**	2021-07-18
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2021-07-18
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-09-01

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.83203 / -117.76179	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3743792 E429512	**Elevation (ft):**	897
PLSS:	T04S, R08W, Sec. 7, SW (S)	**Acres:**	18.0

Location:	JUST W OF NOHL RANCH RD AT CARNEGIE AVE, 0.16 MI N OF ANAHEIM HILLS ELEMENTARY SCHOOL, 1.25 MI SE OF ANAHEIM HILLS.
Detailed Location:	MAPPED TO PROVIDED COORDINATES.
Ecological:	INDIVIDUAL SEEN FORAGING ON FLOWERS. PRIMARILY RESIDENTIAL AREA WITH VARIOUS PARKS AND OPEN NATURAL SPACES SURROUNDING.
General:	1 ADULT FOUND AND PHOTOGRAPHED ON 18 JUL 2021.
Owner/Manager:	UNKNOWN

Occurrence No.	235	**Map Index:**	B9361	**EO Index:**	125580	**Element Last Seen:**	2020-10-24
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2020-10-24
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-09-01

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.85595 / -117.81636	**Accuracy:**	non-specific area
UTM:	Zone-11 N3746484 E424483	**Elevation (ft):**	255
PLSS:	T04S, R09W, Sec. 3, NW (S)	**Acres:**	232.0

Location:	ALONG SANTA ANA RIVER NEAR S LAKEVIEW AVE CROSSING, 1.5 MI W OF ANAHEIM HILLS POST OFFICE, 3.2 MI E OF LA JOLLA.
Detailed Location:	MAPPED AS A TWO PART POLYGON TO THE PROVIDED COORDINATES USING THE GIVEN ACCURACY VALUES.
Ecological:	INDIVIDUALS FOUND FORAGING ON VARIOUS FLOWERS, SOME WITH LARGE POLLEN BASKETS.
General:	1 ADULT FOUND ON 7 OCT 2019. 1 ADULT FOUND ON 9 JUL 2020. 1 ADULT MALE FOUND ON 10 SEP 2020. 1 ADULT MALE FOUND ON 12 SEP 2020. 1 ADULT FOUND ON 27 SEP 2020. 1 ADULT FEMALE FOUND ON 24 OCT 2020. ALL INDIVIDUALS PHOTOGRAPHED.
Owner/Manager:	ORA COUNTY

Occurrence No.	236	**Map Index:**	B9362	**EO Index:**	125581	**Element Last Seen:**	2020-09-01
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2020-09-01
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-09-01

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.83639 / -117.80663	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3744308 E425366	**Elevation (ft):**	843
PLSS:	T04S, R09W, Sec. 10, SE (S)	**Acres:**	18.0

Location:	JUST N OF E REGENCY AVE AT N ROXBURY ST, 0.96 MI E OF OLIVE HILLS RESERVOIR, 1.5 MI NNE OF VILLA PARK HIGH SCHOOL.
Detailed Location:	MAPPED TO PROVIDED COORDINATES.
Ecological:	INDIVIDUAL SEEN FORAGING ON FLOWERS IN YARD AT PRIVATE RESIDENCE. SURROUNDING AREA IS PRIMARILY RESIDENTIAL DEVELOPMENT.
General:	1 ADULT FOUND AND PHOTOGRAPHED ON 1 SEP 2020.
Owner/Manager:	PVT

Occurrence No.	237	**Map Index:**	66320	**EO Index:**	125589	**Element Last Seen:**	1958-01-04
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1958-01-04
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-09-11

Quad Summary:	Tustin (3311767), Newport Beach (3311768), Orange (3311777), Anaheim (3311778)
County Summary:	Orange

Lat/Long:	33.74572 / -117.86785	**Accuracy:**	1 mile
UTM:	Zone-11 N3734300 E419616	**Elevation (ft):**	110
PLSS:	T05S, R09W, Sec. 18 (S)	**Acres:**	0.0

Location:	SANTA ANA.
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED NON-SPECIFICALLY TO THE CITY OF SANTA ANA.
Ecological:	BOMBUS CROTCHII ALSO COLLECTED AT THIS LOCATION.
General:	2 COLLECTED ON 12 AUG 1917 (BOMBUS #1109 & #1110). 1 ADULT COLLECTED ON 4 SEP 1936 (LACMENT #1867). 1 ADULT FEMALE COLLECTED BY R. BISHOP ON 5 OCT 1942 (UCRCENT #295551). 1 ADULT FEMALE COLLECTED BY J. BATH ON 4 JAN 1958 (UCRCENT #295556).
Owner/Manager:	UNKNOWN

Occurrence No.	238	**Map Index:**	B9376	**EO Index:**	125596	**Element Last Seen:**	2019-12-08
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2019-12-08
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-05-21

Quad Summary:	Black Star Canyon (3311776), Orange (3311777)
County Summary:	Orange

Lat/Long:	33.7958 / -117.75047	**Accuracy:**	non-specific area
UTM:	Zone-11 N3739768 E430529	**Elevation (ft):**	586
PLSS:	T04S, R08W, Sec. 30, E (S)	**Acres:**	43.0

Location:	VICINITY OF IRVINE PARK, 0.55 MI E OF IRVINE PARK RD AT JAMBOREE RD, 1.9 MI ESE OF ORANGE PARK ACRES.
Detailed Location:	MAPPED AS A TWO PART POLYGON TO THE PROVIDED COORDINATES. COLLECTION MADE AT GENERAL "IRVINE PARK" ALSO ATTRIBUTED TO THIS LOCATION.
Ecological:	SURROUNDING AREA CONSISTS OF OAK AND SYCAMORE GROVES, AS WELL AS GRASSLAND.
General:	1 ADULT COLLECTED ON 4 AUG 1938. 1 ADULT FOUND & PHOTOGRAPHED ON 25 JUN 2019. 1 OR 2 ADULTS FOUND AND PHOTOGRAPHED ON 8 DEC 2019.
Owner/Manager:	ORA COUNTY, UNKNOWN

Occurrence No.	250	**Map Index:**	B9400	**EO Index:**	125619	**Element Last Seen:**	2022-10-31
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2022-10-31
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-09-19

Quad Summary:	Seal Beach (3311861), Los Alamitos (3311871)
County Summary:	Los Angeles, Orange

Lat/Long:	33.751 / -118.10326	**Accuracy:**	non-specific area
UTM:	Zone-11 N3735095 E397818	**Elevation (ft):**	10
PLSS:	T05S, R12W, Sec. 11, SE (S)	**Acres:**	54.0

Location:	VICINITY OF CA-1 AT SAN GABRIEL RIVER, 0.7 MI NW OF J H MCGAUGH ELEMENTARY SCHOOL, 2 MI SE OF ROGERS MIDDLE SCHOOL.
Detailed Location:	MAPPED AS A THREE PART POLYGON TO THE PROVIDED COORDINATES. VICINITY OF GUM GROVE PARK.
Ecological:	INDIVIDUALS SEEN FLYING, RESTING, AND FORAGING ON FLOWERS. WETLAND AREA WITH RESIDENTIAL DEVELOPMENT TO THE SOUTH.
General:	1 ADULT FOUND AND PHOTOGRAPHED ON 25 AUG 2016. 1 ADULT FOUND AND PHOTOGRAPHED ON 23 SEP 2021. 1 ADULT FOUND AND PHOTOGRAPHED ON 7 AUG 2022. 1 ADULT FEMALE FOUND AND PHOTOGRAPHED ON 31 OCT 2022.
Owner/Manager:	LOS CERRITOS WETLAND AUTH, PVT

Occurrence No.	251	**Map Index:**	B9403	**EO Index:**	125624	**Element Last Seen:**	2021-04-23
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2021-04-23
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-09-19

Quad Summary:	Los Alamitos (3311871)
County Summary:	Orange

Lat/Long:	33.77554 / -118.07079	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3737783 E400854	**Elevation (ft):**	18
PLSS:	T05S, R11W, Sec. 6, NE (S)	**Acres:**	18.0

Location:	JUST W OF OLD RANCH GOLF COURSE, 0.16 MI E OF SEAL BEACH BLVD AT OLD RANCH PKWY, 1.4 MI S OF SAINT HEDWIG SCHOOL.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL WITH LARGE POLLEN BASKETS FOUND FORAGING ON FLOWERS. AREA IS HIGHLY RESIDENTIALLY AND COMMERCIALLY DEVELOPED.
General:	1 ADULT FEMALE FOUND AND PHOTOGRAPHED ON 23 APR 2021.
Owner/Manager:	PVT

Occurrence No.	252	**Map Index:**	B9404	**EO Index:**	125625	**Element Last Seen:**	2020-09-07
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2020-09-07
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-09-19

Quad Summary: South Gate (3311882)

County Summary: Los Angeles

Lat/Long:	33.97286 / -118.24239	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3759842 E385228	**Elevation (ft):**	151
PLSS:	T02S, R13W, Sec. 28, NE (S)	**Acres:**	18.0

Location: N SIDE OF ROOSEVELT PARK, 0.8 MI E OF S CENTRAL AVE AT E 74TH ST, 1.7 MI W OF SAINT MATTHIAS SCHOOL, FLORENCE.

Detailed Location: MAPPED TO THE PROVIDED COORDINATES.

Ecological: SURROUNDING AREA IS HIGHLY DEVELOPED. INDIVIDUAL FOUND ON CONCRETE GROUND; UNSURE IF DEAD OR ALIVE.

General: 1 ADULT FOUND AND PHOTOGRAPHED ON 7 SEP 2020.

Owner/Manager: LAX COUNTY

Occurrence No.	271	**Map Index:**	B9513	**EO Index:**	125745	**Element Last Seen:**	1953-09-03
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1953-09-03
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-10-20

Quad Summary: Orange (3311777), Yorba Linda (3311787)

County Summary: Orange

Lat/Long:	33.88867 / -117.81299	**Accuracy:**	1 mile
UTM:	Zone-11 N3750109 E424823	**Elevation (ft):**	383
PLSS:	T03S, R09W, Sec. 27 (S)	**Acres:**	1987.0

Location: YORBA LINDA.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED NON-SPECIFICALLY TO THE CITY OF YORBA LINDA.

Ecological:

General: 1 ADULT FEMALE COLLECTED BY P. TIMBERLAKE ON 14 AUG 1920. 1 ADULT FEMALE COLLECTED BY P. TIMBERLAKE ON 15 AUG 1920. 1 COLLECTED IN FEB 1934. 1 ADULT COLLECTED IN NOV 1934. 1 ADULT COLLECTED ON 3 SEP 1953.

Owner/Manager: UNKNOWN

Occurrence No.	272	**Map Index:**	B9516	**EO Index:**	125749	**Element Last Seen:**	2022-09-08
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2022-09-08
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-10-23

Quad Summary: Whittier (3311881)

County Summary: Los Angeles

Lat/Long:	33.98737 / -118.07809	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3761279 E400424	**Elevation (ft):**	171
PLSS:	T02S, R11W, Sec. 19, NW (S)	**Acres:**	18.0

Location: ALONG BIKE TRAIL JUST NE OF MINES AVE AT RIMBANK ST, 0.42 MI W OF I-605 AT BEXLEY DR, 0.5 MI E OF VALENCIA SCHOOL.

Detailed Location: MAPPED TO THE PROVIDED COORDINATES.

Ecological: INDIVIDUAL FOUND FORAGING ON MORNING GLORY ALONG BIKE TRAIL. SAN GABRIEL RIVER TO THE E WITH SOME OPEN GREEN SPACE SURROUNDED BY RESIDENTIAL DEVELOPMENT.

General: 1 ADULT FOUND & PHOTOGRAPHED ON 8 SEP 2022.

Owner/Manager: UNKNOWN

Occurrence No.	273	**Map Index:**	B9517	**EO Index:**	125750	**Element Last Seen:**	2021-08-31
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2021-08-31
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-10-23

Quad Summary:	Whittier (3311881)
County Summary:	Los Angeles

Lat/Long:	33.91891 / -118.01009	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3753625 E406630	**Elevation (ft):**	197
PLSS:	T03S, R11W, Sec. 11, SW (S)	**Acres:**	18.0

Location:	HOME DEPOT GARDEN CENTER, 0.51 MI E OF MESA SCHOOL, 1.2 MI WSW OF MEADOW GREEN SCHOOL.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL WITH VISIBLE POLLEN BASKETS SEEN FORAGING ON FLOWERS.
General:	1 ADULT FEMALE FOUND & PHOTOGRAPHED ON 31 AUG 2021.
Owner/Manager:	PVT

Occurrence No.	279	**Map Index:**	B9529	**EO Index:**	125762	**Element Last Seen:**	2017-08-26
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2017-08-26
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-10-26

Quad Summary:	Long Beach (3311872), South Gate (3311882)
County Summary:	Los Angeles

Lat/Long:	33.87503 / -118.219	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3748968 E387260	**Elevation (ft):**	45
PLSS:	T03S, R13W, Sec. 26, SW (S)	**Acres:**	18.0

Location:	COMPTON CREEK, JUST N OF CA-91, 0.45 MI WSW OF COMPTON COLLEGE, COMPTON.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL SEEN FORAGING ON A FLOWER. SURROUNDING AREA IS HIGHLY COMMERCIALLY DEVELOPED.
General:	1 ADULT FOUND & PHOTOGRAPHED ON 26 AUG 2017.
Owner/Manager:	UNKNOWN

Occurrence No.	282	**Map Index:**	B9551	**EO Index:**	125783	**Element Last Seen:**	2020-05-10
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2020-05-10
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-11-30

Quad Summary:	Los Alamitos (3311871)
County Summary:	Los Angeles

Lat/Long:	33.76268 / -118.11895	**Accuracy:**	non-specific area
UTM:	Zone-11 N3736405 E396378	**Elevation (ft):**	13
PLSS:	T05S, R12W, Sec. 10, NE (S)	**Acres:**	35.0

Location:	SIMS POND & MARINE STADIUM FLANKING LOYNES DR, 0.8 MI E OF LOWELL SCHOOL, 0.9 MI W OF N STUDEBAKER RD AT LOYNES DR.
Detailed Location:	MAPPED AS A TWO-PART POLYGON TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUALS SEEN FLYING OR FORAGING ON FLOWERS.
General:	1 ADULT FOUND & PHOTOGRAPHED ON 13 AUG 2014. 1 ADULT FOUND & PHOTOGRAPHED ON 6 JUL 2019. 1 ADULT FOUND & PHOTOGRAPHED ON 10 MAY 2020.
Owner/Manager:	CITY OF LONG BEACH

Occurrence No.	283	**Map Index:**	B9558	**EO Index:**	125789	**Element Last Seen:**	1918-02-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1918-02-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-11-03

Quad Summary: South Gate (3311882)

County Summary: Los Angeles

Lat/Long:	33.93029 / -118.21146	**Accuracy:**	1 mile
UTM:	Zone-11 N3755087 E388030	**Elevation (ft):**	92
PLSS:	T03S, R13W, Sec. 11 (S)	**Acres:**	1987.0

Location: LYNWOOD.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED NON-SPECIFICALLY TO THE CITY OF LYNWOOD.

Ecological:

General: 1 INDIVIDUAL COLLECTED IN FEB 1918 (BBSL BOMBUS #1196).

Owner/Manager: UNKNOWN

Occurrence No.	284	**Map Index:**	B9564	**EO Index:**	125794	**Element Last Seen:**	2017-03-02
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2017-03-02
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-11-06

Quad Summary: South Gate (3311882)

County Summary: Los Angeles

Lat/Long:	33.91709 / -118.16942	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3753579 E391899	**Elevation (ft):**	83
PLSS:	T03S, R12W, Sec. 7, SE (S)	**Acres:**	18.0

Location: JUST W OF GARFIELD AVE AT MAIN ST, 0.23 MI E OF HOLLYDALE ELEMENTARY SCHOOL, HOLLYDALE SOUTH GATE.

Detailed Location: MAPPED TO THE PROVIDED COORDINATES.

Ecological: INDIVIDUAL SEEN FORAGING ON A FLOWER. SURROUNDING AREA IS HIGHLY DEVELOPED.

General: 1 INDIVIDUAL FOUND & PHOTOGRAPHED ON 2 MAR 2017.

Owner/Manager: PVT

Occurrence No.	285	**Map Index:**	B9565	**EO Index:**	125795	**Element Last Seen:**	2020-04-26
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2020-04-26
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-11-06

Quad Summary: South Gate (3311882)

County Summary: Los Angeles

Lat/Long:	33.95102 / -118.13749	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3757308 E394893	**Elevation (ft):**	124
PLSS:	T02S, R12W, Sec. 33, SE (S)	**Acres:**	18.0

Location: VICINITY OF RIO HONDO ELEMENTARY SCHOOL, 0.5 MI SW OF FLORENCE AVE AT PARAMOUNT BLVD, 1.1 MI E OF CRAWFORD PARK, DOWNEY.

Detailed Location: MAPPED TO THE PROVIDED COORDINATES.

Ecological: INDIVIDUAL SEEN FORAGING ON A ROSE.

General: 1 INDIVIDUAL FOUND & PHOTOGRAPHED ON 26 APR 2020.

Owner/Manager: PVT

Occurrence No.	286	**Map Index:**	B9604	**EO Index:**	125833	**Element Last Seen:**	2006-XX-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2006-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-12-12

Quad Summary: Whittier (3311881), South Gate (3311882)

County Summary: Los Angeles

Lat/Long:	33.97669 / -118.13934	**Accuracy:**	1 mile
UTM:	Zone-11 N3760157 E394753	**Elevation (ft):**	149
PLSS:	T02S, R12W, Sec. 21 (S)	**Acres:**	1987.0

Location: LAGUNA.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED NON-SPECIFICALLY TO HISTORICAL TOWN OF LAGUNA (NOW COMMERCE).

Ecological:

General: 1 ADULT FEMALE COLLECTED ON 9 AUG 1912. 1 COLLECTED ON 17 AUG 1917. 1 ADULT COLLECTED ON 9 JUL 1933. 2 ADULT MALES & 13 ADULT FEMALES COLLECTED ON 5 JUL 1936. 2 ADULT FEMALES COLLECTED ON 20 JUN 1939. 2 ADULT FEMALES COLLECTED IN 2006.

Owner/Manager: UNKNOWN

Occurrence No.	287	**Map Index:**	B9605	**EO Index:**	125834	**Element Last Seen:**	2022-08-14
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2022-08-14
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-11-20

Quad Summary: Los Alamitos (3311871)

County Summary: Orange

Lat/Long:	33.86006 / -118.01382	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3747102 E406221	**Elevation (ft):**	67
PLSS:	T03S, R11W, Sec. 34, SE (S)	**Acres:**	18.0

Location: VICINITY OF BUENA PARK JR HIGH, JUST NW OF KNOTT AVE AT ORANGETHORPE AVE, 1.6 MI E OF BETTENCOURT PARK, BUENA PARK.

Detailed Location: MAPPED TO THE PROVIDED COORDINATES.

Ecological: INDIVIDUAL FOUND FORAGING ON PEPPER PLANT AND SALVIA. SURROUNDING AREA IS HIGHLY DEVELOPED.

General: 1 ADULT FEMALE FOUND & PHOTOGRAPHED ON 14 AUG 2022.

Owner/Manager: PVT

Occurrence No.	288	**Map Index:**	B9606	**EO Index:**	125835	**Element Last Seen:**	2019-10-06
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2019-10-06
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-11-20

Quad Summary: Los Alamitos (3311871)

County Summary: Orange

Lat/Long:	33.84936 / -118.02176	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3745923 E405474	**Elevation (ft):**	56
PLSS:	T04S, R11W, Sec. 3, SW (S)	**Acres:**	18.0

Location: JUST N OF LA CIENAGA DR AT LA MONA CIR, 0.13 MI W OF TEMPLE SCHOOL, 0.5 MI SE OF BRENNER PARK, BUENA PARK.

Detailed Location: MAPPED TO THE PROVIDED COORDINATES.

Ecological: INDIVIDUAL FOUND IN GARDEN AT PRIVATE RESIDENCE. SURROUNDING AREA IS PRIMARILY RESIDENTIALLY DEVELOPED WITH A LARGE COMMUNITY GARDEN TO THE N.

General: 1 ADULT FOUND & PHOTOGRAPHED ON 6 OCT 2019.

Owner/Manager: PVT

Occurrence No.	289	**Map Index:**	B9607	**EO Index:**	125836	**Element Last Seen:**	2020-01-06
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2020-01-06
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-11-20

Quad Summary: Los Alamitos (3311871)

County Summary: Los Angeles

Lat/Long:	33.86212 / -118.06189	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3747375 E401776	**Elevation (ft):**	48
PLSS:	T03S, R11W, Sec. 32, SW (S)	**Acres:**	18.0

Location: JUST S OF HERITAGE PARK, 0.48 MI NW OF SHOEMAKER AVE AT SOUTH ST, 0.85 MI N OF CERRITOS REGIONAL COUNTY PARK, CERRITOS.

Detailed Location: MAPPED TO THE PROVIDED COORDINATES.

Ecological: INDIVIDUAL FOUND FORAGING ON LAVENDER AT PRIVATE RESIDENCE. SURROUNDING AREA IS PRIMARILY RESIDENTIAL.

General: 1 ADULT FOUND & PHOTOGRAPHED ON 6 JAN 2020.

Owner/Manager: PVT

Occurrence No.	290	**Map Index:**	B9608	**EO Index:**	125837	**Element Last Seen:**	2020-09-09
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2020-09-09
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-11-20

Quad Summary: Los Alamitos (3311871)

County Summary: Los Angeles

Lat/Long:	33.8258 / -118.09149	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3743377 E398996	**Elevation (ft):**	33
PLSS:	T04S, R12W, Sec. 13, SW (S)	**Acres:**	18.0

Location: NW SIDE OF EL DORADO EAST RP, 0.48 MI N OF E WARDLOW AVE AT SAN GABRIEL BIKE TRAIL, 1.1 MI E OF HENRY ELEMENTARY SCHOOL.

Detailed Location: MAPPED TO THE PROVIDED COORDINATES.

Ecological: INDIVIDUAL FOUND FORAGING ON A FLOWER.

General: 1 ADULT FOUND & PHOTOGRAPHED ON 9 SEP 2020.

Owner/Manager: CITY OF LONG BEACH

Occurrence No.	291	**Map Index:**	B9616	**EO Index:**	126841	**Element Last Seen:**	2020-08-03
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2020-08-03
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-11-28

Quad Summary: Los Alamitos (3311871)

County Summary: Los Angeles

Lat/Long:	33.8201 / -118.08539	**Accuracy:**	non-specific area
UTM:	Zone-11 N3742738 E399554	**Elevation (ft):**	33
PLSS:	T04S, R12W, Sec. 24, N (S)	**Acres:**	35.0

Location: EL DORADO EAST REGIONAL PARK, JUST N OF E WARDLOW RD, 1.15 MI NW OF LOS ALAMITOS HIGH SCHOOL, LONG BEACH.

Detailed Location: MAPPED AS A TWO-PART POLYGON TO THE PROVIDED COORDINATES.

Ecological: INDIVIDUALS WERE FOUND FORAGING ON FLOWERS.

General: 1 ADULT FOUND & PHOTOGRAPHED ON 22 JUL 2020. 1 ADULT FOUND & PHOTOGRAPHED ON 3 AUG 2020.

Owner/Manager: CITY OF LONG BEACH

Occurrence No.	292	**Map Index:**	B9623	**EO Index:**	126842	**Element Last Seen:**	2023-09-27
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-09-27
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-12-04

Quad Summary: Los Alamitos (3311871)

County Summary: Los Angeles

Lat/Long:	33.80771 / -118.08316	**Accuracy:**	non-specific area
UTM:	Zone-11 N3741363 E399745	**Elevation (ft):**	23
PLSS:	T04S, R12W, Sec. 24, SE (S)	**Acres:**	62.0

Location: EL DORADO NATURE CENTER, 1.1 MI SW OF LOS ALAMITOS BLVD AT E WARDLOW RD, 1.4 MI E OF MILLIKAN HIGH SCHOOL, LONG BEACH.

Detailed Location: MAPPED AS A THREE-PART POLYGON TO THE PROVIDED COORDINATES.

Ecological: INDIVIDUALS WERE ALL FOUND FORAGING ON VARIOUS FLOWERS. MANY FEMALES HAD LARGE POLLEN BASKETS. BOMBUS CROTCHII ALSO FOUND IN THIS AREA.

General: 1 MALE FOUND ON 30 JUN 2017. 2 ADULTS FOUND ON 7 JUN 2019. 1 MALE FOUND ON 2 AUG 2019. 1 FEMALE FOUND ON 16 AUG 2019. 1 ADULT FOUND ON 23 JUL 2020. 1 ADULT FOUND ON 9 SEP 2022. 1 FOUND ON 27 SEP 2023. ALL INDIVIDUALS WERE PHOTOGRAPHED.

Owner/Manager: CITY OF LONG BEACH

Occurrence No.	293	**Map Index:**	B9626	**EO Index:**	126850	**Element Last Seen:**	2019-07-14
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2019-07-14
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-12-04

Quad Summary: Los Alamitos (3311871)

County Summary: Orange

Lat/Long:	33.77652 / -118.09504	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3737916 E398609	**Elevation (ft):**	9
PLSS:	T05S, R12W, Sec. 1, NW (S)	**Acres:**	18.0

Location: 0.1 MI N OF COLLEGE PARK DR AT LOYOLA PLZ, 0.7 MI S OF I-405 AT SAN GABRIEL RIVER, 0.9 MI SW OF RUSH SCHOOL, SEAL BEACH.

Detailed Location: MAPPED TO THE PROVIDED COORDINATES.

Ecological: INDIVIDUAL WAS FOUND FORAGING ON FLOWERS AT A PRIVATE RESIDENCE. SURROUNDING AREA PRIMARILY RESIDENTIAL.

General: 1 ADULT FOUND & PHOTOGRAPHED ON 14 JUL 2019.

Owner/Manager: PVT

Occurrence No.	294	**Map Index:**	B9629	**EO Index:**	126851	**Element Last Seen:**	2022-08-01
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2022-08-01
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-12-13

Quad Summary:	Los Alamitos (3311871)
County Summary:	Los Angeles

Lat/Long:	33.78264 / -118.11264	**Accuracy:**	non-specific area
UTM:	Zone-11 N3738612 E396986	**Elevation (ft):**	16
PLSS:	T04S, R12W, Sec. 35, W (S)	**Acres:**	70.0

Location:	CSU LONG BEACH, 1.4 MI W OF HOPKINSON SCHOOL, 1.6 MI SE OF I-405 AT N BELLFLOWER BLVD, LONG BEACH.
Detailed Location:	MAPPED AS A THREE-PART POLYGON TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUALS FOUND FORAGING ON FLOWERS. SOME FEMALES HAD LARGE POLLEN BASKETS. CSU LONG BEACH IS A WELL-DEVELOPED COLLEGE CAMPUS.
General:	1 ADULT FOUND & PHOTOGRAPHED ON 1 AUG 2016. 1 ADULT FOUND & PHOTOGRAPHED ON 13 MAR 2018. 1 ADULT FEMALE FOUND & PHOTOGRAPHED ON 17 JUL 2022. 1 ADULT FOUND & PHOTOGRAPHED ON 23 JUL 2022. 2 ADULT FEMALES FOUND & PHOTOGRAPHED ON 1 AUG 2022.
Owner/Manager:	CSU-LONG BEACH

Occurrence No.	295	**Map Index:**	B9632	**EO Index:**	126856	**Element Last Seen:**	2022-12-07
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2022-12-07
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-12-13

Quad Summary:	Whittier (3311881)
County Summary:	Los Angeles

Lat/Long:	33.87855 / -118.05296	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3749189 E402622	**Elevation (ft):**	62
PLSS:	T03S, R11W, Sec. 29, SE (S)	**Acres:**	18.0

Location:	VICINITY OF GRETCHEN WHITNEY HIGH SCHOOL, 0.2 MI SE OF 166TH ST AT SHOEMAKER RD, 0.7 MI W OF GONSALVES SCHOOL, CERRITOS.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	SURROUNDING AREA IS RESIDENTIALLY AND COMMERCIALLY DEVELOPED.
General:	1 ADULT FOUND & PHOTOGRAPHED ON 7 DEC 2022.
Owner/Manager:	PVT

Occurrence No.	296	**Map Index:**	B9634	**EO Index:**	126858	**Element Last Seen:**	2023-06-24
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-06-24
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-12-13

Quad Summary:	Los Alamitos (3311871)
County Summary:	Los Angeles

Lat/Long:	33.84021 / -118.10933	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3744993 E397362	**Elevation (ft):**	40
PLSS:	T04S, R12W, Sec. 11, SW (S)	**Acres:**	18.0

Location:	JUST W OF CONQUISTA AVE AT SEABORN ST, 0.25 MI E OF MACARTHUR SCHOOL, 0.7 MI WSW OF MONTEVERDE PARK, LAKEWOOD.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL HAD LARGE POLLEN BASKETS AND WAS SEEN FORAGING ON A TOMATO PLANT AT A PRIVATE RESIDENCE. SURROUNDING AREA IS HIGHLY RESIDENTIALLY DEVELOPED.
General:	1 ADULT FEMALE FOUND & PHOTOGRAPHED ON 24 JUN 2023.
Owner/Manager:	PVT

Occurrence No.	298	**Map Index:**	B9645	**EO Index:**	126869	**Element Last Seen:**	2016-06-15
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2016-06-15
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-12-07

Quad Summary:	La Habra (3311788)
County Summary:	Los Angeles

Lat/Long:	33.96703 / -117.9097	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3758873 E415958	**Elevation (ft):**	681
PLSS:	T02S, R10W, Sec. 27, E (S)	**Acres:**	18.0

Location:	PATHFINDER COMMUNITY PARK, 0.3 MI ESE OF FULLERTON RD AT PATHFINDER RD, 0.8 MI SW OF BLANDFORD SCHOOL, ROWLAND HEIGHTS.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL FOUND FORAGING ON LUPINE. RESIDENTIAL DEVELOPMENT TO THE N AND OPEN GRASSLAND AND CHAPARRAL SPACE TO THE S.
General:	1 ADULT FOUND & PHOTOGRAPHED ON 15 JUN 2016.
Owner/Manager:	LAX COUNTY-PARKS & REC

Occurrence No.	299	**Map Index:**	B9646	**EO Index:**	126871	**Element Last Seen:**	2023-09-23
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-09-23
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-12-13

Quad Summary:	La Habra (3311788)
County Summary:	Los Angeles

Lat/Long:	33.97672 / -117.93009	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3759965 E414083	**Elevation (ft):**	657
PLSS:	T02S, R10W, Sec. 21, SE (S)	**Acres:**	18.0

Location:	PETER F SCHABARUM REGIONAL PARK, 0.25 MI WSW OF SALEROS DR AT PAMELA CT, 1.9 MI ESE OF GRAZIDE SCHOOL, ROWLAND HEIGHTS.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL OBSERVED FLYING NEAR FLOWERS. PETER F SCHABARUM REGIONAL PARK IS A 575-ACRE PARK COMPRISED OF OPEN GRASSLAND AND CHAPARRAL HABITATS.
General:	1 ADULT FOUND & PHOTOGRAPHED ON 23 SEP 2023.
Owner/Manager:	LAX COUNTY-PARKS & REC

Occurrence No.	300	**Map Index:**	B9647	**EO Index:**	126872	**Element Last Seen:**	2023-06-25
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-06-25
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-08-26

Quad Summary:	La Habra (3311788)
County Summary:	Los Angeles

Lat/Long:	33.97014 / -117.93151	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3759236 E413945	**Elevation (ft):**	919
PLSS:	T02S, R10W, Sec. 28, NE (S)	**Acres:**	18.0

Location:	POWDER CANYON OPEN SPACE, 0.4 MI NE OF E SKYLINE DR AT AIROSO RD, 1.9 MI W OF BLANDFORD SCHOOL, LA HABRA HEIGHTS.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES. 2016 COLLECTION MADE AT GENERAL "POWDER CANYON, LA HABRA HEIGHTS" ALSO ATTRIBUTED TO THIS LOCATION.
Ecological:	2023 INDIVIDUALS FOUND FORAGING ON VICIA VILLOSA AND BRASSICA NIGRA. POWDER CANYON OPEN SPACE IS MADE UP OF CHAPARRAL AND GRASSLAND HABITAT.
General:	1 ADULT FEMALE COLLECTED ON 14 MAY 2016 (UCSB-IZC #10472). 3 INDIVIDUALS CAPTURED, PHOTOGRAPHED, AND RELEASED ON 25 JUN 2023.
Owner/Manager:	PUENTE HILLS LANDFILL NHPA

Occurrence No.	301	**Map Index:**	B9650	**EO Index:**	126875	**Element Last Seen:**	2022-08-27
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2022-08-27
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-12-08

Quad Summary:	La Habra (3311788)
County Summary:	Los Angeles, Orange

Lat/Long:	33.94506 / -117.93479	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3756458 E413618	**Elevation (ft):**	481
PLSS:	T03S, R10W, Sec. 4, N (S)	**Acres:**	18.0

Location:	JUST W OF ROANNE DR AT WOODCREST AVE, 0.1 MI NE OF ARBOLITA SCHOOL, 0.85 MI W OF ESTELI PARK, LA HABRA.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUALS FOUND FORAGING ON SALVIA GREGGII, SALVIA GUARANITICA, & TECOMA STANS AT PRIVATE RESIDENCE. SURROUNDING AREA IS PRIMARILY RESIDENTIAL DEVELOPMENT.
General:	1 ADULT FEMALE FOUND & PHOTOGRAPHED ON 13 AUG 2022. 3 ADULT FEMALES FOUND & PHOTOGRAPHED ON 27 AUG 2022.
Owner/Manager:	PVT

Occurrence No.	302	**Map Index:**	B9651	**EO Index:**	126877	**Element Last Seen:**	2023-09-05
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-09-05
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-12-13

Quad Summary:	La Habra (3311788)
County Summary:	Orange

Lat/Long:	33.92892 / -117.95743	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3754688 E411508	**Elevation (ft):**	280
PLSS:	T03S, R10W, Sec. 8, NW (S)	**Acres:**	18.0

Location:	JUST E OF S MARIAN ST AT WALKER AVE, 0.1 MI SW OF OUR LADY OF GUADALUPE SCHOOL, 0.4 MI N OF VISTA GRANDE PARK, LA HABRA.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL FOUND FORAGING ON FLOWERS AT PRIVATE RESIDENCE. BOMBUS CROTCHII ALSO FOUND NEAR THIS LOCATION.
General:	1 ADULT FEMALE FOUND & PHOTOGRAPHED ON 5 SEP 2023.
Owner/Manager:	PVT

Occurrence No.	303	**Map Index:**	B9653	**EO Index:**	126878	**Element Last Seen:**	2022-08-08
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2022-08-08
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-12-11

Quad Summary:	La Habra (3311788)
County Summary:	Los Angeles, Orange

Lat/Long:	33.9264 / -117.97753	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3754426 E409648	**Elevation (ft):**	286
PLSS:	T03S, R11W, Sec. 12, NE (S)	**Acres:**	18.0

Location:	MAYBROOK SCHOOL GARDEN, 0.13 MI N OF LAMBERT DR AT SUGARGROVE DR, 0.65 MI E OF GROVEDALE SCHOOL, WHITTIER.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUALS FOUND FORAGING ON GUARA SP. AND DURANTA ERECTA AT SCHOOL GARDEN. SURROUNDING AREA IS HIGHLY DEVELOPED.
General:	1 ADULT FEMALE FOUND & PHOTOGRAPHED ON 6 AUG 2022. 15 ADULT FEMALES & 1 ADULT MALE FOUND & PHOTOGRAPHED ON 8 AUG 2022.
Owner/Manager:	PVT

Occurrence No.	304	**Map Index:**	B9657	**EO Index:**	126882	**Element Last Seen:**	2022-07-28
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2022-07-28
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-12-12

Quad Summary:	La Habra (3311788)
County Summary:	Orange

Lat/Long:	33.9178 / -117.9733	**Accuracy:**	non-specific area
UTM:	Zone-11 N3753469 E410029	**Elevation (ft):**	285
PLSS:	T03S, R10W, Sec. 7, SW (S)	**Acres:**	35.0

Location:	0.85 MI E OF 1ST AVE AT SUMMERSHADE DR, ON BOTH SIDES OF CA-39, 0.95 MI SW OF VISTA GRANDE PARK, LA HABRA.
Detailed Location:	MAPPED AS A TWO-PART POLYGON TO THE PROVIDED COORDINATES.
Ecological:	SURROUNDING AREA IS PRIMARILY RESIDENTIAL AND COMMERCIAL DEVELOPMENT.
General:	3 ADULTS FOUND & PHOTOGRAPHED ON 9 AUG 2019. 1 DEAD ADULT FEMALE FOUND & PHOTOGRAPHED ON 28 JUL 2022.
Owner/Manager:	PVT

Occurrence No.	305	**Map Index:**	B9659	**EO Index:**	126884	**Element Last Seen:**	2022-08-21
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2022-08-21
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-12-11

Quad Summary:	La Habra (3311788)
County Summary:	Orange

Lat/Long:	33.91709 / -117.95889	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3753377 E411361	**Elevation (ft):**	239
PLSS:	T03S, R10W, Sec. 17, NW (S)	**Acres:**	18.0

Location:	VICINITY OF CA-90 AT IDAHO ST, 0.3 MI NW OF IMPERIAL MIDDLE SCHOOL, 0.87 MI SE OF OESTE PARK, LA HABRA.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUALS WERE FOUND FORAGING ON FLOWERS. SURROUNDING AREA IS HIGHLY COMMERCIALLY AND RESIDENTIALLY DEVELOPED.
General:	2-3 ADULTS FOUND & PHOTOGRAPHED ON 21 AUG 2022.
Owner/Manager:	PVT

Occurrence No.	306	**Map Index:**	B9663	**EO Index:**	126887	**Element Last Seen:**	2022-06-26
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2022-06-26
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-12-11

Quad Summary:	La Habra (3311788)
County Summary:	Orange

Lat/Long:	33.91644 / -117.94539	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3753294 E412608	**Elevation (ft):**	260
PLSS:	T03S, R10W, Sec. 17, NE (S)	**Acres:**	18.0

Location:	JUST N OF CAMBRIDGE DR AT STANSBURY LN, 0.5 MI NE OF IMPERIAL MIDDLE SCHOOL, 0.78 MI NW OF LAGUNA LAKE, LA HABRA.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL HAD LARGE POLLEN BASKETS AND WAS FOUND AT PRIVATE RESIDENCE. SURROUNDING AREA IS PRIMARILY RESIDENTIAL AND COMMERCIAL DEVELOPMENT.
General:	1 ADULT FEMALE FOUND & PHOTOGRAPHED ON 26 JUN 2022.
Owner/Manager:	PVT

Occurrence No.	307	**Map Index:**	B9665	**EO Index:**	126890	**Element Last Seen:**	2022-07-13
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2022-07-13
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2023-12-11

Quad Summary: La Habra (3311788)

County Summary: Orange

Lat/Long:	33.91533 / -117.93269	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3753160 E413781	**Elevation (ft):**	290
PLSS:	T03S, R10W, Sec. 16, NE (S)	**Acres:**	18.0

Location: ARMSTRONG GARDEN CENTER, JUST N OF LAS RIENDAS DR AT S HARBOR BLVD, 0.6 MI ENE OF MONTWOOD PARK, LA HABRA.

Detailed Location: MAPPED TO THE PROVIDED COORDINATES.

Ecological: INDIVIDUAL FOUND FORAGING ON FLOWERS. SURROUNDING AREA IS HIGHLY RESIDENTIALLY AND COMMERCIALLY DEVELOPED.

General: 1 ADULT FEMALE FOUND & PHOTOGRAPHED ON 13 JUL 2022.

Owner/Manager: PVT

Occurrence No.	308	**Map Index:**	B9850	**EO Index:**	127075	**Element Last Seen:**	2023-10-11
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-10-11
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-01-02

Quad Summary: Los Angeles (3411812)

County Summary: Los Angeles

Lat/Long:	34.11094 / -118.2102	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3775118 E388383	**Elevation (ft):**	556
PLSS:	T01S, R13W, Sec. 2, SE (S)	**Acres:**	18.0

Location: JUST NW OF ALDAMA ST AT TERRACE 49, 0.2 MI W OF ALDAMA SCHOOL, 0.5 MI NE OF MOUNT WASHINGTON SCHOOL, LOS ANGELES.

Detailed Location: MAPPED TO THE PROVIDED COORDINATES.

Ecological: INDIVIDUAL FOUND FORAGING ON FLOWERS IN YARD AT PRIVATE RESIDENCE.

General: 1 ADULT FOUND AND PHOTOGRAPHED ON 11 OCT 2023.

Owner/Manager: PVT

Occurrence No.	309	**Map Index:**	B9853	**EO Index:**	127078	**Element Last Seen:**	2023-08-31
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-08-31
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-01-03

Quad Summary: Los Angeles (3411812)

County Summary: Los Angeles

Lat/Long:	34.08622 / -118.20632	**Accuracy:**	non-specific area
UTM:	Zone-11 N3772372 E388709	**Elevation (ft):**	593
PLSS:	T01S, R13W, Sec. 14, NE (S)	**Acres:**	31.0

Location: 0.15 MI S OF E AVENUE 39 AT GRIFFIN AVE, 0.37 MI E OF HILLSIDE SCHOOL, 0.65 MI N OF ELA PARK, LOS ANGELES.

Detailed Location: MAPPED TO THE PROVIDED COORDINATES.

Ecological: OPEN CHAPARRAL SPACE SURROUNDED BY RESIDENTIAL DEVELOPMENT. SITE IS CURRENTLY OWNED AND MANAGED BY AN ENVIRONMENT NON-PROFIT INTERESTED IN ENVIRONEMTNAL JUSTICE AND HABITAT RESTORATION.

General: 1 ADULT FOUND AND PHOTOGRAPHED ON 10 AUG 2023. 1 ADULT FOUND AND PHOTOGRAPHED ON 31 AUG 2023.

Owner/Manager: PVT-NORTH EAST TREES

Occurrence No.	310	**Map Index:**	B9856	**EO Index:**	127081	**Element Last Seen:**	2021-08-28
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2021-08-28
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-01-03

Quad Summary:	Los Angeles (3411812)
County Summary:	Los Angeles

Lat/Long:	34.10201 / -118.24302	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3774165 E385344	**Elevation (ft):**	351
PLSS:	T01S, R13W, Sec. 9, NE (S)	**Acres:**	18.0

Location:	LOS ANGELES RIVER GREENWAY TRAIL AT NEWELL ST, 0.2 MI NE OF BENEDICT RECREATION CENTER, 0.5 MI E OF ALLESANDRO SCHOOL.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL SEEN FORAGING ON FLOWERS. SURROUNDING AREA IS HIGHLY DEVELOPED WITH RESIDENTIAL AND COMMERCIAL DEVELOPMENT TO THE W AND LOS ANGELES RIVER TO THE E.
General:	1 ADULT FOUND & PHOTOGRAPHED ON 28 AUG 2021.
Owner/Manager:	UNKNOWN

Occurrence No.	311	**Map Index:**	B9857	**EO Index:**	127082	**Element Last Seen:**	2023-08-27
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-08-27
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-01-03

Quad Summary:	Los Angeles (3411812)
County Summary:	Los Angeles

Lat/Long:	34.11925 / -118.18212	**Accuracy:**	non-specific area
UTM:	Zone-11 N3776010 E390984	**Elevation (ft):**	619
PLSS:	T01S, R12W, Sec. 6, NW (S)	**Acres:**	35.0

Location:	0.1 MI W AND SE OF MERIDIAN ST AT N FIGUEROA ST, 0.35 MI N OF HIGHLAND PARK, 0.65 MI S OF ANNADALE SCHOOL, LOS ANGELES.
Detailed Location:	MAPPED AS A TWO-PART POLYGON TO THE PROVIDED COORDINATES. ONE INDIVIDUAL FOUND AT BURBANK MIDDLE SCHOOL GARDEN AND ONE INDIVIDUAL FOUND AT PRIVATE RESIDENCE.
Ecological:	APRIL INDIVIDUAL FOUND FORAGING ON FLOWERS AT SCHOOL GARDEN. AUGUST INDIVIDUAL FOUND ON CONCRETE GROUND AT PRIVATE RESIDENCE. SURROUNDING AREA IS RESIDENTIALLY DEVELOPED.
General:	1 ADULT FOUND AND PHOTOGRAPHED ON 21 APR 2023. 1 ADULT FOUND AND PHOTOGRAPHED ON 27 AUG 2023.
Owner/Manager:	PVT

Occurrence No.	312	**Map Index:**	B9858	**EO Index:**	127083	**Element Last Seen:**	2022-07-24
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2022-07-24
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-01-03

Quad Summary:	Los Angeles (3411812)
County Summary:	Los Angeles

Lat/Long:	34.08595 / -118.14099	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3772274 E394736	**Elevation (ft):**	473
PLSS:	T01S, R12W, Sec. 16, NE (S)	**Acres:**	18.0

Location:	HOME DEPOT GARDEN CENTER, 0.12 MI SE OF W COMMONWEALTH AVE AT S MARENGO AVE, 0.34 MI W OF NORTHRUP SCHOOL, ALHAMBRA.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL WITH LARGE POLLEN BASKETS FOUND FORAGING ON FLOWERS. SURROUNDING AREA IS HIGHLY COMMERCIALLY AND RESIDENTIALLY DEVELOPED.
General:	1 ADULT FEMALE FOUND AND PHOTOGRAPHED ON 24 JUL 2022.
Owner/Manager:	PVT

Occurrence No.	313	**Map Index:**	B9859	**EO Index:**	127084	**Element Last Seen:**	2023-07-27
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-07-27
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-01-04

Quad Summary:	Los Angeles (3411812)
County Summary:	Los Angeles

Lat/Long:	34.04054 / -118.14678	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3767244 E394145	**Elevation (ft):**	304
PLSS:	T01S, R12W, Sec. 33, W (S)	**Acres:**	18.0

Location:	EAST LOS ANGELES COLLEGE, 0.2 MI N OF S ATLANTIC BLVD AT AVENIDA CESAR CHAVEZ, 1.2 MI E OF SOLEDAD SCHOOL, MONTEREY PARK
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL WITH NOTICEABLE POLLEN BASKETS FOUND FORAGING ON FLOWERS. EAST LOS ANGELES COLLEGE IS A WELL-DEVELOPED COLLEGE CAMPUS SURROUNDED BY RESIDENTIAL AND COMMERCIAL DEVELOPMENT.
General:	1 ADULT FEMALE FOUND AND PHOTOGRAPHED ON 27 JUL 2023.
Owner/Manager:	PVT

Occurrence No.	314	**Map Index:**	B9861	**EO Index:**	127085	**Element Last Seen:**	2023-09-14
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-09-14
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-01-04

Quad Summary:	Los Angeles (3411812)
County Summary:	Los Angeles

Lat/Long:	34.04479 / -118.17275	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3767743 E391753	**Elevation (ft):**	286
PLSS:	T01S, R12W, Sec. 31, NE (S)	**Acres:**	18.0

Location:	JUST S OF FOLSOM ST AT N SYDNEY DR, 0.34 MI NW OF SOLEDAD SCHOOL, 0.85 MI S OF CITY TERRACE SCHOOL, EAST LOS ANGELES.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL FOUND ON CONCRETE GROUND AT PRIVATE RESIDENCE. RESIDENTIAL DEVELOPMENT SURROUNDING.
General:	1 ADULT (UNKNOWN IF ALIVE OR DEAD) FOUND AND PHOTOGRAPHED ON 14 SEP 2023.
Owner/Manager:	PVT

Occurrence No.	315	**Map Index:**	B9862	**EO Index:**	127087	**Element Last Seen:**	2016-09-04
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2016-09-04
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-01-04

Quad Summary:	Los Angeles (3411812)
County Summary:	Los Angeles

Lat/Long:	34.05324 / -118.19602	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3768705 E389616	**Elevation (ft):**	402
PLSS:	T01S, R13W, Sec. 25, S (S)	**Acres:**	18.0

Location:	JUST W OF N EVERGREEN AVE AT POMEROY AVE, 0.2 MI S OF RAMONA GARDENS PARK, 0.43 MI N OF ASSUMPTION SCHOOL, LOS ANGELES.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL WITH NOTICEABLE POLLEN BASKET FOUND FORAGING ON A FLOWER AT PRIVATE RESIDENCE. SURROUNDING AREA IS PRIMARILY RESIDENTIAL.
General:	1 ADULT FEMALE FOUND AND PHOTOGRAPHED ON 4 SEP 2016.
Owner/Manager:	PVT

Occurrence No.	316	**Map Index:**	B9863	**EO Index:**	127088	**Element Last Seen:**	2020-08-30
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2020-08-30
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-01-05

Quad Summary:	Hollywood (3411813)
County Summary:	Los Angeles

Lat/Long:	34.08594 / -118.26812	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3772411 E383006	**Elevation (ft):**	497
PLSS:	T01S, R13W, Sec. 17, NW (S)	**Acres:**	18.0

Location:	JUST NE OF SILVERWOOD TER AT ANGELUS AVE, 0.25 MI NW OF MAYBERRY STREET SCHOOL, 0.45 MI SE OF MICHELTORENA SCHOOL.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL WITH LARGE POLLEN BASKETS FOUND FORAGING ON FLOWERS AT PRIVATE RESIDENCE. SURROUNDING AREA IS PRIMARILY RESIDENTIAL.
General:	1 ADULT FEMALE FOUND AND PHOTOGRAPHED ON 30 AUG 2020.
Owner/Manager:	PVT

Occurrence No.	317	**Map Index:**	B9864	**EO Index:**	127089	**Element Last Seen:**	2015-08-08
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2015-08-08
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-01-05

Quad Summary:	Hollywood (3411813)
County Summary:	Los Angeles

Lat/Long:	34.09628 / -118.35595	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3773661 E374918	**Elevation (ft):**	352
PLSS:	T01S, R14W, Sec. 9, SW (S)	**Acres:**	18.0

Location:	DE LONGPRE AVE AT N STANLEY AVE, 0.3 MI SW OF GARDNER STREET SCHOOL, 0.4 MI NE OF SAINT AMBROSE SCHOOL, LOS ANGELES.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL FOUND FORAGING ON FLOWERS AT PRIVATE RESIDENCE. SURROUNDING AREA IS PRIMARILY RESIDENTIAL.
General:	1 ADULT FOUND AND PHOTOGRAPHED ON 8 AUG 2015.
Owner/Manager:	PVT

Occurrence No.	318	**Map Index:**	B9865	**EO Index:**	127090	**Element Last Seen:**	2019-04-27
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2019-04-27
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-01-05

Quad Summary:	Hollywood (3411813)
County Summary:	Los Angeles

Lat/Long:	34.08634 / -118.34731	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3772548 E375701	**Elevation (ft):**	259
PLSS:	T01S, R14W, Sec. 16, NE (S)	**Acres:**	18.0

Location:	JUST S OF WILLOUGHBY AVE AT N ALTA VISTA BLVD, 0.17 MI NW OF MELROSE ELEMENTARY SCHOOL, 0.77 MI NE OF FAIRFAX HS.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL WITH POLLEN BASKETS FOUND FORAGING ON FLOWERS IN GARDEN OUTSIDE OF APARTMENT COMPLEX. SURROUNDING AREA IS PRIMARILY RESIDENTIAL AND COMMERCIAL DEVELOPMENT.
General:	1 ADULT FOUND AND PHOTOGRAPHED ON 27 APR 2019.
Owner/Manager:	PVT

Occurrence No.	319	**Map Index:**	B9870	**EO Index:**	127092	**Element Last Seen:**	2017-07-30
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2017-07-30
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-01-08

Quad Summary:	Hollywood (3411813)
County Summary:	Los Angeles

Lat/Long:	34.06397 / -118.35637	**Accuracy:**	non-specific area
UTM:	Zone-11 N3770079 E374832	**Elevation (ft):**	183
PLSS:	T01S, R14W, Sec. 21, SW (S)	**Acres:**	30.0

Location:	LA BREA TAR PITS, 0.3 MI ESE OF S FAIRFAX AVE AT W 6TH ST, 0.85 MI NW OF WILSHIRE CREST SCHOOL.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES. MOST INDIVIDUALS FOUND AT PLEISTOCENE GARDEN AT LA BREA TAR PITS.
Ecological:	MOST INDIVIDUALS FOUND FORAGING ON ESCHSCHOLZIA CALIFORNICA, SOME WITH LARGE POLLEN BASKETS. SURROUNDING AREA IS COMPRISED OF RESIDENTIAL AND COMMERCIAL DEVELOPMENT.
General:	1 ADULT FEMALE FOUND ON 20 APR 2016. 2 ADULTS FOUND ON 21 APR 2016. 1 ADULT FOUND ON 27 APR 2016. 8 ADULTS FOUND ON 14 JUN 2016. 1 ADULT FOUND DEAD ON 9 SEP 2016. 1 ADULT FOUND ON 10 SEP 2016. 1 ADULT FOUND ON 30 JUL 2017. ALL PHOTOGRAPHED.
Owner/Manager:	CITY OF LOS ANGELES

Occurrence No.	320	**Map Index:**	B9871	**EO Index:**	127097	**Element Last Seen:**	2023-10-06
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-10-06
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-01-09

Quad Summary:	Los Angeles (3411812)
County Summary:	Los Angeles

Lat/Long:	34.05916 / -118.24693	**Accuracy:**	non-specific area
UTM:	Zone-11 N3769417 E384925	**Elevation (ft):**	381
PLSS:	T01S, R13W, Sec. 28, N (S)	**Acres:**	20.0

Location:	VICINITY OF N HOPE ST ON-RAMP OF US-101, 0.18 MI NW OF LOS ANGELES CIVIC CENTER, 0.35 MI S OF BETSY ROSS HIGH SCHOOL.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES FOR 2023 OBSERVATIONS ALONG TEMPLE ST NEAR GRAND AVE. GENERAL SPECIMENS COLLECTED FROM 1916-1975 LABELED ONLY "LOS ANGELES" ATTRIBUTED TO THIS LOCATION.
Ecological:	2023 INDIVIDUALS WERE UTILIZING UNDEVELOPED ROADSIDE LOT WITH GRASS AND VARIOUS FLOWERS. SURROUNDING AREA IS HIGHLY DEVELOPED.
General:	40 SPECIMENS COLLECTED IN "LOS ANGELES" FROM 1916, 1917, 1928, 1936, 1940, 1955, 1958, 1972, 1973 & 1975. 2+ ADULTS PHOTOGRAPHED ON 27 AUG 2023. ABOUT 10 ADULTS ON 8 SEP 2023. 1 ADULT PHOTOGRAPHED ON 6 OCT 2023.
Owner/Manager:	UNKNOWN

Occurrence No.	321	**Map Index:**	B9872	**EO Index:**	127098	**Element Last Seen:**	2017-03-07
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2017-03-07
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-01-09

Quad Summary:	Los Angeles (3411812)
County Summary:	Los Angeles

Lat/Long:	34.09744 / -118.20126	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3773611 E389190	**Elevation (ft):**	468
PLSS:	T01S, R13W, Sec. 12, SW (S)	**Acres:**	18.0

Location:	W SIDE OF ERNEST E DEBS REGIONAL PARK, 0.17 MI N OF GRIFFIN AVE AT MONTECITO DR, 0.76 MI SW OF BUSHNELL WAY SCHOOL.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL WAS UTILIZING SALVIA MELLIFERA. ERNEST E DEBS REGIONAL PARK IS A 282-ACRE PARK WITH OAK WOODLAND HABITAT.
General:	1 ADULT FEMALE FOUND ON 7 MAR 2017.
Owner/Manager:	CITY OF LOS ANGELES

Occurrence No.	322	**Map Index:**	B9876	**EO Index:**	127099	**Element Last Seen:**	2023-10-19
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-10-19
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-01-22

Quad Summary:	Hollywood (3411813)
County Summary:	Los Angeles

Lat/Long:	34.0552 / -118.27184	**Accuracy:**	non-specific area
UTM:	Zone-11 N3769006 E382621	**Elevation (ft):**	309
PLSS:	T01S, R13W, Sec. 29, NW (S)	**Acres:**	29.0

Location:	ESPERANZA ELEMENTARY SCHOOL GARDEN, 0.4 MI SE OF MACARTHUR PARK LAKE, 0.5 MI N OF TENTH STREET SCHOOL, LOS ANGELES.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES. MOST INDIVIDUALS DETECTED AT GARDEN COMPRISED OF CA NATIVE PLANTS ADJACENT TO ESPERANZA ELEMENTARY SCHOOL. 1 INDIVIDUAL DETECTED 0.1 MI NE OF THIS GARDEN.
Ecological:	MOST INDIVIDUALS WERE FOUND FORAGING ON FLOWERS OR FLYING. SURROUNDING AREA IS HIGHLY DEVELOPED WITH CLOSEST NOTABLE NATURAL AREA (MACARTHUR PARK) BEING 0.4 MI NW.
General:	1 ADULT IN APR 2016. 1 ADULT IN JAN 2019. 1 ADULT IN OCT 2019. 2 ADULTS IN NOV 2019. 1 ADULT IN DEC 2019. 1 ADULT IN JAN 2020. 1 ADULT IN JUL 2020. 1 ADULT IN OCT 2020. 3 IN NOV 2022. 3 IN DEC 2022. 4+ IN SEP 2023. 1 DEAD IN OCT 2023.
Owner/Manager:	PVT

Occurrence No.	323	**Map Index:**	B9877	**EO Index:**	127104	**Element Last Seen:**	2023-08-18
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-08-18
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-01-11

Quad Summary:	Hollywood (3411813)
County Summary:	Los Angeles

Lat/Long:	34.03294 / -118.31389	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3766586 E378708	**Elevation (ft):**	207
PLSS:	T01S, R14W, Sec. 35, SE (S)	**Acres:**	18.0

Location:	WILLIAM ANDREWS CLARK MEMORIAL LIBRARY, 0.1 MI SE OF W 25TH ST AT CIMARRON ST, 0.2 MI SW OF TWENTY-FOURTH STREET SCHOOL.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL WITH LARGE POLLEN BASKETS FOUND FORAGING ON FLOWERS. SURROUNDING AREA IS PRIMARILY RESIDENTIAL AND COMMERCIAL DEVELOPMENT.
General:	1 ADULT FEMALE FOUND & PHOTOGRAPHED ON 18 AUG 2023.
Owner/Manager:	PVT

Occurrence No.	324	**Map Index:**	B9878	**EO Index:**	127106	**Element Last Seen:**	2023-06-15
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-06-15
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-01-22

Quad Summary:	Hollywood (3411813)
County Summary:	Los Angeles

Lat/Long:	34.01723 / -118.28812	**Accuracy:**	non-specific area
UTM:	Zone-11 N3764814 E381065	**Elevation (ft):**	182
PLSS:	T02S, R13W, Sec. 6, SW (S)	**Acres:**	45.0

Location:	NATURE GARDENS AT NATURAL HISTORY MUSEUM OF LA COUNTY, 0.2 MI W OF AEROSPACE MUSEUM, 0.6 MI SE OF 37TH ST SCHOOL.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES. INDIVIDUALS FOUND IN EDIBLE GARDEN, BUTTERFLY PAVILLION, POLLINATOR GARDEN, AND VARIOUS OTHER LOCATIONS IN THE NATURE GARDENS. 1 INDIVIDUAL FOUND JUST E AT EXPOSITION PARK ROSE GARDEN.
Ecological:	INDIVIDUALS FOUND FORAGING ON NATIVE PLANTS AT THE NATURE GARDENS. BOMBUS CROTCHII ALSO FOUND NEAR THIS LOCATION.
General:	1 IN JUL 2015. 1 IN AUG 2015. 1 IN AUG 2017. 1 MALE IN SEP 2017. 1 IN MAR 2018. 1 FEMALE IN JUL 2018. 2 IN SEP 2018. 1 IN APR 2019. 2 IN JUL 2019. 1 FEMALE IN OCT 2019. 1 FEMALE IN AUG 2022. 1 FEMALE IN JUN 2023.
Owner/Manager:	STATE

Occurrence No.	325	**Map Index:**	B9884	**EO Index:**	127110	**Element Last Seen:**	2020-07-19
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2020-07-19
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-01-12

Quad Summary:	Hollywood (3411813)
County Summary:	Los Angeles

Lat/Long:	34.00875 / -118.32222	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3763914 E377904	**Elevation (ft):**	125
PLSS:	T02S, R14W, Sec. 11, SW (S)	**Acres:**	18.0

Location:	JUST S OF GARTHWAITE WALK AT 5TH AVE, 0.17 MI N OF 42ND STREET SCHOOL, 0.4 MI E OF AUDUBON MIDDLE SCHOOL, LOS ANGELES.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUALS FOUND FORAGING ON FLOWERS AT PRIVATE RESIDENCE. SURROUNDING AREA IS PRIMARILY RESIDENTIAL.
General:	1 ADULT FOUND & PHOTOGRAPHED ON 14 AUG 2019. 1 ADULT FOUND & PHOTOGRAPHED ON 19 JUL 2020.
Owner/Manager:	PVT

Occurrence No.	326	**Map Index:**	B9895	**EO Index:**	127122	**Element Last Seen:**	2023-09-05
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-09-05
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-01-17

Quad Summary: Hollywood (3411813)

County Summary: Los Angeles

Lat/Long:	34.10584 / -118.35747	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3774723 E374792	**Elevation (ft):**	792
PLSS:	T01S, R14W, Sec. 4, SW (S)	**Acres:**	18.0

Location: S SIDE OF TREBEK OPEN SPACE, 0.12 MI NE OF NICHOLS CANYON RD AT COURTNEY AVE, 0.53 MI NW OF GARDNER STREET SCHOOL.

Detailed Location: MAPPED TO THE PROVIDED COORDINATES.

Ecological: TREBEK OPEN SPACE IS A 62-ACRE NATURE PRESERVE COMPRISED PRIMARILY OF CHAPARRAL HABITAT WITH RESIDENTIAL DEVELOPMENT SURROUNDING.

General: 1 ADULT FOUND & PHOTOGRAPHED ON 5 SEP 2023.

Owner/Manager: MRCA-TREBEK OPEN SPACE

Occurrence No.	327	**Map Index:**	B9896	**EO Index:**	127124	**Element Last Seen:**	2023-09-22
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-09-22
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-01-17

Quad Summary: Hollywood (3411813)

County Summary: Los Angeles

Lat/Long:	34.10528 / -118.34909	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3774651 E375564	**Elevation (ft):**	555
PLSS:	T01S, R14W, Sec. 9, NE (S)	**Acres:**	18.0

Location: S END OF RUNYON CANYON PARK, JUST N OF HILLSIDE AVE AT N FULLER AVE, 0.3 MI ENE OF WATTLES GARDEN PARK, LOS ANGELES.

Detailed Location: MAPPED TO THE PROVIDED COORDINATES.

Ecological: INDIVIDUAL FOUND FORAGING ON FLOWERS. RUNYON CANYON PARK IS A 160-ACRE PARK WITH PRIMARILY CHAPARRAL HABITAT. RESIDENTIAL DEVELOPMENT DIRECTLY TO THE E AND S.

General: 1 ADULT FOUND & PHOTOGRAPHED ON 22 SEP 2023.

Owner/Manager: CITY OF LOS ANGELES

Occurrence No.	328	**Map Index:**	66305	**EO Index:**	127130	**Element Last Seen:**	1970-11-21
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1970-11-21
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-01-17

Quad Summary: Hollywood (3411813)

County Summary: Los Angeles

Lat/Long:	34.09826 / -118.32682	**Accuracy:**	1 mile
UTM:	Zone-11 N3773845 E377608	**Elevation (ft):**	350
PLSS:	T01S, R14W, Sec. 10 (S)	**Acres:**	0.0

Location: HOLLYWOOD.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED NON-SPECIFICALLY TO LOCATION STATED AS "HOLLYWOOD".

Ecological:

General: 1 ADULT COLLECTED ON 21 NOV 1970 (LACMENT #1863).

Owner/Manager: UNKNOWN

Occurrence No.	329	**Map Index:**	B9905	**EO Index:**	127132	**Element Last Seen:**	2023-09-20
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-09-20
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-01-18

Quad Summary:	Hollywood (3411813)
County Summary:	Los Angeles

Lat/Long:	34.00499 / -118.3461	**Accuracy:**	non-specific area
UTM:	Zone-11 N3763526 E375694	**Elevation (ft):**	279
PLSS:	T02S, R14W, Sec. 9, SE (S)	**Acres:**	65.0

Location:	JUST E OF DON ARELLANES DR AT DON FELIPE DR AND VICINITY OF STOCKER ST AT VALLEY RIDGE AVE, 0.8 MI W OF LEIMERT PARK.
Detailed Location:	MAPPED AS A TWO-PART POLYGON TO THE PROVIDED COORDINATES. INDIVIDUALS FOUND AT PRIVATE RESIDENCE AND AT KENNETH HAHN SRA.
Ecological:	INDIVIDUALS FOUND FORAGING ON FLOWERS. SURROUNDING AREA IS PRIMARILY RESIDENTIAL WITH KENNETH HAHN SRA EXTENDING TO THE W.
General:	1 ADULT FOUND & PHOTOGRAPHED ON 19 JUN 2017. 1 ADULT FOUND & PHOTOGRAPHED ON 14 AUG 2022. 1 ADULT FOUND & PHOTOGRAPHED ON 28 JUL 2023. 2 ADULTS FOUND & PHOTOGRAPHED ON 20 SEP 2023.
Owner/Manager:	PVT, DPR- KENNETH HAHN SRA

Occurrence No.	330	**Map Index:**	B9912	**EO Index:**	127135	**Element Last Seen:**	2023-09-11
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-09-11
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-01-22

Quad Summary:	Inglewood (3311883), Hollywood (3411813)
County Summary:	Los Angeles

Lat/Long:	34.00157 / -118.35847	**Accuracy:**	non-specific area
UTM:	Zone-11 N3763162 E374546	**Elevation (ft):**	437
PLSS:	T02S, R14W, Sec. 16, NW (S)	**Acres:**	82.0

Location:	KENNETH HAHN SRA & NORMAN O HOUSTON PARK, JUST E & W OF LA BREA AVE AT DON LORENZO DR, 1.1 MI SW OF HILLCREST DR SCHOOL.
Detailed Location:	MAPPED AS A 2-PART POLYGON TO THE PROVIDED COORDINATES. SPECIMENS COLLECTED FROM 1952-1953 LABELED AS "BALDWIN HILLS [= SLAUSON HILLS]" ATTRIBUTED TO THIS LOCATION. 2012-2023 INDIVIDUALS FOUND AT KENNETH HAHN SRA AND NORMAN O HOUSTON PARK.
Ecological:	MOST INDIVIDUALS FOUND FORAGING ON FLOWERS. KENNETH HAHN SRA IS A 401-ACRE PARK WITH LARGE AREAS OF COASTAL SAGE SCRUB HABITAT.
General:	6 SPECIMENS COLLECTED IN "BALDWIN HILLS [= SLAUSON HILLS]" FROM 1952 & 1953. 1 ADULT FOUND ON 5 JUL 2012. 1 ADULT FOUND ON 18 JUL 2019. 2 ADULTS FOUND IN AUG 2022. 1 ADULT FOUND ON 25 MAY 2023. 1 ADULT FOUND ON 11 SEP 2023.
Owner/Manager:	DPR, CITY OF LOS ANGELES

Occurrence No.	332	**Map Index:**	B9921	**EO Index:**	127148	**Element Last Seen:**	1970-10-19
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1970-10-19
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-01-18

Quad Summary:	Hollywood (3411813)
County Summary:	Los Angeles

Lat/Long:	34.01845 / -118.33707	**Accuracy:**	3/5 mile
UTM:	Zone-11 N3765007 E376547	**Elevation (ft):**	114
PLSS:	T02S, R14W, Sec. 3, S (S)	**Acres:**	776.0

Location:	CRENSHAW AREA, 1.7 MI S OF LAFAYETTE SQUARE, 3.4 MI E OF CENTRAL CULVER CITY.
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED NON-SPECIFICALLY TO THE LOCATION STATED AS "CRENSHAW AREA".
Ecological:	
General:	1 ADULT COLLECTED ON 19 OCT 1970 (LACMENT #1864).
Owner/Manager:	UNKNOWN

Occurrence No.	333	**Map Index:**	B9923	**EO Index:**	127150	**Element Last Seen:**	1961-04-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1961-04-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-01-18

Quad Summary:	Hollywood (3411813)
County Summary:	Los Angeles

Lat/Long:	34.02249 / -118.35967	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3765484 E374466	**Elevation (ft):**	113
PLSS:	T02S, R14W, Sec. 4, SW (S)	**Acres:**	70.0

Location:	JUST W OF REDONDO BLVD AT SUNLIGHT PL, 0.3 MI E OF BALDWIN HILLS SCHOOL, 0.6 MI SW OF BALDWIN HILLS LIBRARY, LOS ANGELES
Detailed Location:	MAPPED TO THE PROVIDED ADDRESS.
Ecological:	SURROUNDING AREA IS HIGHLY RESIDENTIALLY AND COMMERCIALLY DEVELOPED.
General:	1 ADULT COLLECTED IN APR 1961 (LACMENT #1770).
Owner/Manager:	PVT

Occurrence No.	371	**Map Index:**	C0080	**EO Index:**	128302	**Element Last Seen:**	2023-09-29
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-09-29
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-02-16

Quad Summary:	Hollywood (3411813), Beverly Hills (3411814)
County Summary:	Los Angeles

Lat/Long:	34.01811 / -118.38117	**Accuracy:**	non-specific area
UTM:	Zone-11 N3765023 E372474	**Elevation (ft):**	359
PLSS:	T02S, R14W, Sec. 6, SE (S)	**Acres:**	183.0

Location:	BALDWIN HILLS SCENIC OVERLOOK AND STONEVIEW NATURE CENTER, 0.75 MI S OF WASHINGTON SCHOOL, 1 MI NE OF CARLSON PARK.
Detailed Location:	MAPPED AS A TWO-PART POLYGON TO THE PROVIDED COORDINATES. GENERAL SPECIMEN RECORDS COLLECTED IN "CULVER CITY" ALSO ATTRIBUTED TO THIS LOCATION. INDIVIDUALS FOUND AT BALDWIN HILLS SCENIC OVERLOOK, STONEVIEW NATURE CENTER, & PVT RESIDENCES.
Ecological:	MOST INDIVIDUALS FOUND FORAGING ON FLOWERS. VARIOUS RECREATION AREAS AND PARKS NEARBY, AS WELL AS COMMERCIAL AND RESIDENTIAL DEVELOPMENT.
General:	COLLECTED IN 1955 & 1984. 4 IN JUN 2016. 1 IN FEB 2018. 1 IN MAY 2019. 2 IN JUL 2019. 8 IN AUG 2019. 1 IN APR 2020. 1 IN MAY 2020. 1 IN MAY 2021. 1 IN JUL 2021. 5 IN MAY-AUG 2022. 1 IN JUN 2023. 3 IN JUL 2023. 5 IN AUG 2023. 2 IN SEP 2023.
Owner/Manager:	DPR, LAX COUNTY, PVT

Occurrence No.	382	**Map Index:**	C0116	**EO Index:**	128343	**Element Last Seen:**	2023-09-20
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-09-20
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-02-26

Quad Summary:	Los Angeles (3411812)
County Summary:	Los Angeles

Lat/Long:	34.06832 / -118.16772	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3770346 E392247	**Elevation (ft):**	502
PLSS:	T01S, R12W, Sec. 20, SW (S)	**Acres:**	18.0

Location:	CSU LOS ANGELES STATE PLAYHOUSE, 0.32 MI SW OF I-710 AT W HELLMAN AVE, 1 MI E OF WOODROW WILSON HIGH SCHOOL.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL(S) FOUND FORAGING ON FLOWERS OUTSIDE OF STATE PLAYHOUSE THEATER. CSU LOS ANGELES IS A WELL-DEVELOPED COLLEGE CAMPUS SUROUNDED PRIMARILY BY RESIDENTIAL DEVELOPMENT.
General:	1 OR 2 INDIVIDUALS FOUND & PHOTOGRAPHED ON 20 SEP 2023.
Owner/Manager:	CSU-LOS ANGELES

Occurrence No.	383	**Map Index:**	C0117	**EO Index:**	128344	**Element Last Seen:**	2023-03-26
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-03-26
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-03-04

Quad Summary:	Los Angeles (3411812)
County Summary:	Los Angeles

Lat/Long:	34.07302 / -118.18871	**Accuracy:**	non-specific area
UTM:	Zone-11 N3770890 E390316	**Elevation (ft):**	506
PLSS:	T01S, R13W, Sec. 24, NE (S)	**Acres:**	87.0

Location:	ASCOT HILLS PARK, JUST S OF ASCOT RESERVOIR, 0.9 MI E OF GATES STREET ELEMENTARY SCHOOL, LOS ANGELES.
Detailed Location:	MAPPED AS A TWO-PART POLYGON TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUALS WITH LARGE POLLEN BASKETS FOUND FORAGING ON FLOWERS. ASCOT HILLS PARK'S 88 ACRES OF OPEN SPACE WAS RESTORED WITH NATIVE PLANTS (TREES, GRASSES, & PERENNIALS) IN 2019. PARK IS SURROUNDED BY RESIDENTIAL AND COMMERCIAL DEVELOPMENT.
General:	1 ADULT FEMALE FOUND & PHOTOGRAPHED ON 31 JUL 2021. 1 ADULT FEMALE FOUND & PHOTOGRAPHED ON 26 MAR 2023.
Owner/Manager:	CITY OF LOS ANGELES

Occurrence No.	384	**Map Index:**	C0119	**EO Index:**	128345	**Element Last Seen:**	2023-10-01
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-10-01
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-02-26

Quad Summary:	Los Angeles (3411812)
County Summary:	Los Angeles

Lat/Long:	34.092 / -118.18894	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3772994 E390320	**Elevation (ft):**	525
PLSS:	T01S, R13W, Sec. 12, SE (S)	**Acres:**	18.0

Location:	JUST N OF MCKENZIE AVE AT MONTEREY RD, 0.5 MI SW OF BUDD WIENER PARK, 0.8 MI E OF LATONA AVE SCHOOL, LOS ANGELES.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL FOUND FORAGING ON A SUNFLOWER AT PRIVATE RESIDENCE. SURROUNDING AREA IS PRIMARILY RESIDENTIAL DEVELOPMENT WITH VARIOUS PARKS AND OPEN SPACE AREAS NEARBY, THE MOST NOTABLE OF WHICH BEING ERNEST E DEBS REGIONAL PARK TO THE W.
General:	1 ADULT FOUND & PHOTOGRAPHED ON 1 OCT 2023.
Owner/Manager:	PVT

Occurrence No.	385	**Map Index:**	C0120	**EO Index:**	128347	**Element Last Seen:**	2023-07-19
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-07-19
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-02-26

Quad Summary:	Los Angeles (3411812)
County Summary:	Los Angeles

Lat/Long:	34.09873 / -118.16209	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3773713 E392805	**Elevation (ft):**	583
PLSS:	T01S, R12W, Sec. 8, W (S)	**Acres:**	18.0

Location:	JUST W OF MAYCREST AVE AT MOFFATT ST, 0.39 MI SSE OF MONTEREY HILLS SCHOOL, 0.45 MI N OF EL SERENO COMMUNITY GARDENS.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL WITH LARGE POLLEN BASKETS FOUND FLYING AND FORAGING ON FLOWERS AT PRIVATE RESIDENCE. SURROUNDING AREA IS PRIMARILY RESIDENTIAL DEVELOPMENT.
General:	1 ADULT FEMALE FOUND & PHOTOGRAPHED ON 19 JUL 2023.
Owner/Manager:	PVT

Occurrence No.	386	**Map Index:**	C0121	**EO Index:**	128348	**Element Last Seen:**	2023-10-14
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-10-14
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-02-26

Quad Summary:	Los Angeles (3411812)
County Summary:	Los Angeles

Lat/Long:	34.09874 / -118.17313	**Accuracy:**	non-specific area
UTM:	Zone-11 N3773725 E391787	**Elevation (ft):**	819
PLSS:	T01S, R12W, Sec. 7, E (S)	**Acres:**	52.0

Location:	ELEPHANT HILL OPEN SPACE, 0.45 MI W OF EL SERENO NORTH PARK, 0.6 MI N OF EL SERENO SCHOOL, LOS ANGELES.
Detailed Location:	MAPPED AS A THREE-PART POLYGON TO THE PROVIDED COORDINATES.
Ecological:	MARCH & OCTOBER INDIVIDUALS FOUND FORAGING ON FLOWERS. ELEPHANT HILL IS 110 ACRES OF OPEN SPACE WITH PRIMARILY GRASSLAND AND NATIVE WALNUT WOODLANDS. ELEPHANT HILL RECEIVED A GRANT IN 2023 TO HELP RESTORE AND PREVENT FUTURE ORV DAMAGE.
General:	1 DEAD ADULT FOUND & PHOTOGRAPHED ON 2 JAN 2023. 1 ADULT FOUND & PHOTOGRAPHED ON 27 MAR 2023. 1 ADULT FOUND & PHOTOGRAPHED ON 14 OCT 2023.
Owner/Manager:	MRCA, PVT

Occurrence No.	387	**Map Index:**	C0122	**EO Index:**	128349	**Element Last Seen:**	2023-09-03
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-09-03
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-02-26

Quad Summary:	Los Angeles (3411812)
County Summary:	Los Angeles

Lat/Long:	34.08563 / -118.1725	**Accuracy:**	non-specific area
UTM:	Zone-11 N3772271 E391828	**Elevation (ft):**	509
PLSS:	T01S, R12W, Sec. 18, NE (S)	**Acres:**	320.0

Location:	VICINITY OF ALL SAINTS SCHOOL, 0.8 MI NE OF EL SERENO RECREATION CENTER, 1.3 MI SW OF MONTEREY HILLS SCHOOL, LOS ANGELES
Detailed Location:	MAPPED AS A TWO-PART POLYGON TO THE PROVIDED COORDINATES. 2022 INDIVIDUAL FOUND NEAR PORTOLA AVE. OTHER INDIVIDUALS FOUND AT NEARBY RESIDENCES.
Ecological:	INDIVIDUALS FOUND FORAGING ON VARIOUS FLOWERS. SURROUNDING AREA IS RESIDENTIALLY AND COMMERCIALLY DEVELOPED.
General:	1 ADULT FEMALE FOUND & PHOTOGRAPHED ON 22 JUL 2022. 1 ADULT FOUND & PHOTOGRAPHED ON 10 JUL 2023. 1 ADULT FEMALE FOUND & PHOTOGRAPHED ON 19 JUL 2023. 1 ADULT FOUND & PHOTOGRAPHED ON 3 SEP 2023.
Owner/Manager:	PVT

Occurrence No.	459	**Map Index:**	C0390	**EO Index:**	130613	**Element Last Seen:**	2023-08-03
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-08-03
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-05-06

Quad Summary:	Whittier (3311881)
County Summary:	Los Angeles

Lat/Long:	33.979 / -118.06219	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3760336 E401883	**Elevation (ft):**	166
PLSS:	T02S, R11W, Sec. 20, SW (S)	**Acres:**	18.0

Location:	SORENSEN PARK, JUST E OF BROADWAY AVE AT BRADHURST ST, 1 MI W OF WHITTIER HIGH SCHOOL, WHITTIER.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL WITH NOTICEABLE POLLEN BASKETS FOUND FORAGING ON NON-NATIVE BLUE POTATO BUSH (LYCIANTHES RANTONNETII). SURROUNDING AREA IS HIGHLY RESIDENTIALLY DEVELOPED.
General:	1 ADULT FEMALE FOUND & PHOTOGRAPHED ON 3 AUG 2023.
Owner/Manager:	LAX COUNTY

Occurrence No.	460	**Map Index:**	C0391	**EO Index:**	130614	**Element Last Seen:**	2022-11-23
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2022-11-23
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-06-27

Quad Summary:	Whittier (3311881)
County Summary:	Los Angeles

Lat/Long:	33.97547 / -118.03307	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3759917 E404569	**Elevation (ft):**	323
PLSS:	T02S, R11W, Sec. 21, SE (S)	**Acres:**	18.0

Location:	VICINITY OF PAINTER AVE AT PENN ST, 0.13 MI NE OF WHITTIER PUBLIC LIBRARY, 0.53 MI W OF WILLIAM PENN PARK, WHITTIER.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES. COLLECTIONS FROM GENERAL "WHITTIER" ALSO ATTRIBUTED TO THIS LOCATION.
Ecological:	2022 INDIVIDUAL FOUND ON GROUND; UNSURE IF DEAD OR ALIVE. AREA IS HIGHLY RESIDENTIALLY & COMMERCIALLY DEVELOPED. BOMBUS CROTCHII ALSO COLLECTED NEAR THIS LOCATION.
General:	7 COLLECTED IN 1911. 2 COLLECTED IN 1912. 1 COLLECTED IN 1920. 1 COLLECTED IN 1923. 2 COLLECTED IN 1950. 1 COLLECTED IN 1956. 2 COLLECTED IN 1959. 1 COLLECTED IN 1968. 1 COLLECTED IN 1973. 1 ADULT FOUND & PHOTOGRAPHED ON 23 NOV 2022.
Owner/Manager:	UNKNOWN

Occurrence No.	461	**Map Index:**	C0392	**EO Index:**	130615	**Element Last Seen:**	2016-07-16
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2016-07-16
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-05-07

Quad Summary:	Whittier (3311881)
County Summary:	Los Angeles

Lat/Long:	33.98922 / -118.01739	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3761427 E406032	**Elevation (ft):**	911
PLSS:	T02S, R11W, Sec. 22, NE (S)	**Acres:**	18.0

Location:	TURNBULL CANYON OPEN SPACE, 0.2 MI NE OF ALTMARK AVE AT SOUTHWIND DR, 0.84 MI WSW OF WORKMAN HILL, WHITTIER.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL WITH NOTICEABLE POLLEN BASKETS FOUND FORAGING ON NON-NATIVE BRISTLY OXTONGUE (HELMINTHOTHECA ECHIOIDES). PRESERVED OPEN SPACE WITH RESIDENTIAL DEVELOPMENT SURROUNDING.
General:	1 ADULT FEMALE FOUND & PHOTOGRAPHED ON 16 JUL 2016.
Owner/Manager:	HABITAT AUTHORITY

Occurrence No.	569	**Map Index:**	C0629	**EO Index:**	131858	**Element Last Seen:**	2024-06-16
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2024-06-16
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-07-09

Quad Summary:	La Habra (3311788)
County Summary:	Los Angeles

Lat/Long:	33.98623 / -117.92889	**Accuracy:**	non-specific area
UTM:	Zone-11 N3761018 E414203	**Elevation (ft):**	568
PLSS:	T02S, R10W, Sec. 21, NE (S)	**Acres:**	23.0

Location:	PETER F SCHABARUM REGIONAL COUNTY PARK, 0.75 MI E OF COUNTRYWOOD PARK, 1.3 MI W OF ROWLAND ELEMENTARY, ROWLAND HEIGHTS.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUALS FOUND FORAGING ON FLOWERS. PETER F SCHABARUM REGIONAL COUNTY PARK IS A 575-ACRE PARK SURROUNDED BY RESIDENTIAL & COMMERCIAL DEVELOPMENT.
General:	1 ADULT FOUND & PHOTOGRAPHED ON 19 JUN 2023. 1 ADULT FOUND & PHOTOGRAPHED ON 16 JUN 2024.
Owner/Manager:	LAX COUNTY

Occurrence No.	570	**Map Index:**	C0630	**EO Index:**	131859	**Element Last Seen:**	2020-08-20
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2020-08-20
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-07-09

Quad Summary:	La Habra (3311788)
County Summary:	Los Angeles

Lat/Long:	33.94916 / -117.95163	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3756927 E412065	**Elevation (ft):**	579
PLSS:	T02S, R10W, Sec. 32, S (S)	**Acres:**	70.0

Location:	JUST N OF VIA PATRICIO AT EL PASEO DR, 0.7 MI SE OF HACIENDA PARK, 0.8 MI N OF WALNUT ELEMENTARY, LA HABRA HEIGHTS.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL FOUND FORAGING ON FLOWERS AT PRIVATE RESIDENCE. SURROUNDING AREA IS DISPERSED RESIDENTIAL DEVELOPMENT.
General:	1 ADULT FOUND & PHOTOGRAPHED ON 20 AUG 2020.
Owner/Manager:	PVT

Occurrence No.	572	**Map Index:**	C0632	**EO Index:**	131861	**Element Last Seen:**	2023-09-01
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-09-01
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-07-09

Quad Summary:	La Habra (3311788)
County Summary:	Los Angeles

Lat/Long:	33.93904 / -117.99143	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3755839 E408377	**Elevation (ft):**	259
PLSS:	T03S, R11W, Sec. 1, W (S)	**Acres:**	18.0

Location:	NEAR HOMELAND AVE AT CONOY RD, 0.15 MI ENE OF LEFFINGWELL SCHOOL, 0.6 MI SSW OF MURPHY RANCH SCHOOL, WHITTIER.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL FOUND FORAGING ON FLOWERS AT PRIVATE RESIDENCE. SURROUNDING AREA IS HIGHLY RESIDENTIALLY & COMMERCIALLY DEVELOPED.
General:	1 ADULT FOUND & PHOTOGRAPHED ON 1 SEP 2023.
Owner/Manager:	PVT

Occurrence No.	573	**Map Index:**	C0634	**EO Index:**	131864	**Element Last Seen:**	1955-07-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1955-07-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-07-09

Quad Summary:	La Habra (3311788)
County Summary:	Orange

Lat/Long:	33.92572 / -117.89937	**Accuracy:**	1 mile
UTM:	Zone-11 N3754284 E416872	**Elevation (ft):**	339
PLSS:	T03S, R10W, Sec. 11 (S)	**Acres:**	1987.0

Location:	BREA.
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED NON-SPECIFICALLY TO THE LOCATION STATED AS "BREA HILLS, FULLERTON" & "BREA".
Ecological:	
General:	1 COLLECTED ON 12 MAY 1917. 1 COLLECTED ON 15 JUL 1917. 3 COLLECTED ON 9 SEP 1917. 1 ADULT FEMALE COLLECTED ON 15 MAY 1950. 1 ADULT FEMALE COLLECTED IN JUL 1955.
Owner/Manager:	UNKNOWN

Occurrence No.	574	**Map Index:**	C0635	**EO Index:**	131865	**Element Last Seen:**	2023-09-05
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-09-05
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-07-09

Quad Summary:	La Habra (3311788)
County Summary:	Orange

Lat/Long:	33.90647 / -117.90236	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3752153 E416576	**Elevation (ft):**	325
PLSS:	T03S, R10W, Sec. 14, SW (S)	**Acres:**	18.0

Location:	JUST W OF SEQUOIA AVE AT PONDEROSA AVE, 0.3 MI N OF ROLLING HILLS SCHOOL, 0.5 MI S OF CITY HALL PARK, FULLERTON.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUALS FOUND FORAGING ON FLOWERS AT PRIVATE RESIDENCE. SURROUNDING AREA IS HIGHLY RESIDENTIALLY & COMMERCIALLY DEVELOPED.
General:	1 ADULT FEMALE FOUND & PHOTOGRAPHED ON 22 JUN 2020. 1 ADULT FOUND & PHOTOGRAPHED ON 27 SEP 2020. 1 ADULT FOUND & PHOTOGRAPHED ON 5 SEP 2023.
Owner/Manager:	PVT

Occurrence No.	575	**Map Index:**	C0636	**EO Index:**	131866	**Element Last Seen:**	2016-08-25
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2016-08-25
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-07-09

Quad Summary:	La Habra (3311788)
County Summary:	Orange

Lat/Long:	33.90252 / -117.91359	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3751723 E415535	**Elevation (ft):**	315
PLSS:	T03S, R10W, Sec. 22, NE (S)	**Acres:**	18.0

Location:	JUST S OF ROLLING HILLS DR AT PUENTE ST, 0.1 MI NE OF BEECHWOOD SCHOOL, 0.7 MI W OF ROLLING HILLS SCHOOL, FULLERTON.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL WITH NOTICEABLE POLLEN BASKETS FOUND FORAGING ON SOLANUM SP. AT PRIVATE RESIDENCE. SURROUNDING AREA IS RESIDENTIALLY & COMMERCIALLY DEVELOPED.
General:	1 ADULT FEMALE FOUND & PHOTOGRAPHED ON 25 AUG 2016.
Owner/Manager:	PVT

Occurrence No.	576	**Map Index:**	C0639	**EO Index:**	131867	**Element Last Seen:**	2020-08-27
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2020-08-27
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-07-09

Quad Summary:	La Habra (3311788)
County Summary:	Orange

Lat/Long:	33.89375 / -117.92561	**Accuracy:**	non-specific area
UTM:	Zone-11 N3750761 E414414	**Elevation (ft):**	302
PLSS:	T03S, R10W, Sec. 22, W (S)	**Acres:**	35.0

Location:	0.3 MI E OF HARBOR BLVD AT BASTANCHURY RD, 0.7 MI SW OF BEECHWOOD SCHOOL, 0.9 MI N OF HILLCREST PARK, FULLERTON.
Detailed Location:	MAPPED AS A TWO-PART POLYGON TO THE PROVIDED COORDINATES. 1 INDIVIDUAL FOUND AT PRIVATE RESIDENCE; 6+ INDIVIDUALS FOUND AT BREA DAM PARK.
Ecological:	INDIVIDUALS FOUND FORAGING ON FLOWERS. SURROUNDING AREA IS PRIMARILY RESIDENTIAL & COMMERCIAL DEVELOPMENT.
General:	1 ADULT FOUND & PHOTOGRAPHED ON 26 JUL 2020. 5+ ADULT FEMALES FOUND & PHOTOGRAPHED ON 18 AUG 2020. 1 ADULT FOUND & PHOTOGRAPHED ON 27 AUG 2020.
Owner/Manager:	CITY OF FULLERTON, PVT

Occurrence No.	577	**Map Index:**	C0640	**EO Index:**	131870	**Element Last Seen:**	2023-07-02
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-07-02
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-07-10

Quad Summary:	La Habra (3311788)
County Summary:	Orange

Lat/Long:	33.90414 / -117.94716	**Accuracy:**	non-specific area
UTM:	Zone-11 N3751932 E412433	**Elevation (ft):**	419
PLSS:	T03S, R10W, Sec. 17, SE (S)	**Acres:**	37.0

Location:	ROBERT E WARD NATURE PRESERVE, 0.2 TO 0.4 MILES WEST OF LAKEVIEW DRIVE AT EUCLID STREET, FULLERTON.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUALS FOUND FORAGING ON FLOWERS (ACMISPON GLABER, SALVIA APIANA). ROBERT E WARD NATURE PRESERVE IS A 72-ACRE PRESERVE COMPRISED PRIMARILY OF CHAPARRAL HABITAT. SURROUNDING AREA IS OPEN CHAPARRAL & RESIDENTIAL DEVELOPMENT.
General:	2 ADULT FEMALES FOUND & PHOTOGRAPHED ON 19 JUN 2023. 1 ADULT FEMALE FOUND & PHOTOGRAPHED ON 2 JUL 2023.
Owner/Manager:	CITY OF FULLERTON, PVT

Occurrence No.	578	**Map Index:**	32729	**EO Index:**	131871	**Element Last Seen:**	2023-10-22
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-10-22
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-07-19

Quad Summary:	La Habra (3311788)
County Summary:	Orange

Lat/Long:	33.88714 / -117.88340	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3749993 E418310	**Elevation (ft):**	260
PLSS:	T03S, R10W, Sec. 25, NW (S)	**Acres:**	0.0

Location:	ARBORETUM AND BOTANICAL GARDEN AT CALIFORNIA STATE UNIVERSITY, FULLERTON.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	MOST INDIVIDUALS FOUND FORAGING ON FLOWERS. THE CSUF ARBORETUM IS 26 ACRES OF GARDENS COMPRISED OF VARIOUS NATIVE & NON-NATIVE PLANTS. SURROUNDING AREA IS HIGHLY RESIDENTIALLY & COMMERCIALLY DEVELOPED.
General:	1 ADULT IN SEP 2013. 2 ADULTS IN MAR 2018. 4 ADULTS IN AUG-SEP 2019. 1 ADULT IN AUG 2020. 1 ADULT IN MAR 2022. 1 ADULT IN JUN 2022. 2 ADULTS IN JUL 2022. 8 ADULTS IN AUG 2022. 1 ADULT IN JUL 2023. 1 ADULT IN SEP 2023. 1 ADULT IN OCT 2023.
Owner/Manager:	CSU-FULLERTON

Occurrence No.	579	**Map Index:**	C0642	**EO Index:**	131873	**Element Last Seen:**	2019-08-09
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2019-08-09
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-07-11

Quad Summary:	La Habra (3311788)
County Summary:	Orange

Lat/Long:	33.88639 / -117.99559	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3750005 E407936	**Elevation (ft):**	103
PLSS:	T03S, R11W, Sec. 26, NE (S)	**Acres:**	18.0

Location:	0.1 MI N OF BEACH BLVD AT LA MIRADA BLVD, 0.2 MI NW OF SMITH-MURPHY PARK, 0.5 MI E OF ANTHONY SCHOOL, BUENA PARK.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUALS FOUND FORAGING ON FLOWERS. SURROUNDING AREA IS HIGHLY RESIDENTIALLY & COMMERCIALLY DEVELOPED.
General:	1 ADULT FOUND & PHOTOGRAPHED ON 9 AUG 2019. 1 ADULT FOUND & PHOTOGRAPHED ON 26 OCT 2019.
Owner/Manager:	PVT

Occurrence No.	580	**Map Index:**	C0647	**EO Index:**	131876	**Element Last Seen:**	2024-05-25
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2024-05-25
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-07-11

Quad Summary:	La Habra (3311788)
County Summary:	Los Angeles, Orange

Lat/Long:	33.89754 / -117.98089	**Accuracy:**	non-specific area
UTM:	Zone-11 N3751228 E409307	**Elevation (ft):**	279
PLSS:	T03S, R11W, Sec. 24 (S)	**Acres:**	160.0

Location:	ABOUT 0.5 MILES NORTH AND EAST OF BEACH BLVD AT ROSECRANS AVE, 1 MI S OF DULLES SCHOOL, BUENA PARK.
Detailed Location:	MAPPED AS A THREE-PART POLYGON TO THE PROVIDED COORDINATES. 1 INDIVIDUAL FOUND AT PRIVATE RESIDENCE; 2 INDIVIDUALS FOUND NEAR BEHRINGER PARK; 3 INDIVIDUALS AT RALPH B CLARK REGIONAL PARK.
Ecological:	INDIVIDUALS FOUND FORAGING ON FLOWERS. SURROUNDING AREA IS COMPRISED OF RESIDENTIAL DEVELOPMENT AND VARIOUS CITY & COUNTY OWNED PARKS.
General:	1 ADULT FOUND ON 31 AUG 2017. 1 ADULT FOUND ON 12 JUL 2019. 1 ADULT FOUND ON 19 AUG 2019. 1 ADULT FOUND ON 17 MAY 2023. 1 ADULT FOUND ON 18 JUN 2023. 1 ADULT FOUND ON 25 MAY 2024. ALL INDIVIDUALS PHOTOGRAPHED.
Owner/Manager:	ORA COUNTY, PVT

Occurrence No.	581	**Map Index:**	C0648	**EO Index:**	131879	**Element Last Seen:**	2023-09-22
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-09-22
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-07-11

Quad Summary:	La Habra (3311788)
County Summary:	Los Angeles

Lat/Long:	33.98322 / -117.95194	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3760704 E412072	**Elevation (ft):**	695
PLSS:	T02S, R10W, Sec. 20 (S)	**Acres:**	18.0

Location:	NEAR CANBERRA COURT, EAST OF GARONA DRIVE, HACIENDA HEIGHTS.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL FOUND FORAGING ON FLOWERS AT PRIVATE RESIDENCE. SURROUNDING AREA IS PRIMARILY RESIDENTIAL DEVELOPMENT WITH LARGE UNDEVELOPED GREEN SPACE TO THE SE.
General:	1 ADULT FEMALE FOUND & PHOTOGRAPHED ON 22 SEP 2023.
Owner/Manager:	PVT

Occurrence No.	582	**Map Index:**	C0651	**EO Index:**	131882	**Element Last Seen:**	2024-04-06
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2024-04-06
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-07-12

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.86248 / -117.75853	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3747167 E429838	**Elevation (ft):**	413
PLSS:	T03S, R08W, Sec. 31, SW (S)	**Acres:**	18.0

Location:	DEER CANYON PARK, 0.3 MILES SE OF SANTA ANA CANYON RD AT EUCALYPTUS DR, 0.8 MI W OF SYCAMORE PARK, ANAHEIM.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL FOUND FORAGING ON FLOWERS. DEER CANYON PARK IS A 103-ACRE WILDERNESS AREA SURROUNDED BY RESIDENTIAL DEVELOPMENT.
General:	1 ADULT FOUND & PHOTOGRAPHED ON 6 APR 2024.
Owner/Manager:	CITY OF ANAHEIM

Occurrence No.	583	**Map Index:**	C0652	**EO Index:**	131883	**Element Last Seen:**	2023-08-12
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-08-12
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-07-12

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.85875 / -117.78796	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3746774 E427112	**Elevation (ft):**	289
PLSS:	T04S, R09W, Sec. 2, NE (S)	**Acres:**	18.0

Location:	ARMSTRONG GARDEN CENTERS, 0.15 MI SE OF CA-90 AT LA PALMA AVE, 0.8 MI W OF EUCALYPTUS PARK, ANAHEIM.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL FOUND FORAGING ON FLOWERS. SURROUNDING AREA IS HIGHLY RESIDENTIALLY & COMMERCIALLY DEVELOPED WITH SANTA ANA RIVER JUST S.
General:	1 ADULT FOUND & PHOTOGRAPHED ON 12 AUG 2023.
Owner/Manager:	PVT

Occurrence No.	584	**Map Index:**	C0654	**EO Index:**	131885	**Element Last Seen:**	2023-09-09
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-09-09
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-07-12

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.84445 / -117.79352	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3745192 E426586	**Elevation (ft):**	477
PLSS:	T04S, R09W, Sec. 11, NW (S)	**Acres:**	18.0

Location:	0.1 MILE NORTH OF NOHL RANCH ROAD AT WESTRIDGE CIRCLE, 0.25 MI WEST OF IMPERIAL ELEMENTARY, ANAHEIM.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUALS FOUND FORAGING ON FLOWERS AT PRIVATE RESIDENCE. SURROUNDING AREA IS HIGHLY RESIDENTIALLY & COMMERCIALLY DEVELOPED.
General:	1 ADULT FOUND & PHOTOGRAPHED ON 19 AUG 2023. 1 ADULT FOUND & PHOTOGRAPHED ON 9 SEP 2023.
Owner/Manager:	PVT

Occurrence No.	585	**Map Index:**	C0656	**EO Index:**	131887	**Element Last Seen:**	2023-12-18
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-12-18
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-07-12

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.83272 / -117.77583	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3743879 E428212	**Elevation (ft):**	917
PLSS:	T04S, R09W, Sec. 12, SW (S)	**Acres:**	18.0

Location:	JUST SW OF E SAPPHIRE LN AT E TWIN PEAK CIR, 0.4 MI NE OF SERRANO PARK, 0.9 MI WNW OF ANAHEIM HILLS ELEMENTARY, ANAHEIM.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL FOUND AT PRIVATE RESIDENCE. SURROUNDING AREA IS OPEN COASTAL SAGE SCRUB WITH SOME RESIDENTIAL DEVELOPMENT.
General:	1 ADULT FOUND & PHOTOGRAPHED ON 18 DEC 2023.
Owner/Manager:	PVT

Occurrence No.	586	**Map Index:**	C0658	**EO Index:**	131889	**Element Last Seen:**	2023-07-14
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-07-14
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-07-12

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.80546 / -117.76482	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3740849 E429209	**Elevation (ft):**	516
PLSS:	T04S, R08W, Sec. 19, SW (S)	**Acres:**	18.0

Location:	SANTIAGO OAKS REGIONAL PARK, 0.3 MI ENE OF SANTIAGO CYN RD AT AMAPOLA AVE, 0.9 MI SE OF RATTLESNAKE PEAK, ORANGE.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL WITH NOTICEABLE POLLEN BASKETS FOUND FORAGING ON CIRSIUM. SANTIAGO OAKS REGIONAL PARK IS A 1269-ACRE PARK CONTAINING VARIOUS HABITAT TYPES INCLUDING CHAPARRAL, FOREST, AND RIPARIAN AREAS.
General:	1 ADULT FEMALE FOUND & PHOTOGRAPHED ON 14 JUL 2023.
Owner/Manager:	ORA COUNTY

Occurrence No.	588	**Map Index:**	C0661	**EO Index:**	131891	**Element Last Seen:**	2020-08-31
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2020-08-31
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-07-15

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.80909 / -117.79811	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3741275 E426131	**Elevation (ft):**	361
PLSS:	T04S, R09W, Sec. 23, SW (S)	**Acres:**	18.0

Location:	SAN REMO PL AT VALENCIA DR, 0.15 MI W OF LINDA VISTA ELEMENTARY SCHOOL, 0.9 MI N OF SANTIAGO MIDDLE SCHOOL, ORANGE.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL FOUND FORAGING ON FLOWERS AT PRIVATE RESIDENCE. SURROUNDING AREA IS PRIMARILY RESIDENTIAL DEVELOPMENT WITH SOME OPEN GREEN SPACE NEARBY.
General:	1 ADULT FOUND & PHOTOGRAPHED ON 31 AUG 2020.
Owner/Manager:	PVT

Occurrence No.	589	**Map Index:**	C0662	**EO Index:**	131892	**Element Last Seen:**	2020-09-16
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2020-09-16
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-07-15

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.80227 / -117.80555	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3740524 E425436	**Elevation (ft):**	328
PLSS:	T04S, R09W, Sec. 27, NE (S)	**Acres:**	18.0

Location:	NEAR NORTH HEWES STREET AT EAST ADOBE LANE, 0.6 MILES NW OF SANTIAGO MIDDLE SCHOOL, ORANGE.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUALS WITH NOTICEABLE POLLEN BASKETS FOUND FORAGING ON FLOWERS AT PRIVATE RESIDENCE. SURROUNDING AREA IS PRIMARILY RESIDENTIAL DEVELOPMENT WITH SOME OPEN GREEN SPACE NEARBY.
General:	1 ADULT FEMALE FOUND & PHOTOGRAPHED ON 31 AUG 2020. 1 ADULT FEMALE FOUND & PHOTOGRAPHED ON 3 SEP 2020. 1 ADULT FEMALE FOUND & PHOTOGRAPHED ON 16 SEP 2020.
Owner/Manager:	PVT

Occurrence No.	590	**Map Index:**	C0663	**EO Index:**	131893	**Element Last Seen:**	2019-06-25
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2019-06-25
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-08-26

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.79387 / -117.79807	**Accuracy:**	non-specific area
UTM:	Zone-11 N3739587 E426122	**Elevation (ft):**	328
PLSS:	T04S, R09W, Sec. 26, SW (S)	**Acres:**	35.0

Location:	JUST S OF SANTIAGO MIDDLE SCHOOL, 0.7 MI E OF ESPLANADE ELEMENTARY SCHOOL, 1 MI NNE OF EL MODENA PARK, ORANGE.
Detailed Location:	MAPPED AS A TWO-PART POLYGON TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUALS FOUND FORAGING ON FLOWERS. SURROUNDING AREA IS PRIMARILY RESIDENTIAL DEVELOPMENT WITH ORANGE COUNTY OPEN SPACE TO THE N.
General:	1 ADULT FOUND & PHOTOGRAPHED ON 22 JAN 2015. 1 ADULT FEMALE FOUND & PHOTOGRAPHED ON 25 JUN 2019.
Owner/Manager:	PVT

Occurrence No.	591	**Map Index:**	C0668	**EO Index:**	131895	**Element Last Seen:**	2023-08-29
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-08-29
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-07-15

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.78968 / -117.81191	**Accuracy:**	non-specific area
UTM:	Zone-11 N3739133 E424836	**Elevation (ft):**	286
PLSS:	T04S, R09W, Sec. 27, SW (S)	**Acres:**	57.0

Location:	EL MODENA HIGH SCHOOL, 0.25 MI SW OF ESPLANADE ELEMENTARY SCHOOL, 0.6 MI NE OF MCPHERSON ATHLETIC FACILITY, ORANGE.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES. MOST OBSERVATIONS WITHIN THE JEANNE CARTER NATURE CENTER AND NATIVE PLANT GARDEN AT EL MODENA HIGH SCHOOL (ABOUT 0.8 ACRES).
Ecological:	ALL INDIVIDUALS PHOTOGRAPHED, MOST OF WHICH WHILE FORAGING ON FLOWERS. SOME OBSERVATIONS FROM AUG 2019 ARE LIKELY OF THE SAME INDIVIDUALS. SURROUNDING AREA IS HIGHLY RESIDENTIALLY & COMMERCIALLY DEVELOPED.
General:	13 ADULTS ON 27 AUG 2019. 27 ADULTS ON 28 AUG 2019. 1 ADULT FEMALE ON 9 SEP 2019. 1 ADULT ON 1 SEP 2021. 1 ADULT ON 14 SEP 2021. 1 ADULT FEMALE ON 10 AUG 2023. 1-4 ADULTS ON 24 AUG 2023. 1 ADULT ON 29 AUG 2023.
Owner/Manager:	ORANGE UNIFIED SCHOOL DISTRICT

Occurrence No.	595	**Map Index:**	C0673	**EO Index:**	131907	**Element Last Seen:**	2018-10-11
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2018-10-11
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-07-16

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.79505 / -117.87135	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3739773 E419338	**Elevation (ft):**	153
PLSS:	T04S, R10W, Sec. 25, SE (S)	**Acres:**	18.0

Location:	JUST E OF N POPLAR ST AT W ORANGEWOOD AVE, 0.3 MI NW OF SYCAMORE ELEMENTARY, 0.75 MI SE OF ANGEL STADIUM, ORANGE.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL FOUND, LIKELY DEAD, ON THE SIDEWALK. SURROUNDING AREA IS RESIDENTIALLY & COMMERCIALLY DEVELOPED.
General:	1 (LIKELY DEAD) ADULT FOUND & PHOTOGRAPHED ON 11 OCT 2018.
Owner/Manager:	PVT

Occurrence No.	596	**Map Index:**	C0674	**EO Index:**	131908	**Element Last Seen:**	2023-09-16
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-09-16
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-07-16

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.77876 / -117.84713	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3737948 E421566	**Elevation (ft):**	193
PLSS:	T04S, R09W, Sec. 32, SW (S)	**Acres:**	18.0

Location:	ALONG SANTIAGO CREEK TRAIL, 0.2 MI NW OF CAMBRIDGE ST AT FAIRWAY DR, 0.4 MI NNE OF FAIRHAVEN ELEMENTARY SCHOOL, ORANGE.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	INDIVIDUAL FOUND FORAGING ON FLOWERS. AREA IS COMPRISED OF RIPARIAN HABITAT NEAR SANTIAGO CREEK SURROUNDED BY RESIDENTIAL DEVELOPMENT.
General:	1 ADULT FOUND & PHOTOGRAPHED ON 16 SEP 2023.
Owner/Manager:	CITY OF ORANGE

Occurrence No.	597	**Map Index:**	C0675	**EO Index:**	131910	**Element Last Seen:**	2024-07-05
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2024-07-05
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-07-16

Quad Summary: Orange (3311777), Anaheim (3311778)

County Summary: Orange

Lat/Long:	33.78134 / -117.87648	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3738257 E418851	**Elevation (ft):**	142
PLSS:	T04S, R10W, Sec. 36, SE (S)	**Acres:**	18.0

Location: VICINITY OF S FLOWER ST AT W ORCHARD AVE, 0.25 MI N OF WILLIAM ELRIDGE PARK, 0.7 MI SW OF WEST ORANGE SCHOOL, ORANGE.

Detailed Location: MAPPED TO THE PROVIDED COORDINATES.

Ecological: INDIVIDUAL WITH NOTICEABLE POLLEN BASKETS FOUND FORAGING ON FLOWERS. SURROUNDING AREA IS HIGHLY RESIDENTIALLY & COMMERCIALLY DEVELOPED.

General: 1 ADULT FEMALE FOUND & PHOTOGRAPHED ON 5 JUL 2024.

Owner/Manager: PVT

Occurrence No.	598	**Map Index:**	C0677	**EO Index:**	131911	**Element Last Seen:**	2011-04-12
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2011-04-12
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-08-23

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.79856 / -117.84708	**Accuracy:**	1 mile
UTM:	Zone-11 N3740143 E421588	**Elevation (ft):**	214
PLSS:	T04S, R09W, Sec. 29 (S)	**Acres:**	1987.0

Location: ORANGE.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED NON-SPECIFICALLY TO THE CITY OF ORANGE. GENERAL COLLECTIONS/OBSERVATIONS FROM "ORANGE COUNTY" ALSO ATTRIBUTED TO THIS LOCATION.

Ecological:

General: 1 ADULT COLLECTED ON 14 JUL 1929 (BOMBUS #7959). 1 ADULT COLLECTED ON 9 AUG 1939 (BOMBUS #7960). 1 ADULT FEMALE COLLECTED BY L. ORSAK ON 30 AUG 1967 (EMEC #550899). 1 ADULT FOUND & PHOTOGRAPHED ON 12 APR 2011.

Owner/Manager: UNKNOWN

Occurrence No.	602	**Map Index:**	C0696	**EO Index:**	131933	**Element Last Seen:**	2024-06-14
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2024-06-14
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-08-23

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.7802 / -117.76473	**Accuracy:**	non-specific area
UTM:	Zone-11 N3738048 E429196	**Elevation (ft):**	574
PLSS:	T04S, R08W, Sec. 31, SW (S)	**Acres:**	57.0

Location: PETERS CANYON REGIONAL PARK, 0.7 MI E OF NEWPORT AVE AT HIGHCLIFF DR, 0.8 MI SSE OF SANTIAGO HILLS PARK, SANTA ANA.

Detailed Location: MAPPED AS A TWO-PART POLYGON TO THE PROVIDED COORDINATES/LOCATION DESCRIPTIONS.

Ecological: MOST INDIVIDUALS FOUND FORAGING ON FLOWERS. PETERS CANYON REGIONAL PARK IS A 340-ACRE PARK COMPRISED OF COASTAL SAGE SCRUB, GRASSLAND, FRESHWATER MARSH, & RIPARIAN HABITATS. AREAS TO THE N & S ARE RESIDENTIALLY DEVELOPED.

General: 1 ADULT FOUND ON 5 AUG 2023. 1 ADULT FEMALE FOUND ON 14 SEP 2023. 1 ADULT FOUND ON 12 FEB 2024. 1 ADULT FEMALE FOUND ON 7 JUN 2024. 1 ADULT FEMALE FOUND ON 14 JUN 2024. ALL INDIVIDUALS PHOTOGRAPHED.

Owner/Manager: ORA COUNTY

Occurrence No.	749	**Map Index:**	C1376	**EO Index:**	132606	**Element Last Seen:**	2017-08-15
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2017-08-15
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-11-07

Quad Summary: Los Angeles (3411812), Pasadena (3411822)

County Summary: Los Angeles

Lat/Long:	34.128 / -118.20902	**Accuracy:**	non-specific area
UTM:	Zone-11 N3777008 E388514	**Elevation (ft):**	677
PLSS:	T01N, R13W, Sec. 35, E (S)	**Acres:**	159.0

Location: OCCIDENTAL COLLEGE, 0.6 MI N OF BUCHANAN ST ELEMENTARY SCHOOL, 1.6 MI W OF POPPY PEAK, LOS ANGELES.

Detailed Location: MAPPED TO THE PROVIDED LOCATION DESCRIPTIONS & COORDINATES. 5 INDIVIDUALS FOUND AT GENERAL "FIJI HILL"; 1 INDIVIDUAL FOUND AT GENERAL "OCCIDENTAL COLLEGE"; 2 INDIVIDUALS FOUND JUST SW OF OCCIDENTAL COLLEGE AT PROVIDED COORDINATES.

Ecological: 2017 INDIVIDUALS WERE FOUND FORAGING ON FLOWERS. UNDEVELOPED OPEN SPACE AROUND FIJI HILL & WELL-DEVELOPED COLLEGE CAMPUS WITH RESIDENTIAL DEVELOPMENT SURROUNDING. BOMBUS CROTCHII ALSO FOUND AT OCCIDENTAL COLLEGE CAMPUS.

General: 1 ADULT FEMALE COLLECTED ON 1 OCT 1973. 1 ADULT MALE COLLECTED ON 3 APR 1980. 2 ADULT MALES & 1 ADULT FEMALE COLLECTED ON 1 OCT 1983. 1 ADULT FEMALE COLLECTED ON 28 OCT 1983. 2 ADULTS FOUND & PHOTOGRAPHED ON 15 AUG 2017.

Owner/Manager: PVT

Occurrence No.	756	**Map Index:**	C1391	**EO Index:**	132620	**Element Last Seen:**	2016-06-15
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2016-06-15
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-11-08

Quad Summary:	Hollywood (3411813)
County Summary:	Los Angeles

Lat/Long:	34.0737 / -118.26438	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3771049 E383335	**Elevation (ft):**	463
PLSS:	T01S, R13W, Sec. 20, NE (S)	**Acres:**	18.0

Location:	JUST E OF CLINTON ST AT ALVARADO ST, 0.2 MI W OF ECHO PARK, 0.4 MI NE OF ROSEMONT AVE ELEMENTARY SCHOOL, LOS ANGELES.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES. OBSERVATION FROM GENERAL "ECHO PARK" ALSO ATTRIBUTED TO THIS LOCATION.
Ecological:	INDIVIDUALS WITH NOTICEABLE POLLEN BASKETS FOUND FORAGING ON FLOWERS. SURROUNDING AREA IS PRIMARILY RESIDENTIAL & COMMERCIAL DEVELOPMENT.
General:	2 ADULT FEMALES FOUND & PHOTOGRAPHED ON 15 JUN 2016.
Owner/Manager:	PVT

Occurrence No.	757	**Map Index:**	C1392	**EO Index:**	132621	**Element Last Seen:**	2024-08-13
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2024-08-13
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-11-08

Quad Summary:	Hollywood (3411813)
County Summary:	Los Angeles

Lat/Long:	34.11156 / -118.27167	**Accuracy:**	non-specific area
UTM:	Zone-11 N3775255 E382714	**Elevation (ft):**	458
PLSS:	T01S, R13W, Sec. 5, SW (S)	**Acres:**	26.0

Location:	NEAR ROWENA RESERVOIR, 0.4 MI NE OF JOHN MARSHALL HIGH SCHOOL, 0.6 MI S OF I-5 AT LOS FELIZ BLVD, LOS ANGELES.
Detailed Location:	MAPPED TO THE PROVIDED COORDINATES.
Ecological:	2023 INDIVIDUALS FOUND FORAGING ON FLOWER; 2024 INDIVIDUAL FOUND RESTING ON CONCRETE. SURROUNDING AREA IS PRIMARILY RESIDENTIAL & COMMERCIAL DEVELOPMENT.
General:	2 ADULTS FOUND & PHOTOGRAPHED ON 23 AUG 2023. 1 ADULT FOUND & PHOTOGRAPHED ON 13 AUG 2024.
Owner/Manager:	CITY OF LOS ANGELES, PVT

Occurrence No.	758	**Map Index:**	C1393	**EO Index:**	132622	**Element Last Seen:**	2023-09-06
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2023-09-06
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-11-08

Quad Summary: Hollywood (3411813)

County Summary: Los Angeles

Lat/Long:	34.10063 / -118.26635	**Accuracy:**	non-specific area
UTM:	Zone-11 N3774037 E383190	**Elevation (ft):**	462
PLSS:	T01S, R13W, Sec. 8, N (S)	**Acres:**	295.0

Location: VICINITY OF SILVER LAKE RESERVOIR, 0.9 MI W OF ALLESANDRO ELEMENTARY SCHOOL, 1.5 MI E OF BARNSDALL PARK, LOS ANGELES.

Detailed Location: MAPPED TO THE PROVIDED COORDINATES. 2 INDIVIDUALS FOUND NEAR SILVER LAKE RESERVOIR; 1 INDIVIDUAL FOUND NEAR PRIVATE RESIDENCE TO THE W.

Ecological: INDIVIDUALS WITH NOTICEABLE POLLEN BASKETS FOUND FORAGING ON VARIOUS FLOWERS. SURROUNDING AREA IS HIGHLY RESIDENTIALLY & COMMERCIALLY DEVELOPED.

General: 1 ADULT FEMALE FOUND & PHOTOGRAPHED ON 15 JUN 2023. 1 ADULT FEMALE FOUND & PHOTOGRAPHED ON 1 AUG 2023. 1 ADULT FEMALE FOUND & PHOTOGRAPHED ON 6 SEP 2023.

Owner/Manager: CITY OF LOS ANGELES, PVT

Occurrence No.	759	**Map Index:**	C1394	**EO Index:**	132623	**Element Last Seen:**	2021-02-08
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2021-02-08
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2024-11-08

Quad Summary: Los Angeles (3411812), Hollywood (3411813)

County Summary: Los Angeles

Lat/Long:	34.08675 / -118.24531	**Accuracy:**	2/5 mile
UTM:	Zone-11 N3772475 E385112	**Elevation (ft):**	607
PLSS:	T01S, R13W, Sec. 16, NE (S)	**Acres:**	280.0

Location: ELYSIAN PARK, 0.9 MI NNW OF DODGER STADIUM, 1.4 MI SE OF SILVER LAKE RESERVOIR, LOS ANGELES.

Detailed Location: MAPPED NON-SPECIFICALLY TO THE PROVIDED COORDINATES.

Ecological: INDIVIDUAL FOUND FORAGING ON FLOWERS. ELYSIAN PARK IS A 600-ACRE CITY-OWNED PARK. SURROUNDING AREA IS PRIMARILY RESIDENTIAL & COMMERCIAL DEVELOPMENT.

General: 1 ADULT FOUND & PHOTOGRAPHED ON 8 FEB 2021.

Owner/Manager: CITY OF LOS ANGELES

Bombus crotchii

Element Code: IIHYM24480

Crotch's bumble bee

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G2
	State:	Candidate Endangered		**State:**	S2
	Other:	IUCN_EN-Endangered			
Habitat:	**General:**	COASTAL CALIFORNIA EAST TO THE SIERRA-CASCADE CREST AND SOUTH INTO MEXICO.			
	Micro:	FOOD PLANT GENERA INCLUDE ANTIRRHINUM, PHACELIA, CLARKIA, DENDROMECON, ESCHSCHOLZIA, AND ERIOGONUM.			

Occurrence No.	153	**Map Index:**	97621	**EO Index:**	98955	**Element Last Seen:**	1940-06-17
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1940-06-17
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-09-25

Quad Summary: Hollywood (3411813)

County Summary: Los Angeles

Lat/Long:	34.01501 / -118.28646	**Accuracy:**	3/5 mile
UTM:	Zone-11 N3764567 E381215	**Elevation (ft):**	200
PLSS:	T02S, R13W, Sec. 07 (S)	**Acres:**	0.0

Location: EXPOSITION PARK, LOS ANGELES.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDB IN THE GENERAL VICINITY OF EXPOSITION PARK. COLLECTIONS FROM LOS ANGELES ARE ALSO ATTRIBUTED HERE.

Ecological:

General: COLLECTIONS WERE MADE IN THIS VICINITY ON 29 APR 1916, 5 MAY 1917, 5 JUN 1917, 30 JUN 1917, 4 MAY 1918, 1 AUG 1928, 19 APR 1933, AND 17 JUN 1940.

Owner/Manager: UNKNOWN

Occurrence No.	162	**Map Index:**	01722	**EO Index:**	98991	**Element Last Seen:**	1953-05-02
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1953-05-02
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-09-29

Quad Summary: Inglewood (3311883), Venice (3311884), Hollywood (3411813), Beverly Hills (3411814)

County Summary: Los Angeles

Lat/Long:	33.99055 / -118.38285	**Accuracy:**	1 mile
UTM:	Zone-11 N3761970 E372277	**Elevation (ft):**	200
PLSS:	T02S, R14W, Sec. 18 (S)	**Acres:**	0.0

Location: BALDWIN HILLS.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDB IN THE VICINITY OF THE COMMUNITY OF BALDWIN HILLS, LOS ANGELES.

Ecological:

General: COLLECTIONS WERE MADE IN THIS VICINITY IN SEPTEMBER 1952 AND ON 2 MAY 1953.

Owner/Manager: UNKNOWN

Occurrence No.	188	**Map Index:**	92022	**EO Index:**	99040	**Element Last Seen:**	XXXX-XX-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-10-01

Quad Summary: Whittier (3311881)

County Summary: Los Angeles

Lat/Long:	33.98050 / -118.03520	**Accuracy:**	1 mile
UTM:	Zone-11 N3760477 E404377	**Elevation (ft):**	300
PLSS:	T02S, R11W, Sec. 21 (S)	**Acres:**	0.0

Location: WHITTIER.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDB IN THE GENERAL VICINITY OF THE CITY OF WHITTIER.

Ecological:

General: HISTORIC COLLECTIONS ARE KNOWN FROM THIS VICINITY BUT THE COLLECTION DATES ARE NOT KNOWN.

Owner/Manager: UNKNOWN

Occurrence No.	191	**Map Index:**	97687	**EO Index:**	99049	**Element Last Seen:**	1968-06-17
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1968-06-17
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-10-05

Quad Summary: La Habra (3311788)

County Summary: Los Angeles, Orange

Lat/Long:	33.93279 / -117.94590	**Accuracy:**	1 mile
UTM:	Zone-11 N3755107 E412577	**Elevation (ft):**	300
PLSS:	T03S, R10W, Sec. 05 (S)	**Acres:**	0.0

Location: LA HABRA.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDB IN THE VICINITY OF THE CITY OF LA HABRA.

Ecological:

General: COLLECTED 17 JUN 1968.

Owner/Manager: UNKNOWN

Occurrence No.	192	**Map Index:**	97688	**EO Index:**	99050	**Element Last Seen:**	1969-03-19
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1969-03-19
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-10-05

Quad Summary: Anaheim (3311778), La Habra (3311788)

County Summary: Orange

Lat/Long:	33.87040 / -117.92430	**Accuracy:**	1 mile
UTM:	Zone-11 N3748171 E414511	**Elevation (ft):**	150
PLSS:	T03S, R10W, Sec. 34 (S)	**Acres:**	0.0

Location: FULLERTON.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDB IN THE GENERAL VICINITY OF THE CITY OF FULLERTON.

Ecological:

General: COLLECTED 19 MAR 1969.

Owner/Manager: UNKNOWN

Occurrence No.	193	**Map Index:**	66320	**EO Index:**	99051	**Element Last Seen:**	1942-03-28
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1942-03-28
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-10-05

Quad Summary: Tustin (3311767), Newport Beach (3311768), Orange (3311777), Anaheim (3311778)

County Summary: Orange

Lat/Long:	33.74572 / -117.86785	**Accuracy:**	1 mile
UTM:	Zone-11 N3734300 E419616	**Elevation (ft):**	100
PLSS:	T05S, R09W, Sec. 18 (S)	**Acres:**	0.0

Location: SANTA ANA.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDB IN THE VICINITY OF THE CITY OF SANTA ANA.

Ecological:

General: COLLECTIONS WERE MADE IN THIS VICINITY ON 28 MAR 1942.

Owner/Manager: UNKNOWN

Occurrence No.	315	**Map Index:**	B6397	**EO Index:**	119454	**Element Last Seen:**	2017-05-30
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2017-05-30
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-11-04

Quad Summary: Whittier (3311881)

County Summary: Los Angeles

Lat/Long:	33.87908 / -118.08589	**Accuracy:**	80 meters
UTM:	Zone-11 N3749280 E399576	**Elevation (ft):**	64
PLSS:	T03S, R12W, Sec. 25, NE (S)	**Acres:**	5.0

Location: NIEMES ELEMENTARY SCHOOL, ON THE E SIDE OF JERSEY AVE ABOUT 0.1 MI S OF E 166TH STREET IN ARTESIA.

Detailed Location: MAPPED TO PROVIDED COORDINATES.

Ecological: OBSERVED ON CENTAUREA CYANUS (CORNFLOWER) IN 1-ACRE NATURE CENTER AND GARDEN WITH CALIFORNIA NATIVE PLANTS, FRUITS, AND VEGETABLES.

General: 1 FEMALE OBSERVED AND PHOTOGRAPHED ON 30 MAY 2017.

Owner/Manager: UNKNOWN

Occurrence No.	323	**Map Index:**	B6407	**EO Index:**	119463	**Element Last Seen:**	2020-04-30
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2020-04-30
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-11-05

Quad Summary: El Monte (3411811)

County Summary: Los Angeles

Lat/Long:	34.10041 / -118.01273	**Accuracy:**	specific area
UTM:	Zone-11 N3773752 E406585	**Elevation (ft):**	339
PLSS:	T01S, R11W, Sec. 10, NE (S)	**Acres:**	9.0

Location: JUST WEST OF INTERSECTION OF PECK ROAD AND RIO HONDO PARKWAY, PECK ROAD WATER CONSERVATION PARK, ARCADIA.

Detailed Location: MAPPED TO PROVIDED COORDINATES.

Ecological: OBSERVED ON NATIVE SHRUB PLANTINGS AND NATIVE AND NON-NATIVE SALVIAS IN COUNTY PARK.

General: 1 OBSERVED AND PHOTOGRAPHED 28 APR, 1 ON 29 APR, 1 ON 2 MAY 2018. 1 OBSERVED & PHOTOGRAPHED ON 11 APR, 1 ON 24 APR & 1 ON 30 APR 2020.

Owner/Manager: LAX COUNTY

Occurrence No.	350	**Map Index:**	B6449	**EO Index:**	119507	**Element Last Seen:**	2020-06-01
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2020-06-01
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-11-13

Quad Summary: Los Alamitos (3311871)

County Summary: Los Angeles

Lat/Long:	33.8067 / -118.08311	**Accuracy:**	80 meters
UTM:	Zone-11 N3741251 E399749	**Elevation (ft):**	23
PLSS:	T04S, R12W, Sec. 24, SE (S)	**Acres:**	5.0

Location: EL DORADO NATURE CENTER, 0.3 MILES SW OF EAST SPRING STREET AT INTERSTATE 605, LONG BEACH.

Detailed Location: MAPPED TO PROVIDED COORDINATES.

Ecological:

General: 1 OBSERVED AND PHOTOGRAPHED ON 1 JUN 2020.

Owner/Manager: CITY OF LONG BEACH

Occurrence No.	352	**Map Index:**	B6458	**EO Index:**	119517	**Element Last Seen:**	2020-04-26
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2020-04-26
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-11-13

Quad Summary:	Los Angeles (3411812)
County Summary:	Los Angeles

Lat/Long:	34.10625 / -118.24315	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3774635 E385338	**Elevation (ft):**	348
PLSS:	T01S, R13W, Sec. 4, SE (S)	**Acres:**	18.0

Location:	NEAR LOS ANGELES RIVER, 0.3 MILES NW OF THE INTERSECTION OF EAGLE ROCK BLVD AND SAN FERNANDO RD, LOS ANGELES.
Detailed Location:	MAPPED TO PROVIDED COORDINATES.
Ecological:	
General:	1 OBSERVED AND PHOTOGRAPHED ON 26 APR 2020.
Owner/Manager:	UNKNOWN

Occurrence No.	354	**Map Index:**	B6465	**EO Index:**	119524	**Element Last Seen:**	2020-04-24
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2020-04-24
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-11-16

Quad Summary:	Los Angeles (3411812), Pasadena (3411822)
County Summary:	Los Angeles

Lat/Long:	34.12444 / -118.23489	**Accuracy:**	80 meters
UTM:	Zone-11 N3776642 E386124	**Elevation (ft):**	538
PLSS:	T01N, R13W, Sec. 34, SW (S)	**Acres:**	5.0

Location:	YORK BLVD, BETWEEN RANONS AVE AND AGUILAR WAY, JUST NE OF FOREST LAWN MEMORIAL PARK, LOS ANGELES.
Detailed Location:	
Ecological:	OBSERVED FORAGING ON LUPINUS SUCCULENTUS & PHACELIA TANACETIFOLIA IN NATIVE PLANT GARDEN ON RESIDENTIAL PROPERTY. NEARBY HABITAT INCLUDED VACANT LOTS AND FOREST LAWN MEMORIAL PARK.
General:	1 OBSERVED FORAGING ON 24 APR 2020.
Owner/Manager:	PVT

Eugnosta busckana

Element Code: IILEM2X090

Busck's gallmoth

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G1G3
	State:	None		**State:**	S2S3
	Other:				
Habitat:	**General:**	COASTAL SOUTHERN CALIFORNIA.			
	Micro:	TINY MICRO-MOTH (1 CM) WITH LARVA FORMING GALLS ON HOST PLANT ENCELIA CALIFORNICA (CALIFORNIA BRITTLEBUSH). ADULT FLIGHT PERIOD IS DURING WINTER, GENERALLY FROM NOVEMBER TO FEBRUARY, AND HAVE BEEN REPORTED AT UV LIGHTS AND PORCH LIGHTS.			

Occurrence No.	2	**Map Index:** 60377	**EO Index:**	60413	**Element Last Seen:**	1929-01-05
Occ. Rank:	Unknown		**Presence:**	Presumed Extant	**Site Last Seen:**	1929-01-05
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:**	2023-02-22

Quad Summary: Hollywood (3411813), Beverly Hills (3411814)

County Summary: Los Angeles

Lat/Long:	34.08070 / -118.38965	**Accuracy:**	1 mile
UTM:	Zone-11 N3771976 E371784	**Elevation (ft):**	225
PLSS:	T01S, R14W, Sec. 18 (S)	**Acres:**	0.0

Location: BEVERLY TERRACE.

Detailed Location: MAPPED AS A 1-MILE RADIUS CIRCLE CENTERED ON BEVERLY TERRACE HOTEL. SIMILAR SPECIMENS FROM 1927-1929 FROM "BEVERLY TERRACE" COLLECTED BY J. AUGUST KUSCHE. BEVERLY TERRACE MAY REFER TO EITHER SIDE OF SANTA MONICA MTS JUST N OF BEVERLY HILLS.

Ecological: THIS IS A TINY GALL FORMING MICRO-MOTH THAT IS UNDER-SURVEYED AND POORLY DOCUMENTED.

General: COMSTOCK PARATYPE 1, MALE, AND PARATYPE 2, FEMALE, COLLECTED BETWEEN 12 DEC 1928 - 5 JAN 1929 AND DEPOSITED AT USNM. COMSTOCK PARATYPE 13 COLLECTED BETWEEN 12 DEC 1928 - 5 JAN 1929 AND UNCLEAR WHERE DEPOSITED.

Owner/Manager: UNKNOWN

Euphydryas editha quino **Element Code:** IILEPK405L

quino checkerspot butterfly

Listing Status:	**Federal:**	Endangered	**CNDDB Element Ranks:**	**Global:**	G4G5T1T2
	State:	None		**State:**	S1S2
	Other:				
Habitat:	**General:**	SUNNY OPENINGS WITHIN CHAPARRAL AND COASTAL SAGE SHRUBLANDS IN PARTS OF RIVERSIDE AND SAN DIEGO COUNTIES.			
	Micro:	HILLS AND MESAS NEAR THE COAST. NEED HIGH DENSITIES OF FOOD PLANTS PLANTAGO ERECTA, P. INSULARIS, AND ORTHOCARPUS PURPURESCENS.			

Occurrence No.	104	**Map Index:**	A7987	**EO Index:**	109776	**Element Last Seen:**	1930-06-24
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1930-06-24
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2018-09-14

Quad Summary: Anaheim (3311778)

County Summary: Orange

Lat/Long:	33.85415 / -117.97201	**Accuracy:**	2/5 mile
UTM:	Zone-11 N3746409 E410082	**Elevation (ft):**	98
PLSS:	T04S, R10W, Sec. 6, NW (S)	**Acres:**	280.0

Location: AREA JUST SE THE INTERSECTION OF HWY 91 AND I-5.

Detailed Location: MAPPED TO LOCALITY DESCRIPTION OF "ANAHEIM, HOUSTON STREET, BTW GILBERT & MAGNOLIA. ELEVATION 100 FT."

Ecological: ORANGE CO EXTIRPATION: LARGE-SCALE LOSS OF POPULATIONS DUE TO NATURALLY OCCURRING EVENTS (DROUGHT, COLD-SNAPS, 100-YR FLOOD IN 1938, & FIRE) & HUMAN-CAUSED HABITAT DESTRUCTION & DEGRADATION (DEVELOPMENT, AGRICULTURE, & GRAZING) (FWS03R03).

General: 1 COLLECTED ON 24 JUN 1930. SPECIES CONSIDERED EXTIRPATED IN ORANGE COUNTY BY THE USFWS. SPECIMEN MAY BE EITHER AN ABERRANT E. E. QUINO OR A MISLABELED E. WHEELERI (ALL90R0001).

Owner/Manager: UNKNOWN

Occurrence No.	105	**Map Index:**	A7996	**EO Index:**	109778	**Element Last Seen:**	1937-04-23
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1983-03-19
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2018-10-03

Quad Summary: Black Star Canyon (3311776), Orange (3311777)

County Summary: Orange

Lat/Long:	33.79787 / -117.74352	**Accuracy:**	1 mile
UTM:	Zone-11 N3739993 E431174	**Elevation (ft):**	680
PLSS:	T04S, R08W, Sec. 29 (S)	**Acres:**	1987.0

Location: IRVINE PARK, JUST N OF HWY 261 AT SANTIAGO CANYON RD, NW OF IRVINE LAKE.

Detailed Location: LOCALITIES STATED AS "ORANGE CO. PARK," "HILLS E OF ORANGE CO. PARK," "HILLS N OF ORANGE CO. PARK," AND "IRVINE PARK." ORANGE COUNTY PARK CHANGED NAMES INTO IRVINE PARK IN 1928.

Ecological: ORANGE CO EXTIRPATION: LARGE-SCALE LOSS OF POPULATIONS DUE TO NATURALLY OCCURRING EVENTS (DROUGHT, COLD-SNAPS, 100-YR FLOOD IN 1938, & FIRE) & HUMAN-CAUSED HABITAT DESTRUCTION & DEGRADATION (DEVELOPMENT, AGRICULTURE, & GRAZING) (FWS03R03).

General: COLLECTED 1917, 1918, 1921, 1922, 1927, 1928, 1931, 1933, 1934, 1935, AND 1937. 0 FOUND IN 1973 & ON 19 MAR 1983.

Owner/Manager: ORA COUNTY

Danaus plexippus plexippus pop. 1 **Element Code:** IILEPP2012

monarch - California overwintering population

Listing Status:	**Federal:**	Candidate	**CNDDB Element Ranks:**	**Global:**	G4T1T2Q
	State:	None		**State:**	S2
	Other:	IUCN_EN-Endangered, USFS_S-Sensitive			
Habitat:	**General:**	WINTER ROOST SITES EXTEND ALONG THE COAST FROM NORTHERN MENDOCINO TO BAJA CALIFORNIA, MEXICO.			
	Micro:	ROOSTS LOCATED IN WIND-PROTECTED TREE GROVES (EUCALYPTUS, MONTEREY PINE, CYPRESS), WITH NECTAR AND WATER SOURCES NEARBY.			

Occurrence No.	299	**Map Index:**	33188	**EO Index:**	2681	**Element Last Seen:**	2013-11-XX
Occ. Rank:	Fair			**Presence:**	Presumed Extant	**Site Last Seen:**	2021-11-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2022-08-10

Quad Summary: Los Alamitos (3311871)

County Summary: Los Angeles

Lat/Long:	33.80690 / -118.08711	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3741277 E399378	**Elevation (ft):**	20
PLSS:	T04S, R12W, Sec. 24, SE (S)	**Acres:**	0.0

Location: EL DORADO NATURE CENTER, BETWEEN SPRING STREET AND WILLOW STREET, WEST OF I-605, LONG BEACH.

Detailed Location: XERCES SITE #2882.

Ecological: ROOST TREES IN MIXED GROVE OF ALDER & EUCALYPTUS TREES. ALTHOUGH WATER SUPPLY IS ADEQUATE, NECTAR SOURCE REMAINS UNKNOWN. SMALL NUMBERS OF MONARCHS SOMETIMES ROOST IN CANARY ISLAND PINES FURTHER NORTH IN THE PARK (XERCES SITE #3196).

General: 200 IN DEC 1989. 100S OBS 1990-91. 0 OBS 1992-93. 50 IN NOV 1995. 2500 IN NOV 1997. 500 IN NOV 1998. 10-40 IN 1999-2001 & 2003 & 2006-08 & 2010-11. 5 IN 2012. 85 IN 2013. 16 IN 2014. 5 IN 2016. 0 IN 2017 & 2021.

Owner/Manager: CITY OF LONG BEACH

Occurrence No.	303	**Map Index:**	33192	**EO Index:**	2680	**Element Last Seen:**	2016-11-XX
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2022-01-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2022-09-02

Quad Summary: Seal Beach (3311861), Los Alamitos (3311871)

County Summary: Orange

Lat/Long:	33.74977 / -118.09323	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3734948 E398745	**Elevation (ft):**	15
PLSS:	T05S, R12W, Sec. 12, W (S)	**Acres:**	0.0

Location: GUM GROVE PARK, NORTH OF CRESTVIEW AVENUE, SEAL BEACH (TOWN).

Detailed Location: XERCES SITE #2954.

Ecological: ROOSTING HABITAT CONSISTS OF A SMALL GROVE OF EUCALYPTUS PLANTED ON A SLOPE BEHIND SOME HOMES. THANKSGIVING COUNTS BEGAN IN 1997. NEW YEAR COUNTS BEGAN IN WINTER OF 2021-22.

General: 50-100 FLYERS ON 21 MAR 1990. 700 IN 1990-91, <10 IN 1992-93, 25 IN 1995-96, 2000 IN 1997, 20 IN 1999, 2 IN 2007, 25 IN 2008, 20-40 IN 2010-13, 12 IN 2014, 35 IN 2016, 8 IN 2018. NONE FOUND IN 1998, 2000-01, 2003, 2015, 2017 & 2019-2021.

Owner/Manager: UNKNOWN

Gonidea angulata **Element Code:** IMBIV19010

western ridged mussel

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G3
	State:	None		**State:**	S2
	Other:	IUCN_VU-Vulnerable			
Habitat:	**General:**	PRIMARILY CREEKS AND RIVERS AND LESS OFTEN LAKES. ORIGINALLY IN MOST OF STATE, NOW EXTIRPATED FROM CENTRAL AND SOUTHERN CALIFORNIA.			
	Micro:				

Occurrence No.	152	**Map Index:**	63806	**EO Index:**	119063	**Element Last Seen:**	1919-07-22
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1919-07-22
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-08-31

Quad Summary: Hollywood (3411813), Beverly Hills (3411814)

County Summary: Los Angeles

Lat/Long:	34.02445 / -118.37083	**Accuracy:**	1 mile
UTM:	Zone-11 N3765714 E373438	**Elevation (ft):**	100
PLSS:	T02S, R14W, Sec. 05 (S)	**Acres:**	0.0

Location: BALLONA CREEK, VICINITY OF THE FORMER CIENEGA SCHOOL, LOS ANGELES.

Detailed Location: MAPPED BASED ON SPECIMEN LOCALITIES LIKE "CIENEGA SCHOOL," "ADAMS ST SWAMP, LOS ANGELES," "BALLONA CREEK," OR SIMILAR. SPECIMENS FROM "LOS ANGELES" ATTRIBUTED HERE, EXACT LOCATIONS UNKNOWN. 1894 TOPOS SHOW MARSH IN THIS VICINITY.

Ecological: INGRAM (1948) INDICATED THAT THIS WETLAND HAD BEEN DRAINED SINCE TIME OF COLLECTION. HOWARD (2010) VISITED BALLONA CREEK IN 2009 BUT DID NOT SAMPLE, IT WAS NOW A CONCRETE CHANNEL.

General: AT LEAST 9 COLLECTED ON UNKNOWN DATES. 2 VALVES COLLECTED PRIOR TO 1909. 4 COLLECTED IN JUL 1916. 2 COLLECTED ON 22 JUL 1919. HABITAT WAS ELIMINATED SOME TIME BEFORE 1948.

Owner/Manager: UNKNOWN

Occurrence No.	153	**Map Index:**	B6054	**EO Index:**	119087	**Element Last Seen:**	XXXX-XX-XX
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1993-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-08-31

Quad Summary: Long Beach (3311872), South Gate (3311882), Los Angeles (3411812), Hollywood (3411813), Burbank (3411823), Van Nuys (3411824), Canoga Park (3411825), Calabasas (3411826)

County Summary: Los Angeles

Lat/Long:	34.05581 / -118.22744	**Accuracy:**	non-specific area
UTM:	Zone-11 N3769024 E386720	**Elevation (ft):**	283
PLSS:	T01S, R13W, Sec. 27 (S)	**Acres:**	7001.0

Location: LOS ANGELES RIVER.

Detailed Location: LOCALITY LISTED IN HANNIBAL (1912) AND INGRAM (1948), REPORTEDLY BASED ON STEARNS (1882?) AND DALL (1908) THOUGH THE LATTER REFERENCE GIVES LOCALITY AS "VALLEY OF LOS ANGELES," NOT THE RIVER SPECIFICALLY.

Ecological: LISTED AS HISTORICAL SITE IN HOWARD (2010).

General: LOCALITY LISTED IN 1912 AND 1948 ARTICLES. NONE FOUND IN 1991-92 SURVEY OF RIVER. PRESUMED EXTIRPATED, WAS NOT RESAMPLED IN 2008-2010 STUDY.

Owner/Manager: UNKNOWN

Glyptostoma gabrielense **Element Code:** IMGASB1010

San Gabriel chestnut

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G2
	State:	None		**State:**	S3
	Other:				

Habitat:	**General:**	TERRESTRIAL.
	Micro:	

Occurrence No.	17	**Map Index:**	58452	**EO Index:**	118934	**Element Last Seen:**	1944-01-09
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1944-01-09
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-07-24

Quad Summary:	Los Angeles (3411812), Hollywood (3411813)
County Summary:	Los Angeles

Lat/Long:	34.07735 / -118.23932	**Accuracy:**	1 mile
UTM:	Zone-11 N3771425 E385651	**Elevation (ft):**	
PLSS:	T01S, R13W, Sec. 16 (S)	**Acres:**	0.0

Location:	VICINITY OF ELYSIAN PARK, LOS ANGELES.
Detailed Location:	MAPPED TO COLLECTIONS WITH LOCALITY DESCRIBED AS ELYSIAN PARK. PARK WAS ESTABLISHED IN 1886. ATTRIBUTED COLLECTIONS FROM "LOS ANGELES," AND "NEAR LOS ANGELES."
Ecological:	G. GRANT FOUND SNAILS TO BE COMMON BUT LOCALIZED, ON THE SURFACE AND UNDER PLANT DEBRIS. SMITH 1970 NOTED THAT SPECIES WAS "PROBABLY SAFE IN ELYSIAN PARK." AREA HAS BEEN DEVELOPED SINCE TIME OF COLLECTION; POPULATION IS LIKELY EXTIRPATED.
General:	10 COLLECTED ON UNKNOWN DATE AND 2 IN 1915 FROM/NEAR LOS ANGELES. 48 COLLECTED ON UNKNOWN DATE, 12 ON 23 DEC 1923, 6 IN 1924, 6 ON 19 MAY 1930, 148 IN 1932, AND 5 ON 9 JAN 1944.
Owner/Manager:	CITY OF LOS ANGELES

Occurrence No.	18	**Map Index:**	B5922	**EO Index:**	118935	**Element Last Seen:**	2017-01-29
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2017-01-29
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-07-24

Quad Summary:	Baldwin Park (3411718), El Monte (3411811)
County Summary:	Los Angeles

Lat/Long:	34.00614 / -117.99897	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3763286 E407752	**Elevation (ft):**	713
PLSS:	T02S, R11W, Sec. 11, SE (S)	**Acres:**	70.0

Location:	SOUTH OF OLD CANYON DRIVE, NEAR THE COMMUNITY OF HACIENDA HEIGHTS, EAST OF WHITTIER.
Detailed Location:	COLLECTION LOCALITY DESCRIBED AS "HILLSIDE S OF HOUSES ON OLD CANYON DR, HACIENDA HEIGHTS." MAPPED TO THE VICINITY OF HACIENDA HILLS OPEN SPACE JUST SOUTH OF CANYON DR.
Ecological:	PORTIONS OF THIS AREA ARE MANAGED AS OPEN SPACE WITH RECREATIONAL USE (HIKING, HORSEBACK RIDING).
General:	1 COLLECTED ON 29 JAN 2017.
Owner/Manager:	UNKNOWN

Occurrence No.	19	**Map Index:**	B5925	**EO Index:**	118937	**Element Last Seen:**	1953-05-22
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1953-05-22
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-07-30

Quad Summary:	Long Beach (3311872), South Gate (3311882)
County Summary:	Los Angeles

Lat/Long:	33.86276 / -118.23165	**Accuracy:**	1 mile
UTM:	Zone-11 N3747622 E386074	**Elevation (ft):**	189
PLSS:	T03S, R13W, Sec. 34 (S)	**Acres:**	1987.0

Location:	VICINITY OF DOMINGUEZ HILLS.
Detailed Location:	GIVEN COLLECTION LOCALITES INCLUDE DOMINGUEZ HILLS, DOMINGUEZ, AND DOMINGUEZ JUNCTION.
Ecological:	E. CHACE FOUND SNAILS UNDER DEAD CACTI. OIL EXTRACTION STARTED AT SITE IN THE 1920S. SMITH IN 1970 NOTED SPECIES WAS ENDANGERED AT THIS SITE FROM INDUSTRIAL DEVELOPMENT. AERIAL IMAGERY FROM 2000S SHOWS SITE HAS BEEN COMPLETELY DEVELOPED.
General:	COLLECTIONS MADE ON UNKNOWN DATE, IN 1906, 1914, 1917, 1922, 1936, 1937, 1938, 1940, 1941, AND 1953. AREA HAS BEEN HEAVILY DEVELOPED SINCE TIME OF COLLECTIONA AND POPULATION IS LIKELY EXTIRPATED.
Owner/Manager:	UNKNOWN

Occurrence No.	21	**Map Index:**	B5932	**EO Index:**	118946	**Element Last Seen:**	19XX-XX-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	19XX-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-07-27

Quad Summary:	Whittier (3311881), El Monte (3411811)
County Summary:	Los Angeles

Lat/Long:	33.99533 / -118.03402	**Accuracy:**	3/5 mile
UTM:	Zone-11 N3762120 E404503	**Elevation (ft):**	675
PLSS:	T02S, R11W, Sec. 16, SE (S)	**Acres:**	776.0

Location:	SOUTH OF SYCAMORE CANYON AND NW OF TURNBULL CANYON, VICINITY OF HELLMAN PARK, WHITTIER.
Detailed Location:	GIVEN LOCATION"CALBADEN CYN, BETWEEN SYCAMORE CYN & TURNBULL CYN, PUENTE HILLS, 2 MI NW OF WHITTIER." CANNONT LOCATE CALBADEN CANYON. MAPPED AT THE AREA BETWEEN SYCAMORE AND TURNBULL CANYONS.
Ecological:	
General:	3 COLLECTED ON UNKNOWN DATE, LIKELY IN THE 1930S OR 1940S.
Owner/Manager:	CITY OF WHITTIER

Occurrence No.	22	**Map Index:**	B5933	**EO Index:**	118948	**Element Last Seen:**	194X-XX-XX
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	194X-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-07-28

Quad Summary:	Los Angeles (3411812), Pasadena (3411822)
County Summary:	Los Angeles

Lat/Long:	34.11797 / -118.16767	**Accuracy:**	1 mile
UTM:	Zone-11 N3775852 E392315	**Elevation (ft):**	582
PLSS:	T01S, R12W, Sec. 5 (S)	**Acres:**	1987.0

Location:	ARROYO SECO, SOUTH PASADENA.
Detailed Location:	MAPPED THE VICINITY OF ARROYO SECO NEAR SOUTH PASADENA. ATTRIBUTED SPECIMEN COLLECTED FROM PASADENA.
Ecological:	
General:	COLLECTED ON UNKNOWN DATES, LIKELY IN THE 1930S AND 1940S. ARROYO SECO HAS CHANGED SIGNIGICANTLY SINCE THE TIME OF COLLECTIONS. OCCURRENCE IS LIKELY EXTIRPATED.
Owner/Manager:	UNKNOWN

Occurrence No.	24	**Map Index:**	B5934	**EO Index:**	118950	**Element Last Seen:**	193X-XX-XX
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	193X-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2020-07-28

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.78797 / -117.8126	**Accuracy:**	1 mile
UTM:	Zone-11 N3738943 E424772	**Elevation (ft):**	277
PLSS:	T04S, R09W, Sec. 34 (S)	**Acres:**	1987.0

Location:	VICINITY OF EL MODENA, CITY OF ORANGE.
Detailed Location:	COLLECTION LOCALITIES DESCRIBED AS EL MODENA. EXACT LOCATIONS UNKNOWN. MAPPED CENTERED ON THE NEIGHBORHOOD OF EL MODENA.
Ecological:	
General:	COLLECTED ON UNKNOWN DATE, LIKELY IN THE 1930S. AREA HAS BEEN HEAVILY DEVELOPED SINCE THEN. OCCURRENCE IS POSSIBLY EXTIRPATED.
Owner/Manager:	UNKNOWN

Pseudognaphalium leucocephalum

Element Code: PDAST440C0

white rabbit-tobacco

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G4
	State:	None		**State:**	S2
	Other:	Rare Plant Rank - 2B.2			
Habitat:	**General:**	RIPARIAN WOODLAND, CISMONTANE WOODLAND, COASTAL SCRUB, CHAPARRAL.			
	Micro:	SANDY, GRAVELLY SITES. 35-515 M.			

Occurrence No.	11	**Map Index:** 66305	**EO Index:** 70819	**Element Last Seen:**	1907-XX-XX
Occ. Rank:	Unknown		**Presence:** Presumed Extant	**Site Last Seen:**	1907-XX-XX
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2016-06-29

Quad Summary: Hollywood (3411813)

County Summary: Los Angeles

Lat/Long:	34.09826 / -118.32682	**Accuracy:**	1 mile
UTM:	Zone-11 N3773845 E377608	**Elevation (ft):**	
PLSS:	T01S, R14W, Sec. 10 (S)	**Acres:**	0.0

Location: HOLLYWOOD.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDB AS BEST GUESS IN VICINITY OF HOLLYWOOD.

Ecological:

General: ONLY SOURCE OF INFORMATION IS A 1907 COLLECTION BY DAVIDSON. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Helianthus nuttallii ssp. parishii

Element Code: PDAST4N102

Los Angeles sunflower

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G5TX
	State:	None		**State:**	SX
	Other:	Rare Plant Rank - 1A			
Habitat:	**General:**	MARSHES AND SWAMPS (COASTAL SALT AND FRESHWATER).			
	Micro:	35-1525 M.			

Occurrence No.	1	**Map Index:** 26518	**EO Index:** 16790	**Element Last Seen:**	1891-XX-XX
Occ. Rank:	None		**Presence:** Extirpated	**Site Last Seen:**	1891-XX-XX
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2017-04-19

Quad Summary: Hollywood (3411813)

County Summary: Los Angeles

Lat/Long:	34.02178 / -118.32788	**Accuracy:**	1 mile
UTM:	Zone-11 N3765365 E377400	**Elevation (ft):**	120
PLSS:	T02S, R14W, Sec. 03 (S)	**Acres:**	0.0

Location: CIENEGA, BETWEEN LOS ANGELES AND SANTA MONICA.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDB IN THE VICINITY OF CIENEGA.

Ecological:

General: SITE IS BASED ON AN UNDATED NEVIN COLLECTION AND AN 1891 HASSE COLLECTION. "DIMINISHED NUMBERS" REPORTED IN A 1903 ARTICLE BY DAVY, UNKNOWN WHEN THIS OBSERVATION WAS MADE.

Owner/Manager: UNKNOWN

Occurrence No.	2	**Map Index:**	02183	**EO Index:**	16793	**Element Last Seen:**	1901-09-XX
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1901-09-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2017-04-25

Quad Summary: Los Angeles (3411812), Pasadena (3411822)

County Summary: Los Angeles

Lat/Long:	34.12390 / -118.13701	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3776477 E395149	**Elevation (ft):**	700
PLSS:	T01N, R12W, Sec. 33 (S)	**Acres:**	0.0

Location: OAK KNOLL, PASADENA.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDB IN THE VICINITY OF OAK KNOLL.

Ecological: MOIST, SHADY PLACES.

General: SITE IS BASED ON MCCLATCHIE COLLECTIONS FROM 1897 AND 1901 COLLECTIONS BY GREATA AND GRANT. A 1903 DAVIDSON ARTICLE REPORTS ONE CLUMP OF PLANTS HERE, UNKNOWN WHEN SEEN.

Owner/Manager: UNKNOWN

Occurrence No.	11	**Map Index:**	A4086	**EO Index:**	105763	**Element Last Seen:**	1901-09-XX
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1901-09-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2017-04-25

Quad Summary: Los Angeles (3411812)

County Summary: Los Angeles

Lat/Long:	34.02389 / -118.17201	**Accuracy:**	1 mile
UTM:	Zone-11 N3765424 E391795	**Elevation (ft):**	
PLSS:	T02S, R12W, Sec. 6 (S)	**Acres:**	1987.0

Location: EAST LOS ANGELES.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDB IN THE GENERAL VICINITY OF EAST LOS ANGELES.

Ecological:

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1901 DAVIDSON COLLECTION.

Owner/Manager: UNKNOWN

Centromadia parryi ssp. australis

Element Code: PDAST4R0P4

southern tarplant

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G3T2
	State:	None		**State:**	S2
	Other:	Rare Plant Rank - 1B.1, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank, SB_SBBG-Santa Barbara Botanic Garden			
Habitat:	**General:**	MARSHES AND SWAMPS (MARGINS), VALLEY AND FOOTHILL GRASSLAND, VERNAL POOLS.			
	Micro:	OFTEN IN DISTURBED SITES NEAR THE COAST AT MARSH EDGES; ALSO IN ALKALINE SOILS SOMETIMES WITH SALTGRASS. SOMETIMES ON VERNAL POOL MARGINS. 0-975 M.			

Occurrence No.	20	**Map Index:**	35370	**EO Index:**	30112	**Element Last Seen:**	1933-09-17
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1933-09-17
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1997-02-07

Quad Summary:	Newport Beach (3311768), Anaheim (3311778), Seal Beach (3311861), Los Alamitos (3311871)
County Summary:	Orange

Lat/Long:	33.76153 / -118.00779	**Accuracy:**	1 mile
UTM:	Zone-11 N3736171 E406671	**Elevation (ft):**	
PLSS:	T05S, R11W (S)	**Acres:**	0.0

Location:	WESTMINSTER.
Detailed Location:	INCLUDES COLLECTION FROM "5 MILES WEST OF SANTA ANA".
Ecological:	COMMON IN WEEDY ALKALI FIELDS WITH HELIOTROPUM CURASSAVICUM.
General:	SITE BASED ON A 1920 COLLECTION, 1932 WHEELER COLLECTIONS, AND A 1933 KECK COLLECTION.
Owner/Manager:	UNKNOWN

Occurrence No.	21	**Map Index:**	35373	**EO Index:**	30109	**Element Last Seen:**	1932-06-28
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1997-10-10
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1998-08-31

Quad Summary:	Los Alamitos (3311871)
County Summary:	Los Angeles

Lat/Long:	33.79424 / -118.11906	**Accuracy:**	non-specific area
UTM:	Zone-11 N3739904 E396406	**Elevation (ft):**	40
PLSS:	T04S, R12W, Sec. 27, SE (S)	**Acres:**	43.5

Location:	BRYANT RANCH NEAR LONG BEACH, ABOUT 0.25 MILE SOUTH OF STANFORD JR HIGH SCHOOL.
Detailed Location:	COLLECTED IN 1932 AT MIDDLE OF WESTERN BOUNDARY OF 40 ACRE ORANGE GROVE AT BRYANT AVENUE AND HANSEN ROAD (T04S T11W NE 1/4 SE 1/4 SECTION 27). BRYANT AVE AND HANSEN ROAD APPARENTLY NO LONGER EXIST IN THIS AREA.
Ecological:	
General:	MAPPED BASED ON 1932 COLLECTION BY WOLF. ACCORDING TO G. GARDINER (1997) THIS SITE WAS PROBABLY ONCE A TIDAL FLOODPLAIN. NOW DEVELOPED INTO A BEACH COMMUNITY. NO SUITABLE HABITAT REMAINS.
Owner/Manager:	UNKNOWN

Occurrence No.	22	**Map Index:**	35374	**EO Index:**	30110	**Element Last Seen:**	1934-08-16
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1997-10-10
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1998-08-31

Quad Summary:	Los Alamitos (3311871)
County Summary:	Los Angeles

Lat/Long:	33.78683 / -118.12355	**Accuracy:**	non-specific area
UTM:	Zone-11 N3739087 E395981	**Elevation (ft):**	15
PLSS:	T04S, R12W, Sec. 34, NE (S)	**Acres:**	39.9

Location:	BRYANT RANCH NEAR LONG BEACH, VICINITY OF WHALEY PARK.
Detailed Location:	COLLECTED IN 1934 300 FEET EAST OF THE CENTER OF SECTION 34 AND 100 FEET SOUTH OF THE NORTH LINE OF THE SAME SECTION.
Ecological:	
General:	MAPPED BASED ON 1934 COLLECTION BY WOLF. ACCORDING TO G. GARDINER (1997), THIS SITE WAS PROBABLY ONCE A FLOODPLAIN WHICH HAS BEEN DEVELOPED INTO A BEACH COMMUNITY. NO SUITABLE HABITAT REMAINS.
Owner/Manager:	UNKNOWN

Occurrence No.	23	**Map Index:**	35372	**EO Index:**	30999	**Element Last Seen:**	1932-09-13
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1997-10-10
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1998-08-31

Quad Summary:	Los Alamitos (3311871)
County Summary:	Orange

Lat/Long:	33.79381 / -118.07950	**Accuracy:**	non-specific area
UTM:	Zone-11 N3739818 E400068	**Elevation (ft):**	25
PLSS:	T04S, R11W, Sec. 30, SW (S)	**Acres:**	39.8

Location:	BRYANT RANCH NEAR LONG BEACH, WEST OF ROSSMOOR SCHOOL.
Detailed Location:	COLLECTED IN 1932 0.3 MILE WEST OF LOS ALAMITOS BLVD, 700 FEET SOUTH OF BRYANT AVE (800 FEET EAST AND 700 FEET SOUTH OF THE NW CORNER OF THE SW 1/4 OF SECTION 30, T04S R11W). THIS BRYANT AVE APPARENTLY NO LONGER EXISTS.
Ecological:	
General:	MAPPED BASED ON 1932 COLLECTION BY WOLF. ACCORDING TO G. GARDINER (1997) SITE WAS PROBABLY ONCE A TIDAL FLOODPLAIN WHICH HAS BEEN DEVELOPED INTO A BEACH COMMINUTY. NO SUITABLE HABITAT REMAINS.
Owner/Manager:	UNKNOWN

Occurrence No.	24	**Map Index:**	35375	**EO Index:**	30111	**Element Last Seen:**	1973-06-15
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1973-06-15
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1997-02-04

Quad Summary:	Los Alamitos (3311871)
County Summary:	Los Angeles

Lat/Long:	33.77027 / -118.11912	**Accuracy:**	non-specific area
UTM:	Zone-11 N3737247 E396372	**Elevation (ft):**	10
PLSS:	T05S, R12W, Sec. 03, NE (S)	**Acres:**	60.5

Location:	LONG BEACH, WEST OF PACIFIC COAST HIGHWAY AND SOUTH OF 7TH STREET.
Detailed Location:	COLLECTED IN 1932 IN LOW MARSH GROUND 100-200 FEET WEST OF HIGHWAY AT SE CORNER OF OIL LEASE IN THE NE 1/4 OF SECTION 3. 1973 COLLECTION FROM BELOW THE STATE UNIVERSITY NEAR PACIFIC COAST HIGHWAY IS ALSO ATTRIBUTED TO THIS SITE.
Ecological:	IN SALINE AREAS BELOW GRASS DOMINATED HILLSIDE. ASSOCIATED WITH BROMUS, LOLIUM, AND AVENA.
General:	TWO COLLECTIONS FROM THIS VICINITY; WOLF (#4098 RSA) IN 1932 AND J. HENDRICKSON (#10706 RSA) IN 1973.
Owner/Manager:	UNKNOWN

Occurrence No.	29	**Map Index:**	35369	**EO Index:**	7744	**Element Last Seen:**	1931-07-31
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1931-07-31
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1997-02-04

Quad Summary:	South Gate (3311882)
County Summary:	Los Angeles

Lat/Long:	33.98902 / -118.13773	**Accuracy:**	2/5 mile
UTM:	Zone-11 N3761522 E394916	**Elevation (ft):**	60
PLSS:	T02S, R12W (S)	**Acres:**	0.0

Location:	EAST LOS ANGELES, TELEGRAPH ROAD NEAR SANTA FE RAILROAD CROSSING.
Detailed Location:	MAPPED EAST OF THE SANTA ANA FREEWAY (I-5) AT GARFIELD AVE NEAR THE ATCHISON, TOPEKA AND SANTA FE TRACKS, CITY OF COMMERCE.
Ecological:	
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS 1931 COLLECTION BY EWAN. SPECIMEN FILED IN H. PUNGENS FILE AT RSA, BUT HAS BEEN TENATIVELY IDENTIFIED TO H. PARRYI SSP. AUSTRALIS BY D. BRAMLET (1990).
Owner/Manager:	UNKNOWN

Occurrence No.	44	**Map Index:**	39586	**EO Index:**	34588	**Element Last Seen:**	1997-10-10
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1997-10-10
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-08-10

Quad Summary:	Los Alamitos (3311871)
County Summary:	Los Angeles

Lat/Long:	33.76717 / -118.10750	**Accuracy:**	non-specific area
UTM:	Zone-11 N3736892 E397443	**Elevation (ft):**	15
PLSS:	T05S, R12W, Sec. 02, SW (S)	**Acres:**	10.0

Location:	LOYNES DRIVE AND STUDEBAKER AVENUE, WEST OF BRIDGE THAT CROSSES LOS CERRITOS CHANNEL.
Detailed Location:	MAPPED BY CNDDB AS BEST GUESS NON-SPECIFICALLY AROUND THE OPEN FIELD JUST WEST OF THE BRIDGE CROSSING THE LOS CERRITOS CHANNEL, SOUTH OF LOYNES DRIVE.
Ecological:	
General:	UNKNOWN NUMBER OF PLANTS SEEN IN 1997.
Owner/Manager:	UNKNOWN

Occurrence No.	45	**Map Index:**	39587	**EO Index:**	34589	**Element Last Seen:**	2014-10-01
Occ. Rank:	Fair			**Presence:**	Presumed Extant	**Site Last Seen:**	2014-10-01
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-08-05

Quad Summary:	Seal Beach (3311861), Los Alamitos (3311871)
County Summary:	Los Angeles, Orange

Lat/Long:	33.75463 / -118.10098	**Accuracy:**	specific area
UTM:	Zone-11 N3735495 E398032	**Elevation (ft):**	10
PLSS:	T05S, R12W, Sec. 11 (S)	**Acres:**	87.0

Location:	ALONG BOTH SIDES OF THE SAN GABRIEL RIVER CHANNEL AND THE LOS ANGELES/ORANGE COUNTY LINE, JUST EAST OF HIGHWAY 1.
Detailed Location:	"LOS CERRITOS WETLANDS." SMALL PORTION OF AT THE SOUTH END OF OCCURRENCE IS WITHIN GUM GROVE PARK. MAPPED BY CNDDB AS 18 POLYGONS; MOSTLY ACCORDING TO A MAP FROM A 2012 TIDAL INFLUENCE REPORT.
Ecological:	DISTURBED ALKALI MEADOW AND RUDERAL GRASSLAND WITH BASSIA HYSSOPIFOLIA, DISTICHLIS SPICATA, POLYPOGON MONSPELIENSIS, ASTER SUBULATUS, HELIOTROPIUM CURASSAVICUM, CRESSA TRUXILLENSIS, PICRIS ECHIOIDES, SALICORNIA VIRGINICA, FRANKENIA SALINA.
General:	POPULATION NUMBERS ARE FOR PORTIONS OF OCCURRENCE: ~4000 PLANTS IN 1996, 100 PLANTS IN 1997, 100 PLANTS IN 2004, "RELATIVELY ABUNDANT" IN 2011, 200-300 PLANTS IN 2014. INCLUDES FORMER OCCURRENCES #46 & 51.
Owner/Manager:	PVT, CITY OF SAN DIEGO

Occurrence No.	75	**Map Index:**	63800	**EO Index:**	63895	**Element Last Seen:**	2003-07-08
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2003-07-08
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2006-01-26

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.81639 / -117.78972	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3742078 E426913	**Elevation (ft):**	385
PLSS:	T04S, R09W, Sec. 23, NE (S)	**Acres:**	0.0

Location:	ORANGE PARK ACRES, ALONG SANTIAGO CREEK.
Detailed Location:	0.5 KM EAST OF CANNON RD AND 0.3 KM NORTH OF SANTIAGO CANYON RD.
Ecological:	DISTURBED CLAY SOIL ON STREAM TERRACE.
General:	ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 2003 COLLECTION BY ROBERTS. NEEDS FIELDWORK.
Owner/Manager:	UNKNOWN

Occurrence No.	77	**Map Index:**	63806	**EO Index:**	63901	**Element Last Seen:**	1994-05-28
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1994-05-28
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-08-10

Quad Summary:	Hollywood (3411813), Beverly Hills (3411814)
County Summary:	Los Angeles

Lat/Long:	34.02445 / -118.37083	**Accuracy:**	1 mile
UTM:	Zone-11 N3765714 E373438	**Elevation (ft):**	
PLSS:	T02S, R14W, Sec. 05 (S)	**Acres:**	0.0

Location:	BETWEEN WEST ADAMS AND CULVER CITY.
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED BY CNDDB AS BEST GUESS.
Ecological:	ROADSIDE.
General:	MAIN SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 1994 COLLECTION BY MOREY. 1900 COLLECTION BY GREATA FROM "CIENEGA" AND 1916 MCMURPHY COLLECTION FROM "BETWEEN LOS ANGELES AND SANTA MONICA BEACH" ALSO ATTRIBUTED HERE. NEEDS FIELDWORK.
Owner/Manager:	UNKNOWN

Occurrence No.	80	**Map Index:**	77192	**EO Index:**	78128	**Element Last Seen:**	2015-04-03
Occ. Rank:	Fair			**Presence:**	Presumed Extant	**Site Last Seen:**	2015-04-03
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-08-06

Quad Summary: El Monte (3411811)

County Summary: Los Angeles

Lat/Long:	34.03686 / -118.06893	**Accuracy:**	specific area
UTM:	Zone-11 N3766759 E401326	**Elevation (ft):**	200
PLSS:	T01S, R11W, Sec. 31, SE (S)	**Acres:**	4.0

Location: WHITTIER NARROWS, BETWEEN SAN GABRIEL RIVER AND RIO HONDO, W SIDE OF HWY 19 ALONG ROAD TO SHOOTING AREA, S OF HWY 60.

Detailed Location: ALONG SCE POWERLINES. 3 POLYGONS MAPPED ACCORDING TO 2010 AND 2011 DIGITAL DATA FROM ICF INTERNATIONAL, INC.

Ecological: SANDY FLATS, HIGHLY DISTURBED AND PARTIALLY LANDSCAPED. MANY PLANTED TREES ALONG ROAD AND AROUND SHOOTING AREA. IN A FAIRLY BARE DISTURBED FIELD, ESPECIALLY IN MINOR DEPRESSIONS. ASSOCIATED WITH ATRIPLEX SERENANA, AMBROSIA, CROTON, ETC.

General: ABOUT 1500 PLANTS OBSERVED IN 2009. WESTERN POLYGON: 2000 PLANTS OBSERVED IN 2010, 12 IN 2015. UNKNOWN NUMBER OF PLANTS OBSERVED IN 2 EASTERN POLYGONS IN 2011.

Owner/Manager: PVT-SCE

Occurrence No.	94	**Map Index:**	97135	**EO Index:**	98382	**Element Last Seen:**	2013-11-21
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2013-11-21
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-08-06

Quad Summary: Los Alamitos (3311871)

County Summary: Orange

Lat/Long:	33.80454 / -118.04987	**Accuracy:**	80 meters
UTM:	Zone-11 N3740979 E402823	**Elevation (ft):**	30
PLSS:	T04S, R11W, Sec. 29, NE (S)	**Acres:**	0.0

Location: ADJACENT TO LOS ALAMITOS RACETRACK, NORTH END OF KATELLA AVENUE AT JUNCTION WITH ENTERPRISE DRIVE, LOS ALAMITOS.

Detailed Location: MAPPED BY CNDDB ACCORDING TO 2013 COORDINATES FROM COLLECTION LABEL, IN THE NE 1/4 OF THE NE 1/4 OF SECTION 29.

Ecological: OPEN LOT WITH MIX OF RUDERAL, WETLAND AND ALKALI WETLAND SPECIES. WITH ATRIPLEX SUBERECTA, RUMEX OBTUSIFOLIUS, AND CYNODON DACTYLON. DISTINCTLY GRAY SILTY LOAM TO CLAY SOILS. AREA HISTORICALLY A NETWORK OF SLOUGHS AND VERNALLY MOIST SUMPS.

General: SITE BASED ON A 2013 GEORGE COLLECTION. A 1920 HALL COLLECTION FROM "CYPRESS, ALONG RAILROAD" IS ALSO ATTRIBUTED TO THIS SITE; MENTIONED AS "COMMON" IN 1920.

Owner/Manager: PVT

Occurrence No.	95	**Map Index:**	97136	**EO Index:**	98383	**Element Last Seen:**	1930-11-04
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1930-11-04
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-08-06

Quad Summary: South Gate (3311882), Inglewood (3311883)

County Summary: Los Angeles

Lat/Long:	33.94023 / -118.24246	**Accuracy:**	4/5 mile
UTM:	Zone-11 N3756225 E385177	**Elevation (ft):**	
PLSS:	T03S, R13W, Sec. 04 (S)	**Acres:**	0.0

Location: WATTS.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDB AS BEST GUESS AROUND WATTS.

Ecological: WITH DISTICHLIS, ISOCOMA, ATRIPLEX BRACTEOSA, ETC.

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1930 HALL COLLECTION.

Owner/Manager: UNKNOWN

Occurrence No.	96	**Map Index:**	97137	**EO Index:**	98384	**Element Last Seen:**	1920-06-22
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1920-06-22
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-08-06

Quad Summary: Baldwin Park (3411718), El Monte (3411811)

County Summary: Los Angeles

Lat/Long:	34.05204 / -118.00004	**Accuracy:**	non-specific area
UTM:	Zone-11 N3768377 E407702	**Elevation (ft):**	
PLSS:	T01S, R11W, Sec. 26 (S)	**Acres:**	141.0

Location: ALONG VALLEY BOULEVARD AT BASSETT.

Detailed Location: MAPPED BY CNDDB AS BEST GUESS ALONG THE PORTION OF VALLEY BOULEVARD NEAR BASSETT.

Ecological:

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1920 PEIRSON COLLECTION.

Owner/Manager: UNKNOWN

Lasthenia glabrata ssp. coulteri

Element Code: PDAST5L0A1

Coulter's goldfields

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G4T2
	State:	None		**State:**	S2
	Other:	Rare Plant Rank - 1B.1, BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden			
Habitat:	**General:**	COASTAL SALT MARSHES, PLAYAS, VERNAL POOLS.			
	Micro:	USUALLY FOUND ON ALKALINE SOILS IN PLAYAS, SINKS, AND GRASSLANDS. 1-1375 M.			

Occurrence No.	28	**Map Index:**	23779	**EO Index:**	22063	**Element Last Seen:**	1932-XX-XX
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1932-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2010-11-22

Quad Summary: Los Alamitos (3311871)

County Summary: Orange

Lat/Long:	33.83113 / -118.03185	**Accuracy:**	1 mile
UTM:	Zone-11 N3743910 E404520	**Elevation (ft):**	
PLSS:	T04S, R11W, Sec. 16 (S)	**Acres:**	0.0

Location: CYPRESS.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDB AS BEST GUESS CENTERED ON CYPRESS.

Ecological:

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS ORANGE COUNTY DATABASE REPORTED BY ROBERTS. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Occurrence No.	29	**Map Index:**	23780	**EO Index:**	21299	**Element Last Seen:**	1937-XX-XX
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1937-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2010-11-22

Quad Summary: Los Alamitos (3311871)

County Summary: Los Angeles, Orange

Lat/Long:	33.80407 / -118.06972	**Accuracy:**	1 mile
UTM:	Zone-11 N3740946 E400984	**Elevation (ft):**	
PLSS:	T04S, R11W, Sec. 30 (S)	**Acres:**	0.0

Location: LOS ALAMITOS.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDB AS BEST GUESS CENTERED ON LOS ALAMITOS.

Ecological:

General: ONLY SOURCE OF SITE INFORMATION IS ORANGE COUNTY DATABASE REPORTED BY ROBERTS. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Occurrence No.	30	**Map Index:**	80782	**EO Index:**	21298	**Element Last Seen:**	1934-04-11
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1934-04-11
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2013-02-05

Quad Summary: Los Alamitos (3311871)

County Summary: Orange

Lat/Long:	33.78620 / -118.01908	**Accuracy:**	non-specific area
UTM:	Zone-11 N3738917 E405652	**Elevation (ft):**	30
PLSS:	T04S, R11W, Sec. 34 (S)	**Acres:**	737.0

Location: BRYANT RANCH, NEAR GARDEN GROVE.

Detailed Location: EAST END CAMP. EXACT LOCATION UNKNOWN, MAPPED BY CNDDB TO ENCOMPASS SECTION 34 AND THE SE 1/4 SECTION 27 ACCORDING TO TRS INFORMATION FROM A 1932 SNOW COLLECTION AND A 1934 WOLF COLLECTION.

Ecological:

General: OCCURRENCE IS BASED ON A 1931 JOHNSON COLLECTION, 1932 SNOW COLLECTION, AND A 1934 WOLF COLLECTION. "GARDEN GROVE (1934)" FROM ORANGE COUNTY DATABASE REPORTED BY ROBERTS ATTRIBUTED TO THIS SITE. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Occurrence No.	51	**Map Index:**	31520	**EO Index:**	2502	**Element Last Seen:**	1935-03-24
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1935-03-24
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2010-11-23

Quad Summary: La Habra (3311788), Whittier (3311881)

County Summary: Los Angeles, Orange

Lat/Long:	33.90290 / -117.98902	**Accuracy:**	1 mile
UTM:	Zone-11 N3751830 E408560	**Elevation (ft):**	175
PLSS:	T03S, R11W, Sec. 13 (S)	**Acres:**	0.0

Location: 1 MILE NORTH OF BUENA PARK, VALLEY TO THE WEST OF WEST COYOTE HILLS.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDB NORTH OF BUENA PARK AND WEST OF THE WEST COYOTE HILLS IN VICINITY OF COYOTE CREEK.

Ecological: GRASSLAND, LOW ALKALINE SPOTS IN HEAVY LOAM.

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1935 WOLF COLLECTION. CONSIDERED "COMMON" IN 1935.

Owner/Manager: UNKNOWN

Occurrence No.	61	**Map Index:**	48235	**EO Index:**	48235	**Element Last Seen:**	1939-04-20
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1939-04-20
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2010-11-30

Quad Summary: Whittier (3311881)

County Summary: Los Angeles

Lat/Long:	33.90613 / -118.08388	**Accuracy:**	1 mile
UTM:	Zone-11 N3752277 E399794	**Elevation (ft):**	
PLSS:	T03S, R12W, Sec. 13 (S)	**Acres:**	0.0

Location: NORWALK.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDB AS BEST GUESS CENTERED ON NORWALK.

Ecological: EXTENSIVE FIELDS.

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS 1939 JEPSON COLLECTION. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Occurrence No.	108	**Map Index:**	97648	**EO Index:**	98983	**Element Last Seen:**	2015-03-10
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2015-03-10
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2019-04-22

Quad Summary: Los Alamitos (3311871)

County Summary: Orange

Lat/Long:	33.75341 / -118.09646	**Accuracy:**	specific area
UTM:	Zone-11 N3735355 E398450	**Elevation (ft):**	5
PLSS:	T05S, R12W, Sec. 12, SW (S)	**Acres:**	9.0

Location: LOS CERRITOS WETLANDS; SOUTH OF WHERE SAN GABRIEL RIVER CROSSES WESTMINSTER AVE, JUST SOUTH OF LAX/ORA COUNTY LINE.

Detailed Location: MAPPED AS 4 POLYGONS ACCORDING TO A MAP IN A 2012 TIDAL INFLUENCE REPORT, IN THE NW 1/4 OF THE SW 1/4 OF SECTION 12 AND THE SE 1/4 OF THE SE 1/4 OF SECTION 11.

Ecological: COASTAL SALINE MARSH. WITHIN OIL FIELDS, IN LOW SPOT AGAINST FENCE LINE.

General: "SEVERAL POPULATIONS" OBSERVED IN 2009, 2010, AND 2011. UNKNOWN NUMBER OBSERVED IN 2015.

Owner/Manager: PVT

Occurrence No.	110	**Map Index:** 97666	**EO Index:**	99030	**Element Last Seen:**	XXXX-XX-XX
Occ. Rank:	Unknown		**Presence:**	Presumed Extant	**Site Last Seen:**	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:**	2015-10-01

Quad Summary: Los Alamitos (3311871)

County Summary: Orange

Lat/Long:	33.75917 / -118.05638	**Accuracy:**	80 meters
UTM:	Zone-11 N3735955 E402168	**Elevation (ft):**	15
PLSS:	T05S, R11W, Sec. 08, NW (S)	**Acres:**	0.0

Location: SOUTH SIDE OF WESTMINSTER AVE BETWEEN SEAL BEACH BLVD AND BOLSA CHICA RD, SEAL BEACH NAVAL WEAPONS STATION.

Detailed Location: MAPPED ACCORDING TO A MAP IN A 2013 REPORT, IN THE SE 1/4 OF THE NW 1/4 OF SECTION 8.

Ecological: MOWED ANNUAL GRASSLAND.

General: SITE BASED ON A MAP IN A 2013 REPORT FOR THE SUNSET GAP MONITORING WELLS; UNKNOWN WHEN PLANTS WERE SEEN. NEED ADDITIONAL INFORMATION FOR THIS SITE.

Owner/Manager: DOD-SEAL BEACH NWS

Symphyotrichum defoliatum

Element Code: PDASTE80C0

San Bernardino aster

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G2
	State:	None		**State:**	S2
	Other:	Rare Plant Rank - 1B.2, BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank, USFS_S-Sensitive			
Habitat:	**General:**	MEADOWS AND SEEPS, CISMONTANE WOODLAND, COASTAL SCRUB, LOWER MONTANE CONIFEROUS FOREST, MARSHES AND SWAMPS, VALLEY AND FOOTHILL GRASSLAND.			
	Micro:	VERNALLY MESIC GRASSLAND OR NEAR DITCHES, STREAMS AND SPRINGS; DISTURBED AREAS. 3-2045 M.			

Occurrence No.	27	**Map Index:** 60532	**EO Index:**	60568	**Element Last Seen:**	1932-09-16
Occ. Rank:	None		**Presence:**	Extirpated	**Site Last Seen:**	1932-09-16
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:**	2010-04-27

Quad Summary: Los Alamitos (3311871)

County Summary: Los Angeles

Lat/Long:	33.77539 / -118.11888	**Accuracy:**	non-specific area
UTM:	Zone-11 N3737814 E396399	**Elevation (ft):**	10
PLSS:	T05S, R12W, Sec. 03, NE (S)	**Acres:**	178.1

Location: BRYANT RANCH, AT EXTREME SE CORNER OF PACIFIC WESTERN OIL CO LEASE, 100-150 FT WEST OF STATE HIGHWAY.

Detailed Location: MAPPED BY CNDDB IN THE NE1/4 OF SECTION 3 BASED ON TRS ON COLLECTION LABEL.

Ecological: LOW MARSHY GROUND.

General: A 1932 WOLF COLLECTION IS THE ONLY SOURCE OF INFORMATION FOR THIS SITE.

Owner/Manager: UNKNOWN

Occurrence No.	40	**Map Index:**	26518	**EO Index:**	60598	**Element Last Seen:**	1904-07-08
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1904-07-08
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2017-11-07

Quad Summary: Hollywood (3411813)

County Summary: Los Angeles

Lat/Long:	34.02178 / -118.32788	**Accuracy:**	1 mile
UTM:	Zone-11 N3765365 E377400	**Elevation (ft):**	
PLSS:	T02S, R14W, Sec. 03 (S)	**Acres:**	0.0

Location: CIENEGA.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDB AS BEST GUESS AROUND CIENEGA.

Ecological:

General: SITE BASED ON AN 1890 DAVIDSON COLLECTION, A 1902 BRAUNTON COLLECTION, AND A 1904 GRANT COLLECTION.

Owner/Manager: UNKNOWN

Occurrence No.	74	**Map Index:**	66318	**EO Index:**	79626	**Element Last Seen:**	1896-XX-XX
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1896-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2010-04-27

Quad Summary: Anaheim (3311778), La Habra (3311788), Los Alamitos (3311871), Whittier (3311881)

County Summary: Los Angeles, Orange

Lat/Long:	33.86705 / -117.99820	**Accuracy:**	1 mile
UTM:	Zone-11 N3747863 E407672	**Elevation (ft):**	
PLSS:	T03S, R11W, Sec. 35 (S)	**Acres:**	0.0

Location: BUENA PARK.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDB AS BEST GUESS AROUND BUENA PARK.

Ecological:

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS AN 1896 HAMLIN COLLECTION.

Owner/Manager: UNKNOWN

Occurrence No.	75	**Map Index:**	78716	**EO Index:**	79627	**Element Last Seen:**	1932-09-16
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1932-09-16
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2010-04-28

Quad Summary: Los Alamitos (3311871)

County Summary: Los Angeles

Lat/Long:	33.77226 / -118.10090	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3737450 E398061	**Elevation (ft):**	10
PLSS:	T05S, R12W, Sec. 02, E (S)	**Acres:**	0.0

Location: BRYANT RANCH; W SIDE OF SAN GABRIEL RIVER FLOOD CONTROL, LONG BEACH.

Detailed Location: COLLECTION LABEL SAYS "1645 FT EAST AND 200 FT NORTH OF CENTER 8, SECTION 2". MAPPED BY CNDDB AS BEST GUESS ~1645 FT E AND 200 FT NORTH OF THE CENTER OF SECTION 2.

Ecological:

General: SITE BASED ON A 1932 WOLF COLLECTION. ANOTHER 1932 COLLECTION FROM "SAN GABRIEL RIVER, LONG BEACH" IS ALSO ATTRIBUTED HERE.

Owner/Manager: UNKNOWN

Occurrence No.	78	**Map Index:**	66305	**EO Index:**	79630	**Element Last Seen:**	1893-XX-XX
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1893-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2010-04-28

Quad Summary:	Hollywood (3411813)
County Summary:	Los Angeles

Lat/Long:	34.09826 / -118.32682	**Accuracy:**	1 mile
UTM:	Zone-11 N3773845 E377608	**Elevation (ft):**	
PLSS:	T01S, R14W, Sec. 10 (S)	**Acres:**	0.0

Location:	HOLLYWOOD.
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED BY CNDDB AS BEST GUESS AROUND HOLLYWOOD.
Ecological:	
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS AN 1893 DAVIDSON COLLECTION.
Owner/Manager:	UNKNOWN

Occurrence No.	80	**Map Index:**	78721	**EO Index:**	79632	**Element Last Seen:**	1930-11-11
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1930-11-11
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2010-04-28

Quad Summary:	La Habra (3311788), Baldwin Park (3411718)
County Summary:	Los Angeles

Lat/Long:	34.01424 / -117.95849	**Accuracy:**	1 mile
UTM:	Zone-11 N3764149 E411498	**Elevation (ft):**	328
PLSS:	T02S, R10W, Sec. 08 (S)	**Acres:**	0.0

Location:	TEMPLETON, S OF PUENTE.
Detailed Location:	EXACT LOCATION UNKNOWN. UNABLE TO LOCATE "TEMPLETON"; MAPPED BY CNDDB AS BEST GUESS S OF LA PUENTE NEAR SAN JOSE CREEK AND APPROPRIATE ELEVATION.
Ecological:	SMALL MARSH.
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1930 FOSBERG COLLECTION.
Owner/Manager:	UNKNOWN

Symphyotrichum greatae **Element Code:** PDASTE80U0

Greata's aster

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G2
	State:	None		**State:**	S2
	Other:	Rare Plant Rank - 1B.3, BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden			
Habitat:	**General:**	CHAPARRAL, CISMONTANE WOODLAND, BROADLEAFED UPLAND FOREST, LOWER MONTANE CONIFEROUS FOREST, RIPARIAN WOODLAND.			
	Micro:	MESIC CANYONS. 335-2015 M.			

Occurrence No.	12	**Map Index:**	27701	**EO Index:**	58480	**Element Last Seen:**	1902-07-XX
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1902-07-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-12-18

Quad Summary: Los Angeles (3411812), Pasadena (3411822)

County Summary: Los Angeles

Lat/Long:	34.11713 / -118.17885	**Accuracy:**	1 mile
UTM:	Zone-11 N3775770 E391282	**Elevation (ft):**	
PLSS:	T01S, R12W (S)	**Acres:**	0.0

Location: ARROYO SECO, NEAR GARVANZA.

Detailed Location: MAPPED AS BEST GUESS IN THE VICINITY OF GARVANZA.

Ecological:

General: ONLY SOURCE IS 1902 COLLECTION. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Occurrence No.	13	**Map Index:**	58452	**EO Index:**	58488	**Element Last Seen:**	1932-09-21
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1932-09-21
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-12-18

Quad Summary: Los Angeles (3411812), Hollywood (3411813)

County Summary: Los Angeles

Lat/Long:	34.07735 / -118.23932	**Accuracy:**	1 mile
UTM:	Zone-11 N3771425 E385651	**Elevation (ft):**	
PLSS:	T01S, R13W, Sec. 16 (S)	**Acres:**	0.0

Location: ELYSIAN PARK.

Detailed Location: MAPPED AS BEST GUESS TO COVER PRESENT ELYSIAN PARK AREA.

Ecological: FOOT HILLS.

General: ONLY SOURCE IS 1932 COLLECTION. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Berberis nevinii **Element Code:** PDBER060A0

Nevin's barberry

Listing Status:	**Federal:**	Endangered	**CNDDB Element Ranks:**	**Global:**	G1
	State:	Endangered		**State:**	S1
	Other:	Rare Plant Rank - 1B.1, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden			
Habitat:	**General:**	CHAPARRAL, CISMONTANE WOODLAND, COASTAL SCRUB, RIPARIAN SCRUB.			
	Micro:	ON STEEP, N-FACING SLOPES OR IN LOW GRADE SANDY WASHES. 90-1590 M.			

Occurrence No.	52	**Map Index:**	B1326	**EO Index:**	113237	**Element Last Seen:**	2010-05-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2010-05-XX
Occ. Type:	Transplant Outside of Native Hab./Range			**Trend:**	Unknown	**Record Last Updated:**	2018-11-06

Quad Summary: Hollywood (3411813)

County Summary: Los Angeles

Lat/Long:	34.1177 / -118.29802	**Accuracy:**	specific area
UTM:	Zone-11 N3775967 E380292	**Elevation (ft):**	900
PLSS:	T01S, R14W, Sec. 1, NE (S)	**Acres:**	22.0

Location: VICINITY OF VERMONT CANYON AND GRIFFITH OBSERVATORY, GRIFFITH PARK.

Detailed Location: MAPPED AS 3 POLYGONS ACCORDING TO A MAP SHOWN IN A 2013 ESA REPORT.

Ecological:

General: UNKNOWN NUMBER OF PLANTS SEEN IN 2010. PROBABLY PLANTED HERE DURING THE 1930'S & 1940'S; THIS SHRUB COMMONLY PLANTED IN GRIFFITH PARK AFTER FIRE ACCORDING TO PARK HORTICULTURAL STAFF.

Owner/Manager: CITY OF LOS ANGELES

Occurrence No.	53	**Map Index:**	B1328	**EO Index:**	113239	**Element Last Seen:**	2010-05-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2010-05-XX
Occ. Type:	Transplant Outside of Native Hab./Range			**Trend:**	Unknown	**Record Last Updated:**	2018-11-06

Quad Summary: Hollywood (3411813)

County Summary: Los Angeles

Lat/Long:	34.12386 / -118.31467	**Accuracy:**	80 meters
UTM:	Zone-11 N3776669 E378766	**Elevation (ft):**	625
PLSS:	T01N, R14W, Sec. 35, SE (S)	**Acres:**	5.0

Location: BRUSH CANYON, APPROXIMATELY 0.9 AIR MILE WNW OF GRIFFITH OBSERVATORY, GRIFFITH PARK.

Detailed Location: MAPPED ACCORDING TO A MAP SHOWN IN A 2013 ESA REPORT.

Ecological:

General: UNKNOWN NUMBER OF PLANTS SEEN IN 2010. PROBABLY PLANTED HERE DURING THE 1930'S & 1940'S; THIS SHRUB COMMONLY PLANTED IN GRIFFITH PARK AFTER FIRE ACCORDING TO PARK HORTICULTURAL STAFF.

Owner/Manager: CITY OF LOS ANGELES

Lepidium virginicum var. robinsonii **Element Code:** PDBRA1M114

Robinson's pepper-grass

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G5T3
	State:	None		**State:**	S3
	Other:	Rare Plant Rank - 4.3			
Habitat:	**General:**	CHAPARRAL, COASTAL SCRUB.			
	Micro:	DRY SOILS, SHRUBLAND. 4-1435 M.			

Occurrence No.	154	**Map Index:** 85296	**EO Index:** 86320	**Element Last Seen:**	1950-02-14
Occ. Rank:	Unknown		**Presence:** Presumed Extant	**Site Last Seen:**	1950-02-14
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2012-03-02

Quad Summary: Los Angeles (3411812)

County Summary: Los Angeles

Lat/Long:	34.05421 / -118.21760	**Accuracy:**	2/5 mile
UTM:	Zone-11 N3768836 E387624	**Elevation (ft):**	
PLSS:	T01S, R13W, Sec. 26 (S)	**Acres:**	0.0

Location: BETWEEN RINEHART STREET AND PROSPECT PARK, LOS ANGELES.

Detailed Location: EXACT LOCATION UNKNOWN, UNABLE TO LOCATE RINEHART STREET. MAPPED AS BEST GUESS BY CNDDB IN GENERAL VICINITY OF PROSPECT PARK.

Ecological: CLAY SOIL WITH ERODIUM MOSCHATUM AND AVENA SP.

General: ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 1950 COLLECTION BY ROOS. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Nasturtium gambelii **Element Code:** PDBRA270V0

Gambel's water cress

Listing Status:	**Federal:**	Endangered	**CNDDB Element Ranks:**	**Global:**	G1
	State:	Threatened		**State:**	S1
	Other:	Rare Plant Rank - 1B.1, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden			
Habitat:	**General:**	MARSHES AND SWAMPS.			
	Micro:	FRESHWATER AND BRACKISH MARSHES AT THE MARGINS OF LAKES AND ALONG STREAMS, IN OR JUST ABOVE THE WATER LEVEL. 5-305 M.			

Occurrence No.	7	**Map Index:**	26518	**EO Index:**	73430	**Element Last Seen:**	1904-07-08
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1904-07-08
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2017-12-20

Quad Summary: Hollywood (3411813)

County Summary: Los Angeles

Lat/Long:	34.02178 / -118.32788	**Accuracy:**	1 mile
UTM:	Zone-11 N3765365 E377400	**Elevation (ft):**	
PLSS:	T02S, R14W, Sec. 03 (S)	**Acres:**	0.0

Location: CIENEGA, LOS ANGELES BASIN.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDB AS BEST GUESS IN THE VICINITY OF CIENEGA. AN 1892 DAVIDSON COLLECTION AND ANONYMOUS 1904 COLLECTION FROM "LOS ANGELES" ARE ALSO ATTRIBUTED TO THIS SITE.

Ecological:

General: SITE BASED ON VAGUE HERBARIUM COLLECTIONS FROM LATE 1800S & EARLY 1900S. ID OF SPECIMENS SHOULD BE CHECKED. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Occurrence No.	17	**Map Index:**	66320	**EO Index:**	109471	**Element Last Seen:**	1927-06-13
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1927-06-13
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2017-12-20

Quad Summary: Tustin (3311767), Newport Beach (3311768), Orange (3311777), Anaheim (3311778)

County Summary: Orange

Lat/Long:	33.74572 / -117.86785	**Accuracy:**	1 mile
UTM:	Zone-11 N3734300 E419616	**Elevation (ft):**	
PLSS:	T05S, R09W, Sec. 18 (S)	**Acres:**	0.0

Location: SANTA ANA.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS CENTERED ON SANTA ANA.

Ecological:

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1927 HOFFMASTER COLLECTION. PRESUMABLY EXTIRPATED.

Owner/Manager: UNKNOWN

Arenaria paludicola **Element Code:** PDCAR040L0

marsh sandwort

Listing Status:	**Federal:**	Endangered	**CNDDB Element Ranks:**	**Global:**	G1
	State:	Endangered		**State:**	S1
	Other:	Rare Plant Rank - 1B.1, SB_SBBG-Santa Barbara Botanic Garden			
Habitat:	**General:**	MARSHES AND SWAMPS.			
	Micro:	GROWING UP THROUGH DENSE MATS OF TYPHA, JUNCUS, SCIRPUS, ETC. IN FRESHWATER MARSH. SANDY SOIL. 3-170 M.			

Occurrence No.	15	**Map Index:**	26518	**EO Index:**	69869	**Element Last Seen:**	1900-08-26
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1900-08-26
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-02-19

Quad Summary:	Hollywood (3411813)
County Summary:	Los Angeles

Lat/Long:	34.02178 / -118.32788	**Accuracy:**	1 mile
UTM:	Zone-11 N3765365 E377400	**Elevation (ft):**	100
PLSS:	T02S, R14W, Sec. 03 (S)	**Acres:**	0.0

Location:	CIENEGA.
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED BY CNDDB AS A BEST GUESS IN THE COMMUNITY OF CIENEGA.
Ecological:	SWAMP.
General:	MAPPED BASED ON A 1900 COLLECTION BY DAVIDSON & GREATA FROM CIENEGA, LA COUNTY. 1890 COLLECTION BY HASSE FROM LA COUNTY ALSO ATTRIBUTED HERE. THESE ARE THE ONLY TWO KNOWN RECORDS FOR THIS COUNTY.
Owner/Manager:	UNKNOWN

Atriplex parishii **Element Code:** PDCHE041D0

Parish's brittlescale

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G1G2
	State:	None		**State:**	S1
	Other:	Rare Plant Rank - 1B.1, BLM_S-Sensitive, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank, USFS_S-Sensitive			
Habitat:	**General:**	VERNAL POOLS, CHENOPOD SCRUB, PLAYAS.			
	Micro:	USUALLY ON DRYING ALKALI FLATS WITH FINE SOILS. 4-1420 M.			

Occurrence No.	16	**Map Index:** 66318	**EO Index:** 77294	**Element Last Seen:**	1881-10-XX
Occ. Rank:	Unknown		**Presence:** Presumed Extant	**Site Last Seen:**	1881-10-XX
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2009-08-31

Quad Summary: Anaheim (3311778), La Habra (3311788), Los Alamitos (3311871), Whittier (3311881)

County Summary: Los Angeles, Orange

Lat/Long:	33.86705 / -117.99820	**Accuracy:**	1 mile
UTM:	Zone-11 N3747863 E407672	**Elevation (ft):**	
PLSS:	T03S, R11W, Sec. 35 (S)	**Acres:**	0.0

Location: "COSTA STATION," IN BUENA PARK.

Detailed Location: EXACT LOCATION UNKNOWN. ACCORDING TO F. ROBERTS, "COSTA RAIL STATION WAS NAMED 'ALMOND' IN THE 1800'S - NOW FOUND IN BUENA PARK IN ORA CO." UNABLE TO LOCATE COSTA RAIL STATION. MAPPED BY CNDDB AS BEST GUESS AT BUENA PARK.

Ecological:

General: TYPE LOCALITY. MAIN SOURCE OF INFORMATION FOR THIS SITE IS AN 1881 PARISH & PARISH COLLECTION. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Atriplex serenana var. davidsonii **Element Code:** PDCHE041T1

Davidson's saltscale

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G5T1
	State:	None		**State:**	S1
	Other:	Rare Plant Rank - 1B.2, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden			
Habitat:	**General:**	COASTAL BLUFF SCRUB, COASTAL SCRUB.			
	Micro:	ALKALINE SOIL. 0-480 M.			

Occurrence No.	4	**Map Index:** 34628	**EO Index:** 484	**Element Last Seen:**	1902-09-XX
Occ. Rank:	None		**Presence:** Possibly Extirpated	**Site Last Seen:**	1902-09-XX
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2013-01-08

Quad Summary: Los Angeles (3411812), Hollywood (3411813)

County Summary: Los Angeles

Lat/Long:	34.06710 / -118.25562	**Accuracy:**	non-specific area
UTM:	Zone-11 N3770307 E384133	**Elevation (ft):**	
PLSS:	T01S, R13W, Sec. 21 (S)	**Acres:**	249.0

Location: TEMPLE STREET, LOS ANGELES.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDB TO ENCOMPASS ENTIRE LENGTH OF TEMPLE STREET.

Ecological:

General: ONLY SOURCES OF INFORMATION FOR THIS OCCURRENCE ARE TWO 1902 COLLECTIONS BY BRAUNTON. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Occurrence No.	13	**Map Index:** 26518	**EO Index:** 49312	**Element Last Seen:**	1902-09-XX
Occ. Rank:	None		**Presence:** Possibly Extirpated	**Site Last Seen:**	1902-09-XX
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2013-01-23

Quad Summary: Hollywood (3411813)

County Summary: Los Angeles

Lat/Long:	34.02178 / -118.32788	**Accuracy:**	1 mile
UTM:	Zone-11 N3765365 E377400	**Elevation (ft):**	
PLSS:	T02S, R14W, Sec. 03 (S)	**Acres:**	0.0

Location: CIENEGA.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDB IN THE GENERAL VICINITY OF CIENEGA.

Ecological:

General: OCCURRENCE IS BASED ON A 1902 BRAUNTON COLLECTION (#634). ANOTHER BRAUNTON COLLECTION FROM SAME DATE AND LOCATION (#636) WAS RECENTLY ANNOTATED FROM VAR. DAVIDSONII TO VAR. SERENANA; IDENTIFICATION OF BRAUNTON #634 SHOULD BE CHECKED.

Owner/Manager: UNKNOWN

Suaeda esteroa

Element Code: PDCHE0P0D0

estuary seablite

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G3
	State:	None		**State:**	S2
	Other:	Rare Plant Rank - 1B.2			
Habitat:	**General:**	MARSHES AND SWAMPS.			
	Micro:	COASTAL SALT MARSHES IN CLAY, SILT, AND SAND SUBSTRATES. 0-80 M.			

Occurrence No.	39	**Map Index:** A2542	**EO Index:**	104129	**Element Last Seen:** 2014-02-06
Occ. Rank:	Good		**Presence:**	Presumed Extant	**Site Last Seen:** 2014-02-06
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:** 2016-11-09

Quad Summary: Los Alamitos (3311871)

County Summary: Los Angeles

Lat/Long:	33.76438 / -118.10821	**Accuracy:**	specific area
UTM:	Zone-11 N3736583 E397375	**Elevation (ft):**	0
PLSS:	T05S, R12W, Sec. 11, N (S)	**Acres:**	55.0

Location: LOS CERRITOS WETLANDS COMPLEX AND ALONG LOS CERRITOS CHANNEL, LONG BEACH.

Detailed Location: MAPPED AS 4 POLYGONS ACCORDING TO 2009 CRAIN COORDINATES, A MAP IN A 2012 TIDAL INFLUENCE REPORT, AND 2014 BIELFELT COORDINATES.

Ecological: COASTAL SALT MARSH AND ALONG CHANNEL EMBANKMENTS. ASSOCIATED WITH SALICORNIA PACIFICA, ARTHROCNEMUM SUBTERMINALE, ATRIPLEX WATSONII, BATIS MARITIMA, FRANKENIA SALINA, CARPOBROTUS EDULIS, ATRIPLEX SEMIBACCATA, ETC.

General: SOUTHERN POLYGON: EXTENSIVE POPULATION NOTED SOMETIME BETWEEN 2006 AND 2011, 100+ PLANTS OBSERVED IN 2014. 1 PLANT OBSERVED IN NW POLYGON IN 2009. 20+ PLANTS OBSERVED IN TWO EASTERN POLYGONS IN 2014.

Owner/Manager: PVT

Calystegia felix

Element Code: PDCON040P0

lucky morning-glory

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G1Q
	State:	None		**State:**	S1
	Other:	Rare Plant Rank - 1B.1			
Habitat:	**General:**	MEADOWS AND SEEPS, RIPARIAN SCRUB.			
	Micro:	SOMETIMES ALKALINE, ALLUVIAL. 9-205 M.			

Occurrence No.	7	**Map Index:**	84920	**EO Index:**	94538	**Element Last Seen:**	1902-05-01
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1902-05-01
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2014-08-12

Quad Summary:	Whittier (3311881)
County Summary:	Los Angeles

Lat/Long:	33.98325 / -118.09701	**Accuracy:**	1 mile
UTM:	Zone-11 N3760841 E398670	**Elevation (ft):**	
PLSS:	T02S, R12W, Sec. 24 (S)	**Acres:**	0.0

Location:	RIVERIA, LOS ANGELES.
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED BY CNDDB AROUND PICO RIVERA; PROVANCE BELIEVES THAT 1902 DAVIDSON COLLECTION FROM "RIVERIA" IS ACTUALLY REFERING TO PICO RIVERA.
Ecological:	
General:	SITE BASED ON A VAGUE 1902 DAVIDSON COLLECTION. THIS WAS FORMER CALYSTEGIA SEPIUM SSP. BINGHAMIAE OCCURRENCE #9.
Owner/Manager:	UNKNOWN

Occurrence No.	8	**Map Index:**	26518	**EO Index:**	94539	**Element Last Seen:**	1899-04-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1899-04-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2014-08-12

Quad Summary:	Hollywood (3411813)
County Summary:	Los Angeles

Lat/Long:	34.02178 / -118.32788	**Accuracy:**	1 mile
UTM:	Zone-11 N3765365 E377400	**Elevation (ft):**	100
PLSS:	T02S, R14W, Sec. 03 (S)	**Acres:**	0.0

Location:	CIENEGA.
Detailed Location:	MAPPED NEAR THE TOWN OF CIENEGA, NE OF BALDWIN HILLS. PREVIOUSLY CALYSTEGIA SEPIUM SSP. BINGHAMIAE OCCURRENCE #2.
Ecological:	
General:	ONLY SOURCE OF INFO IS 1899 COLLECTION BY ABRAMS. ORIGINAL LABEL SAYS CONVOLVULUS; ANNOTATED TO CALYSTEGIA BINGHAMIAE BY WALTERS AND WEBB IN 1960, C. SEPIUM SSP. BINGHAMIAE WRITTEN ON SHEET. LIKELY REPRESENTS NEWLY DESCRIBED C. FELIX.
Owner/Manager:	UNKNOWN

Occurrence No.	9	**Map Index:**	84921	**EO Index:**	94540	**Element Last Seen:**	1899-XX-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1899-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2014-08-12

Quad Summary: Hollywood (3411813)

County Summary: Los Angeles

Lat/Long:	34.09819 / -118.29173	**Accuracy:**	1 mile
UTM:	Zone-11 N3773797 E380845	**Elevation (ft):**	
PLSS:	T01S, R13W, Sec. 07 (S)	**Acres:**	0.0

Location: UNIVERSITY STATION, LOS ANGELES.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDB CENTERED NEAR VARMONT AVE AND SANTA MONICA BLVD ACCORDING TO A COMMENT BY PROVANCE REGARDING LOCATION OF DAVIDSON'S 1899 "UNIVERSITY STATION" COLLECTION.

Ecological:

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A VAGUE 1899 DAVIDSON COLLECTION. PREVIOUSLY C. SEPIUM SSP. BINGHAMIAE OCCURRENCE #10.

Owner/Manager: UNKNOWN

Occurrence No.	10	**Map Index:**	A7914	**EO Index:**	109700	**Element Last Seen:**	2014-06-25
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2014-06-25
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2018-01-03

Quad Summary: Los Alamitos (3311871)

County Summary: Los Angeles

Lat/Long:	33.82488 / -118.08529	**Accuracy:**	1/10 mile
UTM:	Zone-11 N3743269 E399569	**Elevation (ft):**	30
PLSS:	T04S, R12W, Sec. 13, SE (S)	**Acres:**	18.0

Location: EL DORADO EAST REGIONAL PARK, CITY OF LONG BEACH.

Detailed Location: GROWING ON THE VERY EDGE OF THE NORTH LAKE. MAPPED BY CNDDB AROUND THE NORTHERN LAKE WITHIN EL DORADO EAST REGIONAL PARK.

Ecological: RIPARIAN HABITAT. IN VERY WET SOIL.

General: PLANT NOT NOTICED BEFORE 2014. MENTIONED AS "RARE" IN 2014. IDENTITY CONFIRMED BY PROVANCE, SANDERS, AND NAMOFF.

Owner/Manager: CITY OF LONG BEACH

Dudleya multicaulis

Element Code: PDCRA040H0

many-stemmed dudleya

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G2
	State:	None		**State:**	S2
	Other:	Rare Plant Rank - 1B.2, BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, USFS_S-Sensitive			
Habitat:	**General:**	CHAPARRAL, COASTAL SCRUB, VALLEY AND FOOTHILL GRASSLAND.			
	Micro:	IN HEAVY, OFTEN CLAYEY SOILS OR GRASSY SLOPES. 1-910 M.			

Occurrence No.	11	**Map Index:**	02710	**EO Index:**	19715	**Element Last Seen:**	1983-04-22
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1983-04-22
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-05-22

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.83704 / -117.79236	**Accuracy:**	80 meters
UTM:	Zone-11 N3744369 E426687	**Elevation (ft):**	700
PLSS:	T04S, R09W, Sec. 11, SW (S)	**Acres:**	0.0

Location:	PERALTA HILLS, ABOUT 1 MILE SOUTH OF SANTA ANA CANYON ROAD AT IMPERIAL HIGHWAY, ANAHEIM.
Detailed Location:	ON NORTH-FACING SLOPE JUST NORTH OF POWERLINES AND 0.5 MILE NW OF NORTH MESA DRIVE AT VALLEY DRIVE IN CERRO VILLA HEIGHTS. ABOUT 0.5 MILE SOUTH OF ANAHEIM HILLS RESIDENTIAL DEVELOPMENT.
Ecological:	ON HEAVY CLAY OVERLYING SANDSTONE. IN COASTAL SAGE SCRUB MIXED WITH GRASSLAND. ASSOCIATED WITH CALOCHORTUS CATALINAE, BLOOMERIA CROCEA, NASSELLA PULCHRA AND SANICULA ARGUTA.
General:	FEWER THAN 50 PLANTS IN 1983.
Owner/Manager:	PVT-SCE

Occurrence No.	22	**Map Index:**	48012	**EO Index:**	48012	**Element Last Seen:**	1925-06-XX
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1925-06-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-04-15

Quad Summary:	Hollywood (3411813), Burbank (3411823)
County Summary:	Los Angeles

Lat/Long:	34.11269 / -118.30901	**Accuracy:**	1 mile
UTM:	Zone-11 N3775425 E379270	**Elevation (ft):**	
PLSS:	T01S, R14W, Sec. 01 (S)	**Acres:**	0.0

Location:	FOOTHILLS NORTH OF LOS ANGELES BETWEEN VERMONT & WESTERN AVENUES, IN THE HOLLYWOOD HILLS, AND HILLS N OF COLEGROVE.
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS BY CNDDB IN THE FOOTHILLS NORTH OF HOLLYWOOD AND LOS ANGELES TO INCLUDE SEVERAL HISTORIC COLLECTIONS.
Ecological:	FOOTHILLS.
General:	ONLY SOURCES OF INFORMATION ARE 4 COLLECTIONS: BRANTON (1905) FROM "HOLLYWOOD", MINTHORN (1910) FROM "FOOTHILLS NEAR COLEGROVE", OSTER (1924) FROM "FOOTHILLS N, BTWN VERMONT & WESTERN AVE-LOS ANGELES", KESSLER (1925) FROM "HOLLYWOOD HILLS".
Owner/Manager:	UNKNOWN

Occurrence No.	140	**Map Index:**	63609	**EO Index:**	63704	**Element Last Seen:**	2016-01-07
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2016-01-07
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2018-03-08

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.80281 / -117.79635	**Accuracy:**	specific area
UTM:	Zone-11 N3740577 E426288	**Elevation (ft):**	500
PLSS:	T04S, R09W, Sec. 26, NW (S)	**Acres:**	15.0

Location: VICINITY OF EL MODENA AND ORANGE PARK ACRES, ABOUT 0.4 AIR MILE SOUTHEAST OF SANTIAGO BLVD/HEWES ST JUNCTION.

Detailed Location: 3 POLYGONS MAPPED BY CNDDB. S POLY IS BASED ON 1993 LOCATION DESCRIPTION "LOMITA AVE, 0.4 ROAD KM E SANTIAGO BLVD, 0.4 KM W BAUER SURVEY MARKER." OTHER POLYGONS ARE BASED ON 2012 AND 2016 VANDERHOFF COORDINATES.

Ecological: BASALTIC OUTCROPS IN COASTAL SAGE SCRUB AND ANNUAL GRASSLAND. ASSOC WITH AVENA BARBATA, ERIOGONUM FASCICULATUM, ARTEMISIA CALIFORNICA, VULPIA MYUROS, ENCELIA CALIFORNICA, OPUNTIA SP, MALOSMA LAURINA, BROMUS DIANDRUS, BLOOMERIA CROCEA, ETC.

General: SOUTHERN POLYGON: 100 PLANTS SEEN IN 1993. MIDDLE POLYGON: 381 PLANTS IN 1993, <50 PLANTS IN 2012. NORTHERN POLYGON: <50 PLANTS IN 2016. A 1980 MARSH ET AL. OBSERVATION FROM SANTIAGO OAKS REGIONAL PARK IS ATTRIBUTED HERE.

Owner/Manager: PVT

Occurrence No.	179	**Map Index:**	96142	**EO Index:**	97299	**Element Last Seen:**	XXXX-XX-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-05-19

Quad Summary: La Habra (3311788), Whittier (3311881), Baldwin Park (3411718), El Monte (3411811)

County Summary: Los Angeles

Lat/Long:	34.00159 / -118.01029	**Accuracy:**	non-specific area
UTM:	Zone-11 N3762793 E406701	**Elevation (ft):**	
PLSS:	T02S, R11W, Sec. 14 (S)	**Acres:**	6822.0

Location: WHITTIER HILLS.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS BY CNDDB ROUGHLY BASED ON SURVEY AREA DESCRIBED IN A CHECKLIST OF PLANTS OF THE WHITTIER HILLS, FROM WORKMAN MILL RD TO COLIMA RD, TO THE BOUNDARIES OF WHITTIER, CITY OF INDUSTRY, HACIENDA HTS.

Ecological:

General: ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 2002 CHECKLIST OF PLANTS BY LJUBENKOV & ROSS. FIELDWORK WAS DONE BETWEEN 1986-1992. THE ORIGINAL CHECKLIST, PUBLISHED IN THE JOURNAL CROSSOSOMA, COULD NOT BE LOCATED. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Cuscuta obtusiflora var. glandulosa **Element Code:** PDCUS01111

Peruvian dodder

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G5T4?
	State:	None		**State:**	SH
	Other:	Rare Plant Rank - 2B.2			
Habitat:	**General:**	MARSHES AND SWAMPS (FRESHWATER).			
	Micro:	FRESHWATER MARSH. 15-280 M.			

Occurrence No.	2	**Map Index:** 34599	**EO Index:**	84863	**Element Last Seen:**	XXXX-XX-XX
Occ. Rank:	Unknown		**Presence:**	Presumed Extant	**Site Last Seen:**	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:**	2011-10-05

Quad Summary: El Monte (3411811)

County Summary: Los Angeles

Lat/Long:	34.07405 / -118.03901	**Accuracy:**	1 mile
UTM:	Zone-11 N3770853 E404131	**Elevation (ft):**	
PLSS:	T01S, R11W, Sec. 21 (S)	**Acres:**	0.0

Location: EL MONTE.

Detailed Location: EXACT LOCATION UNKNOWN, MAPPED BY CNDDB IN GENERAL VICINITY OF EL MONTE.

Ecological:

General: MAIN SOURCE OF INFO FOR THIS OCCURRENCE IS SITE NAME IN MUNZ'S 1974 "A FLORA OF SOUTHERN CALIFORNIA", UNKNOWN WHEN PLANTS SEEN. COOPER STATES THAT NEARBY WHITTIER NARROWS RIVERBOTTOM AREA STILL SUPPORTS APPROPRIATE HABITAT; SURVEYS NEEDED.

Owner/Manager: UNKNOWN

Astragalus brauntonii **Element Code:** PDFAB0F1G0

Braunton's milk-vetch

Listing Status:	**Federal:**	Endangered	**CNDDB Element Ranks:**	**Global:**	G2
	State:	None		**State:**	S2
	Other:	Rare Plant Rank - 1B.1, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden			
Habitat:	**General:**	CHAPARRAL, COASTAL SCRUB, VALLEY AND FOOTHILL GRASSLAND.			
	Micro:	RECENT BURNS OR DISTURBED AREAS; USUALLY ON SANDSTONE WITH CARBONATE LAYERS. SOIL SPECIALIST; REQUIRES SHALLOW SOILS TO DEFEAT POCKET GOPHERS AND OPEN AREAS, PREFERABLY ON HILLTOPS, SADDLES OR BOWLS BETWEEN HILLS. 3-640 M.			

Occurrence No.	1	**Map Index:** 41758	**EO Index:**	41758	**Element Last Seen:**	1930-06-01
Occ. Rank:	None		**Presence:**	Possibly Extirpated	**Site Last Seen:**	1930-06-01
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:**	2016-04-26

Quad Summary: Hollywood (3411813), Beverly Hills (3411814)

County Summary: Los Angeles

Lat/Long:	34.10514 / -118.38794	**Accuracy:**	1 mile
UTM:	Zone-11 N3774683 E371980	**Elevation (ft):**	
PLSS:	T01S, R14W, Sec. 7 (S)	**Acres:**	1987.0

Location: FOOTHILLS NEAR SHERMAN.

Detailed Location: SHERMAN WAS A POWER STATION ON THE OLD 'RED CAR' RAIL LINES. MAPPED BY CNDDB AROUND THE FOOTHILLS JUST NORTH OF SHERMAN AS SHOWN ON HISTORIC TOPOGRAPHIC MAPS.

Ecological:

General: POSSIBLE TYPE LOCALITY. SITE BASED ON HISTORIC 1901, 1907, AND 1930 COLLECTIONS FROM SHERMAN. PRESUMABLY EXTIRPATED ACCORDING TO FOTHERINGHAM. INCLUDES FORMER OCCURRENCE #35.

Owner/Manager: UNKNOWN

Astragalus hornii var. hornii **Element Code:** PDFAB0F421

Horn's milk-vetch

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	GUT1
	State:	None		**State:**	S1
	Other:	Rare Plant Rank - 1B.1, BLM_S-Sensitive			
Habitat:	**General:**	MEADOWS AND SEEPS, PLAYAS.			
	Micro:	LAKE MARGINS, ALKALINE SITES. 75-350 M.			

Occurrence No.	28	**Map Index:** B4592	**EO Index:** 117528	**Element Last Seen:**	1896-07-XX
Occ. Rank:	None		**Presence:** Extirpated	**Site Last Seen:**	1896-07-XX
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2019-12-19

Quad Summary: Newport Beach (3311768), Anaheim (3311778), Seal Beach (3311861), Los Alamitos (3311871), Long Beach (3311872)

County Summary: Los Angeles, Orange

Lat/Long:	33.78301 / -118.06702	**Accuracy:**	5 miles
UTM:	Zone-11 N3738609 E401211	**Elevation (ft):**	
PLSS:	T04S, R11W, Sec. 31 (S)	**Acres:**	49683.0

Location: ALAMITOS RANCH.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDB AS BEST GUESS AROUND THE AREA OF HISTORIC RANCHO LOS ALAMITOS AND LOS ALAMITOS. THE JEPSON MANUAL GIVES ELEVATION RANGE FOR THIS SPECIES AS 60-300 M BUT MAPPED AREA IS MUCH LOWER IN ELEVATION.

Ecological: ALKALI FLAT.

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS AN 1896 MCCLATCHIE COLLECTION.

Owner/Manager: UNKNOWN

Quercus dumosa

Element Code: PDFAG050D0

Nuttall's scrub oak

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G3
	State:	None		**State:**	S3
	Other:	Rare Plant Rank - 1B.1, BLM_S-Sensitive, IUCN_EN-Endangered, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank, USFS_S-Sensitive			
Habitat:	**General:**	CLOSED-CONE CONIFEROUS FOREST, CHAPARRAL, COASTAL SCRUB.			
	Micro:	GENERALLY ON SANDY SOILS NEAR THE COAST; SOMETIMES ON CLAY LOAM. 15-640 M.			

Occurrence No.	186	**Map Index:**	B1558	**EO Index:**	113467	**Element Last Seen:**	1924-04-27
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1924-04-27
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2018-12-06

Quad Summary: Hollywood (3411813)

County Summary: Los Angeles

Lat/Long:	34.11561 / -118.29892	**Accuracy:**	3/5 mile
UTM:	Zone-11 N3775737 E380207	**Elevation (ft):**	
PLSS:	T01S, R14W, Sec. 1 (S)	**Acres:**	776.0

Location: FOOTHILLS NORTH, BETWEEN VERMONT AND WESTERN AVE.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS BY CNDDB IN THE FOOTHILLS OF THE SANTA MONICA MOUNTAINS BETWEEN WESTERN CANYON ROAD AND VERMONT AVENUE.

Ecological:

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1924 OSTER COLLECTION. ANNOTATED AS QUERCUS DUMOSA BY NIXON IN 1992. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Ribes divaricatum var. parishii

Element Code: PDGRO020F3

Parish's gooseberry

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G5TX
	State:	None		**State:**	SX
	Other:	Rare Plant Rank - 1A			
Habitat:	**General:**	RIPARIAN WOODLAND.			
	Micro:	SALIX SWALES IN RIPARIAN HABITATS. 65-300 M.			

Occurrence No.	1	**Map Index:**	02296	**EO Index:**	19545	**Element Last Seen:**	1981-XX-XX
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	199X-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2017-01-03

Quad Summary:	El Monte (3411811)
County Summary:	Los Angeles

Lat/Long:	34.02820 / -118.05728	**Accuracy:**	80 meters
UTM:	Zone-11 N3765786 E402392	**Elevation (ft):**	210
PLSS:	T02S, R11W, Sec. 05, NW (S)	**Acres:**	0.0

Location:	SAN GABRIEL RIVER AT WHITTIER NARROWS RECREATION AREA, 0.5 MILE EAST OF DURFEE AVE AT SIPHON ROAD, NORTH OF WHITTIER.
Detailed Location:	ALONG SELF-GUIDED TRAIL OF WHITTER NARROWS, IMMEDIATELY E OF POWER LINE AND N OF FLOOD CONTROL CHANNEL. NUMEROUS HISTORICAL COLLECTIONS FROM "WHITTIER NARROWS" AND "SAN GABRIEL RIVER" ARE ATTRIBUTED HERE BUT MAY HAVE BEEN FROM NEARBY EO #2.
Ecological:	
General:	1 PLANT COLLECTED IN 1980 OR 1981. AREA SEARCHED IN SUBSEQUENT YEARS BUT NOT SEEN SINCE; LAST DOCUMENTED SEARCH WAS IN MID-1990S, NO PLANTS FOUND. AREAS SURROUNDING MAPPED SITE SEARCHED IN 2002, NONE FOUND. INCLUDES FORMER EOS #3 AND 4.
Owner/Manager:	LAX COUNTY

Occurrence No.	2	**Map Index:**	02308	**EO Index:**	19544	**Element Last Seen:**	1979-03-06
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	199X-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2017-01-03

Quad Summary:	El Monte (3411811)
County Summary:	Los Angeles

Lat/Long:	34.03260 / -118.04627	**Accuracy:**	80 meters
UTM:	Zone-11 N3766264 E403413	**Elevation (ft):**	220
PLSS:	T02S, R11W, Sec. 04, NW (S)	**Acres:**	0.0

Location:	SAN GABIREL RIVER AT WHITTIER NARROWS RECREATION AREA, S OF DURFEE RD AND 0.5 MI W OF PECK RD, N OF WHITTIER.
Detailed Location:	AT WHITTIER NARROWS NATURE AREA ABOUT 0.25 MILE SW OF NATURE CENTER HEADQUARTERS, JUST N OF FLOOD CONTROL CHANNEL.
Ecological:	ON SANDY LOAM SOIL. GROWING INTERMIXED WITH RIBES AUREUM, SALIX LASIOLEPIS ALONG TRAIL.
General:	SINGLE PLANT OBSERVED IN 1979. AREA SEARCHED IN SUBSEQUENT YEARS BUT HAS NOT BEEN SEEN SINCE; LAST DOCUMENTED SEARCH WAS IN THE MID-1990S, NO PLANTS FOUND. NEEDS FIELDWORK.
Owner/Manager:	LAX COUNTY

Occurrence No.	6	**Map Index:**	39017	**EO Index:**	34024	**Element Last Seen:**	1893-04-XX
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1893-04-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2016-12-28

Quad Summary:	El Monte (3411811), Los Angeles (3411812), Mt. Wilson (3411821), Pasadena (3411822)
County Summary:	Los Angeles

Lat/Long:	34.15159 / -118.15084	**Accuracy:**	5 miles
UTM:	Zone-11 N3779562 E393908	**Elevation (ft):**	1000
PLSS:	T01N, R12W, Sec. 21 (S)	**Acres:**	0.0

Location:	PASADENA.
Detailed Location:	EXACT LOCATION NOT KNOWN; SITE MAPPED IN GENERAL AREA OF PASADENA.
Ecological:	
General:	SITE BASED ON AN 1882 COLLECTION BY JONES AND AN 1893 COLLECTION BY MCCLATCHIE.
Owner/Manager:	UNKNOWN

Occurrence No.	7	**Map Index:**	A3211	**EO Index:**	104838	**Element Last Seen:**	1951-05-12
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1951-05-12
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2016-12-28

Quad Summary:	El Monte (3411811)
County Summary:	Los Angeles

Lat/Long:	34.07208 / -118.04675	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3770643 E403415	**Elevation (ft):**	250
PLSS:	T01S, R11W, Sec. 21, NW (S)	**Acres:**	70.0

Location:	RIO HONDO RIVER BOTTOM, 100 YARDS SOUTH OF PACIFIC ELECTRIC RAILROAD TRACKS 1 MILE WEST OF EL MONTE.
Detailed Location:	MAPPED BY CNDDB AS BEST GUESS BASED ON LOCATION DESCRIPTION.
Ecological:	SILT. GROWING AMONG RUBUS AND SALIX.
General:	SITE BASED ON A 1951 COLLIER COLLECTION. HISTORIC COLLECTIONS FROM "EL MONTE" AND "LEXINGTON WASH AT EL MONTE" ARE ALSO ATTRIBUTED TO THIS SITE.
Owner/Manager:	UNKNOWN

Nama stenocarpa

Element Code: PDHYD0A0H0

mud nama

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G4G5
	State:	None		**State:**	S1S2
	Other:	Rare Plant Rank - 2B.2			
Habitat:	**General:**	MARSHES AND SWAMPS.			
	Micro:	LAKE SHORES, RIVER BANKS, INTERMITTENTLY WET AREAS. 15-815 M.			

Occurrence No.	10	**Map Index:** 02270	**EO Index:** 48666	**Element Last Seen:**	1932-07-01
Occ. Rank:	Unknown		**Presence:** Presumed Extant	**Site Last Seen:**	1932-07-01
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2010-10-07

Quad Summary: Seal Beach (3311861), Los Alamitos (3311871)

County Summary: Orange

Lat/Long:	33.73881 / -118.07696	**Accuracy:**	1 mile
UTM:	Zone-11 N3733717 E400239	**Elevation (ft):**	
PLSS:	T05S, R11W, Sec. 18 (S)	**Acres:**	0.0

Location: ANAHEIM MARSH, ORANGE COUNTY.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDB AS BEST GUESS IN THE MARSH AREA NEAR ANAHEIM BAY.

Ecological: DRY POND BOTTOM.

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1932 BOOTH COLLECTION. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Phacelia stellaris

Element Code: PDHYD0C510

Brand's star phacelia

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G1
	State:	None		**State:**	S1
	Other:	Rare Plant Rank - 1B.1, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden			
Habitat:	**General:**	COASTAL SCRUB, COASTAL DUNES.			
	Micro:	OPEN AREAS. 3-370 M.			

Occurrence No.	1	**Map Index:** 26517	**EO Index:** 1567	**Element Last Seen:**	1935-03-18
Occ. Rank:	None		**Presence:** Possibly Extirpated	**Site Last Seen:**	1935-03-18
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2013-09-17

Quad Summary: Baldwin Park (3411718), El Monte (3411811)

County Summary: Los Angeles

Lat/Long:	34.07029 / -118.00219	**Accuracy:**	1 mile
UTM:	Zone-11 N3770402 E407524	**Elevation (ft):**	300
PLSS:	T01S, R11W (S)	**Acres:**	0.0

Location: SAN GABRIEL RIVER, 2 MILES EAST OF EL MONTE.

Detailed Location: EXACT LOCATION UNKNOWN, MAPPED BY CNDDB AS A BEST GUESS.

Ecological: ALLUVIAL SAND.

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS 1935 COLLECTION BY KECK. OCCURRENCE MARKED BY CNDDB AS POSSIBLY EXTIRPATED DUE TO SIGNIFICANT AMOUNT OF DEVELOPMENT IN AREA SINCE DATE OF COLLECTION.

Owner/Manager: UNKNOWN

Occurrence No.	3	**Map Index:**	90351	**EO Index:**	1726	**Element Last Seen:**	1923-03-19
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1923-03-19
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2013-09-17

Quad Summary:	South Gate (3311882)
County Summary:	Los Angeles

Lat/Long:	33.91037 / -118.14066	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3752804 E394548	**Elevation (ft):**	90
PLSS:	T03S, R12W, Sec. 16, E (S)	**Acres:**	0.0

Location:	DOWNEY CEMETERY.
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS BY CNDDB IN THE VICINITY OF THE OLD DOWNEY CEMETERY.
Ecological:	SANDY SOIL.
General:	ONLY SOURCES OF INFORMATION FOR THIS OCCURRENCE ARE TWO 1923 COLLECTIONS BY MOSKEDAHL AND MUNZ. REISER SUGGESTS THAT THIS POPULATION IS NO LONGER EXTANT (1994).
Owner/Manager:	UNKNOWN

Occurrence No.	14	**Map Index:**	90366	**EO Index:**	91444	**Element Last Seen:**	1932-XX-XX
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1932-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2013-09-18

Quad Summary:	Los Alamitos (3311871)
County Summary:	Orange

Lat/Long:	33.79438 / -118.01523	**Accuracy:**	non-specific area
UTM:	Zone-11 N3739820 E406017	**Elevation (ft):**	45
PLSS:	T04S, R11W, Sec. 27, SE (S)	**Acres:**	169.0

Location:	BRYANT RANCH, NEAR LONG BEACH.
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED BY CNDDB IN GARDEN GROVE JUST EAST OF LONG BEACH ACCORDING TO GIVEN TRS: T4S R11W SE 1/4 SECTION 27.
Ecological:	
General:	ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 1932 COLLECTION BY SNOW. OCCURRENCE MARKED BY CNDDB AS POSSIBLY EXTIRPATED DUE TO SIGNIFICANT AMOUNT OF DEVELOPMENT IN AREA SINCE DATE OF COLLECTION.
Owner/Manager:	UNKNOWN

Scutellaria bolanderi ssp. austromontana

Element Code: PDLAM1U0A1

southern mountains skullcap

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G4T3
	State:	None		**State:**	S3
	Other:	Rare Plant Rank - 1B.2, BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, USFS_S-Sensitive			
Habitat:	**General:**	CHAPARRAL, CISMONTANE WOODLAND, LOWER MONTANE CONIFEROUS FOREST.			
	Micro:	IN GRAVELLY SOILS ON STREAMBANKS OR IN MESIC SITES IN OAK OR PINE WOODLAND. 425-2000 M.			

Occurrence No.	16	**Map Index:**	34599	**EO Index:**	14693	**Element Last Seen:**	XXXX-XX-XX
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1996-03-19

Quad Summary: El Monte (3411811)

County Summary: Los Angeles

Lat/Long:	34.07405 / -118.03901	**Accuracy:**	1 mile
UTM:	Zone-11 N3770853 E404131	**Elevation (ft):**	300
PLSS:	T01S, R11W, Sec. 21 (S)	**Acres:**	0.0

Location: EL MONTE, SAN GABRIEL VALLEY.

Detailed Location: ELEVATION 300 FEET.

Ecological:

General: ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS SITE NAME NOTED BY JEPSON "A FLORA OF CALIFORNIA" (1943); JEPSON FUTHER NOTES THIS SPECIMEN IS "PERHAPS A WAIF FROM THE MOUNTAINS." IDENTIFICATION OF THIS OCCURRENCE IS QUESTIONABLE.

Owner/Manager: UNKNOWN

Sidalcea neomexicana

Element Code: PDMAL110J0

salt spring checkerbloom

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G4
	State:	None		**State:**	S2
	Other:	Rare Plant Rank - 2B.2, USFS_S-Sensitive			
Habitat:	**General:**	PLAYAS, CHAPARRAL, COASTAL SCRUB, LOWER MONTANE CONIFEROUS FOREST, MOJAVEAN DESERT SCRUB.			
	Micro:	ALKALI SPRINGS AND MARSHES. 3-2380 M.			

Occurrence No.	3	**Map Index:**	35236	**EO Index:**	21131	**Element Last Seen:**	1934-04-11
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1934-04-11
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2017-02-07

Quad Summary:	Los Alamitos (3311871)
County Summary:	Los Angeles

Lat/Long:	33.77051 / -118.09936	**Accuracy:**	1/5 mile
UTM:	Zone-11 N3737254 E398202	**Elevation (ft):**	10
PLSS:	T05S, R12W, Sec. 02, SE (S)	**Acres:**	0.0

Location:	BRYANT RANCH, EAST OF LONG BEACH, SOUTH OF 7TH STREET ON W SIDE OF SAN GABRIEL FLOOD CONTROL.
Detailed Location:	1400 FEET SOUTH OF 7TH STREET ON THE WEST SIDE OF THE FLOOD CONTROL CHANNEL. MAPPED BY CNDDB AS A BEST GUESS.
Ecological:	UPPER SONORAN GRASSLAND WITH FINE, ALKALINE SOILS.
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1934 WOLF COLLECTION. NEEDS FIELDWORK.
Owner/Manager:	UNKNOWN

Occurrence No.	15	**Map Index:**	48780	**EO Index:**	48780	**Element Last Seen:**	1952-05-30
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1952-05-30
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2017-02-09

Quad Summary:	Los Alamitos (3311871)
County Summary:	Orange

Lat/Long:	33.80027 / -118.01382	**Accuracy:**	2/5 mile
UTM:	Zone-11 N3740472 E406156	**Elevation (ft):**	50
PLSS:	T04S, R11W, Sec. 27, NE (S)	**Acres:**	280.0

Location:	ABOUT 100 YARDS N OF KATELLA AVE TO W OF HANSON STREET, AND AT NW CORNER OF BRYANT AVE AND HANSON STREET.
Detailed Location:	BASED ON HISTORIC TOPO MAPS HANSON ST IS CURRENTLY KNOTT ST AND BRYANT AVE IS CURRENTLY ORANGEWOOD AVE. MAPPED BY CNDDB TO ENCOMPASS NW CORNER OF KNOTT ST/ORANGEWOOD AVE INTERSECTION & N SIDE OF KATELLA AVE JUST W OF KNOTT ST.
Ecological:	LOCATED IN OLD HORSE PASTURE WITH SUAEDA, DISTICHLIS, AND ANEMOPSIS. FINE ALKALI SOIL.
General:	SITE IS BASED ON A 1935 EVERETT COLLECTION, 1936 WOLF COLLECTIONS, AND A 1952 HITCHCOCK COLLECTION.
Owner/Manager:	UNKNOWN

Occurrence No.	21	**Map Index:**	66320	**EO Index:**	105318	**Element Last Seen:**	1929-04-01
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1929-04-01
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2017-02-21

Quad Summary: Tustin (3311767), Newport Beach (3311768), Orange (3311777), Anaheim (3311778)

County Summary: Orange

Lat/Long:	33.74572 / -117.86785	**Accuracy:**	1 mile
UTM:	Zone-11 N3734300 E419616	**Elevation (ft):**	
PLSS:	T05S, R09W, Sec. 18 (S)	**Acres:**	0.0

Location: SANTA ANA.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDB IN THE GENERAL VICINITY OF SANTA ANA.

Ecological:

General: MAIN SOURCE OF INFORMATION FOR THIS SITE IS A 1929 ELMORE COLLECTION. A 1908 KING COLLECTION FROM "BETWEEN SANTA ANA AND NEWPORT" IS ALSO ATTRIBUTED TO THIS SITE. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Occurrence No.	26	**Map Index:**	47943	**EO Index:**	105337	**Element Last Seen:**	1902-07-XX
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1902-07-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2017-02-21

Quad Summary: Los Angeles (3411812), Hollywood (3411813)

County Summary: Los Angeles

Lat/Long:	34.05223 / -118.24369	**Accuracy:**	1 mile
UTM:	Zone-11 N3768645 E385214	**Elevation (ft):**	
PLSS:	T01S, R13W, Sec. 28 (S)	**Acres:**	0.0

Location: LOS ANGELES.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS BY CNDDB AROUND HISTORIC CENTER OF LOS ANGELES.

Ecological:

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1902 DAVIDSON COLLECTION. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Occurrence No.	27	**Map Index:**	A3696	**EO Index:**	105338	**Element Last Seen:**	1922-05-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1922-05-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2017-02-09

Quad Summary: Inglewood (3311883), Venice (3311884), Hollywood (3411813), Beverly Hills (3411814)

County Summary: Los Angeles

Lat/Long:	34.01264 / -118.37575	**Accuracy:**	1 mile
UTM:	Zone-11 N3764410 E372967	**Elevation (ft):**	
PLSS:	T02S, R14W, Sec. 8 (S)	**Acres:**	1987.0

Location: BETWEEN W ADAMS AND CULVER CITY.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS BY CNDDB AROUND HILLS JUST EAST OF CULVER CITY AND SOUTH OF THE WEST END OF WEST ADAMS STREET.

Ecological: HILLSIDE.

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1922 MOREY COLLECTION. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Abronia villosa var. aurita **Element Code:** PDNYC010P1

chaparral sand-verbena

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G5T2?
	State:	None		**State:**	S2
	Other:	Rare Plant Rank - 1B.1, BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, USFS_S-Sensitive			
Habitat:	**General:**	CHAPARRAL, COASTAL SCRUB, DESERT DUNES.			
	Micro:	SANDY AREAS. -60-1570 M.			

Occurrence No.	28	**Map Index:**	45060	**EO Index:**	45060	**Element Last Seen:**	1935-06-28
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1935-06-28
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2010-06-21

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.86638 / -117.81750	**Accuracy:**	non-specific area
UTM:	Zone-11 N3747641 E424385	**Elevation (ft):**	350
PLSS:	T03S, R09W, Sec. 34 (S)	**Acres:**	37.0

Location: 0.8 MILE EAST OF ATWOOD.

Detailed Location: ON S SIDE OF RR TRACKS. MAPPED BY CNDDB AS BEST GUESS ~0.8 MI E OF ATWOOD ALONG S SIDE OF RR TRACKS. ELEVATION IN AREA IS LOWER THAN ELEVATION ON COLLECTION LABEL (350 FT). COLLECTION MAY HAVE BEEN MADE FURTHER S NEAR THE SANTA ANA RIVER.

Ecological: OPEN DRY FIELD, SANDY SOIL.

General: SITE BASED ON A 1935 EVERETT COLLECTION. LIKELY EXTIRPATED ACCORDING TO ROBERTS AS A RESULT OF CHANNELIZATION OF THE SANTA ANA RIVER IN THE 1940S.

Owner/Manager: UNKNOWN

Occurrence No.	29	**Map Index:**	45061	**EO Index:**	45061	**Element Last Seen:**	1929-04-06
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1929-04-06
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2010-06-21

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.86797 / -117.84887	**Accuracy:**	non-specific area
UTM:	Zone-11 N3747842 E421485	**Elevation (ft):**	300
PLSS:	T03S, R09W, Sec. 32 (S)	**Acres:**	68.0

Location: 1 MILE WEST OF ATWOOD.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDB AS BEST GUESS ALONG THE RR TRACKS ABOUT 1 MI W OF ATWOOD; UNCLEAR WHAT ROADS WERE PRESENT IN THE 1920S WHEN THE COLLECTION WAS MADE. COLLECTION MAY HAVE BEEN MADE FURTHER S NEAR THE SANTA ANA RIVER.

Ecological: SANDY LANDS.

General: SITE BASED ON A 1929 JOHNSON COLLECTION. LIKELY EXTIRPATED ACCORDING TO ROBERTS AS A RESULT OF CHANNELIZATION OF THE SANTA ANA RIVER IN THE 1940S.

Owner/Manager: UNKNOWN

Occurrence No.	30	**Map Index:** 45062	**EO Index:**	45062	**Element Last Seen:**	1924-08-29
Occ. Rank:	None		**Presence:**	Extirpated	**Site Last Seen:**	1924-08-29
Occ. Type:	Natural/Native occurrence		**Trend:**	Decreasing	**Record Last Updated:**	2010-06-21

Quad Summary: Orange (3311777), Anaheim (3311778)

County Summary: Orange

Lat/Long:	33.79869 / -117.87795	**Accuracy:**	non-specific area
UTM:	Zone-11 N3740182 E418730	**Elevation (ft):**	150
PLSS:	T04S, R10W, Sec. 25 (S)	**Acres:**	345.0

Location: SANTA ANA RIVER BED, BETWEEN ANAHEIM AND SANTA ANA.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDB ALONG THE PRESENT LOCATION OF THE CHANNELIZED SANTA ANA RIVER. ADMITTEDLY, THIS DOES NOT REPRESENT THE HISTORICAL DISTRIBUTION OF THE PLANT HERE.

Ecological: DRY, OPEN SANDY STREAMBED.

General: EXTIRPATED. OCCURRENCE KNOWN FROM A 1924 JOHNSTON COLLECTION FROM "SANTA ANA RIVER BED, BETWEEN ANAHEIM AND SANTA ANA." PEIRSON COLLECTION FROM THE SAME DATE FROM "SANTA ANA" AND 1903 BAKER COLLECTION FROM "ANAHEIM" ALSO ATTRIBUTED HERE.

Owner/Manager: UNKNOWN

Nemacaulis denudata var. denudata

Element Code: PDPGN0G011

coast woolly-heads

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G3G4T2
	State:	None		**State:**	S2
	Other:	Rare Plant Rank - 1B.2, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank			
Habitat:	**General:**	COASTAL DUNES.			
	Micro:	0-5 M.			

Occurrence No.	19	**Map Index:** 86418	**EO Index:**	1006	**Element Last Seen:**	1951-08-18
Occ. Rank:	Unknown		**Presence:**	Presumed Extant	**Site Last Seen:**	1951-08-18
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:**	2012-07-31

Quad Summary: Seal Beach (3311861), Los Alamitos (3311871), Long Beach (3311872)

County Summary: Los Angeles, Orange

Lat/Long:	33.74819 / -118.11288	**Accuracy:**	1 mile
UTM:	Zone-11 N3734792 E396922	**Elevation (ft):**	
PLSS:	T05S, R12W, Sec. 14 (S)	**Acres:**	0.0

Location: SEAL BEACH AND ALAMITOS, LONG BEACH.

Detailed Location: EXACT LOCATIONS UNKNOWN. MAPPED AS BEST GUESS BY CNDDB TO INCLUDE GENERAL VICINITIES OF SEAL BEACH AND ALAMITOS BAY/PENINSULA. COLLECTION FROM ANAHEIM LANDING ALSO ATTRIBUTED HERE; FORMER ANAHEIM LANDING LOCATED IN CURRENT SEAL BEACH.

Ecological:

General: OCCURRENCE IS PRIMARILY BASED ON A 1901 ABRAMS COLLECTION, A 1925 JONES COLLECTION, AND A 1951 PEIRSON COLLECTION. GENERAL COLLECTIONS FROM LONG BEACH FROM 1891, 1896, AND 1900 ARE ALSO ATTRIBUTED TO THIS OCCURRENCE. INCLUDES FORMER EO #22.

Owner/Manager: UNKNOWN

Dodecahema leptoceras **Element Code:** PDPGN0V010

slender-horned spineflower

Listing Status:	**Federal:**	Endangered	**CNDDB Element Ranks:**	**Global:**	G1
	State:	Endangered		**State:**	S1
	Other:	Rare Plant Rank - 1B.1, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden			
Habitat:	**General:**	CHAPARRAL, CISMONTANE WOODLAND, COASTAL SCRUB (ALLUVIAL FAN SAGE SCRUB).			
	Micro:	FLOOD DEPOSITED TERRACES AND WASHES; ASSOCIATES INCLUDE ENCELIA, DALEA, LEPIDOSPARTUM, ETC. SANDY SOILS. 200-765 M.			

Occurrence No.	47	**Map Index:** 54944	**EO Index:**	121087	**Element Last Seen:**	XXXX-XX-XX
Occ. Rank:	None		**Presence:**	Possibly Extirpated	**Site Last Seen:**	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:**	2021-12-10

Quad Summary: El Monte (3411811)

County Summary: Los Angeles

Lat/Long:	34.09227 / -118.10543	**Accuracy:**	1 mile
UTM:	Zone-11 N3772938 E398023	**Elevation (ft):**	400
PLSS:	T01S, R12W, Sec. 11 (S)	**Acres:**	0.0

Location: PLAINS OF SAN GABRIEL.

Detailed Location: EXACT LOCATION UNKNOWN, MAPPED AS BEST GUESS BY CNDDB IN THE VICINITY OF THE COMMUNITY OF SAN GABRIEL. LOCALITY MAY INSTEAD BE REFERENCING THE PLANS SURROUNDING THE SAN GABRIEL RIVER.

Ecological:

General: ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS AN UNDATED LOBB COLLECTION. LIKELY EXTIRPATED DUE TO DEVELOPMENT.

Owner/Manager: UNKNOWN

Eriastrum densifolium ssp. sanctorum

Element Code: PDPLM03035

Santa Ana River woollystar

Listing Status:	**Federal:**	Endangered	**CNDDB Element Ranks:**	**Global:**	G4T1
	State:	Endangered		**State:**	S1
	Other:	Rare Plant Rank - 1B.1, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden			
Habitat:	**General:**	COASTAL SCRUB, CHAPARRAL.			
	Micro:	IN SANDY SOILS ON RIVER FLOODPLAINS OR TERRACED FLUVIAL DEPOSITS. 180-705 M.			

Occurrence No.	2	**Map Index:** 02802	**EO Index:** 18416	**Element Last Seen:**	1927-08-13
Occ. Rank:	None		**Presence:** Possibly Extirpated	**Site Last Seen:**	1927-08-13
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2009-09-02

Quad Summary: Black Star Canyon (3311776), Orange (3311777), Prado Dam (3311786), Yorba Linda (3311787)

County Summary: Orange

Lat/Long:	33.86473 / -117.73894	**Accuracy:**	1 mile
UTM:	Zone-11 N3747403 E431652	**Elevation (ft):**	
PLSS:	T03S, R08W, Sec. 32 (S)	**Acres:**	0.0

Location: BLACK STAR CANYON QUADRANGLE, POSSIBLY NEAR JCT OF WEIR CYN RD & RIVERSIDE FREEWAY.

Detailed Location: TWO 1927 HOWELL COLLECTIONS FROM "SANTA ANA RIVER BOTTOM" AND "SANTA ANA CANYON" IN ORANGE COUNTY, ALSO ATTRIBUTED TO THIS SITE BUT ELEVATION (500 FEET) PLACES THEM FURTHER EAST IN RIVERSIDE COUNTY.

Ecological:

General: SITE BASED ON A PERSONAL COMMUNICATION WITH MARSH THAT IT MAY BE LOCATED NEAR THE JUNCTION OF WEIR CYN RD & RIVERSIDE FREEWAY. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Navarretia prostrata

Element Code: PDPLM0C0Q0

prostrate vernal pool navarretia

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G2
	State:	None		**State:**	S2
	Other:	Rare Plant Rank - 1B.2, BLM_S-Sensitive			
Habitat:	**General:**	COASTAL SCRUB, VALLEY AND FOOTHILL GRASSLAND, VERNAL POOLS, MEADOWS AND SEEPS.			
	Micro:	ALKALINE SOILS IN GRASSLAND, OR IN VERNAL POOLS. MESIC, ALKALINE SITES. 3-1235 M.			

Occurrence No.	9	**Map Index:**	47943	**EO Index:**	47943	**Element Last Seen:**	1907-05-01
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1907-05-01
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-02-11

Quad Summary: Los Angeles (3411812), Hollywood (3411813)

County Summary: Los Angeles

Lat/Long:	34.05223 / -118.24369	**Accuracy:**	1 mile
UTM:	Zone-11 N3768645 E385214	**Elevation (ft):**	
PLSS:	T01S, R13W, Sec. 28 (S)	**Acres:**	0.0

Location: LOS ANGELES.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS BY CNDDB AROUND HISTORIC CENTER OF LOS ANGELES.

Ecological:

General: TYPE LOCALITY. SITE IS BASED ON AN UNDATED NEVIN COLLECTION, AN 1881 PARRY COLLECTION, AND A 1907 GARDNER COLLECTION.

Owner/Manager: UNKNOWN

Occurrence No.	11	**Map Index:**	26503	**EO Index:**	47952	**Element Last Seen:**	1895-05-XX
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1895-05-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-02-11

Quad Summary: Whittier (3311881), South Gate (3311882)

County Summary: Los Angeles

Lat/Long:	33.94216 / -118.13586	**Accuracy:**	1 mile
UTM:	Zone-11 N3756324 E395032	**Elevation (ft):**	
PLSS:	T03S, R12W (S)	**Acres:**	0.0

Location: DOWNEY.

Detailed Location:

Ecological:

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS AN 1895 DAVIDSON COLLECTION. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Occurrence No.	12	**Map Index:**	01965	**EO Index:**	47953	**Element Last Seen:**	1882-XX-XX
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1882-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-02-11

Quad Summary: South Gate (3311882)

County Summary: Los Angeles

Lat/Long:	33.90327 / -118.22273	**Accuracy:**	1 mile
UTM:	Zone-11 N3752103 E386952	**Elevation (ft):**	
PLSS:	T03S, R13W, Sec. 15 (S)	**Acres:**	0.0

Location: COMPTON.

Detailed Location:

Ecological:

General: OCCURRENCE IS BASED ON NEVIN COLLECTIONS FROM 1881, 1882, AND THE 1900S (DATE GIVEN AS 190_ BUT MAY HAVE ALSO BEEN FROM THE 1880S). NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Horkelia cuneata var. puberula **Element Code:** PDROS0W045

mesa horkelia

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G4T1
	State:	None		**State:**	S1
	Other:	Rare Plant Rank - 1B.1, BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, USFS_S-Sensitive			
Habitat:	**General:**	CHAPARRAL, CISMONTANE WOODLAND, COASTAL SCRUB.			
	Micro:	SANDY OR GRAVELLY SITES. 15-1645 M.			

Occurrence No.	22	**Map Index:**	54944	**EO Index:**	54944	**Element Last Seen:**	1911-04-03
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1911-04-03
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2016-01-04

Quad Summary:	El Monte (3411811)
County Summary:	Los Angeles

Lat/Long:	34.09227 / -118.10543	**Accuracy:**	1 mile
UTM:	Zone-11 N3772938 E398023	**Elevation (ft):**	400
PLSS:	T01S, R12W, Sec. 11 (S)	**Acres:**	0.0

Location:	ALHAMBRA AND SAN GABRIEL.
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS BY CNDDB.
Ecological:	
General:	SITE BASED ON HISTORIC COLLECTIONS FROM SAN GABRIEL AND ALHAMBRA. PER M. SKINNER, POPULATIONS IN LA BASIN PRESUMED EXTIRPATED DUE TO DEVELOPMENT IN AREA SINCE DATE OF COLLECTION.
Owner/Manager:	UNKNOWN

Occurrence No.	23	**Map Index:**	27701	**EO Index:**	54945	**Element Last Seen:**	1902-05-XX
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	1902-05-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2004-04-05

Quad Summary:	Los Angeles (3411812), Pasadena (3411822)
County Summary:	Los Angeles

Lat/Long:	34.11713 / -118.17885	**Accuracy:**	1 mile
UTM:	Zone-11 N3775770 E391282	**Elevation (ft):**	600
PLSS:	T01S, R12W (S)	**Acres:**	0.0

Location:	GARVANZA.
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS BY CNDDB, IN THE VICINITY OF GARVANZA.
Ecological:	
General:	UNKNOWN NUMBER OF PLANTS SEEN IN 1902. PER M. SKINNER, POPULATIONS IN THE LA BASIN ARE PRESUMED EXTIRPATED DUE TO DEVELOPMENT IN AREA SINCE DATE OF COLLECTION.
Owner/Manager:	UNKNOWN

Occurrence No.	35	**Map Index:**	98666	**EO Index:**	54971	**Element Last Seen:**	1895-05-XX
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1895-05-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2016-01-05

Quad Summary:	Hollywood (3411813), Burbank (3411823)
County Summary:	Los Angeles

Lat/Long:	34.12446 / -118.34287	**Accuracy:**	1 mile
UTM:	Zone-11 N3776770 E376166	**Elevation (ft):**	
PLSS:	T01N, R14W, Sec. 34 (S)	**Acres:**	1987.0

Location:	CAHUENGA PASS.
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS BY CNDDB, IN THE VICINITY OF CAHUENGA PASS, WEST OF GRIFFITH PARK.
Ecological:	
General:	UNKNOWN NUMBER OF PLANTS SEEN IN 1895. PER M. SKINNER, POPULATIONS IN LA BASIN ARE POSSIBLY EXTIRPATED DUE TO DEVELOPMENT IN THE AREA SINCE DATE OF COLLECTION.
Owner/Manager:	UNKNOWN

Chloropyron maritimum ssp. maritimum **Element Code:** PDSCR0J0C2

salt marsh bird's-beak

Listing Status:	**Federal:**	Endangered	**CNDDB Element Ranks:**	**Global:**	G4?T1
	State:	Endangered		**State:**	S1
	Other:	Rare Plant Rank - 1B.2, BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank, SB_SBBG-Santa Barbara Botanic Garden			
Habitat:	**General:**	MARSHES AND SWAMPS, COASTAL DUNES.			
	Micro:	LIMITED TO THE HIGHER ZONES OF SALT MARSH HABITAT. 0-10 M.			

Occurrence No.	5	**Map Index:** 02270	**EO Index:** 2503	**Element Last Seen:**	1983-XX-XX
Occ. Rank:	Unknown		**Presence:** Presumed Extant	**Site Last Seen:**	1983-XX-XX
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2017-05-19

Quad Summary: Seal Beach (3311861), Los Alamitos (3311871)

County Summary: Orange

Lat/Long:	33.73881 / -118.07696	**Accuracy:**	1 mile
UTM:	Zone-11 N3733717 E400239	**Elevation (ft):**	3
PLSS:	T05S, R11W, Sec. 18 (S)	**Acres:**	0.0

Location: UPPER ANAHEIM BAY, SEAL BEACH.

Detailed Location: EXACT LOCATION NOT KNOWN. MAPPED TO INCLUDE ENTIRE MARSH. HISTORIC OCCURRENCES FROM "ANAHEIM LANDING", "ANAHEIM CREEK", AND "SUNSET BEACH" ALSO ATTRIBUTED TO THIS SITE.

Ecological: SALT MARSH. UPPER LITTORAL ZONE.

General: FIELD SURVEYS IN 1969, 1970, & 1980 FAILED TO LOCATE ANY PLANTS. A REINTRODUCTION WAS MADE IN 1981 & APPEARS TO HAVE PERSISTED (1984). ONE SMALL POP OF <100 PLANTS EXISTS ACC TO BIOME RENOVATORS (DUNN, 1983). RESTORATION PROJECT IS PLANNED.

Owner/Manager: UNKNOWN

Occurrence No.	15	**Map Index:** 26480	**EO Index:** 3081	**Element Last Seen:**	1924-08-29
Occ. Rank:	None		**Presence:** Possibly Extirpated	**Site Last Seen:**	1980-XX-XX
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	1995-06-02

Quad Summary: Los Alamitos (3311871)

County Summary: Los Angeles, Orange

Lat/Long:	33.83945 / -118.05455	**Accuracy:**	1 mile
UTM:	Zone-11 N3744855 E402429	**Elevation (ft):**	35
PLSS:	T04S, R11W, Sec. 08 (S)	**Acres:**	0.0

Location: 2 MILES SOUTHEAST OF ARTESIA.

Detailed Location:

Ecological: ALKALINE PASTURE.

General: SITE BASED ON A 1924 PEIRSON COLLECTION. A 1924 JOHNSTON COLLECTION FROM "3 MILES SE OF ARTESIA" ALSO ATTRIBUTED TO THIS SITE. NOT SEEN IN 1980; SPECIES IS PRESUMED TO BE EXTIRPATED AT THIS SITE (FOX AND KNUDSEN, 1982).

Owner/Manager: UNKNOWN

Sagittaria sanfordii

Element Code: PMALI040Q0

Sanford's arrowhead

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G3
	State:	None		**State:**	S3
	Other:	Rare Plant Rank - 1B.2, BLM_S-Sensitive			
Habitat:	**General:**	MARSHES AND SWAMPS.			
	Micro:	IN STANDING OR SLOW-MOVING FRESHWATER PONDS, MARSHES, AND DITCHES. 0-605 M.			

Occurrence No.	134	**Map Index:** B8061	**EO Index:** 121173	**Element Last Seen:**	2021-06-23
Occ. Rank:	Unknown		**Presence:** Presumed Extant	**Site Last Seen:**	2021-06-23
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2022-02-28

Quad Summary: Los Alamitos (3311871)

County Summary: Los Angeles, Orange

Lat/Long:	33.79945 / -118.08543	**Accuracy:**	specific area
UTM:	Zone-11 N3740449 E399526	**Elevation (ft):**	8
PLSS:	T04S, R12W, Sec. 25, E (S)	**Acres:**	1.0

Location: BASIN ADJACENT TO AND EAST OF LOS ALAMITOS CHANNEL AND COYOTE CREEK, 400 M SOUTH OF WILLOW STREET, LOS ALAMITOS.

Detailed Location: MAPPED ACCORDING TO 2020 VANDERHOFF COORDINATES.

Ecological: WET BRACKISH DRAINAGE/FLOOD CONTROL BASIN FROM URBAN RUNOFF. ASSOCIATED WITH LEPTOCHLOA FUSCA & TYPHA DOMINGENSIS.

General: FIRST DETECTED IN 2019 BY DOUGLAS JAMES GORDON-BLACKWOOD. APPROXIMATELY 40 PLANTS (ROSETTES) OVER 10-15 LINEAR METERS SEEN IN 2020. A 2021 BAILEY OBSERVATION FROM INATURALIST IS ALSO ATTRIBUTED HERE.

Owner/Manager: ORA COUNTY FLOOD CONTROL

Calochortus plummerae

Element Code: PMLIL0D150

Plummer's mariposa-lily

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G4
	State:	None		**State:**	S4
	Other:	Rare Plant Rank - 4.2, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden			
Habitat:	**General:**	COASTAL SCRUB, CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND, CISMONTANE WOODLAND, LOWER MONTANE CONIFEROUS FOREST.			
	Micro:	OCCURS ON ROCKY AND SANDY SITES, USUALLY OF GRANITIC OR ALLUVIAL MATERIAL. CAN BE VERY COMMON AFTER FIRE. 60-2500 M.			

Occurrence No.	38	**Map Index:**	27696	**EO Index:**	22637	**Element Last Seen:**	1913-06-15
Occ. Rank:	None			**Presence:**	Possibly Extirpated	**Site Last Seen:**	1913-06-15
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2005-04-18

Quad Summary:	Los Angeles (3411812), Pasadena (3411822)
County Summary:	Los Angeles

Lat/Long:	34.12751 / -118.17691	**Accuracy:**	2/5 mile
UTM:	Zone-11 N3776919 E391474	**Elevation (ft):**	800
PLSS:	T01N, R12W, Sec. 31 (S)	**Acres:**	0.0

Location:	AMMANDALE, SOUTHEAST SHOULDER OF POPPY PEAK.
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED BY CNDDB AS BEST GUESS.
Ecological:	
General:	MAIN SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 1913 COLLECTION BY MOXLEY, LOCATION GIVEN AS SE SHOULDER OF POPPY PEAK. 1906 COLLECTION BY EASTWOOD, LOCATION GIVEN AS GARVANZA, ALSO ATTRIBUTED HERE. FORMER OCCURRENCE #43 LUMPED HERE.
Owner/Manager:	UNKNOWN

Occurrence No.	117	**Map Index:**	77135	**EO Index:**	78087	**Element Last Seen:**	2005-06-01
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2005-06-01
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2009-10-30

Quad Summary:	La Habra (3311788)
County Summary:	Los Angeles

Lat/Long:	33.97308 / -117.98621	**Accuracy:**	80 meters
UTM:	Zone-11 N3759609 E408894	**Elevation (ft):**	900
PLSS:	T02S, R11W, Sec. 25, NW (S)	**Acres:**	0.0

Location:	SE SIDE OF COLIMA ROAD, 0.2 ROAD MILE SW OF THE INTERSECTION WITH CASINO DR, IN ARROYO SAN MIGUEL OPEN SPACE, WHITTIER.
Detailed Location:	MAPPED USING PROVIDED COORDINATES FROM KRIEG 2005 IN THE NE1/4 OF THE NW1/4 SEC 25.
Ecological:	BLACK SAGE SCRUB. WEST-FACING CLIFF FACE.
General:	16 PLANTS OBSERVED IN 2005.
Owner/Manager:	CITY OF WHITTIER

Occurrence No.	118	**Map Index:**	77136	**EO Index:**	78091	**Element Last Seen:**	2005-05-31
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2005-05-31
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2009-10-30

Quad Summary: La Habra (3311788)

County Summary: Los Angeles

Lat/Long:	33.97184 / -117.95378	**Accuracy:**	specific area
UTM:	Zone-11 N3759444 E411889	**Elevation (ft):**	1200
PLSS:	T02S, R10W, Sec. 29, N (S)	**Acres:**	5.0

Location: SOUTH OF SKYLINE TRAIL, IN POWDER CANYON OPEN SPACE, NEAR THE SOUTHERN END OF PUNTA DEL ESTE DRIVE, HACIENDA HEIGHTS.

Detailed Location: MAPPED BY CNDDB AS SIX POLYGONS, BASED ON SEVEN SETS OF GPS COORDINATES. POPULATION RANGES FROM ABOUT 0.2 AIR MILE SOUTH OF THE END OF PUNTA DEL ESTE DRIVE TO 0.3 AIR MILE SE OF THE END OF THE ROAD.

Ecological: COASTAL SAGE SCRUB, EUCALYPTUS WOODLAND, AND GRASSLAND SCRUB ECOTONE. ASSOCIATED WITH SALVIA MELLIFERA, ERIOGONUM FASCICULATUM, PHACELIA CICUTARIA, LOTUS SCOPARIUS, DUDLEYA LANCEOLATA, MARAH MACROCARPUS, AVENA BARBATA, RHUS INTEGRIFOLIA.

General: NUMBERS OF PLANTS OBSERVED IN POLYGONS, GOING FROM WEST TO EAST, IN 2005: 30, 67, 3, 13, 22, AND APPROXIMATELY 2.

Owner/Manager: PUENTE HILLS LANDFILL NHPA

Occurrence No.	119	**Map Index:**	77225	**EO Index:**	78092	**Element Last Seen:**	2005-06-03
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2005-06-03
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2009-11-10

Quad Summary: Whittier (3311881)

County Summary: Los Angeles

Lat/Long:	33.99538 / -118.02963	**Accuracy:**	specific area
UTM:	Zone-11 N3762122 E404908	**Elevation (ft):**	900
PLSS:	T02S, R11W, Sec. 16, E (S)	**Acres:**	1.0

Location: 0.5 AND 0.7 AIR MILE N OF INTERSECTION OF ALTA AVE & BEVERLY BLVD, BETWEEN SYCAMORE CANYON & TURNBULL CANYON, WHITTIER.

Detailed Location: TWO COLONIES.

Ecological: ON RIDGELINE AND SLOPE IN COASTAL SAGE SCRUB. ASSOC WITH ERIOGONUM FASCICULATUM, ARTEMISIA CALIFORNICA, MALACOTHRIX SAXATILIS, LOTUS SCOPARIUS, BROMUS DIANDRUS, MELICA IMPERFECTA, CENTAUREA MELITENSIS, BRASSICA NIGRA, ERIASTRUM SAPPHIRINUM.

General: 5 PLANTS OBSERVED IN NW COLONY AND 62 PLANTS SEEN IN SE COLONY IN 2005.

Owner/Manager: PUENTE HILLS LANDFILL NHPA

Occurrence No.	120	**Map Index:**	77227	**EO Index:**	78093	**Element Last Seen:**	2005-04-15
Occ. Rank:	Fair			**Presence:**	Presumed Extant	**Site Last Seen:**	2005-04-15
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2009-11-10

Quad Summary:	Whittier (3311881)
County Summary:	Los Angeles

Lat/Long:	33.99699 / -118.02335	**Accuracy:**	specific area
UTM:	Zone-11 N3762295 E405490	**Elevation (ft):**	1100
PLSS:	T02S, R11W, Sec. 15, W (S)	**Acres:**	1.0

Location:	0.7 AIR MILE NE OF INTERSECTION OF ALTA AVE AND BEVERLY BLVD, BETWEEN SYCAMORE CANYON AND TURNBULL CANYON, WHITTIER.
Detailed Location:	TWO COLONIES.
Ecological:	COASTAL SAGE SCRUB/ANNUAL GRASSLAND ECOTONE. THIN, ROCKY SOILS. ASSOCIATED WITH SALVIA MELLIFERA, ERIOGONUM FASCICULATUM, DUDLEYA LANCEOLATA, CENTAUREA MELITENSIS, LOTUS SALUGINOSUS, L. SCOPARIUS, BRASSICA NIGRA, AND ENCELIA CALIFORNICA.
General:	60-100 PLANTS OBSERVED IN WESTERN COLONY AND 32 PLANTS OBSERVED IN EASTERN COLONY IN 2005.
Owner/Manager:	PUENTE HILLS LANDFILL NHPA

Occurrence No.	121	**Map Index:**	77228	**EO Index:**	78094	**Element Last Seen:**	2005-06-02
Occ. Rank:	Poor			**Presence:**	Presumed Extant	**Site Last Seen:**	2005-06-02
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2009-11-10

Quad Summary:	Whittier (3311881)
County Summary:	Los Angeles

Lat/Long:	33.99816 / -118.01065	**Accuracy:**	specific area
UTM:	Zone-11 N3762412 E406664	**Elevation (ft):**	1000
PLSS:	T02S, R11W, Sec. 14 (S)	**Acres:**	1.0

Location:	0.7 AIR MILE NW OF WORKMAN HILL, 0.2-0.3 AIR MILE N OF TURNBULL CANYON RD, NEAR HEAD OF TURNBULL CYN, NE OF WHITTITER.
Detailed Location:	2 COLONIES.
Ecological:	COASTAL SAGE SCRUB AND RUDERAL HABITAT. THIN, ROCKY SOILS. ASSOC WITH CENTAUREA MELITENSIS, ERIOGONUM FASCICULATUM, DEINANDRA FASCICULATA, MALOSMA LAURINA, LOLIUM MULTIFLORUM, BROMUS RUBENS, B. HORDEACEUS, AVENA BARBATA, LOTUS SCOPARIUS.
General:	2 PLANTS OBSERVED IN 2005 (ONE AT EACH POLYGON).
Owner/Manager:	PUENTE HILLS LANDFILL NHPA

Occurrence No.	161	**Map Index:** 77420	**EO Index:**	78329	**Element Last Seen:**	2005-06-02
Occ. Rank:	Good		**Presence:**	Presumed Extant	**Site Last Seen:**	2005-06-02
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:**	2009-11-25

Quad Summary: Whittier (3311881), Baldwin Park (3411718), El Monte (3411811)

County Summary: Los Angeles

Lat/Long:	34.00233 / -118.00559	**Accuracy:**	specific area
UTM:	Zone-11 N3762870 E407135	**Elevation (ft):**	1000
PLSS:	T02S, R11W, Sec. 14, W (S)	**Acres:**	12.0

Location: FROM WORKMAN HILL TO 1.4 AIR MILES NORTH OF THE HILL, PUENTE HILLS, BETWEEN WHITTIER AND HACIENDA HEIGHTS.

Detailed Location: MAPPED AS 13 POLYGONS, BASED ON 20 SETS OF 2005 GPS COORDINATES PROVIDED BY AHMER, MELONI, AND HARRISON, SOME OF THESE IN CLOSE PROXIMITY TO ONE ANOTHER. WITHIN BOTH TURNBULL CANYON OPEN SPACE AND HACIENDA HILLS OPEN SPACE.

Ecological: COASTAL SAGE SCRUB, GRASSLAND, AND CHAPARRAL WITH THIN, ROCKY SOILS.

General: NUMBER OF PLANTS OBSERVED IN 2005 IN POLYGONS GOING FROM NORTH TO SOUTH: 8, 1, 55, 1, 5, 25-30, 12, 48, 25, 6, 7, 10, AND 10.

Owner/Manager: PUENTE HILLS LANDFILL NHPA

Calochortus weedii var. intermedius

Element Code: PMLIL0D1J1

intermediate mariposa-lily

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G3G4T3
	State:	None		**State:**	S3
	Other:	Rare Plant Rank - 1B.2, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, USFS_S-Sensitive			
Habitat:	**General:**	COASTAL SCRUB, CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND.			
	Micro:	DRY, ROCKY CALCAREOUS SLOPES AND ROCK OUTCROPS. 60-1575 M.			

Occurrence No.	83	**Map Index:** 76937	**EO Index:**	77866	**Element Last Seen:**	2017-06-02
Occ. Rank:	Good		**Presence:**	Presumed Extant	**Site Last Seen:**	2017-06-02
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:**	2021-07-08

Quad Summary: La Habra (3311788)

County Summary: Los Angeles

Lat/Long:	33.9717 / -117.95513	**Accuracy:**	specific area
UTM:	Zone-11 N3759429 E411765	**Elevation (ft):**	1250
PLSS:	T02S, R10W, Sec. 29, NW (S)	**Acres:**	9.0

Location: SOUTH SIDE OF SKYLINE DR, EAST OF HACIENDA BLVD, PUENTE HILLS.

Detailed Location: SCE CORRIDOR. 6 POLYGONS MAPPED BASED ON DIGITAL DATA FROM ICF & SCE, 2009 COORDINATES FROM PUENTE HILLS NATIVE HABITAT PRES AUTH, AND 2016/2017 COOPER COORDINATES. A 2008 WHITE COLLECTION TAKEN "AT PROPOSED TOWER 42" IS ATTRIBUTED HERE.

Ecological: ON EXPOSED GRAVELLY SOIL IN DEGRADED COASTAL SAGE SCRUB; IN STEEP, ROCKY ROAD CUT. ASSOCIATES INCLUDE SALVIA APIANA, ERIOGONUM FASCICULATUM, ARTEMISIA CALIFORNICA, CENTAUREA MELITENSIS AND LOTUS SCOPARIUS.

General: POPULATION MENTIONED AS "SCARCE" IN 2008. POPULATION NUMBERS FOR PORTIONS OF OCCURRENCE: 2 PLANTS SEEN IN 2009, 14 PLANTS SEEN IN 2010, UNKNOWN NUMBER OF PLANTS IN 2011, 25-55 PLANTS SEEN IN 2017. LIKELY INTERMEDIATES WITH C. PLUMMERAE.

Owner/Manager: PVT

Occurrence No.	84	**Map Index:**	76933	**EO Index:**	77867	**Element Last Seen:**	2015-05-21
Occ. Rank:	Fair			**Presence:**	Presumed Extant	**Site Last Seen:**	2015-05-21
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-07-08

Quad Summary: Whittier (3311881)

County Summary: Los Angeles

Lat/Long:	33.99396 / -118.00645	**Accuracy:**	specific area
UTM:	Zone-11 N3761943 E407048	**Elevation (ft):**	1050
PLSS:	T02S, R11W, Sec. 14, W (S)	**Acres:**	3.0

Location: NORTH AND SOUTH OF TURNBULL CANYON RD, 0.3 AIR MILE WNW AND 0.4 AIR MILE NNW OF WORKMAN HILL, PUENTE HILLS.

Detailed Location: MAPPED AS 3 POLYGONS BY CNDDB BASED ON DIGITAL DATA PROVIDED BY ICF AND 2008, 2009 & 2015 FIELD SURVEYS.

Ecological: IN COASTAL SAGE SCRUB ON ROADSIDES AND ROADCUT AROUND POWERLINE TOWER. ON A ROCKY CUT SLOPE ABOVE ROAD. ASSOCIATED WITH ERIOGONUM FASCICULATUM, MIMULUS AURANTIACUS, LUPINUS LONGIFOLIUS, AND NON-NATIVE ANNUAL GRASSES.

General: NORTH POLYGON: 45 PLANTS IN 2008, 11 IN 2010, 10 IN 2014. SW POLYGON: 6 PLANTS OBSERVED BY LUCAS IN 2009. SE POLYGON: 1 PLANT OBSERVED IN 2015. THE PLANTS AT THIS SITE ARE LIKELY INTERMEDIATES WITH CALOCHORTUS PLUMMERAE.

Owner/Manager: TURNBULL CANYON OPEN SPACE

Occurrence No.	86	**Map Index:**	76934	**EO Index:**	77869	**Element Last Seen:**	2008-06-04
Occ. Rank:	Fair			**Presence:**	Presumed Extant	**Site Last Seen:**	2008-06-04
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-07-22

Quad Summary: El Monte (3411811)

County Summary: Los Angeles

Lat/Long:	34.00531 / -118.00865	**Accuracy:**	specific area
UTM:	Zone-11 N3763203 E406858	**Elevation (ft):**	1028
PLSS:	T02S, R11W, Sec. 11, SW (S)	**Acres:**	6.0

Location: SE OF ROSE HILLS MEMORIAL PARK, PUENTE HILLS.

Detailed Location: MAPPED AS 2 POLYGONS. NW POLYGON BASED ON 2008 WHITE COORDINATE INFORMATION; ADJACENT TO AGRICULTURAL LAND, SCE CORRIDOR, SITE OF PROPOSED TOWER 25. SE POLYGON BASED ON SOUTHERN CALIFORNIA EDISON DIGITAL DATA.

Ecological: NW POLYGON: ON STEEP, S-FACING, COBBLEY ROCK FACE IN WEEDY, OAK/WALNUT WOODLAND AND COASTAL SAGE SCRUB.

General: 4 INDIVIDUALS SEEN BY WHITE IN NW POLYGON IN 2008. OBSERVED IN SE POLYGON ON AN UNKNOWN DATE ACCORDING TO SOUTHERN CALIFORNIA EDISON.

Owner/Manager: LAX COUNTY, OTHERS

Occurrence No.	120	**Map Index:**	90337	**EO Index:**	91403	**Element Last Seen:**	2003-06-06
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2003-06-06
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2013-09-16

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.82792 / -117.75597	**Accuracy:**	non-specific area
UTM:	Zone-11 N3743333 E430045	**Elevation (ft):**	1100
PLSS:	T04S, R08W, Sec. 18, N (S)	**Acres:**	63.0

Location: ROBBERS PEAK SUBDIVISION, APPROX 2 AIR MI W OF THE EASTERN TRANSPORTATION CORRIDOR AND 2 MI S OF SR 91, PERALTA HILLS.

Detailed Location: EXACT LOCATION WITHIN THE SUBDIVISION IS UNKNOWN. MAPPED ACCORDING TO A MAP OUTLINING THE PROJECT SITE PROVIDED BY SZABO, IN THE NORTH 1/2 OF SECTION 18.

Ecological: MOSTLY ANNUAL GRASSLAND AND MIXED SAGE SCRUB. POLIOPTILA CALIFORNICA CALIFORNICA AND CAMPYLORHYNCHUS BRUNNEICAPILLUS SANDIEGENSIS WERE ALSO OBSERVED AT THIS SITE.

General: UNKNOWN NUMBER OF PLANTS OBSERVED DURING SURVEYS FOR POLIOPTILA CALIFORNICA CALIFORNICA. 2003 SZABO PHOTOS ARE ALSO ATTRIBUTED HERE; LIKELY FROM THE SAME SURVEY AS 2003 SZABO POLIOPTILA SURVEYS.

Owner/Manager: PVT

Occurrence No.	124	**Map Index:**	90349	**EO Index:**	91422	**Element Last Seen:**	2010-06-08
Occ. Rank:	Poor			**Presence:**	Presumed Extant	**Site Last Seen:**	2010-06-08
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2013-09-24

Quad Summary: Whittier (3311881)

County Summary: Los Angeles

Lat/Long:	33.99075 / -118.00192	**Accuracy:**	specific area
UTM:	Zone-11 N3761583 E407462	**Elevation (ft):**	1290
PLSS:	T02S, R11W, Sec. 14, SE (S)	**Acres:**	1.0

Location: SOUTHEAST SLOPE OF WORKMAN HILL, PUENTE HILLS.

Detailed Location: EAST SIDE OF SKYLINE FIRE ROAD. MAPPED BASED ON DIGITAL DATA PROVIDED BY ICF INTERNATIONAL, IN THE SW 1/4 OF THE SE 1/4 OF SECTION 14.

Ecological:

General: 2 PLANTS OBSERVED IN 2010. THE PLANTS ARE LIKELY INTERMEDIATE WITH CALOCHORTUS PLUMMERAE. SURVEY PERFOMED AS PART OF THE SCE TEHACHAPI RENEWABLE ENERGY PROJECT.

Owner/Manager: UNKNOWN

Occurrence No.	125	**Map Index:**	90350	**EO Index:**	91423	**Element Last Seen:**	2010-06-17
Occ. Rank:	Fair			**Presence:**	Presumed Extant	**Site Last Seen:**	2010-06-17
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2013-09-24

Quad Summary:	El Monte (3411811)
County Summary:	Los Angeles

Lat/Long:	34.00095 / -118.02986	**Accuracy:**	specific area
UTM:	Zone-11 N3762739 E404893	**Elevation (ft):**	610
PLSS:	T02S, R11W, Sec. 16, NE (S)	**Acres:**	1.0

Location:	ALONG DARK CYN TRAIL, APPROX 0.25 MILE E OF JUNCTION WITH SYCAMORE CYN TRAIL SWITCHBACK TRAIL, SYCAMORE CYN OPEN SPACE.
Detailed Location:	COULD NOT LOCATE "DARK CANYON TRAIL". MAPPED ACCORDING TO COORDINATES PROVIDED BY LUCAS, IN THE NE 1/4 OF THE NE 1/4 OF SECTION 16.
Ecological:	ROCKY OUTCROP ALONG TRAIL, UNDER A GROVE OF QUERCUS AGRIFOLIA WITH TOXICODENDRON DIVERSILOBUM, CARDUUS PYCNOCEPHALUS, AND NON-NATIVE ANNUAL GRASSES.
General:	1 PLANT OBSERVED IN 2010. A VISIBLE DISTURBANCE REPORTED WAS NON-NATIVE ANNUAL PLANT SPECIES. SITE LOOKS TO BE PART OF SYCAMORE CANYON OPEN SPACE MANAGED BY MOUNTAINS RECREATION AND CONSERVATION AUTHORITY.
Owner/Manager:	MTNS REC & CONS AUTHORITY

Occurrence No.	198	**Map Index:**	B7617	**EO Index:**	120690	**Element Last Seen:**	2020-06-01
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2020-06-01
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-07-16

Quad Summary:	Orange (3311777)
County Summary:	Orange

Lat/Long:	33.77099 / -117.76245	**Accuracy:**	specific area
UTM:	Zone-11 N3737025 E429400	**Elevation (ft):**	541
PLSS:	T05S, R08W, Sec. 6, NW (S)	**Acres:**	1.0

Location:	E RIDGE VIEW TRAIL, PETERS CANYON REGIONAL PARK.
Detailed Location:	MAPPED ACCORDING TO 2019 INATURALIST COORDINATES, IN THE NW 1/4 OF THE NW 1/4 OF SECTION 6. A NEARBY 2020 INATURALIST OBSERVATION FROM ABOUT 245 M SW OF MAPPED POINT IS ATTRIBUTED HERE; POSITIONAL ACCURACY OF THAT POINT GIVEN AS 258 M.
Ecological:	
General:	UNKNOWN NUMBER OF PLANTS OBSERVED AT MAPPED SITE IN 2019. ALSO OBSERVED IN THIS AREA IN 2020.
Owner/Manager:	ORA COUNTY

Occurrence No.	199	**Map Index:**	B7618	**EO Index:**	120691	**Element Last Seen:**	2018-06-20
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2018-06-20
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-07-16

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.82139 / -117.77389	**Accuracy:**	80 meters
UTM:	Zone-11 N3742622 E428383	**Elevation (ft):**	445
PLSS:	T04S, R09W, Sec. 13, S (S)	**Acres:**	5.0

Location: ALONG WINDES DRIVE AND SANTIAGO CREEK, NORTH OF RATTLESNAKE PEAK, SANTIAGO OAKS REGIONAL PARK.

Detailed Location: MAPPED ACCORDING TO 2018 BRAMLET COORDINATES, IN THE SOUTH 1/2 OF SECTION 13.

Ecological:

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 2018 BRAMLET COLLECTION. NEEDS FIELDWORK.

Owner/Manager: ORA COUNTY

Occurrence No.	200	**Map Index:**	B7619	**EO Index:**	120692	**Element Last Seen:**	2009-06-09
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2009-06-09
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-08-11

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.83194 / -117.78559	**Accuracy:**	specific area
UTM:	Zone-11 N3743800 E427309	**Elevation (ft):**	1033
PLSS:	T04S, R09W, Sec. 14, NE (S)	**Acres:**	1.0

Location: APPROXIMATELY 1 AIR MILE NE OF THE JUNCTION OF E SERRANO AVE AND CANNON ST, PERALTA HILLS.

Detailed Location: MAPPED ACCORDING TO SOUTHERN CALIFORNIA EDISON DIGITAL DATA, ON THE SECTION LINE BETWEEN THE SE 1/4 OF SECTION 11 AND THE NE 1/4 OF SECTION 14.

Ecological:

General: UNKNOWN NUMBER OF PLANTS OBSERVED IN 2009.

Owner/Manager: CITY OF ORANGE

Occurrence No.	201	**Map Index:**	B7620	**EO Index:**	120693	**Element Last Seen:**	2020-05-31
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2020-05-31
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2021-07-16

Quad Summary: Orange (3311777)

County Summary: Orange

Lat/Long:	33.79066 / -117.79434	**Accuracy:**	3/5 mile
UTM:	Zone-11 N3739229 E426464	**Elevation (ft):**	
PLSS:	T04S, R09W, Sec. 26 (S)	**Acres:**	776.0

Location: BETWEEN EL MODENA AND ORANGE PARK ACRES.

Detailed Location: MAPPED ACCORDING TO 2020 INATURALIST COORDINATES WITH A POSITIONAL ACCURACY OF 899 METERS.

Ecological:

General: UNKNOWN NUMBER OF PLANTS OBSERVED IN 2020.

Owner/Manager: UNKNOWN

Orcuttia californica **Element Code:** PMPOA4G010

California Orcutt grass

Listing Status:	**Federal:**	Endangered	**CNDDB Element Ranks:**	**Global:**	G1
	State:	Endangered		**State:**	S1
	Other:	Rare Plant Rank - 1B.1, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank			
Habitat:	**General:**	VERNAL POOLS.			
	Micro:	10-660 M.			

Occurrence No.	13	**Map Index:**	47232	**EO Index:**	47232	**Element Last Seen:**	XXXX-XX-XX
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2002-02-14

Quad Summary: Los Alamitos (3311871), Long Beach (3311872)

County Summary: Los Angeles

Lat/Long:	33.83581 / -118.11743	**Accuracy:**	1 mile
UTM:	Zone-11 N3744512 E396606	**Elevation (ft):**	40
PLSS:	T04S, R12W, Sec. 10 (S)	**Acres:**	0.0

Location: NEAR LAKEWOOD, WEST LOS ANGELES COUNTY.

Detailed Location:

Ecological:

General: COLLECTED NEAR LAKEWOOD ACCORDING TO GRIGGS (1977), UNKNOWN WHEN SEEN. APPARENTLY EXTIRPATED.

Owner/Manager: UNKNOWN

Occurrence No.	14	**Map Index:**	26503	**EO Index:**	47231	**Element Last Seen:**	XXXX-XX-XX
Occ. Rank:	None			**Presence:**	Extirpated	**Site Last Seen:**	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2002-02-14

Quad Summary: Whittier (3311881), South Gate (3311882)

County Summary: Los Angeles

Lat/Long:	33.94216 / -118.13586	**Accuracy:**	1 mile
UTM:	Zone-11 N3756324 E395032	**Elevation (ft):**	125
PLSS:	T03S, R12W (S)	**Acres:**	0.0

Location: NEAR DOWNEY, WEST LOS ANGELES COUNTY.

Detailed Location:

Ecological:

General: COLLECTED NEAR DOWNEY ACCORDING TO GRIGGS (1977), UNKNOWN WHEN SEEN. APPARENTLY EXTIRPATED.

Owner/Manager: UNKNOWN

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Hollywood (3411813) OR Los Angeles (3411812) OR South Gate (3311882) OR El Monte (3411811) OR Whittier (3311881) OR Los Alamitos (3311871) OR La Habra (3311788) OR Anaheim (3311778) OR Orange (3311777))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Abronia villosa var. aurita chaparral sand-verbena	PDNYC010P1	None	None	G5T2?	S2	1B.1
Accipiter cooperii Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
Actinemys pallida southwestern pond turtle	ARAAD02032	Proposed Threatened	None	G2G3	SNR	SSC
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S2	SSC
Aimophila ruficeps canescens southern California rufous-crowned sparrow	ABPBX91091	None	None	G5T3	S4	WL
Ammodramus savannarum grasshopper sparrow	ABPBXA0020	None	None	G5	S3	SSC
Anniella stebbinsi Southern California legless lizard	ARACC01060	None	None	G3	S3	SSC
Antrozous pallidus pallid bat	AMACC10010	None	None	G4	S3	SSC
Ardea herodias great blue heron	ABNGA04010	None	None	G5	S4	
Arenaria paludicola marsh sandwort	PDCAR040L0	Endangered	Endangered	G1	S1	1B.1
Arizona elegans occidentalis California glossy snake	ARADB01017	None	None	G5T2	S2	SSC
Aspidoscelis hyperythra orange-throated whiptail	ARACJ02060	None	None	G5	S2S3	WL
Aspidoscelis tigris stejnegeri coastal whiptail	ARACJ02143	None	None	G5T5	S3	SSC
Astragalus brauntonii Braunton's milk-vetch	PDFAB0F1G0	Endangered	None	G2	S2	1B.1
Astragalus hornii var. hornii Horn's milk-vetch	PDFAB0F421	None	None	GUT1	S1	1B.1
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S2	SSC
Atriplex parishii Parish's brittlescale	PDCHE041D0	None	None	G1G2	S1	1B.1
Atriplex serenana var. davidsonii Davidson's saltscale	PDCHE041T1	None	None	G5T1	S1	1B.2
Berberis nevinii Nevin's barberry	PDBER060A0	Endangered	Endangered	G1	S1	1B.1

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Bombus crotchii Crotch's bumble bee	IIHYM24480	None	Candidate Endangered	G2	S2	
Bombus pensylvanicus American bumble bee	IIHYM24260	None	None	G3G4	S2	
Buteo regalis ferruginous hawk	ABNKC19120	None	None	G4	S3S4	WL
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S4	
California Walnut Woodland California Walnut Woodland	CTT71210CA	None	None	G2	S2.1	
Calochortus plummerae Plummer's mariposa-lily	PMLIL0D150	None	None	G4	S4	4.2
Calochortus weedii var. intermedius intermediate mariposa-lily	PMLIL0D1J1	None	None	G3G4T3	S3	1B.2
Calystegia felix lucky morning-glory	PDCON040P0	None	None	G1Q	S1	1B.1
Campylorhynchus brunneicapillus sandiegensis coastal cactus wren	ABPBG02095	None	None	G5T3Q	S2	SSC
Catostomus santaanae Santa Ana sucker	AFCJC02190	Threatened	None	G1	S1	SSC
Centromadia parryi ssp. australis southern tarplant	PDAST4R0P4	None	None	G3T2	S2	1B.1
Chelonia mydas green turtle	ARAAA02010	Threatened	None	G3	S1	
Chloropyron maritimum ssp. maritimum salt marsh bird's-beak	PDSCR0J0C2	Endangered	Endangered	G4?T1	S1	1B.2
Choeronycteris mexicana Mexican long-tongued bat	AMACB02010	None	None	G3G4	S1	SSC
Cicindela hirticollis gravida sandy beach tiger beetle	IICOL02101	None	None	G5T2	S2	
Cicindela latesignata western beach tiger beetle	IICOL02110	None	None	G2G3	S1	
Cicindela senilis frosti senile tiger beetle	IICOL02121	None	None	G2G3T1T3	S1	
Coccyzus americanus occidentalis western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Coturnicops noveboracensis yellow rail	ABNME01010	None	None	G4	S2	SSC
Cuscuta obtusiflora var. glandulosa Peruvian dodder	PDCUS01111	None	None	G5T4?	SH	2B.2
Danaus plexippus plexippus pop. 1 monarch - California overwintering population	IILEPP2012	Candidate	None	G4T1T2Q	S2	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Dodecahema leptoceras slender-horned spineflower	PDPGN0V010	Endangered	Endangered	G1	S1	1B.1
Dudleya multicaulis many-stemmed dudleya	PDCRA040H0	None	None	G2	S2	1B.2
Elanus leucurus white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
Empidonax traillii extimus southwestern willow flycatcher	ABPAE33043	Endangered	Endangered	G5T2	S3	
Eriastrum densifolium ssp. sanctorum Santa Ana River woollystar	PDPLM03035	Endangered	Endangered	G4T1	S1	1B.1
Eugnosta busckana Busck's gallmoth	IILEM2X090	None	None	G1G3	S2S3	
Eumops perotis californicus western mastiff bat	AMACD02011	None	None	G4G5T4	S3S4	SSC
Euphydryas editha quino quino checkerspot butterfly	IILEPK405L	Endangered	None	G4G5T1T2	S1S2	
Falco peregrinus anatum American peregrine falcon	ABNKD06071	Delisted	Delisted	G4T4	S3S4	
Glyptostoma gabrielense San Gabriel chestnut	IMGASB1010	None	None	G2	S3	
Gonidea angulata western ridged mussel	IMBIV19010	None	None	G3	S2	
Habroscelimorpha gabbii western tidal-flat tiger beetle	IICOL02080	None	None	G2G4	S1	
Helianthus nuttallii ssp. parishii Los Angeles sunflower	PDAST4N102	None	None	G5TX	SX	1A
Horkelia cuneata var. puberula mesa horkelia	PDROS0W045	None	None	G4T1	S1	1B.1
Icteria virens yellow-breasted chat	ABPBX24010	None	None	G5	S4	SSC
Lasionycteris noctivagans silver-haired bat	AMACC02010	None	None	G3G4	S3S4	
Lasiurus cinereus hoary bat	AMACC05032	None	None	G3G4	S4	
Lasiurus xanthinus western yellow bat	AMACC05070	None	None	G4G5	S3	SSC
Lasthenia glabrata ssp. coulteri Coulter's goldfields	PDAST5L0A1	None	None	G4T2	S2	1B.1
Laterallus jamaicensis coturniculus California black rail	ABNME03041	None	Threatened	G3T1	S2	FP
Lepidium virginicum var. robinsonii Robinson's pepper-grass	PDBRA1M114	None	None	G5T3	S3	4.3

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Microtus californicus stephensi south coast marsh vole	AMAFF11035	None	None	G5T2T3	S2	SSC
Myotis yumanensis Yuma myotis	AMACC01020	None	None	G5	S4	
Nama stenocarpa mud nama	PDHYD0A0H0	None	None	G4G5	S1S2	2B.2
Nasturtium gambelii Gambel's water cress	PDBRA270V0	Endangered	Threatened	G1	S1	1B.1
Navarretia prostrata prostrate vernal pool navarretia	PDPLM0C0Q0	None	None	G2	S2	1B.2
Nemacaulis denudata var. denudata coast woolly-heads	PDPGN0G011	None	None	G3G4T2	S2	1B.2
Nyctinomops femorosaccus pocketed free-tailed bat	AMACD04010	None	None	G5	S3	SSC
Nyctinomops macrotis big free-tailed bat	AMACD04020	None	None	G5	S3	SSC
Oncorhynchus mykiss irideus pop. 10 steelhead - southern California DPS	AFCHA0209J	Endangered	Candidate Endangered	G5T1Q	S1	
Orcuttia californica California Orcutt grass	PMPOA4G010	Endangered	Endangered	G1	S1	1B.1
Passerculus sandwichensis beldingi Belding's savannah sparrow	ABPBX99015	None	Endangered	G5T3	S3	
Phacelia stellaris Brand's star phacelia	PDHYD0C510	None	None	G1	S1	1B.1
Phrynosoma blainvillii coast horned lizard	ARACF12100	None	None	G4	S4	SSC
Polioptila californica californica coastal California gnatcatcher	ABPBJ08081	Threatened	None	G4G5T3Q	S2	SSC
Pseudognaphalium leucocephalum white rabbit-tobacco	PDAST440C0	None	None	G4	S2	2B.2
Quercus dumosa Nuttall's scrub oak	PDFAG050D0	None	None	G3	S3	1B.1
Ribes divaricatum var. parishii Parish's gooseberry	PDGRO020F3	None	None	G5TX	SX	1A
Riparia riparia bank swallow	ABPAU08010	None	Threatened	G5	S3	
Sagittaria sanfordii Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
Scutellaria bolanderi ssp. austromontana southern mountains skullcap	PDLAM1U0A1	None	None	G4T3	S3	1B.2
Setophaga petechia yellow warbler	ABPBX03010	None	None	G5	S3	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Sidalcea neomexicana salt spring checkerbloom	PDMAL110J0	None	None	G4	S2	2B.2
Sorex ornatus salicornicus southern California saltmarsh shrew	AMABA01104	None	None	G5T1?	S1	SSC
Southern California Arroyo Chub/Santa Ana Sucker Stream Southern California Arroyo Chub/Santa Ana Sucker Stream	CARE2330CA	None	None	GNR	SNR	
Southern Coast Live Oak Riparian Forest Southern Coast Live Oak Riparian Forest	CTT61310CA	None	None	G4	S4	
Southern Coastal Salt Marsh Southern Coastal Salt Marsh	CTT52120CA	None	None	G2	S2.1	
Southern Cottonwood Willow Riparian Forest Southern Cottonwood Willow Riparian Forest	CTT61330CA	None	None	G3	S3.2	
Southern Sycamore Alder Riparian Woodland Southern Sycamore Alder Riparian Woodland	CTT62400CA	None	None	G4	S4	
Spea hammondii western spadefoot	AAABF02020	Proposed Threatened	None	G2G3	S3S4	SSC
Sternula antillarum browni California least tern	ABNNM08103	Endangered	Endangered	G4T2T3Q	S2	FP
Suaeda esteroa estuary seablite	PDCHE0P0D0	None	None	G3	S2	1B.2
Symphyotrichum defoliatum San Bernardino aster	PDASTE80C0	None	None	G2	S2	1B.2
Symphyotrichum greatae Greata's aster	PDASTE80U0	None	None	G2	S2	1B.3
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC
Thamnophis sirtalis pop. 1 south coast gartersnake	ARADB3613F	None	None	G5T1T2	S1S2	SSC
Vireo bellii pusillus least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S3	
Walnut Forest Walnut Forest	CTT81600CA	None	None	G1	S1.1	

Record Count: 98

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Hollywood (3411813) OR Los Angeles (3411812) OR South Gate (3311882) OR El Monte (3411811) OR Whittier (3311881) OR Los Alamitos (3311871) OR La Habra (3311788) OR Anaheim (3311778) OR Orange (3311777))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Abronia villosa var. aurita chaparral sand-verbena	PDNYC010P1	None	None	G5T2?	S2	1B.1
Accipiter cooperii Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S2	SSC
Aimophila ruficeps canescens southern California rufous-crowned sparrow	ABPBX91091	None	None	G5T3	S4	WL
Ammodramus savannarum grasshopper sparrow	ABPBXA0020	None	None	G5	S3	SSC
Anniella stebbinsi Southern California legless lizard	ARACC01060	None	None	G3	S3	SSC
Antrozous pallidus pallid bat	AMACC10010	None	None	G4	S3	SSC
Ardea herodias great blue heron	ABNGA04010	None	None	G5	S4	
Arenaria paludicola marsh sandwort	PDCAR040L0	Endangered	Endangered	G1	S1	1B.1
Arizona elegans occidentalis California glossy snake	ARADB01017	None	None	G5T2	S2	SSC
Aspidoscelis hyperythra orange-throated whiptail	ARACJ02060	None	None	G5	S2S3	WL
Aspidoscelis tigris stejnegeri coastal whiptail	ARACJ02143	None	None	G5T5	S3	SSC
Astragalus brauntonii Braunton's milk-vetch	PDFAB0F1G0	Endangered	None	G2	S2	1B.1
Astragalus hornii var. hornii Horn's milk-vetch	PDFAB0F421	None	None	GUT1	S1	1B.1
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S2	SSC
Atriplex parishii Parish's brittlescale	PDCHE041D0	None	None	G1G2	S1	1B.1
Atriplex serenana var. davidsonii Davidson's saltscale	PDCHE041T1	None	None	G5T1	S1	1B.2
Berberis nevinii Nevin's barberry	PDBER060A0	Endangered	Endangered	G1	S1	1B.1
Bombus crotchii Crotch bumble bee	IIHYM24480	None	Candidate Endangered	G2	S2	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Bombus pensylvanicus American bumble bee	IIHYM24260	None	None	G3G4	S2	
Buteo regalis ferruginous hawk	ABNKC19120	None	None	G4	S3S4	WL
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S4	
California Walnut Woodland California Walnut Woodland	CTT71210CA	None	None	G2	S2.1	
Calochortus plummerae Plummer's mariposa-lily	PMLIL0D150	None	None	G4	S4	4.2
Calochortus weedii var. intermedius intermediate mariposa-lily	PMLIL0D1J1	None	None	G3G4T3	S3	1B.2
Calystegia felix lucky morning-glory	PDCON040P0	None	None	G1Q	S1	1B.1
Campylorhynchus brunneicapillus sandiegensis coastal cactus wren	ABPBG02095	None	None	G5T3Q	S2	SSC
Catostomus santaanae Santa Ana sucker	AFCJC02190	Threatened	None	G1	S1	
Centromadia parryi ssp. australis southern tarplant	PDAST4R0P4	None	None	G3T2	S2	1B.1
Chelonia mydas green turtle	ARAAA02010	Threatened	None	G3	S1	
Chloropyron maritimum ssp. maritimum salt marsh bird's-beak	PDSCR0J0C2	Endangered	Endangered	G4?T1	S1	1B.2
Choeronycteris mexicana Mexican long-tongued bat	AMACB02010	None	None	G3G4	S1	SSC
Cicindela hirticollis gravida sandy beach tiger beetle	IICOL02101	None	None	G5T2	S2	
Cicindela latesignata western beach tiger beetle	IICOL02110	None	None	G2G3	S1	
Cicindela senilis frosti senile tiger beetle	IICOL02121	None	None	G2G3T1T3	S1	
Coccyzus americanus occidentalis western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Coturnicops noveboracensis yellow rail	ABNME01010	None	None	G4	S2	SSC
Cuscuta obtusiflora var. glandulosa Peruvian dodder	PDCUS01111	None	None	G5T4?	SH	2B.2
Danaus plexippus plexippus pop. 1 monarch - California overwintering population	IILEPP2012	Candidate	None	G4T1T2Q	S2	
Dodecahema leptoceras slender-horned spineflower	PDPGN0V010	Endangered	Endangered	G1	S1	1B.1

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Dudleya multicaulis many-stemmed dudleya	PDCRA040H0	None	None	G2	S2	1B.2
Elanus leucurus white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
Empidonax traillii extimus southwestern willow flycatcher	ABPAE33043	Endangered	Endangered	G5T2	S3	
Emys marmorata western pond turtle	ARAAD02030	Proposed Threatened	None	G3G4	S3	SSC
Eriastrum densifolium ssp. sanctorum Santa Ana River woollystar	PDPLM03035	Endangered	Endangered	G4T1	S1	1B.1
Eugnosta busckana Busck's gallmoth	IILEM2X090	None	None	G1G3	S2S3	
Eumops perotis californicus western mastiff bat	AMACD02011	None	None	G4G5T4	S3S4	SSC
Euphydryas editha quino quino checkerspot butterfly	IILEPK405L	Endangered	None	G4G5T1T2	S1S2	
Falco peregrinus anatum American peregrine falcon	ABNKD06071	Delisted	Delisted	G4T4	S3S4	
Glyptostoma gabrielense San Gabriel chestnut	IMGASB1010	None	None	G2	S3	
Gonidea angulata western ridged mussel	IMBIV19010	None	None	G3	S2	
Habroscelimorpha gabbii western tidal-flat tiger beetle	IICOL02080	None	None	G2G4	S1	
Helianthus nuttallii ssp. parishii Los Angeles sunflower	PDAST4N102	None	None	G5TX	SX	1A
Horkelia cuneata var. puberula mesa horkelia	PDROS0W045	None	None	G4T1	S1	1B.1
Icteria virens yellow-breasted chat	ABPBX24010	None	None	G5	S4	SSC
Lasionycteris noctivagans silver-haired bat	AMACC02010	None	None	G3G4	S3S4	
Lasiurus cinereus hoary bat	AMACC05032	None	None	G3G4	S4	
Lasiurus xanthinus western yellow bat	AMACC05070	None	None	G4G5	S3	SSC
Lasthenia glabrata ssp. coulteri Coulter's goldfields	PDAST5L0A1	None	None	G4T2	S2	1B.1
Laterallus jamaicensis coturniculus California black rail	ABNME03041	None	Threatened	G3T1	S2	FP
Lepidium virginicum var. robinsonii Robinson's pepper-grass	PDBRA1M114	None	None	G5T3	S3	4.3

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Microtus californicus stephensi south coast marsh vole	AMAFF11035	None	None	G5T2T3	S2	SSC
Myotis yumanensis Yuma myotis	AMACC01020	None	None	G5	S4	
Nama stenocarpa mud nama	PDHYD0A0H0	None	None	G4G5	S1S2	2B.2
Nasturtium gambelii Gambel's water cress	PDBRA270V0	Endangered	Threatened	G1	S1	1B.1
Navarretia prostrata prostrate vernal pool navarretia	PDPLM0C0Q0	None	None	G2	S2	1B.2
Nemacaulis denudata var. denudata coast woolly-heads	PDPGN0G011	None	None	G3G4T2	S2	1B.2
Nyctinomops femorosaccus pocketed free-tailed bat	AMACD04010	None	None	G5	S3	SSC
Nyctinomops macrotis big free-tailed bat	AMACD04020	None	None	G5	S3	SSC
Oncorhynchus mykiss irideus pop. 10 steelhead - southern California DPS	AFCHA0209J	Endangered	Candidate Endangered	G5T1Q	S1	
Orcuttia californica California Orcutt grass	PMPOA4G010	Endangered	Endangered	G1	S1	1B.1
Passerculus sandwichensis beldingi Belding's savannah sparrow	ABPBX99015	None	Endangered	G5T3	S3	
Phacelia stellaris Brand's star phacelia	PDHYD0C510	None	None	G1	S1	1B.1
Phrynosoma blainvillii coast horned lizard	ARACF12100	None	None	G4	S4	SSC
Polioptila californica californica coastal California gnatcatcher	ABPBJ08081	Threatened	None	G4G5T3Q	S2	SSC
Pseudognaphalium leucocephalum white rabbit-tobacco	PDAST440C0	None	None	G4	S2	2B.2
Quercus dumosa Nuttall's scrub oak	PDFAG050D0	None	None	G3	S3	1B.1
Ribes divaricatum var. parishii Parish's gooseberry	PDGRO020F3	None	None	G5TX	SX	1A
Riparia riparia bank swallow	ABPAU08010	None	Threatened	G5	S3	
Sagittaria sanfordii Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
Scutellaria bolanderi ssp. austromontana southern mountains skullcap	PDLAM1U0A1	None	None	G4T3	S3	1B.2
Setophaga petechia yellow warbler	ABPBX03010	None	None	G5	S3	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Sidalcea neomexicana salt spring checkerbloom	PDMAL110J0	None	None	G4	S2	2B.2
Sorex ornatus salicornicus southern California saltmarsh shrew	AMABA01104	None	None	G5T1?	S1	SSC
Southern California Arroyo Chub/Santa Ana Sucker Stream Southern California Arroyo Chub/Santa Ana Sucker Stream	CARE2330CA	None	None	GNR	SNR	
Southern Coast Live Oak Riparian Forest Southern Coast Live Oak Riparian Forest	CTT61310CA	None	None	G4	S4	
Southern Coastal Salt Marsh Southern Coastal Salt Marsh	CTT52120CA	None	None	G2	S2.1	
Southern Cottonwood Willow Riparian Forest Southern Cottonwood Willow Riparian Forest	CTT61330CA	None	None	G3	S3.2	
Southern Sycamore Alder Riparian Woodland Southern Sycamore Alder Riparian Woodland	CTT62400CA	None	None	G4	S4	
Spea hammondii western spadefoot	AAABF02020	Proposed Threatened	None	G2G3	S3S4	SSC
Sternula antillarum browni California least tern	ABNNM08103	Endangered	Endangered	G4T2T3Q	S2	FP
Suaeda esteroa estuary seablite	PDCHE0P0D0	None	None	G3	S2	1B.2
Symphyotrichum defoliatum San Bernardino aster	PDASTE80C0	None	None	G2	S2	1B.2
Symphyotrichum greatae Greata's aster	PDASTE80U0	None	None	G2	S2	1B.3
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC
Vireo bellii pusillus least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S3	
Walnut Forest Walnut Forest	CTT81600CA	None	None	G1	S1.1	

Record Count: 97

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Hollywood (3411813) OR Los Angeles (3411812) OR South Gate (3311882) OR El Monte (3411811) OR Whittier (3311881) OR Los Alamitos (3311871) OR La Habra (3311788) OR Anaheim (3311778) OR Orange (3311777))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Abronia villosa var. aurita chaparral sand-verbena	PDNYC010P1	None	None	G5T2?	S2	1B.1
Accipiter cooperii Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S2	SSC
Aimophila ruficeps canescens southern California rufous-crowned sparrow	ABPBX91091	None	None	G5T3	S4	WL
Ammodramus savannarum grasshopper sparrow	ABPBXA0020	None	None	G5	S3	SSC
Anniella stebbinsi Southern California legless lizard	ARACC01060	None	None	G3	S3	SSC
Antrozous pallidus pallid bat	AMACC10010	None	None	G4	S3	SSC
Ardea herodias great blue heron	ABNGA04010	None	None	G5	S4	
Arenaria paludicola marsh sandwort	PDCAR040L0	Endangered	Endangered	G1	S1	1B.1
Arizona elegans occidentalis California glossy snake	ARADB01017	None	None	G5T2	S2	SSC
Aspidoscelis hyperythra orange-throated whiptail	ARACJ02060	None	None	G5	S2S3	WL
Aspidoscelis tigris stejnegeri coastal whiptail	ARACJ02143	None	None	G5T5	S3	SSC
Astragalus brauntonii Braunton's milk-vetch	PDFAB0F1G0	Endangered	None	G2	S2	1B.1
Astragalus hornii var. hornii Horn's milk-vetch	PDFAB0F421	None	None	GUT1	S1	1B.1
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S2	SSC
Atriplex parishii Parish's brittlescale	PDCHE041D0	None	None	G1G2	S1	1B.1
Atriplex serenana var. davidsonii Davidson's saltscale	PDCHE041T1	None	None	G5T1	S1	1B.2
Berberis nevinii Nevin's barberry	PDBER060A0	Endangered	Endangered	G1	S1	1B.1
Bombus crotchii Crotch bumble bee	IIHYM24480	None	Candidate Endangered	G2	S2	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Bombus pensylvanicus American bumble bee	IIHYM24260	None	None	G3G4	S2	
Buteo regalis ferruginous hawk	ABNKC19120	None	None	G4	S3S4	WL
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S4	
California Walnut Woodland California Walnut Woodland	CTT71210CA	None	None	G2	S2.1	
Calochortus plummerae Plummer's mariposa-lily	PMLIL0D150	None	None	G4	S4	4.2
Calochortus weedii var. intermedius intermediate mariposa-lily	PMLIL0D1J1	None	None	G3G4T3	S3	1B.2
Calystegia felix lucky morning-glory	PDCON040P0	None	None	G1Q	S1	1B.1
Campylorhynchus brunneicapillus sandiegensis coastal cactus wren	ABPBG02095	None	None	G5T3Q	S2	SSC
Catostomus santaanae Santa Ana sucker	AFCJC02190	Threatened	None	G1	S1	
Centromadia parryi ssp. australis southern tarplant	PDAST4R0P4	None	None	G3T2	S2	1B.1
Chelonia mydas green turtle	ARAAA02010	Threatened	None	G3	S1	
Chloropyron maritimum ssp. maritimum salt marsh bird's-beak	PDSCR0J0C2	Endangered	Endangered	G4?T1	S1	1B.2
Choeronycteris mexicana Mexican long-tongued bat	AMACB02010	None	None	G3G4	S1	SSC
Cicindela hirticollis gravida sandy beach tiger beetle	IICOL02101	None	None	G5T2	S2	
Cicindela latesignata western beach tiger beetle	IICOL02110	None	None	G2G3	S1	
Cicindela senilis frosti senile tiger beetle	IICOL02121	None	None	G2G3T1T3	S1	
Coccyzus americanus occidentalis western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Coturnicops noveboracensis yellow rail	ABNME01010	None	None	G4	S2	SSC
Cuscuta obtusiflora var. glandulosa Peruvian dodder	PDCUS01111	None	None	G5T4?	SH	2B.2
Danaus plexippus plexippus pop. 1 monarch - California overwintering population	IILEPP2012	Candidate	None	G4T1T2Q	S2	
Dodecahema leptoceras slender-horned spineflower	PDPGN0V010	Endangered	Endangered	G1	S1	1B.1

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Dudleya multicaulis many-stemmed dudleya	PDCRA040H0	None	None	G2	S2	1B.2
Elanus leucurus white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
Empidonax traillii extimus southwestern willow flycatcher	ABPAE33043	Endangered	Endangered	G5T2	S3	
Emys marmorata western pond turtle	ARAAD02030	Proposed Threatened	None	G3G4	S3	SSC
Eriastrum densifolium ssp. sanctorum Santa Ana River woollystar	PDPLM03035	Endangered	Endangered	G4T1	S1	1B.1
Eugnosta busckana Busck's gallmoth	IILEM2X090	None	None	G1G3	S2S3	
Eumops perotis californicus western mastiff bat	AMACD02011	None	None	G4G5T4	S3S4	SSC
Euphydryas editha quino quino checkerspot butterfly	IILEPK405L	Endangered	None	G4G5T1T2	S1S2	
Falco peregrinus anatum American peregrine falcon	ABNKD06071	Delisted	Delisted	G4T4	S3S4	
Glyptostoma gabrielense San Gabriel chestnut	IMGASB1010	None	None	G2	S3	
Gonidea angulata western ridged mussel	IMBIV19010	None	None	G3	S2	
Habroscelimorpha gabbii western tidal-flat tiger beetle	IICOL02080	None	None	G2G4	S1	
Helianthus nuttallii ssp. parishii Los Angeles sunflower	PDAST4N102	None	None	G5TX	SX	1A
Horkelia cuneata var. puberula mesa horkelia	PDROS0W045	None	None	G4T1	S1	1B.1
Icteria virens yellow-breasted chat	ABPBX24010	None	None	G5	S4	SSC
Lasionycteris noctivagans silver-haired bat	AMACC02010	None	None	G3G4	S3S4	
Lasiurus cinereus hoary bat	AMACC05032	None	None	G3G4	S4	
Lasiurus xanthinus western yellow bat	AMACC05070	None	None	G4G5	S3	SSC
Lasthenia glabrata ssp. coulteri Coulter's goldfields	PDAST5L0A1	None	None	G4T2	S2	1B.1
Laterallus jamaicensis coturniculus California black rail	ABNME03041	None	Threatened	G3T1	S2	FP
Lepidium virginicum var. robinsonii Robinson's pepper-grass	PDBRA1M114	None	None	G5T3	S3	4.3

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Microtus californicus stephensi south coast marsh vole	AMAFF11035	None	None	G5T2T3	S2	SSC
Myotis yumanensis Yuma myotis	AMACC01020	None	None	G5	S4	
Nama stenocarpa mud nama	PDHYD0A0H0	None	None	G4G5	S1S2	2B.2
Nasturtium gambelii Gambel's water cress	PDBRA270V0	Endangered	Threatened	G1	S1	1B.1
Navarretia prostrata prostrate vernal pool navarretia	PDPLM0C0Q0	None	None	G2	S2	1B.2
Nemacaulis denudata var. denudata coast woolly-heads	PDPGN0G011	None	None	G3G4T2	S2	1B.2
Nyctinomops femorosaccus pocketed free-tailed bat	AMACD04010	None	None	G5	S3	SSC
Nyctinomops macrotis big free-tailed bat	AMACD04020	None	None	G5	S3	SSC
Oncorhynchus mykiss irideus pop. 10 steelhead - southern California DPS	AFCHA0209J	Endangered	Candidate Endangered	G5T1Q	S1	
Orcuttia californica California Orcutt grass	PMPOA4G010	Endangered	Endangered	G1	S1	1B.1
Passerculus sandwichensis beldingi Belding's savannah sparrow	ABPBX99015	None	Endangered	G5T3	S3	
Phacelia stellaris Brand's star phacelia	PDHYD0C510	None	None	G1	S1	1B.1
Phrynosoma blainvillii coast horned lizard	ARACF12100	None	None	G4	S4	SSC
Polioptila californica californica coastal California gnatcatcher	ABPBJ08081	Threatened	None	G4G5T3Q	S2	SSC
Pseudognaphalium leucocephalum white rabbit-tobacco	PDAST440C0	None	None	G4	S2	2B.2
Quercus dumosa Nuttall's scrub oak	PDFAG050D0	None	None	G3	S3	1B.1
Ribes divaricatum var. parishii Parish's gooseberry	PDGRO020F3	None	None	G5TX	SX	1A
Riparia riparia bank swallow	ABPAU08010	None	Threatened	G5	S3	
Sagittaria sanfordii Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
Scutellaria bolanderi ssp. austromontana southern mountains skullcap	PDLAM1U0A1	None	None	G4T3	S3	1B.2
Setophaga petechia yellow warbler	ABPBX03010	None	None	G5	S3	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Sidalcea neomexicana salt spring checkerbloom	PDMAL110J0	None	None	G4	S2	2B.2
Sorex ornatus salicornicus southern California saltmarsh shrew	AMABA01104	None	None	G5T1?	S1	SSC
Southern California Arroyo Chub/Santa Ana Sucker Stream Southern California Arroyo Chub/Santa Ana Sucker Stream	CARE2330CA	None	None	GNR	SNR	
Southern Coast Live Oak Riparian Forest Southern Coast Live Oak Riparian Forest	CTT61310CA	None	None	G4	S4	
Southern Coastal Salt Marsh Southern Coastal Salt Marsh	CTT52120CA	None	None	G2	S2.1	
Southern Cottonwood Willow Riparian Forest Southern Cottonwood Willow Riparian Forest	CTT61330CA	None	None	G3	S3.2	
Southern Sycamore Alder Riparian Woodland Southern Sycamore Alder Riparian Woodland	CTT62400CA	None	None	G4	S4	
Spea hammondii western spadefoot	AAABF02020	None	None	G2G3	S3S4	SSC
Sternula antillarum browni California least tern	ABNNM08103	Endangered	Endangered	G4T2T3Q	S2	FP
Suaeda esteroa estuary seablite	PDCHE0P0D0	None	None	G3	S2	1B.2
Symphyotrichum defoliatum San Bernardino aster	PDASTE80C0	None	None	G2	S2	1B.2
Symphyotrichum greatae Greata's aster	PDASTE80U0	None	None	G2	S2	1B.3
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC
Vireo bellii pusillus least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S3	
Walnut Forest Walnut Forest	CTT81600CA	None	None	G1	S1.1	

Record Count: 97

SciName	ComName	TaxonGroup	FedList	CalList	R Plant Rank	OthrStatus	ElmDate	SiteDate
Spea hammondii	western spadefoot	Amphibians	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_NT-Near Threatened	20050518	20050518
Spea hammondii	western spadefoot	Amphibians	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_NT-Near Threatened	19520301	19520301
Spea hammondii	western spadefoot	Amphibians	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_NT-Near Threatened	19670416	19670416
Spea hammondii	western spadefoot	Amphibians	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_NT-Near Threatened	19560502	19560502
Spea hammondii	western spadefoot	Amphibians	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_NT-Near Threatened	1978XXXX	1978XXXX
Spea hammondii	western spadefoot	Amphibians	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_NT-Near Threatened	19630930	19630930
Spea hammondii	western spadefoot	Amphibians	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_NT-Near Threatened	19980310	201004XX
Falco peregrinus anatum	American peregrine falcon	Birds	Delisted	Delisted		CDF_S-Sensitive | CDFW_FP-Fully Protected | USFWS_BCC-Birds of Conservation Concern	20150401	20150401
Empidonax traillii extimus	southwestern willow flycatcher	Birds	Endangered	Endangered		NABCI_RWL-Red Watch List	18950629	18950629
Empidonax traillii extimus	southwestern willow flycatcher	Birds	Endangered	Endangered		NABCI_RWL-Red Watch List	18940520	18940520
Empidonax traillii extimus	southwestern willow flycatcher	Birds	Endangered	Endangered		NABCI_RWL-Red Watch List	19060914	19060914
Sternula antillarum browni	California least tern	Birds	Endangered	Endangered		CDFW_FP-Fully Protected | NABCI_RWL-Red Watch List	1986XXXX	1988XXXX
Sternula antillarum browni	California least tern	Birds	Endangered	Endangered		CDFW_FP-Fully Protected | NABCI_RWL-Red Watch List	1980XXXX	1981XXXX
Sternula antillarum browni	California least tern	Birds	Endangered	Endangered		CDFW_FP-Fully Protected | NABCI_RWL-Red Watch List	20180527	20180527
Sternula antillarum browni	California least tern	Birds	Endangered	Endangered		CDFW_FP-Fully Protected | NABCI_RWL-Red Watch List	19040616	19040616
Sternula antillarum browni	California least tern	Birds	Endangered	Endangered		CDFW_FP-Fully Protected | NABCI_RWL-Red Watch List	20160629	20160629
Vireo bellii pusillus	least Bell's vireo	Birds	Endangered	Endangered		IUCN_NT-Near Threatened | NABCI_YWL-Yellow Watch List	20110909	20110909
Vireo bellii pusillus	least Bell's vireo	Birds	Endangered	Endangered		IUCN_NT-Near Threatened | NABCI_YWL-Yellow Watch List	20170419	20170419
Vireo bellii pusillus	least Bell's vireo	Birds	Endangered	Endangered		IUCN_NT-Near Threatened | NABCI_YWL-Yellow Watch List	19140524	19140524
Vireo bellii pusillus	least Bell's vireo	Birds	Endangered	Endangered		IUCN_NT-Near Threatened | NABCI_YWL-Yellow Watch List	19230519	19230519

SciName	ComName	TaxonGroup	FedList	CalList	R Plant Rank	OthrStatus	ElmDate	SiteDate
Vireo bellii pusillus	least Bell's vireo	Birds	Endangered	Endangered		IUCN_NT-Near Threatened | NABCI_YWL-Yellow Watch List	20110818	20110818
Vireo bellii pusillus	least Bell's vireo	Birds	Endangered	Endangered		IUCN_NT-Near Threatened | NABCI_YWL-Yellow Watch List	20110722	20110722
Vireo bellii pusillus	least Bell's vireo	Birds	Endangered	Endangered		IUCN_NT-Near Threatened | NABCI_YWL-Yellow Watch List	2017XXXX	2017XXXX
Vireo bellii pusillus	least Bell's vireo	Birds	Endangered	Endangered		IUCN_NT-Near Threatened | NABCI_YWL-Yellow Watch List	2017XXXX	2017XXXX
Vireo bellii pusillus	least Bell's vireo	Birds	Endangered	Endangered		IUCN_NT-Near Threatened | NABCI_YWL-Yellow Watch List	20140711	20150727
Vireo bellii pusillus	least Bell's vireo	Birds	Endangered	Endangered		IUCN_NT-Near Threatened | NABCI_YWL-Yellow Watch List	2013XXXX	2013XXXX
Vireo bellii pusillus	least Bell's vireo	Birds	Endangered	Endangered		IUCN_NT-Near Threatened | NABCI_YWL-Yellow Watch List	20130729	20130729
Vireo bellii pusillus	least Bell's vireo	Birds	Endangered	Endangered		IUCN_NT-Near Threatened | NABCI_YWL-Yellow Watch List	20130729	20130729
Vireo bellii pusillus	least Bell's vireo	Birds	Endangered	Endangered		IUCN_NT-Near Threatened | NABCI_YWL-Yellow Watch List	18930612	18930612
Vireo bellii pusillus	least Bell's vireo	Birds	Endangered	Endangered		IUCN_NT-Near Threatened | NABCI_YWL-Yellow Watch List	18980615	18980615
Vireo bellii pusillus	least Bell's vireo	Birds	Endangered	Endangered		IUCN_NT-Near Threatened | NABCI_YWL-Yellow Watch List	18970603	18970603
Vireo bellii pusillus	least Bell's vireo	Birds	Endangered	Endangered		IUCN_NT-Near Threatened | NABCI_YWL-Yellow Watch List	19130520	19130520
Vireo bellii pusillus	least Bell's vireo	Birds	Endangered	Endangered		IUCN_NT-Near Threatened | NABCI_YWL-Yellow Watch List	18950523	18950523
Vireo bellii pusillus	least Bell's vireo	Birds	Endangered	Endangered		IUCN_NT-Near Threatened | NABCI_YWL-Yellow Watch List	19000610	19000610
Vireo bellii pusillus	least Bell's vireo	Birds	Endangered	Endangered		IUCN_NT-Near Threatened | NABCI_YWL-Yellow Watch List	18990507	18990507
Vireo bellii pusillus	least Bell's vireo	Birds	Endangered	Endangered		IUCN_NT-Near Threatened | NABCI_YWL-Yellow Watch List	20140610	20140610
Vireo bellii pusillus	least Bell's vireo	Birds	Endangered	Endangered		IUCN_NT-Near Threatened | NABCI_YWL-Yellow Watch List	20140505	20140505
Passerculus sandwichensis beldingi	Belding's savannah sparrow	Birds	None	Endangered			2008XXXX	2008XXXX
Accipiter cooperii	Cooper's hawk	Birds	None	None		CDFW_WL-Watch List | IUCN_LC-Least Concern	20020220	20020220
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	Birds	None	None		CDFW_WL-Watch List	200005XX	200005XX

SciName	ComName	TaxonGroup	FedList	CalList	R Plant Rank	OthrStatus	ElmDate	SiteDate
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	Birds	None	None		CDFW_WL-Watch List	20141030	20141030
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	Birds	None	None		CDFW_WL-Watch List	20050419	20050419
Ammodramus savannarum	grasshopper sparrow	Birds	None	None		CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	20110422	20110422
Ardea herodias	great blue heron	Birds	None	None		CDF_S-Sensitive | IUCN_LC-Least Concern	20040214	20040214
Athene cunicularia	burrowing owl	Birds	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFWS_BCC-Birds of Conservation Concern	19210505	19210505
Athene cunicularia	burrowing owl	Birds	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFWS_BCC-Birds of Conservation Concern	20100114	20100216
Athene cunicularia	burrowing owl	Birds	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFWS_BCC-Birds of Conservation Concern	1983XXXX	1983XXXX
Athene cunicularia	burrowing owl	Birds	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFWS_BCC-Birds of Conservation Concern	1981XXXX	1983XXXX
Buteo regalis	ferruginous hawk	Birds	None	None		CDFW_WL-Watch List | IUCN_LC-Least Concern | USFWS_BCC-Birds of Conservation Concern	19971128	19971128
Campylorhynchus brunneicapillus sandiegensis	coastal cactus wren	Birds	None	None		CDFW_SSC-Species of Special Concern | USFS_S-Sensitive | USFWS_BCC-Birds of Conservation Concern	19980422	19980422
Campylorhynchus brunneicapillus sandiegensis	coastal cactus wren	Birds	None	None		CDFW_SSC-Species of Special Concern | USFS_S-Sensitive | USFWS_BCC-Birds of Conservation Concern	19920203	19920203
Campylorhynchus brunneicapillus sandiegensis	coastal cactus wren	Birds	None	None		CDFW_SSC-Species of Special Concern | USFS_S-Sensitive | USFWS_BCC-Birds of Conservation Concern	200005XX	200005XX
Campylorhynchus brunneicapillus sandiegensis	coastal cactus wren	Birds	None	None		CDFW_SSC-Species of Special Concern | USFS_S-Sensitive | USFWS_BCC-Birds of Conservation Concern	20020315	20020315
Campylorhynchus brunneicapillus sandiegensis	coastal cactus wren	Birds	None	None		CDFW_SSC-Species of Special Concern | USFS_S-Sensitive | USFWS_BCC-Birds of Conservation Concern	20011116	20011116

SciName	ComName	TaxonGroup	FedList	CalList	R Plant Rank	OthrStatus	ElmDate	SiteDate
Campylorhynchus brunneicapillus sandiegensis	coastal cactus wren	Birds	None	None		CDFW_SSC-Species of Special Concern | USFS_S-Sensitive | USFWS_BCC-Birds of Conservation Concern	20011012	20011012
Coturnicops noveboracensis	yellow rail	Birds	None	None		CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | NABCI_RWL-Red Watch List | USFS_S-Sensitive | USFWS_BCC-Birds of Conservation Concern	19521015	19521015
Elanus leucurus	white-tailed kite	Birds	None	None		BLM_S-Sensitive | CDFW_FP-Fully Protected | IUCN_LC-Least Concern	20090509	20090509
Elanus leucurus	white-tailed kite	Birds	None	None		BLM_S-Sensitive | CDFW_FP-Fully Protected | IUCN_LC-Least Concern	2008XXXX	2008XXXX
Elanus leucurus	white-tailed kite	Birds	None	None		BLM_S-Sensitive | CDFW_FP-Fully Protected | IUCN_LC-Least Concern	2009XXXX	2009XXXX
Elanus leucurus	white-tailed kite	Birds	None	None		BLM_S-Sensitive | CDFW_FP-Fully Protected | IUCN_LC-Least Concern	20090514	20090514
Icteria virens	yellow-breasted chat	Birds	None	None		CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	20010516	20010516
Icteria virens	yellow-breasted chat	Birds	None	None		CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	20080711	20080711
Icteria virens	yellow-breasted chat	Birds	None	None		CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	20170704	20170704
Setophaga petechia	yellow warbler	Birds	None	None		CDFW_SSC-Species of Special Concern | USFWS_BCC-Birds of Conservation Concern	201306XX	201306XX
Agelaius tricolor	tricolored blackbird	Birds	None	Threatened		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_EN-Endangered | NABCI_RWL-Red Watch List | USFWS_BCC-Birds of Conservation Concern	19990427	19990427
Agelaius tricolor	tricolored blackbird	Birds	None	Threatened		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_EN-Endangered | NABCI_RWL-Red Watch List | USFWS_BCC-Birds of Conservation Concern	19890401	20140420
Buteo swainsoni	Swainson's hawk	Birds	None	Threatened		BLM_S-Sensitive | IUCN_LC-Least Concern | USFWS_BCC-Birds of Conservation Concern	18800410	18800410
Buteo swainsoni	Swainson's hawk	Birds	None	Threatened		BLM_S-Sensitive | IUCN_LC-Least Concern | USFWS_BCC-Birds of Conservation Concern	18880516	18880516
Buteo swainsoni	Swainson's hawk	Birds	None	Threatened		BLM_S-Sensitive | IUCN_LC-Least Concern | USFWS_BCC-Birds of Conservation Concern	20190730	20190730

SciName	ComName	TaxonGroup	FedList	CalList	R Plant Rank	OthrStatus	ElmDate	SiteDate
Laterallus jamaicensis coturniculus	California black rail	Birds	None	Threatened		BLM_S-Sensitive | CDFW_FP-Fully Protected | IUCN_NT-Near Threatened | NABCI_RWL-Red Watch List | USFWS_BCC-Birds of Conservation Concern	19861212	19861212
Riparia riparia	bank swallow	Birds	None	Threatened		BLM_S-Sensitive | IUCN_LC-Least Concern	18940704	18940704
Riparia riparia	bank swallow	Birds	None	Threatened		BLM_S-Sensitive | IUCN_LC-Least Concern	18940704	18940704
Coccyzus americanus occidentalis	western yellow-billed cuckoo	Birds	Threatened	Endangered		BLM_S-Sensitive | NABCI_RWL-Red Watch List | USFS_S-Sensitive | USFWS_BCC-Birds of Conservation Concern	195105XX	20110711
Coccyzus americanus occidentalis	western yellow-billed cuckoo	Birds	Threatened	Endangered		BLM_S-Sensitive | NABCI_RWL-Red Watch List | USFS_S-Sensitive | USFWS_BCC-Birds of Conservation Concern	19120622	19120622
Coccyzus americanus occidentalis	western yellow-billed cuckoo	Birds	Threatened	Endangered		BLM_S-Sensitive | NABCI_RWL-Red Watch List | USFS_S-Sensitive | USFWS_BCC-Birds of Conservation Concern	19180710	19180710
Coccyzus americanus occidentalis	western yellow-billed cuckoo	Birds	Threatened	Endangered		BLM_S-Sensitive | NABCI_RWL-Red Watch List | USFS_S-Sensitive | USFWS_BCC-Birds of Conservation Concern	19100724	19100724
Coccyzus americanus occidentalis	western yellow-billed cuckoo	Birds	Threatened	Endangered		BLM_S-Sensitive | NABCI_RWL-Red Watch List | USFS_S-Sensitive | USFWS_BCC-Birds of Conservation Concern	19XXXXXX	19XXXXXX
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	19940403	19940403
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	19980422	19980422
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	20160608	20160608
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	19920203	19920203
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	1980XXXX	1980XXXX
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	20060309	20060309
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	19961117	19961117
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	20010615	20010615
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	20020611	20020611

SciName	ComName	TaxonGroup	FedList	CalList	R Plant Rank	OthrStatus	ElmDate	SiteDate
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	20010725	20010725
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	20050718	20050718
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	200110XX	200110XX
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	200110XX	200110XX
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	200110XX	200110XX
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	200110XX	200110XX
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	200203XX	200203XX
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	20011109	20011109
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	20000413	20000413
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	20000606	20000606
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	20001117	20001117
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	20070814	20070814
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	20050403	20050403
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	20170301	20170301
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	20050831	20050831
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	20050728	20050728
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	20170713	20170713
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	20050802	20050802
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	20040622	20040622
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	20040622	20040622

SciName	ComName	TaxonGroup	FedList	CalList	R Plant Rank	OthrStatus	ElmDate	SiteDate
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	199803XX	199803XX
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	19940401	19940401
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	19940401	19940401
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	19940401	19940401
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	19940401	19940401
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	20030519	20030519
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	20030626	20030626
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	20011109	20011109
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	19940403	19940403
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	19940403	19940403
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	20040701	20040701
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	20040311	20040311
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	20030626	20030626
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	20020730	20020730
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	20170411	20170411
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	20170629	20170629
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None		CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	20170711	20170711
Arenaria paludicola	marsh sandwort	Dicots	Endangered	Endangered	1B.1	SB_SBBG-Santa Barbara Botanic Garden	19000826	19000826
Berberis nevinii	Nevin's barberry	Dicots	Endangered	Endangered	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden | SB_SBBG-Santa Barbara Botanic Garden	201005XX	201005XX
Berberis nevinii	Nevin's barberry	Dicots	Endangered	Endangered	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden | SB_SBBG-Santa Barbara Botanic Garden	201005XX	201005XX

SciName	ComName	TaxonGroup	FedList	CalList	R Plant Rank	OthrStatus	ElmDate	SiteDate
Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	Dicots	Endangered	Endangered	1B.2	SB_CRES-San Diego Zoo CRES Native Gene Seed Bank | SB_RSABG-Rancho Santa Ana Botanic Garden | SB_SBBG-Santa Barbara Botanic Garden	1983XXXX	1983XXXX
Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	Dicots	Endangered	Endangered	1B.2	SB_CRES-San Diego Zoo CRES Native Gene Seed Bank | SB_RSABG-Rancho Santa Ana Botanic Garden | SB_SBBG-Santa Barbara Botanic Garden	19240829	1980XXXX
Eriastrum densifolium ssp. sanctorum	Santa Ana River woollystar	Dicots	Endangered	Endangered	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	19270813	19270813
Astragalus brauntonii	Braunton's milk-vetch	Dicots	Endangered	None	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden | SB_SBBG-Santa Barbara Botanic Garden	19300601	19300601
Nasturtium gambelii	Gambel's water cress	Dicots	Endangered	Threatened	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden | SB_SBBG-Santa Barbara Botanic Garden	19040708	19040708
Nasturtium gambelii	Gambel's water cress	Dicots	Endangered	Threatened	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden | SB_SBBG-Santa Barbara Botanic Garden	19270613	19270613
Abronia villosa var. aurita	chaparral sand-verbena	Dicots	None	None	1B.1	BLM_S-Sensitive | SB_RSABG-Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	19350628	19350628
Abronia villosa var. aurita	chaparral sand-verbena	Dicots	None	None	1B.1	BLM_S-Sensitive | SB_RSABG-Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	19290406	19290406
Abronia villosa var. aurita	chaparral sand-verbena	Dicots	None	None	1B.1	BLM_S-Sensitive | SB_RSABG-Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	19240829	19240829
Astragalus hornii var. hornii	Horn's milk-vetch	Dicots	None	None	1B.1	BLM_S-Sensitive	189607XX	189607XX
Atriplex parishii	Parish's brittlescale	Dicots	None	None	1B.1	USFS_S-Sensitive	188110XX	188110XX
Atriplex serenana var. davidsonii	Davidson's saltscale	Dicots	None	None	1B.2		190209XX	190209XX
Atriplex serenana var. davidsonii	Davidson's saltscale	Dicots	None	None	1B.2		190209XX	190209XX
Calystegia felix	lucky morning-glory	Dicots	None	None	1B.1		19020501	19020501
Calystegia felix	lucky morning-glory	Dicots	None	None	1B.1		189904XX	189904XX
Calystegia felix	lucky morning-glory	Dicots	None	None	1B.1		1899XXXX	1899XXXX
Calystegia felix	lucky morning-glory	Dicots	None	None	1B.1		20140625	20140625
Centromadia parryi ssp. australis	southern tarplant	Dicots	None	None	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	19310731	19310731
Centromadia parryi ssp. australis	southern tarplant	Dicots	None	None	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	19320628	19971010
Centromadia parryi ssp. australis	southern tarplant	Dicots	None	None	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	19340816	19971010
Centromadia parryi ssp. australis	southern tarplant	Dicots	None	None	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	19730615	19730615

SciName	ComName	TaxonGroup	FedList	CalList	R Plant Rank	OthrStatus	ElmDate	SiteDate
Centromadia parryi ssp. australis	southern tarplant	Dicots	None	None	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	19330917	19330917
Centromadia parryi ssp. australis	southern tarplant	Dicots	None	None	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	19320913	19971010
Centromadia parryi ssp. australis	southern tarplant	Dicots	None	None	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	19971010	19971010
Centromadia parryi ssp. australis	southern tarplant	Dicots	None	None	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	20141001	20141001
Centromadia parryi ssp. australis	southern tarplant	Dicots	None	None	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	20030708	20030708
Centromadia parryi ssp. australis	southern tarplant	Dicots	None	None	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	19940528	19940528
Centromadia parryi ssp. australis	southern tarplant	Dicots	None	None	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	20150403	20150403
Centromadia parryi ssp. australis	southern tarplant	Dicots	None	None	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	20131121	20131121
Centromadia parryi ssp. australis	southern tarplant	Dicots	None	None	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	19301104	19301104
Centromadia parryi ssp. australis	southern tarplant	Dicots	None	None	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	19200622	19200622
Cuscuta obtusiflora var. glandulosa	Peruvian dodder	Dicots	None	None	2B.2		XXXXXXXX	XXXXXXXX
Dudleya multicaulis	many-stemmed dudleya	Dicots	None	None	1B.2	BLM_S-Sensitive | SB_RSABG-Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	19830422	19830422
Dudleya multicaulis	many-stemmed dudleya	Dicots	None	None	1B.2	BLM_S-Sensitive | SB_RSABG-Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	192506XX	192506XX
Dudleya multicaulis	many-stemmed dudleya	Dicots	None	None	1B.2	BLM_S-Sensitive | SB_RSABG-Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	20160107	20160107
Dudleya multicaulis	many-stemmed dudleya	Dicots	None	None	1B.2	BLM_S-Sensitive | SB_RSABG-Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	XXXXXXXX	XXXXXXXX
Helianthus nuttallii ssp. parishii	Los Angeles sunflower	Dicots	None	None	1A		1891XXXX	1891XXXX
Helianthus nuttallii ssp. parishii	Los Angeles sunflower	Dicots	None	None	1A		190109XX	190109XX
Helianthus nuttallii ssp. parishii	Los Angeles sunflower	Dicots	None	None	1A		190109XX	190109XX
Horkelia cuneata var. puberula	mesa horkelia	Dicots	None	None	1B.1	USFS_S-Sensitive	19110403	19110403
Horkelia cuneata var. puberula	mesa horkelia	Dicots	None	None	1B.1	USFS_S-Sensitive	190205XX	190205XX

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Horkelia cuneata var. puberula	mesa horkelia	Dicots	None	None	1B.1	USFS_S-Sensitive	189505XX	189505XX
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Dicots	None	None	1B.1	BLM_S-Sensitive | SB_RSABG-Rancho Santa Ana Botanic Garden | SB_SBBG-Santa Barbara Botanic Garden	19350324	19350324
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Dicots	None	None	1B.1	BLM_S-Sensitive | SB_RSABG-Rancho Santa Ana Botanic Garden | SB_SBBG-Santa Barbara Botanic Garden	19340411	19340411
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Dicots	None	None	1B.1	BLM_S-Sensitive | SB_RSABG-Rancho Santa Ana Botanic Garden | SB_SBBG-Santa Barbara Botanic Garden	1937XXXX	1937XXXX
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Dicots	None	None	1B.1	BLM_S-Sensitive | SB_RSABG-Rancho Santa Ana Botanic Garden | SB_SBBG-Santa Barbara Botanic Garden	1932XXXX	1932XXXX
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Dicots	None	None	1B.1	BLM_S-Sensitive | SB_RSABG-Rancho Santa Ana Botanic Garden | SB_SBBG-Santa Barbara Botanic Garden	19390420	19390420
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Dicots	None	None	1B.1	BLM_S-Sensitive | SB_RSABG-Rancho Santa Ana Botanic Garden | SB_SBBG-Santa Barbara Botanic Garden	20150310	20150310
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Dicots	None	None	1B.1	BLM_S-Sensitive | SB_RSABG-Rancho Santa Ana Botanic Garden | SB_SBBG-Santa Barbara Botanic Garden	XXXXXXXX	XXXXXXXX
Lepidium virginicum var. robinsonii	Robinson's pepper-grass	Dicots	None	None	4.3		19500214	19500214
Nama stenocarpa	mud nama	Dicots	None	None	2B.2		19320701	19320701
Navarretia prostrata	prostrate vernal pool navarretia	Dicots	None	None	1B.2		19070501	19070501
Navarretia prostrata	prostrate vernal pool navarretia	Dicots	None	None	1B.2		189505XX	189505XX
Navarretia prostrata	prostrate vernal pool navarretia	Dicots	None	None	1B.2		1882XXXX	1882XXXX
Nemacaulis denudata var. denudata	coast woolly-heads	Dicots	None	None	1B.2	SB_CRES-San Diego Zoo CRES Native Gene Seed Bank | SB_RSABG-Rancho Santa Ana Botanic Garden	19510818	19510818
Phacelia stellaris	Brand's star phacelia	Dicots	None	None	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	19350318	19350318
Phacelia stellaris	Brand's star phacelia	Dicots	None	None	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	19230319	19230319
Phacelia stellaris	Brand's star phacelia	Dicots	None	None	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	1932XXXX	1932XXXX
Pseudognaphalium leucocephalum	white rabbit-tobacco	Dicots	None	None	2B.2		1907XXXX	1907XXXX

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Quercus dumosa	Nuttall's scrub oak	Dicots	None	None	1B.1	USFS_S-Sensitive	19240427	19240427
Ribes divaricatum var. parishii	Parish's gooseberry	Dicots	None	None	1A		19790306	199XXXXX
Ribes divaricatum var. parishii	Parish's gooseberry	Dicots	None	None	1A		1981XXXX	199XXXXX
Ribes divaricatum var. parishii	Parish's gooseberry	Dicots	None	None	1A		189304XX	189304XX
Ribes divaricatum var. parishii	Parish's gooseberry	Dicots	None	None	1A		19510512	19510512
Scutellaria bolanderi ssp. austromontana	southern mountains skullcap	Dicots	None	None	1B.2	SB_RSABG-Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	XXXXXXXX	XXXXXXXX
Sidalcea neomexicana	salt spring checkerbloom	Dicots	None	None	2B.2	USFS_S-Sensitive	19340411	19340411
Sidalcea neomexicana	salt spring checkerbloom	Dicots	None	None	2B.2	USFS_S-Sensitive	19520530	19520530
Sidalcea neomexicana	salt spring checkerbloom	Dicots	None	None	2B.2	USFS_S-Sensitive	19290401	19290401
Sidalcea neomexicana	salt spring checkerbloom	Dicots	None	None	2B.2	USFS_S-Sensitive	190207XX	190207XX
Sidalcea neomexicana	salt spring checkerbloom	Dicots	None	None	2B.2	USFS_S-Sensitive	192205XX	192205XX
Suaeda esteroa	estuary seablite	Dicots	None	None	1B.2		20140206	20140206
Symphyotrichum defoliatum	San Bernardino aster	Dicots	None	None	1B.2	BLM_S-Sensitive | USFS_S-Sensitive	19320916	19320916
Symphyotrichum defoliatum	San Bernardino aster	Dicots	None	None	1B.2	BLM_S-Sensitive | USFS_S-Sensitive	19040708	19040708
Symphyotrichum defoliatum	San Bernardino aster	Dicots	None	None	1B.2	BLM_S-Sensitive | USFS_S-Sensitive	1896XXXX	1896XXXX
Symphyotrichum defoliatum	San Bernardino aster	Dicots	None	None	1B.2	BLM_S-Sensitive | USFS_S-Sensitive	19320916	19320916
Symphyotrichum defoliatum	San Bernardino aster	Dicots	None	None	1B.2	BLM_S-Sensitive | USFS_S-Sensitive	1893XXXX	1893XXXX
Symphyotrichum defoliatum	San Bernardino aster	Dicots	None	None	1B.2	BLM_S-Sensitive | USFS_S-Sensitive	19301111	19301111
Symphyotrichum greatae	Greata's aster	Dicots	None	None	1B.3	BLM_S-Sensitive	190207XX	190207XX
Symphyotrichum greatae	Greata's aster	Dicots	None	None	1B.3	BLM_S-Sensitive	19320921	19320921
Oncorhynchus mykiss irideus pop. 10	steelhead - southern California DPS	Fish	Endangered	None		AFS_EN-Endangered	1950XXXX	2013XXXX
Catostomus santaanae	Santa Ana sucker	Fish	Threatened	None		AFS_TH-Threatened | IUCN_VU-Vulnerable	20000925	20000925
Catostomus santaanae	Santa Ana sucker	Fish	Threatened	None		AFS_TH-Threatened | IUCN_VU-Vulnerable	XXXXXXXX	XXXXXXXX

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Catostomus santaanae	Santa Ana sucker	Fish	Threatened	None		AFS_TH-Threatened | IUCN_VU-Vulnerable	19870908	19870908
Catostomus santaanae	Santa Ana sucker	Fish	Threatened	None		AFS_TH-Threatened | IUCN_VU-Vulnerable	19870914	19870914
Walnut Forest	Walnut Forest	Forest	None	None			19890514	19890514
Southern California Arroyo Chub/Santa Ana Sucker Stream	Southern California Arroyo Chub/Santa Ana Sucker Stream	Inland Waters	None	None			1991XXXX	1991XXXX
Euphydryas editha quino	quino checkerspot butterfly	Insects	Endangered	None		XERCES_CI-Critically Imperiled	19300624	19300624
Euphydryas editha quino	quino checkerspot butterfly	Insects	Endangered	None		XERCES_CI-Critically Imperiled	19370423	19830319
Bombus crotchii	Crotch bumble bee	Insects	None	Candidate Endangered			19400617	19400617
Bombus crotchii	Crotch bumble bee	Insects	None	Candidate Endangered			19530502	19530502
Bombus crotchii	Crotch bumble bee	Insects	None	Candidate Endangered			XXXXXXXX	XXXXXXXX
Bombus crotchii	Crotch bumble bee	Insects	None	Candidate Endangered			19680617	19680617
Bombus crotchii	Crotch bumble bee	Insects	None	Candidate Endangered			19690319	19690319
Bombus crotchii	Crotch bumble bee	Insects	None	Candidate Endangered			19420328	19420328
Carolella busckana	Busck's gallmoth	Insects	None	None			19290105	19290105
Cicindela gabbii	western tidal-flat tiger beetle	Insects	None	None			19980711	19980711
Cicindela gabbii	western tidal-flat tiger beetle	Insects	None	None			XXXXXXXX	XXXXXXXX
Cicindela hirticollis gravida	sandy beach tiger beetle	Insects	None	None			XXXXXXXX	1979XXXX
Cicindela hirticollis gravida	sandy beach tiger beetle	Insects	None	None			19450815	19450815
Cicindela latesignata latesignata	western beach tiger beetle	Insects	None	None			XXXXXXXX	XXXXXXXX
Cicindela latesignata latesignata	western beach tiger beetle	Insects	None	None			XXXXXXXX	XXXXXXXX
Cicindela senilis frosti	senile tiger beetle	Insects	None	None			XXXXXXXX	1979XXXX
Danaus plexippus pop. 1	monarch - California overwintering population	Insects	None	None		USFS_S-Sensitive	201311XX	201411XX

SciName	ComName	TaxonGroup	FedList	CalList	R Plant Rank	OthrStatus	ElmDate	SiteDate
Danaus plexippus pop. 1	monarch - California overwintering population	Insects	None	None		USFS_S-Sensitive	201311XX	201411XX
Antrozous pallidus	pallid bat	Mammals	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFS_S-Sensitive | WBWG_H-High Priority	19310502	19310502
Antrozous pallidus	pallid bat	Mammals	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFS_S-Sensitive | WBWG_H-High Priority	19710524	19710524
Antrozous pallidus	pallid bat	Mammals	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFS_S-Sensitive | WBWG_H-High Priority	19320415	19320415
Choeronycteris mexicana	Mexican long-tongued bat	Mammals	None	None		CDFW_SSC-Species of Special Concern | IUCN_NT-Near Threatened | WBWG_H-High Priority	19951124	19951124
Eumops perotis californicus	western mastiff bat	Mammals	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | WBWG_H-High Priority	19180723	19180723
Eumops perotis californicus	western mastiff bat	Mammals	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | WBWG_H-High Priority	19910403	19910403
Eumops perotis californicus	western mastiff bat	Mammals	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | WBWG_H-High Priority	19900412	19900412
Eumops perotis californicus	western mastiff bat	Mammals	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | WBWG_H-High Priority	19900321	19900321
Eumops perotis californicus	western mastiff bat	Mammals	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | WBWG_H-High Priority	19891213	19891213
Eumops perotis californicus	western mastiff bat	Mammals	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | WBWG_H-High Priority	19490808	19490728
Eumops perotis californicus	western mastiff bat	Mammals	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | WBWG_H-High Priority	XXXXXXXX	XXXXXXXX
Eumops perotis californicus	western mastiff bat	Mammals	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | WBWG_H-High Priority	XXXXXXXX	XXXXXXXX
Lasionycteris noctivagans	silver-haired bat	Mammals	None	None		IUCN_LC-Least Concern | WBWG_M-Medium Priority	19780222	19780222
Lasiurus cinereus	hoary bat	Mammals	None	None		IUCN_LC-Least Concern | WBWG_M-Medium Priority	19280501	19280501
Lasiurus cinereus	hoary bat	Mammals	None	None		IUCN_LC-Least Concern | WBWG_M-Medium Priority	19420915	19420915
Lasiurus cinereus	hoary bat	Mammals	None	None		IUCN_LC-Least Concern | WBWG_M-Medium Priority	19920419	19920419
Lasiurus cinereus	hoary bat	Mammals	None	None		IUCN_LC-Least Concern | WBWG_M-Medium Priority	19770510	19770510

SciName	ComName	TaxonGroup	FedList	CalList	R Plant Rank	OthrStatus	ElmDate	SiteDate
Lasiurus cinereus	hoary bat	Mammals	None	None		IUCN_LC-Least Concern | WBWG_M-Medium Priority	19221128	19221128
Lasiurus xanthinus	western yellow bat	Mammals	None	None		CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | WBWG_H-High Priority	19901017	19901017
Microtus californicus stephensi	south coast marsh vole	Mammals	None	None		CDFW_SSC-Species of Special Concern	19570414	19570414
Microtus californicus stephensi	south coast marsh vole	Mammals	None	None		CDFW_SSC-Species of Special Concern	19880410	19880410
Myotis yumanensis	Yuma myotis	Mammals	None	None		BLM_S-Sensitive | IUCN_LC-Least Concern | WBWG_LM-Low-Medium Priority	19980904	19980904
Nyctinomops femorosaccus	pocketed free-tailed bat	Mammals	None	None		CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | WBWG_M-Medium Priority	19891031	19891031
Nyctinomops macrotis	big free-tailed bat	Mammals	None	None		CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | WBWG_MH-Medium-High Priority	19851024	19851024
Sorex ornatus salicornicus	southern California saltmarsh shrew	Mammals	None	None		CDFW_SSC-Species of Special Concern	19681117	19681117
Taxidea taxus	American badger	Mammals	None	None		CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	XXXXXXXX	XXXXXXXX
Taxidea taxus	American badger	Mammals	None	None		CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	20060726	20060726
Southern Coastal Salt Marsh	Southern Coastal Salt Marsh	Marsh	None	None			1976XXXX	1976XXXX
Orcuttia californica	California Orcutt grass	Monocots	Endangered	Endangered	1B.1	SB_CRES-San Diego Zoo CRES Native Gene Seed Bank | SB_RSABG-Rancho Santa Ana Botanic Garden	XXXXXXXX	XXXXXXXX
Orcuttia californica	California Orcutt grass	Monocots	Endangered	Endangered	1B.1	SB_CRES-San Diego Zoo CRES Native Gene Seed Bank | SB_RSABG-Rancho Santa Ana Botanic Garden	XXXXXXXX	XXXXXXXX
Calochortus plummerae	Plummer's mariposa-lily	Monocots	None	None	4.2	SB_RSABG-Rancho Santa Ana Botanic Garden	19130615	19130615
Calochortus plummerae	Plummer's mariposa-lily	Monocots	None	None	4.2	SB_RSABG-Rancho Santa Ana Botanic Garden	20050601	20050601
Calochortus plummerae	Plummer's mariposa-lily	Monocots	None	None	4.2	SB_RSABG-Rancho Santa Ana Botanic Garden	20050531	20050531
Calochortus plummerae	Plummer's mariposa-lily	Monocots	None	None	4.2	SB_RSABG-Rancho Santa Ana Botanic Garden	20050603	20050603
Calochortus plummerae	Plummer's mariposa-lily	Monocots	None	None	4.2	SB_RSABG-Rancho Santa Ana Botanic Garden	20050415	20050415
Calochortus plummerae	Plummer's mariposa-lily	Monocots	None	None	4.2	SB_RSABG-Rancho Santa Ana Botanic Garden	20050602	20050602

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Calochortus plummerae	Plummer's mariposa-lily	Monocots	None	None	4.2	SB_RSABG-Rancho Santa Ana Botanic Garden	20050602	20050602
Calochortus weedii var. intermedius	intermediate mariposa-lily	Monocots	None	None	1B.2	SB_RSABG-Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	20170602	20170602
Calochortus weedii var. intermedius	intermediate mariposa-lily	Monocots	None	None	1B.2	SB_RSABG-Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	20150521	20150521
Calochortus weedii var. intermedius	intermediate mariposa-lily	Monocots	None	None	1B.2	SB_RSABG-Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	20080604	20080604
Calochortus weedii var. intermedius	intermediate mariposa-lily	Monocots	None	None	1B.2	SB_RSABG-Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	20030606	20030606
Calochortus weedii var. intermedius	intermediate mariposa-lily	Monocots	None	None	1B.2	SB_RSABG-Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	20100608	20100608
Calochortus weedii var. intermedius	intermediate mariposa-lily	Monocots	None	None	1B.2	SB_RSABG-Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	20100617	20100617
Anniella stebbinsi	southern California legless lizard	Reptiles	None	None		CDFW_SSC-Species of Special Concern | USFS_S-Sensitive	19690129	19690129
Anniella stebbinsi	southern California legless lizard	Reptiles	None	None		CDFW_SSC-Species of Special Concern | USFS_S-Sensitive	19390529	19390529
Anniella stebbinsi	southern California legless lizard	Reptiles	None	None		CDFW_SSC-Species of Special Concern | USFS_S-Sensitive	19490601	19490601
Anniella stebbinsi	southern California legless lizard	Reptiles	None	None		CDFW_SSC-Species of Special Concern | USFS_S-Sensitive	19081111	19081111
Anniella stebbinsi	southern California legless lizard	Reptiles	None	None		CDFW_SSC-Species of Special Concern | USFS_S-Sensitive	193904XX	193904XX
Anniella stebbinsi	southern California legless lizard	Reptiles	None	None		CDFW_SSC-Species of Special Concern | USFS_S-Sensitive	196406XX	196406XX
Anniella stebbinsi	southern California legless lizard	Reptiles	None	None		CDFW_SSC-Species of Special Concern | USFS_S-Sensitive	19670626	19670626
Anniella stebbinsi	southern California legless lizard	Reptiles	None	None		CDFW_SSC-Species of Special Concern | USFS_S-Sensitive	196401XX	196401XX
Anniella stebbinsi	southern California legless lizard	Reptiles	None	None		CDFW_SSC-Species of Special Concern | USFS_S-Sensitive	19160411	19160411
Anniella stebbinsi	southern California legless lizard	Reptiles	None	None		CDFW_SSC-Species of Special Concern | USFS_S-Sensitive	20130329	20130329
Anniella stebbinsi	southern California legless lizard	Reptiles	None	None		CDFW_SSC-Species of Special Concern | USFS_S-Sensitive	20160714	20160714
Arizona elegans occidentalis	California glossy snake	Reptiles	None	None		CDFW_SSC-Species of Special Concern	18890412	18890412
Aspidoscelis hyperythra	orange-throated whiptail	Reptiles	None	None		CDFW_WL-Watch List | IUCN_LC-Least Concern | USFS_S-Sensitive	19620519	19620519

SciName	ComName	TaxonGroup	FedList	CalList	R Plant Rank	OthrStatus	ElmDate	SiteDate
Aspidoscelis hyperythra	orange-throated whiptail	Reptiles	None	None		CDFW_WL-Watch List | IUCN_LC-Least Concern | USFS_S-Sensitive	200005XX	200005XX
Aspidoscelis tigris stejnegeri	coastal whiptail	Reptiles	None	None		CDFW_SSC-Species of Special Concern	20001117	20001117
Aspidoscelis tigris stejnegeri	coastal whiptail	Reptiles	None	None		CDFW_SSC-Species of Special Concern	20001117	20001117
Aspidoscelis tigris stejnegeri	coastal whiptail	Reptiles	None	None		CDFW_SSC-Species of Special Concern	20001117	20001117
Aspidoscelis tigris stejnegeri	coastal whiptail	Reptiles	None	None		CDFW_SSC-Species of Special Concern	20170504	20170504
Aspidoscelis tigris stejnegeri	coastal whiptail	Reptiles	None	None		CDFW_SSC-Species of Special Concern	20170523	20170523
Aspidoscelis tigris stejnegeri	coastal whiptail	Reptiles	None	None		CDFW_SSC-Species of Special Concern	20170706	20170706
Aspidoscelis tigris stejnegeri	coastal whiptail	Reptiles	None	None		CDFW_SSC-Species of Special Concern	20170711	20170711
Emys marmorata	western pond turtle	Reptiles	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable | USFS_S-Sensitive	XXXXXXXX	1987XXXX
Emys marmorata	western pond turtle	Reptiles	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable | USFS_S-Sensitive	198XXXXX	198XXXXX
Emys marmorata	western pond turtle	Reptiles	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable | USFS_S-Sensitive	1989XXXX	1989XXXX
Emys marmorata	western pond turtle	Reptiles	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable | USFS_S-Sensitive	198XXXXX	198XXXXX
Emys marmorata	western pond turtle	Reptiles	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable | USFS_S-Sensitive	19540531	1987XXXX
Emys marmorata	western pond turtle	Reptiles	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable | USFS_S-Sensitive	196503XX	1987XXXX
Emys marmorata	western pond turtle	Reptiles	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable | USFS_S-Sensitive	197710XX	1987XXXX
Emys marmorata	western pond turtle	Reptiles	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable | USFS_S-Sensitive	1987XXXX	1987XXXX
Emys marmorata	western pond turtle	Reptiles	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable | USFS_S-Sensitive	20130724	20130724
Phrynosoma blainvillii	coast horned lizard	Reptiles	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	1971XXXX	1971XXXX
Phrynosoma blainvillii	coast horned lizard	Reptiles	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	1922XXXX	1922XXXX
Phrynosoma blainvillii	coast horned lizard	Reptiles	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	XXXXXXXX	XXXXXXXX

SciName	ComName	TaxonGroup	FedList	CalList	R Plant Rank	OthrStatus	ElmDate	SiteDate
Phrynosoma blainvillii	coast horned lizard	Reptiles	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	19520528	19520528
Phrynosoma blainvillii	coast horned lizard	Reptiles	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	19610511	19610511
Phrynosoma blainvillii	coast horned lizard	Reptiles	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	197408XX	197408XX
Phrynosoma blainvillii	coast horned lizard	Reptiles	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	XXXXXXXX	XXXXXXXX
Phrynosoma blainvillii	coast horned lizard	Reptiles	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	19570414	19570414
Phrynosoma blainvillii	coast horned lizard	Reptiles	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	XXXXXXXX	XXXXXXXX
Phrynosoma blainvillii	coast horned lizard	Reptiles	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	19520415	19520415
Phrynosoma blainvillii	coast horned lizard	Reptiles	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	19600415	19600415
Phrynosoma blainvillii	coast horned lizard	Reptiles	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	1953XXXX	1953XXXX
Phrynosoma blainvillii	coast horned lizard	Reptiles	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	1951XXXX	1951XXXX
Phrynosoma blainvillii	coast horned lizard	Reptiles	None	None		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	19540715	19540715
Chelonia mydas	green turtle	Reptiles	Threatened	None		IUCN_EN-Endangered	2014XXXX	2014XXXX
Southern Coast Live Oak Riparian Forest	Southern Coast Live Oak Riparian Forest	Riparian	None	None			19880608	19880608
Southern Coast Live Oak Riparian Forest	Southern Coast Live Oak Riparian Forest	Riparian	None	None			19880210	19880210
Southern Cottonwood Willow Riparian Forest	Southern Cottonwood Willow Riparian Forest	Riparian	None	None			19880210	19880210
Southern Sycamore Alder Riparian Woodland	Southern Sycamore Alder Riparian Woodland	Riparian	None	None			19780919	19780919
California Walnut Woodland	California Walnut Woodland	Woodland	None	None			19880608	19880608
California Walnut Woodland	California Walnut Woodland	Woodland	None	None			19880210	19880210
California Walnut Woodland	California Walnut Woodland	Woodland	None	None			19880608	19880608
California Walnut Woodland	California Walnut Woodland	Woodland	None	None			19880608	19880608

SciName	ComName	TaxonGroup	FedList	CalList	R Plant Rank	OthrStatus	ElmDate	SiteDate
California Walnut Woodland	California Walnut Woodland	Woodland	None	None			19880210	19880210
California Walnut Woodland	California Walnut Woodland	Woodland	None	None			19780919	19780919
California Walnut Woodland	California Walnut Woodland	Woodland	None	None			19880608	19880608

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Hollywood (3411813) OR Los Angeles (3411812) OR South Gate (3311882) OR El Monte (3411811) OR Whittier (3311881) OR Los Alamitos (3311871) OR La Habra (3311788) OR Anaheim (3311778) OR Orange (3311777))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
American badger *Taxidea taxus*	AMAJF04010	None	None	G5	S3	SSC
American peregrine falcon *Falco peregrinus anatum*	ABNKD06071	Delisted	Delisted	G4T4	S3S4	FP
bank swallow *Riparia riparia*	ABPAU08010	None	Threatened	G5	S2	
Belding's savannah sparrow *Passerculus sandwichensis beldingi*	ABPBX99015	None	Endangered	G5T3	S3	
big free-tailed bat *Nyctinomops macrotis*	AMACD04020	None	None	G5	S3	SSC
Brand's star phacelia *Phacelia stellaris*	PDHYD0C510	None	None	G1	S1	1B.1
Braunton's milk-vetch *Astragalus brauntonii*	PDFAB0F1G0	Endangered	None	G2	S2	1B.1
burrowing owl *Athene cunicularia*	ABNSB10010	None	None	G4	S3	SSC
Busck's gallmoth *Carolella busckana*	IILEM2X090	None	None	G1G3	SH	
California black rail *Laterallus jamaicensis coturniculus*	ABNME03041	None	Threatened	G3G4T1	S1	FP
California glossy snake *Arizona elegans occidentalis*	ARADB01017	None	None	G5T2	S2	SSC
California least tern *Sternula antillarum browni*	ABNNM08103	Endangered	Endangered	G4T2T3Q	S2	FP
California Orcutt grass *Orcuttia californica*	PMPOA4G010	Endangered	Endangered	G1	S1	1B.1
California Walnut Woodland *California Walnut Woodland*	CTT71210CA	None	None	G2	S2.1	
chaparral sand-verbena *Abronia villosa var. aurita*	PDNYC010P1	None	None	G5T2?	S2	1B.1
coast horned lizard *Phrynosoma blainvillii*	ARACF12100	None	None	G3G4	S3S4	SSC
coast woolly-heads *Nemacaulis denudata var. denudata*	PDPGN0G011	None	None	G3G4T2	S2	1B.2
coastal cactus wren *Campylorhynchus brunneicapillus sandiegensis*	ABPBG02095	None	None	G5T3Q	S3	SSC
coastal California gnatcatcher *Polioptila californica californica*	ABPBJ08081	Threatened	None	G4G5T2Q	S2	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
coastal whiptail *Aspidoscelis tigris stejnegeri*	ARACJ02143	None	None	G5T5	S3	SSC
Cooper's hawk *Accipiter cooperii*	ABNKC12040	None	None	G5	S4	WL
Coulter's goldfields *Lasthenia glabrata ssp. coulteri*	PDAST5L0A1	None	None	G4T2	S2	1B.1
Crotch bumble bee *Bombus crotchii*	IIHYM24480	None	Candidate Endangered	G3G4	S1S2	
Davidson's saltscale *Atriplex serenana var. davidsonii*	PDCHE041T1	None	None	G5T1	S1	1B.2
estuary seablite *Suaeda esteroa*	PDCHE0P0D0	None	None	G3	S2	1B.2
ferruginous hawk *Buteo regalis*	ABNKC19120	None	None	G4	S3S4	WL
Gambel's water cress *Nasturtium gambelii*	PDBRA270V0	Endangered	Threatened	G1	S1	1B.1
grasshopper sparrow *Ammodramus savannarum*	ABPBXA0020	None	None	G5	S3	SSC
great blue heron *Ardea herodias*	ABNGA04010	None	None	G5	S4	
Greata's aster *Symphyotrichum greatae*	PDASTE80U0	None	None	G2	S2	1B.3
green turtle *Chelonia mydas*	ARAAA02010	Threatened	None	G3	S1	
hoary bat *Lasiurus cinereus*	AMACC05030	None	None	G5	S4	
Horn's milk-vetch *Astragalus hornii var. hornii*	PDFAB0F421	None	None	GUT1	S1	1B.1
intermediate mariposa-lily *Calochortus weedii var. intermedius*	PMLIL0D1J1	None	None	G3G4T2	S2	1B.2
least Bell's vireo *Vireo bellii pusillus*	ABPBW01114	Endangered	Endangered	G5T2	S2	
Los Angeles sunflower *Helianthus nuttallii ssp. parishii*	PDAST4N102	None	None	G5TH	SH	1A
lucky morning-glory *Calystegia felix*	PDCON040P0	None	None	G1Q	S1	1B.1
many-stemmed dudleya *Dudleya multicaulis*	PDCRA040H0	None	None	G2	S2	1B.2
marsh sandwort *Arenaria paludicola*	PDCAR040L0	Endangered	Endangered	G1	S1	1B.1
mesa horkelia *Horkelia cuneata var. puberula*	PDROS0W045	None	None	G4T1	S1	1B.1

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Mexican long-tongued bat *Choeronycteris mexicana*	AMACB02010	None	None	G4	S1	SSC
monarch - California overwintering population *Danaus plexippus pop. 1*	IILEPP2012	None	None	G4T2T3	S2S3	
mud nama *Nama stenocarpa*	PDHYD0A0H0	None	None	G4G5	S1S2	2B.2
Nevin's barberry *Berberis nevinii*	PDBER060A0	Endangered	Endangered	G1	S1	1B.1
Nuttall's scrub oak *Quercus dumosa*	PDFAG050D0	None	None	G3	S3	1B.1
orange-throated whiptail *Aspidoscelis hyperythra*	ARACJ02060	None	None	G5	S2S3	WL
pallid bat *Antrozous pallidus*	AMACC10010	None	None	G5	S3	SSC
Parish's brittlescale *Atriplex parishii*	PDCHE041D0	None	None	G1G2	S1	1B.1
Parish's gooseberry *Ribes divaricatum var. parishii*	PDGRO020F3	None	None	G5TX	SX	1A
Peruvian dodder *Cuscuta obtusiflora var. glandulosa*	PDCUS01111	None	None	G5T4?	SH	2B.2
Plummer's mariposa-lily *Calochortus plummerae*	PMLIL0D150	None	None	G4	S4	4.2
pocketed free-tailed bat *Nyctinomops femorosaccus*	AMACD04010	None	None	G4	S3	SSC
prostrate vernal pool navarretia *Navarretia prostrata*	PDPLM0C0Q0	None	None	G2	S2	1B.2
quino checkerspot butterfly *Euphydryas editha quino*	IILEPK405L	Endangered	None	G5T1T2	S1S2	
Robinson's pepper-grass *Lepidium virginicum var. robinsonii*	PDBRA1M114	None	None	G5T3	S3	4.3
salt marsh bird's-beak *Chloropyron maritimum ssp. maritimum*	PDSCR0J0C2	Endangered	Endangered	G4?T1	S1	1B.2
salt spring checkerbloom *Sidalcea neomexicana*	PDMAL110J0	None	None	G4	S2	2B.2
San Bernardino aster *Symphyotrichum defoliatum*	PDASTE80C0	None	None	G2	S2	1B.2
sandy beach tiger beetle *Cicindela hirticollis gravida*	IICOL02101	None	None	G5T2	S2	
Santa Ana River woollystar *Eriastrum densifolium ssp. sanctorum*	PDPLM03035	Endangered	Endangered	G4T1	S1	1B.1
Santa Ana sucker *Catostomus santaanae*	AFCJC02190	Threatened	None	G1	S1	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
senile tiger beetle *Cicindela senilis frosti*	IICOL02121	None	None	G2G3T1T3	S1	
silver-haired bat *Lasionycteris noctivagans*	AMACC02010	None	None	G5	S3S4	
south coast marsh vole *Microtus californicus stephensi*	AMAFF11035	None	None	G5T1T2	S1S2	SSC
Southern California Arroyo Chub/Santa Ana Sucker Stream *Southern California Arroyo Chub/Santa Ana Sucker Stream*	CARE2330CA	None	None	GNR	SNR	
southern California legless lizard *Anniella stebbinsi*	ARACC01060	None	None	G3	S3	SSC
southern California rufous-crowned sparrow *Aimophila ruficeps canescens*	ABPBX91091	None	None	G5T3	S3	WL
southern California saltmarsh shrew *Sorex ornatus salicornicus*	AMABA01104	None	None	G5T1?	S1	SSC
Southern Coast Live Oak Riparian Forest *Southern Coast Live Oak Riparian Forest*	CTT61310CA	None	None	G4	S4	
Southern Coastal Salt Marsh *Southern Coastal Salt Marsh*	CTT52120CA	None	None	G2	S2.1	
Southern Cottonwood Willow Riparian Forest *Southern Cottonwood Willow Riparian Forest*	CTT61330CA	None	None	G3	S3.2	
southern mountains skullcap *Scutellaria bolanderi ssp. austromontana*	PDLAM1U0A1	None	None	G4T3	S3	1B.2
Southern Sycamore Alder Riparian Woodland *Southern Sycamore Alder Riparian Woodland*	CTT62400CA	None	None	G4	S4	
southern tarplant *Centromadia parryi ssp. australis*	PDAST4R0P4	None	None	G3T2	S2	1B.1
southwestern willow flycatcher *Empidonax traillii extimus*	ABPAE33043	Endangered	Endangered	G5T2	S1	
steelhead - southern California DPS *Oncorhynchus mykiss irideus pop. 10*	AFCHA0209J	Endangered	None	G5T1Q	S1	
Swainson's hawk *Buteo swainsoni*	ABNKC19070	None	Threatened	G5	S3	
tricolored blackbird *Agelaius tricolor*	ABPBXB0020	None	Threatened	G2G3	S1S2	SSC
Walnut Forest *Walnut Forest*	CTT81600CA	None	None	G1	S1.1	
western beach tiger beetle *Cicindela latesignata latesignata*	IICOL02113	None	None	G2G4T1T2	S1	
western mastiff bat *Eumops perotis californicus*	AMACD02011	None	None	G5T4	S3S4	SSC
western pond turtle *Emys marmorata*	ARAAD02030	None	None	G3G4	S3	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
western spadefoot *Spea hammondii*	AAABF02020	None	None	G3	S3	SSC
western tidal-flat tiger beetle *Cicindela gabbii*	IICOL02080	None	None	G2G4	S1	
western yellow bat *Lasiurus xanthinus*	AMACC05070	None	None	G5	S3	SSC
western yellow-billed cuckoo *Coccyzus americanus occidentalis*	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
white rabbit-tobacco *Pseudognaphalium leucocephalum*	PDAST440C0	None	None	G4	S2	2B.2
white-tailed kite *Elanus leucurus*	ABNKC06010	None	None	G5	S3S4	FP
yellow rail *Coturnicops noveboracensis*	ABNME01010	None	None	G4	S1S2	SSC
yellow warbler *Setophaga petechia*	ABPBX03010	None	None	G5	S3S4	SSC
yellow-breasted chat *Icteria virens*	ABPBX24010	None	None	G5	S3	SSC
Yuma myotis *Myotis yumanensis*	AMACC01020	None	None	G5	S4	

Record Count: 92

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Los Angeles (3411812) OR Hollywood (3411813) OR South Gate (3311882) OR El Monte (3411811) OR Whittier (3311881) OR Los Alamitos (3311871) OR La Habra (3311788) OR Anaheim (3311778) OR Orange (3311777))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
American badger *Taxidea taxus*	AMAJF04010	None	None	G5	S3	SSC
American peregrine falcon *Falco peregrinus anatum*	ABNKD06071	Delisted	Delisted	G4T4	S3S4	FP
bank swallow *Riparia riparia*	ABPAU08010	None	Threatened	G5	S2	
Belding's savannah sparrow *Passerculus sandwichensis beldingi*	ABPBX99015	None	Endangered	G5T3	S3	
big free-tailed bat *Nyctinomops macrotis*	AMACD04020	None	None	G5	S3	SSC
Brand's star phacelia *Phacelia stellaris*	PDHYD0C510	None	None	G1	S1	1B.1
Braunton's milk-vetch *Astragalus brauntonii*	PDFAB0F1G0	Endangered	None	G2	S2	1B.1
burrowing owl *Athene cunicularia*	ABNSB10010	None	None	G4	S3	SSC
Busck's gallmoth *Carolella busckana*	IILEM2X090	None	None	G1G3	SH	
California black rail *Laterallus jamaicensis coturniculus*	ABNME03041	None	Threatened	G3G4T1	S1	FP
California glossy snake *Arizona elegans occidentalis*	ARADB01017	None	None	G5T2	S2	SSC
California least tern *Sternula antillarum browni*	ABNNM08103	Endangered	Endangered	G4T2T3Q	S2	FP
California Orcutt grass *Orcuttia californica*	PMPOA4G010	Endangered	Endangered	G1	S1	1B.1
California Walnut Woodland *California Walnut Woodland*	CTT71210CA	None	None	G2	S2.1	
chaparral sand-verbena *Abronia villosa var. aurita*	PDNYC010P1	None	None	G5T2?	S2	1B.1
coast horned lizard *Phrynosoma blainvillii*	ARACF12100	None	None	G3G4	S3S4	SSC
coast woolly-heads *Nemacaulis denudata var. denudata*	PDPGN0G011	None	None	G3G4T2	S2	1B.2
coastal cactus wren *Campylorhynchus brunneicapillus sandiegensis*	ABPBG02095	None	None	G5T3Q	S3	SSC
coastal California gnatcatcher *Polioptila californica californica*	ABPBJ08081	Threatened	None	G4G5T2Q	S2	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
coastal whiptail *Aspidoscelis tigris stejnegeri*	ARACJ02143	None	None	G5T5	S3	SSC
Cooper's hawk *Accipiter cooperii*	ABNKC12040	None	None	G5	S4	WL
Coulter's goldfields *Lasthenia glabrata ssp. coulteri*	PDAST5L0A1	None	None	G4T2	S2	1B.1
Crotch bumble bee *Bombus crotchii*	IIHYM24480	None	None	G3G4	S1S2	
Davidson's saltscale *Atriplex serenana var. davidsonii*	PDCHE041T1	None	None	G5T1	S1	1B.2
estuary seablite *Suaeda esteroa*	PDCHE0P0D0	None	None	G3	S2	1B.2
ferruginous hawk *Buteo regalis*	ABNKC19120	None	None	G4	S3S4	WL
Gambel's water cress *Nasturtium gambelii*	PDBRA270V0	Endangered	Threatened	G1	S1	1B.1
grasshopper sparrow *Ammodramus savannarum*	ABPBXA0020	None	None	G5	S3	SSC
great blue heron *Ardea herodias*	ABNGA04010	None	None	G5	S4	
Greata's aster *Symphyotrichum greatae*	PDASTE80U0	None	None	G2	S2	1B.3
green turtle *Chelonia mydas*	ARAAA02010	Threatened	None	G3	S1	
hoary bat *Lasiurus cinereus*	AMACC05030	None	None	G5	S4	
intermediate mariposa-lily *Calochortus weedii var. intermedius*	PMLIL0D1J1	None	None	G3G4T2	S2	1B.2
least Bell's vireo *Vireo bellii pusillus*	ABPBW01114	Endangered	Endangered	G5T2	S2	
Los Angeles sunflower *Helianthus nuttallii ssp. parishii*	PDAST4N102	None	None	G5TH	SH	1A
lucky morning-glory *Calystegia felix*	PDCON040P0	None	None	G1Q	S1	1B.1
many-stemmed dudleya *Dudleya multicaulis*	PDCRA040H0	None	None	G2	S2	1B.2
marsh sandwort *Arenaria paludicola*	PDCAR040L0	Endangered	Endangered	G1	S1	1B.1
mesa horkelia *Horkelia cuneata var. puberula*	PDROS0W045	None	None	G4T1	S1	1B.1
Mexican long-tongued bat *Choeronycteris mexicana*	AMACB02010	None	None	G4	S1	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
monarch - California overwintering population *Danaus plexippus pop. 1*	IILEPP2012	None	None	G4T2T3	S2S3	
Nevin's barberry *Berberis nevinii*	PDBER060A0	Endangered	Endangered	G1	S1	1B.1
orange-throated whiptail *Aspidoscelis hyperythra*	ARACJ02060	None	None	G5	S2S3	WL
pallid bat *Antrozous pallidus*	AMACC10010	None	None	G5	S3	SSC
Parish's brittlescale *Atriplex parishii*	PDCHE041D0	None	None	G1G2	S1	1B.1
Parish's gooseberry *Ribes divaricatum var. parishii*	PDGRO020F3	None	None	G5TX	SX	1A
Peruvian dodder *Cuscuta obtusiflora var. glandulosa*	PDCUS01111	None	None	G5T4T5	SH	2B.2
Plummer's mariposa-lily *Calochortus plummerae*	PMLIL0D150	None	None	G4	S4	4.2
pocketed free-tailed bat *Nyctinomops femorosaccus*	AMACD04010	None	None	G4	S3	SSC
prostrate vernal pool navarretia *Navarretia prostrata*	PDPLM0C0Q0	None	None	G2	S2	1B.1
Robinson's pepper-grass *Lepidium virginicum var. robinsonii*	PDBRA1M114	None	None	G5T3	S3	4.3
salt marsh bird's-beak *Chloropyron maritimum ssp. maritimum*	PDSCR0J0C2	Endangered	Endangered	G4?T1	S1	1B.2
salt spring checkerbloom *Sidalcea neomexicana*	PDMAL110J0	None	None	G4	S2	2B.2
San Bernardino aster *Symphyotrichum defoliatum*	PDASTE80C0	None	None	G2	S2	1B.2
sandy beach tiger beetle *Cicindela hirticollis gravida*	IICOL02101	None	None	G5T2	S2	
Santa Ana River woollystar *Eriastrum densifolium ssp. sanctorum*	PDPLM03035	Endangered	Endangered	G4T1	S1	1B.1
Santa Ana sucker *Catostomus santaanae*	AFCJC02190	Threatened	None	G1	S1	
senile tiger beetle *Cicindela senilis frosti*	IICOL02121	None	None	G2G3T1T3	S1	
silver-haired bat *Lasionycteris noctivagans*	AMACC02010	None	None	G5	S3S4	
south coast marsh vole *Microtus californicus stephensi*	AMAFF11035	None	None	G5T1T2	S1S2	SSC
Southern California Arroyo Chub/Santa Ana Sucker Stream *Southern California Arroyo Chub/Santa Ana Sucker Stream*	CARE2330CA	None	None	GNR	SNR	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
southern California legless lizard *Anniella stebbinsi*	ARACC01060	None	None	G3	S3	SSC
southern California rufous-crowned sparrow *Aimophila ruficeps canescens*	ABPBX91091	None	None	G5T3	S3	WL
Southern Coast Live Oak Riparian Forest *Southern Coast Live Oak Riparian Forest*	CTT61310CA	None	None	G4	S4	
Southern Coastal Salt Marsh *Southern Coastal Salt Marsh*	CTT52120CA	None	None	G2	S2.1	
Southern Cottonwood Willow Riparian Forest *Southern Cottonwood Willow Riparian Forest*	CTT61330CA	None	None	G3	S3.2	
southern mountains skullcap *Scutellaria bolanderi ssp. austromontana*	PDLAM1U0A1	None	None	G4T3	S3	1B.2
Southern Sycamore Alder Riparian Woodland *Southern Sycamore Alder Riparian Woodland*	CTT62400CA	None	None	G4	S4	
southern tarplant *Centromadia parryi ssp. australis*	PDAST4R0P4	None	None	G3T2	S2	1B.1
southwestern willow flycatcher *Empidonax traillii extimus*	ABPAE33043	Endangered	Endangered	G5T2	S1	
Swainson's hawk *Buteo swainsoni*	ABNKC19070	None	Threatened	G5	S3	
tricolored blackbird *Agelaius tricolor*	ABPBXB0020	None	Candidate Endangered	G2G3	S1S2	SSC
Walnut Forest *Walnut Forest*	CTT81600CA	None	None	G1	S1.1	
western beach tiger beetle *Cicindela latesignata latesignata*	IICOL02113	None	None	G2G4T1T2	S1	
western mastiff bat *Eumops perotis californicus*	AMACD02011	None	None	G5T4	S3S4	SSC
western pond turtle *Emys marmorata*	ARAAD02030	None	None	G3G4	S3	SSC
western spadefoot *Spea hammondii*	AAABF02020	None	None	G3	S3	SSC
western tidal-flat tiger beetle *Cicindela gabbii*	IICOL02080	None	None	G2G4	S1	
western yellow bat *Lasiurus xanthinus*	AMACC05070	None	None	G5	S3	SSC
western yellow-billed cuckoo *Coccyzus americanus occidentalis*	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
white rabbit-tobacco *Pseudognaphalium leucocephalum*	PDAST440C0	None	None	G4	S2	2B.2
white-tailed kite *Elanus leucurus*	ABNKC06010	None	None	G5	S3S4	FP

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
yellow rail	ABNME01010	None	None	G4	S1S2	SSC
Coturnicops noveboracensis						
yellow warbler	ABPBX03010	None	None	G5	S3S4	SSC
Setophaga petechia						
yellow-breasted chat	ABPBX24010	None	None	G5	S3	SSC
Icteria virens						
Yuma myotis	AMACC01020	None	None	G5	S4	
Myotis yumanensis						

Record Count: 86

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Anaheim (3311778) OR El Monte (3411811) OR Hollywood (3411813) OR Inglewood (3311883) OR Long Beach (3311872) OR Los Alamitos (3311871) OR Los Angeles (3411812) OR South Gate (3311882) OR Whittier (3311881))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
American badger *Taxidea taxus*	AMAJF04010	None	None	G5	S3	SSC
bank swallow *Riparia riparia*	ABPAU08010	None	Threatened	G5	S2	
Belding's savannah sparrow *Passerculus sandwichensis beldingi*	ABPBX99015	None	Endangered	G5T3	S3	
big free-tailed bat *Nyctinomops macrotis*	AMACD04020	None	None	G5	S3	SSC
Brand's star phacelia *Phacelia stellaris*	PDHYD0C510	None	None	G1	S1	1B.1
Braunton's milk-vetch *Astragalus brauntonii*	PDFAB0F1G0	Endangered	None	G2	S2	1B.1
burrowing owl *Athene cunicularia*	ABNSB10010	None	None	G4	S3	SSC
Busck's gallmoth *Carolella busckana*	IILEM2X090	None	None	G1G3	SH	
California brown pelican *Pelecanus occidentalis californicus*	ABNFC01021	Delisted	Delisted	G4T3	S3	FP
California least tern *Sternula antillarum browni*	ABNNM08103	Endangered	Endangered	G4T2T3Q	S2	FP
California Orcutt grass *Orcuttia californica*	PMPOA4G010	Endangered	Endangered	G1	S1	1B.1
California Walnut Woodland *California Walnut Woodland*	CTT71210CA	None	None	G2	S2.1	
chaparral sand-verbena *Abronia villosa var. aurita*	PDNYC010P1	None	None	G5T2T3	S2	1B.1
coast horned lizard *Phrynosoma blainvillii*	ARACF12100	None	None	G3G4	S3S4	SSC
coast woolly-heads *Nemacaulis denudata var. denudata*	PDPGN0G011	None	None	G3G4T2	S2	1B.2
coastal California gnatcatcher *Polioptila californica californica*	ABPBJ08081	Threatened	None	G4G5T2Q	S2	SSC
coastal dunes milk-vetch *Astragalus tener var. titi*	PDFAB0F8R2	Endangered	Endangered	G2T1	S1	1B.1
coastal whiptail *Aspidoscelis tigris stejnegeri*	ARACJ02143	None	None	G5T5	S3	SSC
Coulter's goldfields *Lasthenia glabrata ssp. coulteri*	PDAST5L0A1	None	None	G4T2	S2	1B.1

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Coulter's saltbush *Atriplex coulteri*	PDCHE040E0	None	None	G3	S1S2	1B.2
Crotch bumble bee *Bombus crotchii*	IIHYM24480	None	None	G3G4	S1S2	
Davidson's saltscale *Atriplex serenana var. davidsonii*	PDCHE041T1	None	None	G5T1	S1	1B.2
decumbent goldenbush *Isocoma menziesii var. decumbens*	PDAST57091	None	None	G3G5T2T3	S2	1B.2
estuary seablite *Suaeda esteroa*	PDCHE0P0D0	None	None	G3	S2	1B.2
ferruginous hawk *Buteo regalis*	ABNKC19120	None	None	G4	S3S4	WL
Gambel's water cress *Nasturtium gambelii*	PDBRA270V0	Endangered	Threatened	G1	S1	1B.1
Greata's aster *Symphyotrichum greatae*	PDASTE80U0	None	None	G2	S2	1B.3
green turtle *Chelonia mydas*	ARAAA02010	Threatened	None	G3	S1	
hoary bat *Lasiurus cinereus*	AMACC05030	None	None	G5	S4	
intermediate mariposa-lily *Calochortus weedii var. intermedius*	PMLIL0D1J1	None	None	G3G4T2	S2	1B.2
least Bell's vireo *Vireo bellii pusillus*	ABPBW01114	Endangered	Endangered	G5T2	S2	
Los Angeles sunflower *Helianthus nuttallii ssp. parishii*	PDAST4N102	None	None	G5TH	SH	1A
lucky morning-glory *Calystegia felix*	PDCON040P0	None	None	GHQ	SH	3.1
Lyon's pentachaeta *Pentachaeta lyonii*	PDAST6X060	Endangered	Endangered	G1	S1	1B.1
many-stemmed dudleya *Dudleya multicaulis*	PDCRA040H0	None	None	G2	S2	1B.2
marsh sandwort *Arenaria paludicola*	PDCAR040L0	Endangered	Endangered	G1	S1	1B.1
mesa horkelia *Horkelia cuneata var. puberula*	PDROS0W045	None	None	G4T1	S1	1B.1
monarch - California overwintering population *Danaus plexippus pop. 1*	IILEPP2012	None	None	G4T2T3	S2S3	
Nevin's barberry *Berberis nevinii*	PDBER060A0	Endangered	Endangered	G1	S1	1B.1
Pacific pocket mouse *Perognathus longimembris pacificus*	AMAFD01042	Endangered	None	G5T1	S1	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
pallid bat *Antrozous pallidus*	AMACC10010	None	None	G5	S3	SSC
Parish's brittlescale *Atriplex parishii*	PDCHE041D0	None	None	G1G2	S1	1B.1
Parish's gooseberry *Ribes divaricatum var. parishii*	PDGRO020F3	None	None	G4TH	SH	1A
Peruvian dodder *Cuscuta obtusiflora var. glandulosa*	PDCUS01111	None	None	G5T4T5	SH	2B.2
Plummer's mariposa-lily *Calochortus plummerae*	PMLIL0D150	None	None	G4	S4	4.2
pocketed free-tailed bat *Nyctinomops femorosaccus*	AMACD04010	None	None	G4	S3	SSC
prostrate vernal pool navarretia *Navarretia prostrata*	PDPLM0C0Q0	None	None	G2	S2	1B.1
Robinson's pepper-grass *Lepidium virginicum var. robinsonii*	PDBRA1M114	None	None	G5T3	S3	4.3
round-leaved filaree *California macrophylla*	PDGER01070	None	None	G3?	S3?	1B.2
salt marsh bird's-beak *Chloropyron maritimum ssp. maritimum*	PDSCR0J0C2	Endangered	Endangered	G4?T1	S1	1B.2
Salt Spring checkerbloom *Sidalcea neomexicana*	PDMAL110J0	None	None	G4	S2	2B.2
San Bernardino aster *Symphyotrichum defoliatum*	PDASTE80C0	None	None	G2	S2	1B.2
San Diego button-celery *Eryngium aristulatum var. parishii*	PDAPI0Z042	Endangered	Endangered	G5T1	S1	1B.1
sandy beach tiger beetle *Cicindela hirticollis gravida*	IICOL02101	None	None	G5T2	S2	
senile tiger beetle *Cicindela senilis frosti*	IICOL02121	None	None	G2G3T1T3	S1	
silver-haired bat *Lasionycteris noctivagans*	AMACC02010	None	None	G5	S3S4	
south coast marsh vole *Microtus californicus stephensi*	AMAFF11035	None	None	G5T1T2	S1S2	SSC
southern California rufous-crowned sparrow *Aimophila ruficeps canescens*	ABPBX91091	None	None	G5T3	S2S3	WL
Southern Coastal Salt Marsh *Southern Coastal Salt Marsh*	CTT52120CA	None	None	G2	S2.1	
southern mountains skullcap *Scutellaria bolanderi ssp. austromontana*	PDLAM1U0A1	None	None	G4T3	S3	1B.2
Southern Sycamore Alder Riparian Woodland *Southern Sycamore Alder Riparian Woodland*	CTT62400CA	None	None	G4	S4	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
southern tarplant *Centromadia parryi ssp. australis*	PDAST4R0P4	None	None	G3T2	S2	1B.1
southwestern willow flycatcher *Empidonax traillii extimus*	ABPAE33043	Endangered	Endangered	G5T2	S1	
spreading navarretia *Navarretia fossalis*	PDPLM0C080	Threatened	None	G2	S2	1B.1
Swainson's hawk *Buteo swainsoni*	ABNKC19070	None	Threatened	G5	S3	
tricolored blackbird *Agelaius tricolor*	ABPBXB0020	None	None	G2G3	S1S2	SSC
Walnut Forest *Walnut Forest*	CTT81600CA	None	None	G1	S1.1	
western beach tiger beetle *Cicindela latesignata latesignata*	IICOL02113	None	None	G2G4T1T2	S1	
western mastiff bat *Eumops perotis californicus*	AMACD02011	None	None	G5T4	S3S4	SSC
western pond turtle *Emys marmorata*	ARAAD02030	None	None	G3G4	S3	SSC
western spadefoot *Spea hammondii*	AAABF02020	None	None	G3	S3	SSC
western tidal-flat tiger beetle *Cicindela gabbii*	IICOL02080	None	None	G2G4	S1	
western yellow bat *Lasiurus xanthinus*	AMACC05070	None	None	G5	S3	SSC
western yellow-billed cuckoo *Coccyzus americanus occidentalis*	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
white rabbit-tobacco *Pseudognaphalium leucocephalum*	PDAST440C0	None	None	G4	S2	2B.2

Record Count: 75

CALIFORNIA DEPARTMENT OF FISH and WILDLIFE **RareFind**

Query Summary:
Quad IS (Anaheim (3311778) OR El Monte (3411811) OR Hollywood (3411813) OR La Habra (3311788) OR Los Alamitos (3311871) OR Los Angeles (3411812) OR Orange (3311777) OR South Gate (3311882) OR Whittier (3311881))

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CNDDB Element Query Results

Scientific Name	Common Name	Taxonomic Group	Element Code	Total Occs	Returned Occs	Federal Status	State Status	Global Rank	State Rank	CA Rare Plant Rank	Other Status	Habitats
Abronia villosa var. aurita	chaparral sand-verbena	Dicots	PDNYC010P1	81	3	None	None	G5T2T3	S2	1B.1	BLM_S-Sensitive, USFS_S-Sensitive	Chaparral, Coastal scrub, Desert dunes
Accipiter cooperii	Cooper's hawk	Birds	ABNKC12040	104	1	None	None	G5	S4	null	CDFW_WL-Watch List, IUCN_LC-Least Concern	Cismontane woodland, Riparian forest, Riparian woodland, Upper montane coniferous forest
Agelaius tricolor	tricolored blackbird	Birds	ABPBXB0020	781	2	None	None	G2G3	S1S2	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_EN-Endangered, NABCI_RWL-Red Watch List, USFWS_BCC-Birds of Conservation Concern	Freshwater marsh, Marsh & swamp, Swamp, Wetland
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	Birds	ABPBX91091	197	1	None	None	G5T3	S2S3	null	CDFW_WL-Watch List	Chaparral, Coastal scrub
Antrozous pallidus	pallid bat	Mammals	AMACC10010	403	3	None	None	G5	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive, WBWG_H-High Priority	Chaparral, Coastal scrub, Desert wash, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Riparian woodland, Sonoran desert scrub, Upper montane coniferous forest, Valley & foothill grassland
Ardea herodias	great blue heron	Birds	ABNGA04010	137	1	None	None	G5	S4	null	CDF_S-Sensitive, IUCN_LC-Least Concern	Brackish marsh, Estuary, Freshwater marsh, Marsh & swamp, Riparian forest, Wetland
Arenaria paludicola	marsh sandwort	Dicots	PDCAR040L0	16	1	Endangered	Endangered	G1	S1	1B.1	SB_SBBG-Santa Barbara Botanic Garden	Freshwater marsh, Marsh & swamp, Wetland
Aspidoscelis hyperythra	orangethroat whiptail	Reptiles	ARACJ02060	347	2	None	None	G5	S2S3	null	CDFW_WL-Watch List, IUCN_LC-Least Concern, USFS_S-Sensitive	Chaparral, Cismontane woodland, Coastal scrub
Aspidoscelis tigris stejnegeri	coastal whiptail	Reptiles	ARACJ02143	114	3	None	None	G5T5	S3	null	CDFW_SSC-Species of Special Concern	null
Astragalus brauntonii	Braunton's milk-vetch	Dicots	PDFAB0F1G0	42	1	Endangered	None	G2	S2	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden	Chaparral, Coastal scrub, Limestone, Valley & foothill grassland
Astragalus tener var. titi	coastal dunes milk-vetch	Dicots	PDFAB0F8R2	6	1	Endangered	Endangered	G2T1	S1	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	Coastal bluff scrub, Coastal dunes, Coastal prairie

Athene cunicularia	burrowing owl	Birds	ABNSB10010	1887	4	None	None	G4	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern	Coastal prairie, Coastal scrub, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, Valley & foothill grassland
Atriplex parishii	Parish's brittlescale	Dicots	PDCHE041D0	16	1	None	None	G1G2	S1	1B.1	USFS_S-Sensitive	Alkali playa, Chenopod scrub, Meadow & seep, Vernal pool, Wetland
Atriplex serenana var. davidsonii	Davidson's saltscale	Dicots	PDCHE041T1	28	2	None	None	G5T1	S1	1B.2	null	Coastal bluff scrub, Coastal scrub
Berberis nevinii	Nevin's barberry	Dicots	PDBER060A0	31	1	Endangered	Endangered	G1	S1	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden	Chaparral, Cismontane woodland, Coastal scrub, Riparian scrub
Bombus crotchii	Crotch bumble bee	Insects	IIHYM24480	232	6	None	None	G3G4	S1S2	null	null	null
Buteo regalis	ferruginous hawk	Birds	ABNKC19120	105	1	None	None	G4	S3S4	null	CDFW_WL-Watch List, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern	Great Basin grassland, Great Basin scrub, Pinon & juniper woodlands, Valley & foothill grassland
Buteo swainsoni	Swainson's hawk	Birds	ABNKC19070	2401	2	None	Threatened	G5	S3	null	BLM_S-Sensitive, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern	Great Basin grassland, Riparian forest, Riparian woodland, Valley & foothill grassland
California Walnut Woodland	California Walnut Woodland	Woodland	CTT71210CA	76	7	None	None	G2	S2.1	null	null	Cismontane woodland
California macrophylla	round-leaved filaree	Dicots	PDGER01070	162	1	None	None	G3?	S3?	1B.2	BLM_S-Sensitive, SB_RSABG-Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden	Cismontane woodland, Valley & foothill grassland
Calochortus plummerae	Plummer's mariposa-lily	Monocots	PMLIL0D150	230	7	None	None	G4	S4	4.2	SB_RSABG-Rancho Santa Ana Botanic Garden	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Valley & foothill grassland
Calochortus weedii var. intermedius	intermediate mariposa-lily	Monocots	PMLIL0D1J1	138	6	None	None	G3G4T2	S2	1B.2	SB_RSABG-Rancho Santa Ana Botanic Garden, USFS_S-Sensitive	Chaparral, Coastal scrub, Valley & foothill grassland
Calystegia felix	lucky morning-glory	Dicots	PDCON040P0	9	3	None	None	GHQ	SH	3.1	null	Meadow & seep, Riparian scrub
Campylorhynchus brunneicapillus sandiegensis	coastal cactus wren	Birds	ABPBG02095	151	6	None	None	G5T3Q	S3	null	CDFW_SSC-Species of Special Concern, USFS_S-Sensitive, USFWS_BCC-Birds of Conservation Concern	Coastal scrub
Carolella busckana	Busck's gallmoth	Insects	IILEM2X090	4	1	None	None	G1G3	SH	null	null	Coastal dunes, Coastal scrub
Catostomus santaanae	Santa Ana sucker	Fish	AFCJC02190	27	4	Threatened	None	G1	S1	null	AFS_TH-Threatened, IUCN_VU-Vulnerable	Aquatic, South coast flowing waters
Centromadia parryi ssp. australis	southern tarplant	Dicots	PDAST4R0P4	87	14	None	None	G3T2	S2	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	Marsh & swamp, Salt marsh, Valley & foothill grassland, Vernal pool, Wetland
Charina trivirgata	rosy boa	Reptiles	ARADA01020	48	1	None	None	G4G5	S3S4	null		

											IUCN_LC-Least Concern, USFS_S-Sensitive	Chaparral, Mojavean desert scrub, Sonoran desert scrub
Chelonia mydas	green turtle	Reptiles	ARAAA02010	2	1	Threatened	None	G3	S1	null	IUCN_EN-Endangered	Marine bay
Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	Dicots	PDSCR0J0C2	27	1	Endangered	Endangered	G4?T1	S1	1B.2	SB_RSABG-Rancho Santa Ana Botanic Garden	Coastal dunes, Marsh & swamp, Salt marsh, Wetland
Choeronycteris mexicana	Mexican long-tongued bat	Mammals	AMACB02010	14	1	None	None	G4	S1	null	CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened, WBWG_H-High Priority	Pinon & juniper woodlands, Riparian scrub, Sonoran thorn woodland
Cicindela gabbii	western tidal-flat tiger beetle	Insects	IICOL02080	9	2	None	None	G2G4	S1	null	null	Estuary, Mud shore/flats
Cicindela hirticollis gravida	sandy beach tiger beetle	Insects	IICOL02101	34	2	None	None	G5T2	S2	null	null	Coastal dunes
Cicindela latesignata latesignata	western beach tiger beetle	Insects	IICOL02113	15	2	None	None	G2G4T1T2	S1	null	null	Mud shore/flats
Cicindela senilis frosti	senile tiger beetle	Insects	IICOL02121	9	1	None	None	G2G3T1T3	S1	null	null	Mud shore/flats, Wetland
Coccyzus americanus occidentalis	western yellow-billed cuckoo	Birds	ABNRB02022	155	5	Threatened	Endangered	G5T2T3	S1	null	BLM_S-Sensitive, NABCI_RWL-Red Watch List, USFS_S-Sensitive, USFWS_BCC-Birds of Conservation Concern	Riparian forest
Cuscuta obtusiflora var. glandulosa	Peruvian dodder	Dicots	PDCUS01111	6	1	None	None	G5T4T5	SH	2B.2	null	Marsh & swamp, Wetland
Danaus plexippus pop. 1	monarch - California overwintering population	Insects	IILEPP2012	378	2	None	None	G4T2T3	S2S3	null	USFS_S-Sensitive	Closed-cone coniferous forest
Dudleya multicaulis	many-stemmed dudleya	Dicots	PDCRA040H0	147	4	None	None	G2	S2	1B.2	BLM_S-Sensitive, SB_RSABG-Rancho Santa Ana Botanic Garden, USFS_S-Sensitive	Chaparral, Coastal scrub, Valley & foothill grassland
Elanus leucurus	white-tailed kite	Birds	ABNKC06010	162	4	None	None	G5	S3S4	null	BLM_S-Sensitive, CDFW_FP-Fully Protected, IUCN_LC-Least Concern	Cismontane woodland, Marsh & swamp, Riparian woodland, Valley & foothill grassland, Wetland
Empidonax traillii extimus	southwestern willow flycatcher	Birds	ABPAE33043	70	3	Endangered	Endangered	G5T2	S1	null	NABCI_RWL-Red Watch List	Riparian woodland
Emys marmorata	western pond turtle	Reptiles	ARAAD02030	1159	9	None	None	G3G4	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable, USFS_S-Sensitive	Aquatic, Artificial flowing waters, Klamath/North coast flowing waters, Klamath/North coast standing waters, Marsh & swamp, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South coast flowing waters, South coast standing waters, Wetland
Eriastrum densifolium ssp. sanctorum	Santa Ana River woollystar	Dicots	PDPLM03035	30	1	Endangered	Endangered	G4T1	S1	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	Chaparral, Coastal scrub
Eumops perotis californicus	western mastiff bat	Mammals	AMACD02011	293	8	None	None	G5T4	S3S4	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, WBWG_H-High Priority	Chaparral, Cismontane woodland, Coastal scrub, Valley & foothill grassland

Helianthus nuttallii ssp. parishii	Los Angeles sunflower	Dicots	PDAST4N102	8	2	None	None	G5TH	SH	1A	null	Freshwater marsh, Marsh & swamp, Salt marsh, Wetland
Horkelia cuneata var. puberula	mesa horkelia	Dicots	PDROS0W045	103	3	None	None	G4T1	S1	1B.1	USFS_S-Sensitive	Chaparral, Cismontane woodland, Coastal scrub
Icteria virens	yellow-breasted chat	Birds	ABPBX24010	87	1	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Riparian forest, Riparian scrub, Riparian woodland
Lasionycteris noctivagans	silver-haired bat	Mammals	AMACC02010	138	1	None	None	G5	S3S4	null	IUCN_LC-Least Concern, WBWG_M-Medium Priority	Lower montane coniferous forest, Oldgrowth, Riparian forest
Lasiurus cinereus	hoary bat	Mammals	AMACC05030	235	5	None	None	G5	S4	null	IUCN_LC-Least Concern, WBWG_M-Medium Priority	Broadleaved upland forest, Cismontane woodland, Lower montane coniferous forest, North coast coniferous forest
Lasiurus xanthinus	western yellow bat	Mammals	AMACC05070	57	1	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, WBWG_H-High Priority	Desert wash
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Dicots	PDAST5L0A1	97	7	None	None	G4T2	S2	1B.1	BLM_S-Sensitive, SB_RSABG-Rancho Santa Ana Botanic Garden	Alkali playa, Marsh & swamp, Salt marsh, Vernal pool, Wetland
Lepidium virginicum var. robinsonii	Robinson's pepper-grass	Dicots	PDBRA1M114	142	1	None	None	G5T3	S3	4.3	null	Chaparral, Coastal scrub
Microtus californicus stephensi	south coast marsh vole	Mammals	AMAFF11035	7	1	None	None	G5T1T2	S1S2	null	CDFW_SSC-Species of Special Concern	null
Myotis yumanensis	Yuma myotis	Mammals	AMACC01020	260	1	None	None	G5	S4	null	BLM_S-Sensitive, IUCN_LC-Least Concern, WBWG_LM-Low-Medium Priority	Lower montane coniferous forest, Riparian forest, Riparian woodland, Upper montane coniferous forest
Nasturtium gambelii	Gambel's water cress	Dicots	PDBRA270V0	12	1	Endangered	Threatened	G1	S1	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden	Brackish marsh, Freshwater marsh, Marsh & swamp, Wetland
Navarretia prostrata	prostrate vernal pool navarretia	Dicots	PDPLM0C0Q0	60	3	None	None	G2	S2	1B.1	null	Coastal scrub, Meadow & seep, Valley & foothill grassland, Vernal pool, Wetland
Nemacaulis denudata var. denudata	coast woolly-heads	Dicots	PDPGN0G011	37	1	None	None	G3G4T2	S2	1B.2	SB_RSABG-Rancho Santa Ana Botanic Garden	Coastal dunes
Nyctinomops femorosaccus	pocketed free-tailed bat	Mammals	AMACD04010	90	1	None	None	G4	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, WBWG_M-Medium Priority	Joshua tree woodland, Pinon & juniper woodlands, Riparian scrub, Sonoran desert scrub
Nyctinomops macrotis	big free-tailed bat	Mammals	AMACD04020	32	1	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, WBWG_MH-Medium-High Priority	null
Orcuttia californica	California Orcutt grass	Monocots	PMPOA4G010	37	2	Endangered	Endangered	G1	S1	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	Vernal pool, Wetland
		Birds	ABPBX99015	36	1	None	Endangered	G5T3	S3	null	null	

Passerculus sandwichensis beldingi	Belding's savannah sparrow											Marsh & swamp, Wetland
Phacelia stellaris	Brand's star phacelia	Dicots	PDHYD0C510	15	3	None	None	G1	S1	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	Coastal dunes, Coastal scrub
Phrynosoma blainvillii	coast horned lizard	Reptiles	ARACF12100	731	14	None	None	G3G4	S3S4	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Chaparral, Cismontane woodland, Coastal bluff scrub, Coastal scrub, Desert wash, Pinon & juniper woodlands, Riparian scrub, Riparian woodland, Valley & foothill grassland
Polioptila californica californica	coastal California gnatcatcher	Birds	ABPBJ08081	814	44	Threatened	None	G4G5T2Q	S2	null	CDFW_SSC-Species of Special Concern, NABCI_YWL-Yellow Watch List	Coastal bluff scrub, Coastal scrub
Pseudognaphalium leucocephalum	white rabbit-tobacco	Dicots	PDAST440C0	15	1	None	None	G4	S2	2B.2	null	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland
Ribes divaricatum var. parishii	Parish's gooseberry	Dicots	PDGRO020F3	4	3	None	None	G4TH	SH	1A	null	Riparian woodland
Riparia riparia	bank swallow	Birds	ABPAU08010	296	2	None	Threatened	G5	S2	null	BLM_S-Sensitive, IUCN_LC-Least Concern	Riparian scrub, Riparian woodland
Scutellaria bolanderi ssp. austromontana	southern mountains skullcap	Dicots	PDLAM1U0A1	32	1	None	None	G4T3	S3	1B.2	USFS_S-Sensitive	Chaparral, Cismontane woodland, Lower montane coniferous forest
Sidalcea neomexicana	Salt Spring checkerbloom	Dicots	PDMAL110J0	15	2	None	None	G4	S2	2B.2	USFS_S-Sensitive	Alkali playa, Chaparral, Coastal scrub, Lower montane coniferous forest, Mojavean desert scrub, Wetland
Southern California Arroyo Chub/Santa Ana Sucker Stream	Southern California Arroyo Chub/Santa Ana Sucker Stream	Inland Waters	CARE2330CA	4	1	None	None	GNR	SNR	null	null	null
Southern Coast Live Oak Riparian Forest	Southern Coast Live Oak Riparian Forest	Riparian	CTT61310CA	246	2	None	None	G4	S4	null	null	Riparian forest
Southern Coastal Salt Marsh	Southern Coastal Salt Marsh	Marsh	CTT52120CA	24	1	None	None	G2	S2.1	null	null	Marsh & swamp, Wetland
Southern Cottonwood Willow Riparian Forest	Southern Cottonwood Willow Riparian Forest	Riparian	CTT61330CA	111	1	None	None	G3	S3.2	null	null	Riparian forest
Southern Sycamore Alder Riparian Woodland	Southern Sycamore Alder Riparian Woodland	Riparian	CTT62400CA	230	1	None	None	G4	S4	null	null	Riparian woodland
Spea hammondii	western spadefoot	Amphibians	AAABF02020	429	1	None	None	G3	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened	Cismontane woodland, Coastal scrub, Valley & foothill grassland, Vernal pool, Wetland
Sternula antillarum browni	California least tern	Birds	ABNNM08103	68	2	Endangered	Endangered	G4T2T3Q	S2	null	CDFW_FP-Fully Protected, NABCI_RWL-Red Watch List	Alkali playa, Wetland
Suaeda esteroa	estuary seablite	Dicots	PDCHE0P0D0	23	1	None	None	G3	S2	1B.2	null	Marsh & swamp, Salt marsh, Wetland

Symphyotrichum defoliatum	San Bernardino aster	Dicots	PDASTE80C0	76	6	None	None	G2	S2	1B.2	BLM_S-Sensitive, USFS_S-Sensitive	Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Marsh & swamp, Meadow & seep, Valley & foothill grassland
Symphyotrichum greatae	Greata's aster	Dicots	PDASTE80U0	56	2	None	None	G2	S2	1B.3	BLM_S-Sensitive	Broadleaved upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Riparian woodland
Taxidea taxus	American badger	Mammals	AMAJF04010	493	2	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Alkali marsh, Alkali playa, Alpine, Alpine dwarf scrub, Bog & fen, Brackish marsh, Broadleaved upland forest, Chaparral, Chenopod scrub, Cismontane woodland, Closed-cone coniferous forest, Coastal bluff scrub, Coastal dunes, Coastal prairie, Coastal scrub, Desert dunes, Desert wash, Freshwater marsh, Great Basin grassland, Great Basin scrub, Interior dunes, Ione formation, Joshua tree woodland, Limestone, Lower montane coniferous forest, Marsh & swamp, Meadow & seep, Mojavean desert scrub, Montane dwarf scrub, North coast coniferous forest, Oldgrowth, Pavement plain, Redwood, Riparian forest, Riparian scrub, Riparian woodland, Salt marsh, Sonoran desert scrub, Sonoran thorn woodland, Ultramafic, Upper montane coniferous forest, Upper Sonoran scrub, Valley & foothill grassland
Vireo bellii pusillus	least Bell's vireo	Birds	ABPBW01114	468	19	Endangered	Endangered	G5T2	S2	null	IUCN_NT-Near Threatened, NABCI_YWL-Yellow Watch List	Riparian forest, Riparian scrub, Riparian woodland
Walnut Forest	Walnut Forest	Forest	CTT81600CA	6	1	None	None	G1	S1.1	null	null	Broadleaved upland forest

CALIFORNIA NATIVE PLANT SOCIETY

CNPS Rare Plant Inventory

Search Results

49 matches found. Click on scientific name for details

Search Criteria: Quad is one of [**3411812:3311882:3411811:3311881:3311871:3311788:3311778:3311777:3411813**]

▲ 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
Abronia villosa var. *aurita*	chaparral sand-verbena	Nyctaginaceae	annual herb	(Jan)Mar-Sep	None	None	G5T2?	S2	1B.1		2001-01-01	 © 2011 Aaron E. Sims
Arenaria paludicola	marsh sandwort	Caryophyllaceae	perennial stoloniferous herb	May-Aug	FE	CE	G1	S1	1B.1		1984-01-01	No Photo Available
Astragalus brauntonii	Braunton's milk-vetch	Fabaceae	perennial herb	Jan-Aug	FE	None	G2	S2	1B.1	Yes	1974-01-01	 © 2009 Thomas Stoughton
Astragalus hornii var. *hornii*	Horn's milk-vetch	Fabaceae	annual herb	May-Oct	None	None	GUT1	S1	1B.1		2006-12-01	No Photo Available
Atriplex parishii	Parish's brittlescale	Chenopodiaceae	annual herb	Jun-Oct	None	None	G1G2	S1	1B.1		1988-01-01	No Photo Available
Atriplex serenana var. *davidsonii*	Davidson's saltscale	Chenopodiaceae	annual herb	Apr-Oct	None	None	G5T1	S1	1B.2		1994-01-01	No Photo Available
Berberis nevinii	Nevin's barberry	Berberidaceae	perennial evergreen shrub	(Feb)Mar-Jun	FE	CE	G1	S1	1B.1	Yes	1980-01-01	No Photo Available
Calochortus catalinae	Catalina mariposa lily	Liliaceae	perennial bulbiferous herb	(Feb)Mar-Jun	None	None	G3G4	S3S4	4.2	Yes	1974-01-01	No Photo Available
Calochortus plummerae	Plummer's mariposa-lily	Liliaceae	perennial bulbiferous herb	May-Jul	None	None	G4	S4	4.2	Yes	1994-01-01	No Photo Available
Calochortus weedii var. *intermedius*	intermediate mariposa-lily	Liliaceae	perennial bulbiferous herb	May-Jul	None	None	G3G4T3	S3	1B.2	Yes	1994-01-01	No Photo Available

Calystegia felix	lucky morning-glory	Convolvulaceae	annual rhizomatous herb	Mar-Sep	None	None	G1Q	S1	1B.1	Yes	2014-07-16	No Photo Available
Camissoniopsis lewisii	Lewis' evening-primrose	Onagraceae	annual herb	Mar-May(Jun)	None	None	G4	S4	3		1994-01-01	No Photo Available
Centromadia parryi ssp. *australis*	southern tarplant	Asteraceae	annual herb	May-Nov	None	None	G3T2	S2	1B.1		1994-01-01	No Photo Available
Chloropyron maritimum ssp. *maritimum*	salt marsh bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	May-Oct(Nov)	FE	CE	G4?T1	S1	1B.2		1974-01-01	No Photo Available
Clinopodium mimuloides	monkey-flower savory	Lamiaceae	perennial herb	Jun-Oct	None	None	G3	S3	4.2	Yes	2007-05-04	No Photo Available
Convolvulus simulans	small-flowered morning-glory	Convolvulaceae	annual herb	Mar-Jul	None	None	G4	S4	4.2		1994-01-01	No Photo Available
Cuscuta obtusiflora var. *glandulosa*	Peruvian dodder	Convolvulaceae	annual vine (parasitic)	Jul-Oct	None	None	G5T4?	SH	2B.2		2011-08-24	No Photo Available
Deinandra paniculata	paniculate tarplant	Asteraceae	annual herb	(Mar)Apr-Nov	None	None	G4	S4	4.2		2001-01-01	No Photo Available
Dodecahema leptoceras	slender-horned spineflower	Polygonaceae	annual herb	Apr-Jun	FE	CE	G1	S1	1B.1	Yes	1980-01-01	No Photo Available
Dudleya multicaulis	many-stemmed dudleya	Crassulaceae	perennial herb	Apr-Jul	None	None	G2	S2	1B.2	Yes	1974-01-01	No Photo Available
Eriastrum densifolium ssp. *sanctorum*	Santa Ana River woollystar	Polemoniaceae	perennial herb	Apr-Sep	FE	CE	G4T1	S1	1B.1	Yes	1980-01-01	No Photo Available
Helianthus nuttallii ssp. *parishii*	Los Angeles sunflower	Asteraceae	perennial rhizomatous herb	Aug-Oct	None	None	G5TX	SX	1A	Yes	1974-01-01	No Photo Available
Hordeum intercedens	vernal barley	Poaceae	annual herb	Mar-Jun	None	None	G3G4	S3S4	3.2		1994-01-01	No Photo Available
Horkelia cuneata var. *puberula*	mesa horkelia	Rosaceae	perennial herb	Feb-Jul(Sep)	None	None	G4T1	S1	1B.1	Yes	2001-01-01	 © 2008 Tony Morosco

Juglans californica	Southern California black walnut	Juglandaceae	perennial deciduous tree	Mar-Aug	None	None	G4	S4	4.2	Yes	1994-01-01	 © 2020 Zoya Akulova
Juncus acutus ssp. *leopoldii*	southwestern spiny rush	Juncaceae	perennial rhizomatous herb	(Mar)May-Jun	None	None	G5T5	S4	4.2		1988-01-01	 © 2019 Belinda Lo
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	Asteraceae	annual herb	Feb-Jun	None	None	G4T2	S2	1B.1		1994-01-01	 © 2013 Keir Morse
Lepidium virginicum var. *robinsonii*	Robinson's pepper-grass	Brassicaceae	annual herb	Jan-Jul	None	None	G5T3	S3	4.3		1994-01-01	 © 2015 Keir Morse
Lycium californicum	California box-thorn	Solanaceae	perennial shrub	Mar-Aug(Dec)	None	None	G4	S4	4.2		2001-01-01	No Photo Available
Nama stenocarpa	mud nama	Namaceae	annual/perennial herb	Jan-Jul	None	None	G4G5	S1S2	2B.2		1994-01-01	No Photo Available
Nasturtium gambelii	Gambel's water cress	Brassicaceae	perennial rhizomatous herb	Apr-Oct	FE	CT	G1	S1	1B.1		1980-01-01	No Photo Available
Navarretia prostrata	prostrate vernal pool navarretia	Polemoniaceae	annual herb	Apr-Jul	None	None	G2	S2	1B.2	Yes	2001-01-01	No Photo Available
Nemacaulis denudata var. *denudata*	coast woolly-heads	Polygonaceae	annual herb	Apr-Sep	None	None	G3G4T2	S2	1B.2		1994-01-01	No Photo Available
Orcuttia californica	California Orcutt grass	Poaceae	annual herb	Apr-Aug	FE	CE	G1	S1	1B.1		1974-01-01	No Photo Available
Phacelia hubbyi	Hubby's phacelia	Hydrophyllaceae	annual herb	Apr-Jul	None	None	G4	S4	4.2	Yes	2007-02-02	No Photo Available
Phacelia ramosissima var. *austrolitoralis*	south coast branching phacelia	Hydrophyllaceae	perennial herb	Mar-Aug	None	None	G5?T3Q	S3	3.2		2007-05-17	No Photo Available
Phacelia stellaris	Brand's star phacelia	Hydrophyllaceae	annual herb	Mar-Jun	None	None	G1	S1	1B.1		1994-01-01	No Photo Available
Pseudognaphalium leucocephalum	white rabbit-tobacco	Asteraceae	perennial herb	(Jul)Aug-Nov(Dec)	None	None	G4	S2	2B.2		2006-11-03	No Photo Available

Quercus dumosa	Nuttall's scrub oak	Fagaceae	perennial evergreen shrub	Feb-Apr(May-Aug)	None	None	G3	S3	1B.1		1994-01-01	No Photo Available
Quercus engelmannii	Engelmann oak	Fagaceae	perennial deciduous tree	Mar-Jun	None	None	G3	S3	4.2		1988-01-01	No Photo Available
Ribes divaricatum var. *parishii*	Parish's gooseberry	Grossulariaceae	perennial deciduous shrub	Feb-Apr	None	None	G5TX	SX	1A	Yes	1988-01-01	No Photo Available
Romneya coulteri	Coulter's matilija poppy	Papaveraceae	perennial rhizomatous herb	Mar-Jul(Aug)	None	None	G4	S4	4.2		1974-01-01	No Photo Available
Sagittaria sanfordii	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May-Oct(Nov)	None	None	G3	S3	1B.2	Yes	1984-01-01	 ©2013 Debra L. Cook
Scutellaria bolanderi ssp. *austromontana*	southern mountains skullcap	Lamiaceae	perennial rhizomatous herb	Jun-Aug	None	None	G4T3	S3	1B.2	Yes	1994-01-01	No Photo Available
Sidalcea neomexicana	salt spring checkerbloom	Malvaceae	perennial herb	Mar-Jun	None	None	G4	S2	2B.2		1994-01-01	No Photo Available
Suaeda esteroa	estuary seablite	Chenopodiaceae	perennial herb	(Jan-May)Jul-Oct	None	None	G3	S2	1B.2		1984-01-01	No Photo Available
Suaeda taxifolia	woolly seablite	Chenopodiaceae	perennial evergreen shrub	Jan-Dec	None	None	G4	S4	4.2		1994-01-01	No Photo Available
Symphyotrichum defoliatum	San Bernardino aster	Asteraceae	perennial rhizomatous herb	Jul-Nov	None	None	G2	S2	1B.2	Yes	2004-01-01	No Photo Available
Symphyotrichum greatae	Greata's aster	Asteraceae	perennial rhizomatous herb	Jun-Oct	None	None	G2	S2	1B.3	Yes	1974-01-01	No Photo Available

Showing 1 to 49 of 49 entries

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CNPS California Native Plant Society

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

Plant List

24 matches found. *Click on scientific name for details*

Search Criteria

State Rank is one of [S1, S2], Found in Quads 3411813, 3411812, 3311882, 3411811, 3311881, 3311871, 3311788 3311778 and 3311777;

Modify Search Criteria | Export to Excel | Modify Columns | Modify Sort | Display Photos

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
Abronia villosa var. aurita	chaparral sand-verbena	Nyctaginaceae	annual herb	(Jan)Mar-Sep	1B.1	S2	G5T2?
Arenaria paludicola	marsh sandwort	Caryophyllaceae	perennial stoloniferous herb	May-Aug	1B.1	S1	G1
Astragalus brauntonii	Braunton's milk-vetch	Fabaceae	perennial herb	Jan-Aug	1B.1	S2	G2
Astragalus pycnostachyus var. lanosissimus	Ventura marsh milk-vetch	Fabaceae	perennial herb	(Jun)Aug-Oct	1B.1	S1	G2T1
Atriplex parishii	Parish's brittlescale	Chenopodiaceae	annual herb	Jun-Oct	1B.1	S1	G1G2
Atriplex serenana var. davidsonii	Davidson's saltscale	Chenopodiaceae	annual herb	Apr-Oct	1B.2	S1	G5T1
Berberis nevinii	Nevin's barberry	Berberidaceae	perennial evergreen shrub	(Feb)Mar-Jun	1B.1	S1	G1
Calochortus weedii var. intermedius	intermediate mariposa lily	Liliaceae	perennial bulbiferous herb	May-Jul	1B.2	S2	G3G4T2
Calystegia felix	lucky morning-glory	Convolvulaceae	annual rhizomatous herb	Mar-Sep	1B.1	S1	G1Q
Centromadia parryi ssp. australis	southern tarplant	Asteraceae	annual herb	May-Nov	1B.1	S2	G3T2
Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	May-Oct(Nov)	1B.2	S1	G4?T1
Chorizanthe parryi var. fernandina	San Fernando Valley spineflower	Polygonaceae	annual herb	Apr-Jul	1B.1	S1	G2T1
Dudleya multicaulis	many-stemmed dudleya	Crassulaceae	perennial herb	Apr-Jul	1B.2	S2	G2
Horkelia cuneata var. puberula	mesa horkelia	Rosaceae	perennial herb	Feb-Jul(Sep)	1B.1	S1	G4T1
	Coulter's goldfields	Asteraceae	annual herb	Feb-Jun	1B.1	S2	G4T2

Lasthenia glabrata ssp. coulteri							
Nasturtium gambelii	Gambel's water cress	Brassicaceae	perennial rhizomatous herb	Apr-Oct	1B.1	S1	G1
Navarretia prostrata	prostrate vernal pool navarretia	Polemoniaceae	annual herb	Apr-Jul	1B.1	S2	G2
Orcuttia californica	California Orcutt grass	Poaceae	annual herb	Apr-Aug	1B.1	S1	G1
Phacelia stellaris	Brand's star phacelia	Hydrophyllaceae	annual herb	Mar-Jun	1B.1	S1	G1
Pseudognaphalium leucocephalum	white rabbit-tobacco	Asteraceae	perennial herb	(Jul)Aug-Nov(Dec)	2B.2	S2	G4
Sidalcea neomexicana	salt spring checkerbloom	Malvaceae	perennial herb	Mar-Jun	2B.2	S2	G4
Suaeda esteroa	estuary seablite	Chenopodiaceae	perennial herb	(May)Jul-Oct(Jan)	1B.2	S2	G3
Symphyotrichum defoliatum	San Bernardino aster	Asteraceae	perennial rhizomatous herb	Jul-Nov(Dec)	1B.2	S2	G2
Symphyotrichum greatae	Greata's aster	Asteraceae	perennial rhizomatous herb	Jun-Oct	1B.3	S2	G2

Suggested Citation

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APPENDIX D: BIOLOGICAL RESOURCES FIELD SURVEY DATES

APPENDIX D: BIOLOGICAL RESOURCES FIELD SURVEY DATES

Table D-1 Biological Resources Field Survey Dates

Survey Dates	Personnel
Reconnaissance Field Trip	
May 2007 through February 2010	Kim Boydstun
	James Hickman
	Paul Schwartz
June 22, 2015	James Hickman
October 8–9, 2015	James Hickman
February 25–26, 2016	Kim Boydstun
	Paul Schwartz
March 2, 2016	Paul Schwartz
	Zack West
March 17, 2016	Shelly Dayman
	Marty Lewis
August 18, 2016	Shelly Dayman
	Marty Lewis
August 23, 2016	Paul Schwartz
	Marisa Maggio
December 12, 2016	Lance Woolley
	Marty Lewis
April 28, 2017	Shelly Dayman
	Stephanie Gasca
Botanical Habitat Assessment and Surveys	
August 18, 2016	Shelly Dayman
	Marty Lewis
December 12, 2016	Lance Woolley
	Marty Lewis
April 28, 2017	Shelly Dayman
	Stephanie Gasca

Survey Dates	Personnel
Jurisdictional Delineations	
June 22, 2015	James Hickman
October 8–9, 2015	James Hickman
February 25–26, 2016	Paul Schwartz
	Kim Boydstun
March 2, 2016	Paul Schwartz
	Zack West
March 17, 2016	Paul Schwartz
	Zack West
August 23, 2016	Paul Schwartz
	Marisa Maggio
Vegetation Mapping	
June 22, 2015	James Hickman
October 8–9, 2015	James Hickman
February 25–26, 2016	Paul Schwartz
	Kim Boydstun
March 2, 2016	Paul Schwartz
	Zack West
March 17, 2016	Paul Schwartz
	Zack West
August 18, 2016	Shelly Dayman
	Marty Lewis
August 23, 2016	Paul Schwartz
	Marisa Maggio
December 12, 2016	Lance Woolley
	Marty Lewis
April 28, 2017	Shelly Dayman
	Stephanie Gasca
Wildlife Habitat Assessment	
June 22, 2015	James Hickman

Survey Dates	Personnel
August 18, 2016	Shelly Dayman
	Marty Lewis
December 12, 2016	Lance Woolley
	Marty Lewis
April 28, 2017	Shelly Dayman
	Stephanie Gasca
Bat Roost Surveys	
August 16–18, 2010	Doug Allen
	Natasha Walton

Table D-2 Biological Resources Field Survey Weather Data

Survey Dates	Personnel	Start Time	End Time	Temp (°F)	Percent Cloud Cover	Wind (mph)
Wildlife and Botanical Habitat Assessment						
August 18, 2016	Shelly Dayman	9:00	15:00	75 to 95	0	2 to 4
	Marty Lewis					
December 12, 2016	Lance Woolley	7:00	11:45	66 to 74	100	4 to 7
	Marty Lewis					
April 28, 2017	Shelly Dayman	11:30	7:00	75 to 84	15 to 25	2 to 4
	Stephanie Gasca					

°F = degrees Fahrenheit; mph = miles per hour

APPENDIX E: BAT ROOST SURVEYS FOR CALIFORNIA HIGH-SPEED TRAIN PROJECT, AUGUST 23, 2010

ICF Jones & Stokes
an ICF International Company

Memorandum

Date: August 23, 2010

To: Leslie Hill and Tricia Campbell

cc: Doug Allen

From: Natasha Walton

Subject: **Bat Roost Surveys for California High-Speed Train Project**

Introduction

From Monday, August 16th through Wednesday, August 18th, 2010, Doug Allen and Natasha Walton conducted bat roost surveys under bridges and inside culverts for the California High-Speed Train (HST) project from Los Angeles to Anaheim. The HST extends from Union Station in Los Angeles City to the planned Anaheim Regional Transportation International Center (ARTIC) in Anaheim. The HST follows the general path of the present Metrolink Orange Line through urban areas of Los Angeles County to Orange County. To evaluate impacts of this project to biological resources, the impact study area extends 500 feet from the planned path of the HST.

Methods

Bat roost surveys were conducted during the daylight hours between 1020 hours and 1835 hours. Within the study area, the accessible underside of bridges and inside of culverts were evaluated for bat presence or signs of bats such as guano, urine staining, smell, and piles of insect remains. The bottom portion and sides of each bridge were visually scanned for bats/bat evidence. A bright LED flashlight and/or rechargeable spotlight were used to peer into dark crevices and/or dark corners of the bridges. Binoculars were used to spot bats and/or bat sign along parts of the bridge that were inaccessible for a close-up view of guano and/or staining. An Anabat II bat detector was utilized to evaluate any high pitched sounds suspected of originating from bats. Suspicious items that looked like bat guano (e.g. rodent guano, seed husks) were handled to determine whether or not they were bat guano.

Results

The following bridges and culverts were surveyed and/or evaluated from a distance. No bats or signs of bats were present at any of the following sites. Some sites will need to be evaluated at a closer distance with better access. Recommendations on how to obtain accessibility and conduct future surveys are provided. Structures are listed in the order surveyed. Rock doves were found

roosting under many bridges so they are not included in any of the following notes. All staining of concrete was deemed to be water staining or bird guano staining.

16 August 2010 Survey

Weather: Clear Sky, Wind 0-5 mph

Start Time: 1200 hrs End Time: 1810 hrs

Start Temperature: 91.4°F End Temperature: 87.8°F

Bridge/ Culvert	**HST Section**	**Bats (Y/N)**	**Bat Sign (Y/N)**	**Potential for Bats (if not surveyed)**	**Description**	**Additional Notes**
1st St. bridge (photos 1&2)	02	NA	NA	High	Large, historic bridge with various features	Access via LA River required. Possible roost sites very high (100ft?), so may require emergence surveys. Railroad access required if west end of bridge needs to be surveyed. East end over tracks (not highlighted) surveyed (flagman present), but no bats/bat evidence found. Construction occurring to widen bridge.
4th St. bridge (photos 3&4)	02	NA	NA	High	Large, historic bridge with various features	Access via LA River required. Possible roost sites very high (100ft?), so may require emergence surveys. Railroad access required if west or east ends of bridge needs to be surveyed. Part of east side of bridge over Anheiser-Busch property. Far east end of bridge over Mission Road (not highlighted) surveyed, but no bats/bat evidence found.
6th St. bridge (photos 5&6)	03	NA	NA	High	Large, historic bridge with various features	Access via LA River required. Possible roost sites very high (100ft?), so may require emergence surveys. **Open access road to river under west end of bridge.** Railroad access required if west or east ends

						of bridge need to be surveyed. Part of far west end of bridge (not highlighted) by Mesquit St. surveyed, but no bats/bat evidence found. Mud bird nest over tracks on east end.
Train bridge over Garfield (photos 7&8)	10	N	N	NA	Cement slab with shallow crevices	Heavy car traffic.
Train bridge over Telegraph (photos 9&10)	10	N	N	NA	Open steel girders	
Train bridge over Garfield (photos 11&12)	10	N	N	NA	Open steel girders	Heavy car traffic.
Train bridge over Green-wood (photos 13-15)	10	N	N	NA	Two spans: car bridge made of concrete box beams with crevices; train bridge made of closed concrete box beams	Moderate car traffic
Train bridge over Rio Hondo (photos 16-19)	11	N	N	NA	Concrete slab	Bird mud nests under bridge. Culvert on SE side of bridge. Walked through both sides of culvert with lights and exited through one N entrance. Room (~10 X 20 X 6 ft) at center of culvert. Inspected wooden cycling bridge N of train bridge. No bats/bat evidence found. Good foraging habitat available.
Train bridge over Paramount (photos 20-22)	11	N	N	NA	Two spans: one with open steel girders & one a slab concrete bridge with shallow	Moderate to heavy car traffic.

					crevices	
Train bridge over Rosemead (photos 23&24)	12	N	N	NA	Two spans: both open steel girder bridges	Heavy car traffic.

17 August 2010 Survey

Weather: Clear Sky, Wind 0-5mph

Start Time: 1100hrs End Time: 1835hrs

Start Temperature: ~88^{o}F End Temperature: 84.2^{o}F

Bridge/ Culvert	**HST Section**	**Bats (Y/N)**	**Bat Sign (Y/N)**	**Potential for Bats (if not surveyed)**	**Description**	**Additional Notes**
Bike path bridge on E side of Santa Ana River (photo 25)	E of 33	N	N	NA	Concrete slab with no crevices	Low water flow running through. N of train bridge over Santa Ana River. UTM: 0418969 E, 3740709 N.
Train bridge over Santa Ana River (photos 26-28)	E of 33	N	N	NA	Open steel girder bridge	No water and denuded ground under bridge. Local resident said to have seen bats flying under bridge, but not roosting there. Cement basin (check dam) south of bridge with water, sparse vegetation, fish, snowy egret, killdeer, and juvenile black-crowned night heron. Entrance of culvert on west side of check dam inspected and no bats/bat evidence found.
I5 bridge over Santa Ana River (photos 29-32)	E of 33	N	N	See additional notes	Concrete slab with drainage holes	No water and denuded ground under bridge. White-throated swifts inside of drainage holes (could hear only). Open entrance to culvert NE of bridge inspected and no bats/bat evidence found. Two small open culverts

						immediately NW of bridge inspected by binoculars only, but deemed low potential for bat roosts due to small size and closeness to ground. Bridge portion over bicycle path on west end inspected from a distance and appears to have low potential for a bat roost.
Train bridge over Katella (photos 33&34)	33	N	N	NA	Concrete closed box beam bridge	Crevices filled. Moderate car traffic
Train bridge over Lewis (photos 35&36)	32	N	N	NA	Two spans: one with enclosed cement box beams and the other a concrete slab with drainage holes	Some crevices very shallow and others filled with styrofoam and glue. Low car traffic.
Train bridge over Lincoln (photos 37&38)	30	N	N	NA	Enclosed cement box beams	Decent sized crevices. Only remnants of plants growing in crevices.
Raymond retarding basin culvert (photos 39-41)	29	NA	NA	Low	Concrete covered culvert with one small opening visible on NE side	Inaccessible – should contact Orange County Flood Control District for access. Large portion of basin filled with water. Spotted various bird species from NW side at intersection of Carbon Creek and Balsam St. Species include black-necked stilt, killdeer, double-crested cormorant, juvenile barn swallows, ducklings (probably mallard), female mallard , western kingbird, American avocet, black phoebe, egret species, and willet. All birds spotted outside of buffer but could be utilizing areas within buffer.
Train bridge over Fullerton Creek (photo 42)	27	NA	NA	Moderate	Concrete	Inaccessible – fenced off with locked gate. No crevices seen from outside, but access needed.
Train bridge over Lemon	26/27	N	N	NA	Two spans: both enclosed	Some nice crevices. Remnants of vegetation in crevices – probably

(photos 43&44)					concrete box beams	vines torn out. Mourning dove nesting on light fixture. Heavy car traffic.
Train bridge over Harbor (72) (photos 45&46)	26	N	N	NA	Three spans: each one a concrete slab with no crevices	Moderate to heavy car traffic.
Train bridge over Highland (photos 47&48)	26	N	N	NA	Concrete slab with drainage holes	Moderate car traffic.
Train bridge over Euclid (photos 4 &50)	25	N	N	NA	Two spans: both open steel girders	High car traffic.
Train bridge over Commonwealth (photos 51&52)	25	N	N	NA	Open steel girders	Narrow seams

18 August 2010 Survey

Weather: Scattered Clouds, Wind 0-5mph

Start Time: 1020hrs End Time: 1540hrs

Start Temperature: 87.8^{o}F End Temperature: 95^{o}F

Bridge/ Culvert	**HST Section**	**Bats (Y/N)**	**Bat Sign (Y/N)**	**Potential for Bats (if not surveyed)**	**Description**	**Additional Notes**
Train bridge over Gilbert (photos 53 & 54)	24	N	N	NA	Enclosed concrete box beams	Rodent feces along W edge. Narrow crevices.
Train bridge over Dale (photos 55-56)	23	N	N	NA	Enclosed concrete box beams	Exclusions for rock doves newly in place. Workers placing exclusions have not seen any bats roosting in bridge.
Dale road	23	N	N	NA	Solid concrete	Crevices filled in. Gate was open

bridge over Brea Creek (photos 57 & 58)						so had good access. Able to crawl under southern end of bridge for full view.
Train bridge over Brea Creek (photo 59 & 60)	23	NA	NA	Moderate	Concrete girder	Access needed. To crawl under bridge may require flagman if approach from road level. Creek access will require boots for water. Mourning dove and house sparrow nearby. Barn swallow dropped down from the bridge. Culvert on NW side of wash with broken gate – inaccessible from here.
Train bridge over Beach Blvd. (photos 61&62)	22	N	N	NA	Enclosed cement box beams	Crevices narrow.
Train bridge over Coyote Creek South (photos 63)	22	NA	NA	Moderate	Cement	Access needed. Need flood control access and boots for low water level. Fenced off.
Train bridge over La Mirada Creek (photo 64)	21	NA	NA	Moderate	Two spans: both have cement girders	Access needed - probably via LA County Public Works (on sign posted). Soft bottom with low water so may require boots. Decent foraging habitat below bridge.
Rosecrans bridge over Coyote Creek (photo 65&66)	19	N	N	NA	Enclosed box beams	Barn swallow flying into mud nest under bridge. Three barn swallows in nest. Black phoebe nearby. Four large culverts SW of bridge and outside of buffer, but have high potential for bat roosts. Two culverts SE of bridge are covered.
Train bridge over Coyote Creek (photo 67&68)	19	N	N	NA	Steel girders	Cement crevices between girders. Closed culverts near bridge.
Culvert NW of	19	NA	NA	High	Cement	Large and should be explored

train bridge over Coyote Creek (Photo 69)						further. Has low water coming out so boots recommended. UTM: 0403686 E, 3752171N.

Photographs

1) 1st St. Bridge – N side



2) 1st St Bridge – Under E end over train tracks surveyed



3) 4th St. Bridge – E end surveyed



4) 4th St. Bridge – S side view from W end



5) 6th St. Bridge – N side

6) 6th St. Bridge – part of W side surveyed



7) I5 over Garfield – N side



8) I5 Bridge over Garfield – under bridge



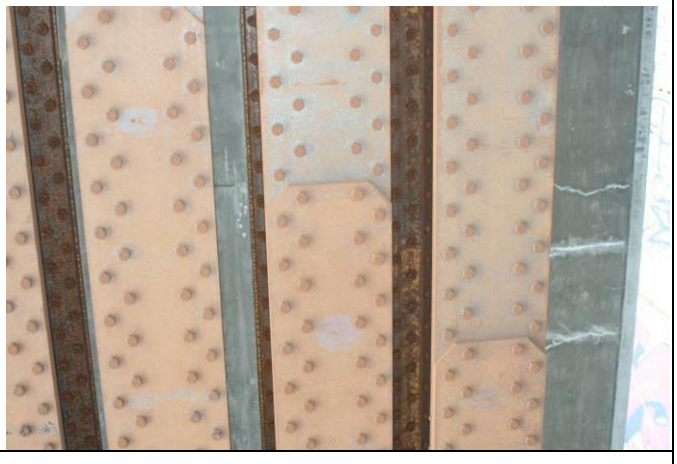
9) Train bridge over Telegraph – S side



10) Train bridge over Telegraph – underneath



11) Train bridge over Garfield



12) Train bridge over Garfield - underneath



13) Bridge over Greenwood – N side



14) Car bridge over Greenwood - underneath



15) Train bridge over Greenwood - underneath



16) Train bridge over Rio Hondo River – N side



17) Train bridge over Rio Hondo River – underside with



18) Culvert entrances SE of train bridge over Rio Hondo

mud nest



River



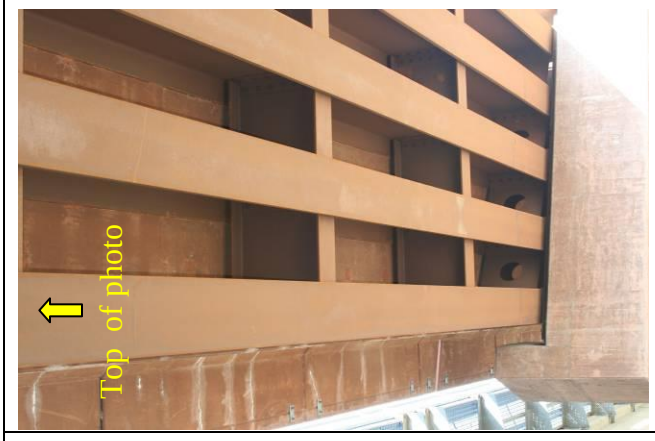
19) Cycling bridge N of train bridge over Rio Hondo River



20) Train bridge over Paramount



21) Steel girder bridge over Paramount – underside

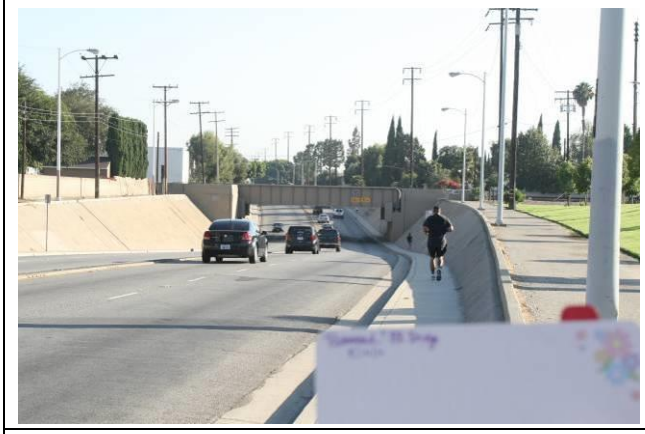


22) Cement slab bridge over Paramount – underside



23) Train bridge over Rosemead

24) Train bridge over Rosemead – underneath two spans



25) Bike path bridge on E side of Santa Ana River



26) Train bridge over Santa Ana River – facing S



27) Train bridge over Santa Ana River - underneath



28) Check dam south of train bridge over Santa Ana River – facing W; culvert visible on W side



29) I5 bridge over Santa Ana River – N side



30) I5 bridge over Santa Ana River – underneath



31) Culvert to NE of I5 bridge over Santa Ana River



32) Train bridge over cycling path on W side of Santa Ana River



33) Train bridge over Katella – S side



34) Train bridge over Katella - underneath



35) Train bridge over Lewis



36) Train bridge over Lewis - underneath



37) Train bridge over Lincoln



38) Train bridge over Lincoln - underneath



39) Raymond retarding basin culvert – E side of tracks



40) Raymond retarding basin – NE portion of basin outside of 500ft buffer; view facing S.



41) Carbon creek entering into Raymond Retarding Basin –



42) Bridge over Fullerton Creek

facing S





43) Train bridge over Lemon

44) Train bridge over Lemon – underneath with mourning dove nesting on top of light fixture





45) Train bridge over Harbor (72) – N side

46) Train bridge over Harbor (72) – underneath





47) Train bridge over Highland

48) Train bridge over Highland - underneath



49) Train bridge over Euclid



50) Train bridge over Euclid - underneath



51) Train over Commonwealth – E side



52) Train bridge over Commonwealth – underneath



53) Train bridge over Gilbert



54) Train bridge over Gilbert - underneath



55) Train bridge over Dale



56) Train bridge over Dale -underneath



57) Dale road bridge over Brea Creek – E side



58) Dale road bridge over Brea Creek - underneath



59) Train bridge over Brea Creek



60) Culvert NW of train bridge over Brea Creek



61) Train bridge over Beach Blvd.



62) Train bridge over Beach Blvd. - underneath



63) Train bridge over Coyote Creek South



64) Train bridge over La Mirada Creek



65) Rosecrans bridge over Coyote Creek – N side



66) Rosecrans bridge over Coyote Creek - underneath





67) Train bridge over Coyote Creek – S side

68) Train bridge over Coyote Creek - underneath





69) Culvert NW of train bridge over Coyote Creek



Discussion

Although no bats or evidence of bat roosts was found at any of the surveyed structures in the HST study area for biological resources, bats may have remain undetected in some structures. If so, such bats may inhabit the study area in such small numbers that they may remain undetected. For example, we scanned for bat guano under one bridge immediately after a man with a leaf blower cleared the sidewalk of debris. Had guano been present in small amounts on that sidewalk, it would likely have been blown away to a less visible area. Yet, bridges without any protective features (e.g. crevices or dark corners) are not be expected to harbor bat roosts.

Various other structures still need to be surveyed for bats and/or signs of bats. Some were listed and discussed in the above tables. Other bridges were quickly scanned in the field and/or deemed inaccessible at this moment via Google Earth maps. Additional bridges requiring train track access and LA River access include 7th St. (HST map 3), I10 and Olympic (HST map 4), Washington (HST map 5) and the three train bridges (HST map 5) near Washington bridge. Train track access will also be required for the Escalona (HST map 21) and 91 FWY (HST map 28) bridges. Access permission from Cal Trans will likely be required to survey the train bridge over I5 (HST map 10). Remaining structures in the HST study area that are not mentioned above can be evaluated for preliminary accessibility issues via Google Earth.

APPENDIX G: PLANT AND ANIMAL SPECIES OBSERVED LIST

APPENDIX G: PLANT AND ANIMAL SPECIES OBSERVED LIST

Species Name	Common Name	Notes
Plants		
Ailanthus altissima	Tree of heaven	Nonnative/Invasive
Amsinckia menziesii	Fiddleneck	-
Avena spp.	Oat grass	Nonnative/Invasive
Baccharis pilularis	Coyote bush	-
Baccharis salicifolia	Mule fat	-
Bromus diandrus	Ripgut brome	Nonnative/Invasive
Bromus madritensis ssp. *rubens*	Foxtail brome	Nonnative/Invasive
Carpobrotus spp.	Common iceplant	Nonnative/Invasive
Centaurea melitensis	Tocalote	Nonnative/Invasive
Chenopodium album	Lamb's quarters	Nonnative/Invasive
Convolvulus arvensis	Field bindweed	Nonnative/Invasive
Cotula australis	Australian water buttons	Nonnative/Invasive
Cupania anacardioides	Carrotwood	Nonnative/Invasive
Cynodon dactylon	Bermuda grass	Nonnative/Invasive
Cyperus eragrostis	Tall flatsedge	-
Cyperus involucratus	Alternate-leaved flat sedge	Nonnative
Datura stramonium	Jimson weed	-
Echinochloa crus-galli	Barnyard grass	Nonnative/Invasive
Erigeron canadensis	Horseweed	-
Erodium cicutarium	Redstem stork's bill	Nonnative/Invasive
Eucalyptus spp.	Eucalyptus	Nonnative/Invasive
Festuca perennis	Italian rye grass	Nonnative/Invasive
Ficus carica	Mission fig tree	Nonnative/Invasive
Pseudognaphalium luteoalbum	Everlasting cudweed	Nonnative/Invasive
Helianthus annuus	Annual sunflower	-
Heterotheca grandiflora	Telegraph weed	-
Hirschfeldia incana	Shortpod mustard	Nonnative/Invasive
Jacaranda spp.	Jacaranda	Nonnative/Invasive
Juncus spp.	Rush	-
Lemna spp.	Duckweed	-
Leptochloa fusca ssp. *uninervia*	Dense-flowered sprangletop	-
Nicotiana glauca	Tree tobacco	Nonnative/Invasive

Species Name	Common Name	Notes
Pennisetum setaceum	Fountain grass	Nonnative/Invasive
Persicaria lapathifolia	Smartweed	-
Phacelia distans	Common phacelia	-
Plantago lanceolata	English plantain	Nonnative/Invasive
Platanus racemosa	Western sycamore	-
Poa annua	Annual bluegrass	Nonnative/Invasive
Raphanus sativus	Cultivated radish	Nonnative/Invasive
Rhus ovata	Sugar bush	-
Ricinus communis	Castor bean	Nonnative/Invasive
Rumex crispus	Curly dock	Nonnative/Invasive
Salix lasiolepis	Arroyo willow	-
Salsola tragus	Prickly Russian thistle	Nonnative/Invasive
Schinus terebinthifolia	Brazilian pepper tree	Nonnative/Invasive
Schoenoplectus spp.	Bulrush	-
Sisymbrium irio	London rocket	Nonnative/Invasive
Solanum americanum	American black nightshade	-
Sonchus oleraceus	Sow thistle	Nonnative/Invasive
Typha domingensis	Southern cattail	-
Urtica urens	Annual stinging nettle	Nonnative/Invasive
Washingtonia robusta	Mexican fan palm	Nonnative/Invasive
Xanthium strumarium	Rough cocklebur	-
Animals		
Aeronautes saxatalis	White-Throated Swift	-
Agelaius phoeniceus	Red-Winged Blackbird	-
Anas platyrhynchos	Mallard	-
Ardea alba	Great Egret	-
Ardea herodias	Great Blue Heron	-
Branta canadensis	Canada Goose	-
Calypte anna	Anna's Hummingbird	-
Cathartes aura	Turkey Vulture	-
Columba livia	Rock Pigeon	Nonnative/Invasive
Corvus brachyrhynchos	American Crow	-
Corvus corax	Common Raven	-
Egretta thula	Snowy Egret	-
Haemorhous mexicanus	House Finch	-

Species Name	Common Name	Notes
Himantopus mexicanus	Black-Necked Stilt	-
Larus occidentalis	Western Gull	-
Mimus polyglottos	Northern Mockingbird	-
Otospermophilus beecheyi	California ground squirrel	-
Passerina caerulea	Blue Grosbeak	-
Psaltriparus minimus	Bushtit	-
Sayornis nigricans	Black Phoebe	-
Selasphorus sasin	Allen's Hummingbird	-
Streptopelia decaocto	Eurasian Collared Dove	Nonnative/Invasive
Sturnus vulgaris	European Starling	Nonnative/Invasive
Thomomys bottae	Botta's pocket gopher	-
Tyrannus vociferans	Cassin's Kingbird	-

APPENDIX H: CALIFORNIA FISH AND WILDLIFE LAKES, STREAMBEDS, AND ASSOCIATED RIPARIAN VEGETATION RESULTS AND MAP

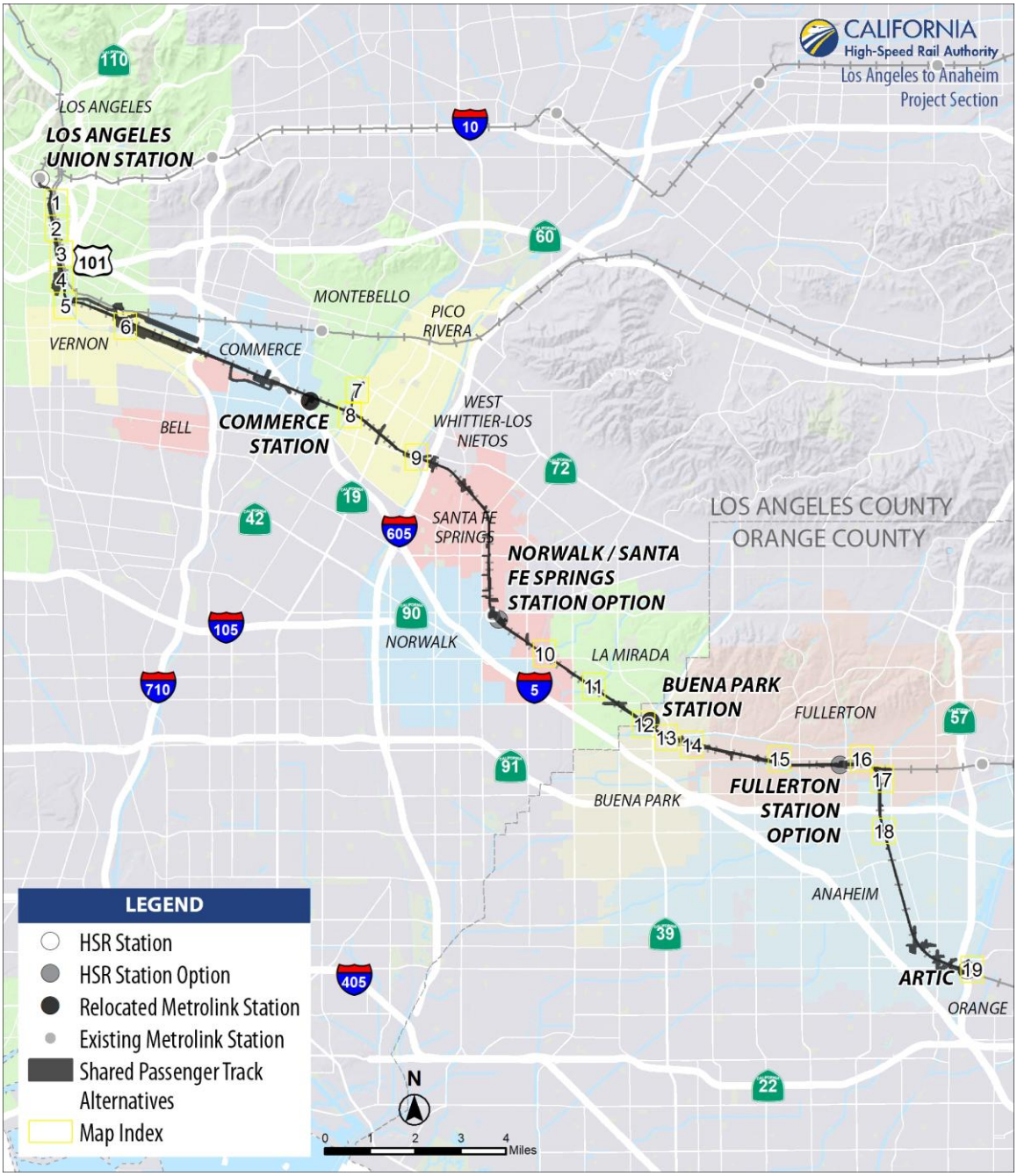
APPENDIX H: CALIFORNIA FISH AND WILDLIFE WATERS OF THE STATE RESULTS AND MAP

California Department of Fish and Wildlife Waters of the State within the Aquatic Resource Study Area[1]

Feature	Page Number	Linear Feet	Total (acres)
Basin – Regulated as "Lakes"			
Feature 7 (Rio Hondo Basin # 1)	7–8	2,062	2.92
Feature 8 (Rio Hondo Basin # 2)	8	1,134	8.22
Feature 9 (Rio Hondo Basin # 3)	8	197	1.24
Feature 9 (Rio Hondo Basin # 3, Riparian 1 [Mulefat thicket])[2]	8	19	0.006
Feature 10 (Rio Hondo Basin # 4)	8	194	2.29
Feature 23 (Lakeside Residential Community Pond)	14	1,181	1.61
Feature 37 (Raymond Northwest Basin)	18	665	2.70
Feature 39 (Raymond Southeast Basin)	18	236	1.60
Feature 55 (Rio Hondo Basin # 5)[3]	7	1,223	0.92
Feature 56 (Rio Hondo Basin # 6)	7	2,497	15.19
Feature 57 (Rio Hondo Basin # 7)	7	71	0.25
Feature 58 (Rio Hondo Basin # 8)	7	241	0.57
	Basin Total	**9,719**	**36.96**
Built Watercourse – Regulated as "Streambeds"			
Feature 29	16	681	0.27
Feature 31	17	780	0.30
	Built Watercourse Total	**1,461**	**0.57**
Riverine – Regulated as "Streambeds"			
Feature 1 (Los Angeles River, LAUS to 1st Street)	1	1,012	3.76
Feature 1 (Los Angeles River, 1st Street to Hobart Yard)	2–6	13,101	71.43
Feature 5 (Rio Hondo)	7–8	4,269	19.81
Feature 12 (San Gabriel River - Riparian 2 [Mulefat thicket])[2]	9	17	0.004
Feature 12 (San Gabriel River – Riparian 3 [Mulefat thicket])[2]	9	53	0.009
Feature 12 (San Gabriel River)	9	1,096	5.68
Feature 14 (North Fork Coyote Creek)	10	1,057	3.24
Feature 15 (Milan Creek)	10	233	0.17
Feature 18 (La Mirada Creek)	11	416	0.47
Feature 19 (La Mirada Creek)	11	296	0.45
Feature 20 (Coyote Creek)	12	1,501	1.84

Feature	Page Number	Linear Feet	Total (acres)
Feature 41 (Brea Creek)	13–14	2,201	2.44
Feature 28 (Fullerton Creek)	15	730	0.60
Feature 30 (Fullerton Creek)	17	1,347	0.59
Feature 38 (Carbon Creek)	18	485	0.09
Feature 40 (Santa Ana River)	19	1,008	3.86
Riverine Total		**28,877**	**114.43**
Wetlands – Regulated as "Associated Riparian Vegetation"[2]			
Freshwater Emergent Wetland (Feature 12, San Gabriel River – Freshwater Emergent Wetland 3)	9	530	1.73
Freshwater Emergent Wetland (Feature 12, San Gabriel River – Freshwater Emergent Wetland 2)	9	120	0.10
Freshwater Forested/Shrub Wetland (Feature 12, San Gabriel River – Freshwater Forested/Shrub Wetland 1)	9	54	0.06
Freshwater Emergent Wetland (Feature 19, La Mirada Creek)[4]	11	50	0.01
Wetland Total		**755**	**1.90**
CDFW Waters of the State Grand Total		**40,758**	**153.86**

[1] As defined by *U.S. Fish and Wildlife Service National Wetland Inventory* (USFWS 2024, 2016), and *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al. 1979).
[2] Within the Aquatic RSA, associated riparian vegetation occurs within wetlands (freshwater emergent wetland, freshwater forested/shrub wetland) as well as nonwetland (basin, riverine) conditions, depending on the hydrologic, geomorphic, soils, and vegetative conditions. Refer to Section 6.4.1.1, Freshwater Emergent Wetland, Section 6.4.2.2, Riverine, and Section 6.4.2.1, Basins, for additional detail.
[3] Feature 55 (Rio Hondo Basin #5) falls within CDFW Section 1600 jurisdiction, but outside of USACE or SWRCB Clean Water Act Section 404/401 jurisdiction.
[4] The freshwater emergent wetland within Feature 19 (La Mirada Creek) is classified as "associated riparian vegetation" for purposes of CDFW Section 1600 jurisdiction and "riverine" for purposes of USACE or SWRCB (CWA Section 404/401) jurisdiction (La Mirada Creek), because this feature does not meet the USACE or SWRCB wetland definitions.
CDFW = California Department of Fish and Wildlife; LAUS = Los Angeles Union Station; RSA = resource study area; SWRCB = State Water Resources Control Board; USACE = U.S. Army Corps of Engineers



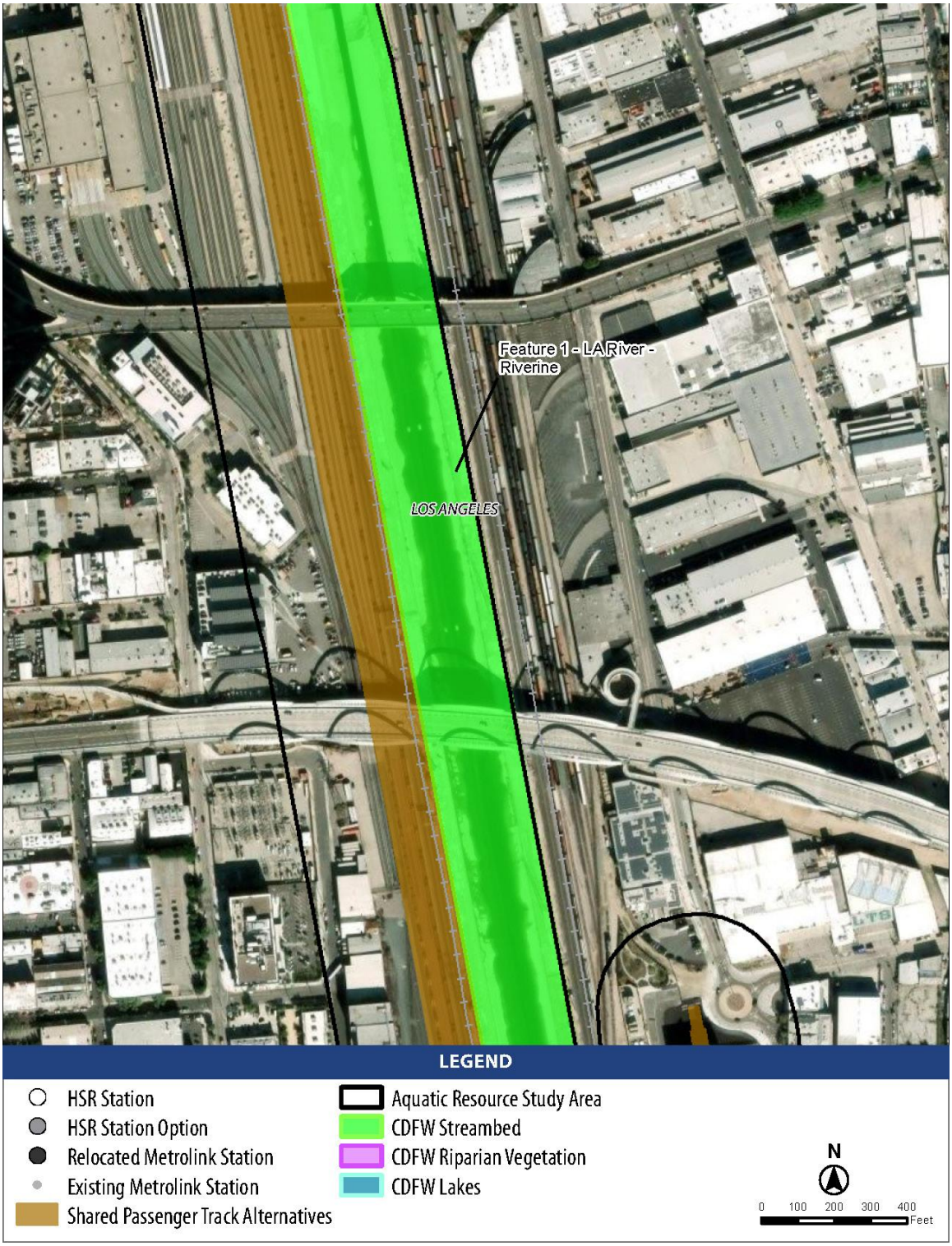
Sources: Authority 2023; ESRI World Imagery 2024; ESRI World Streetmap 2024

Figure H-1 California Department of Fish and Wildlife Waters of the State, Index



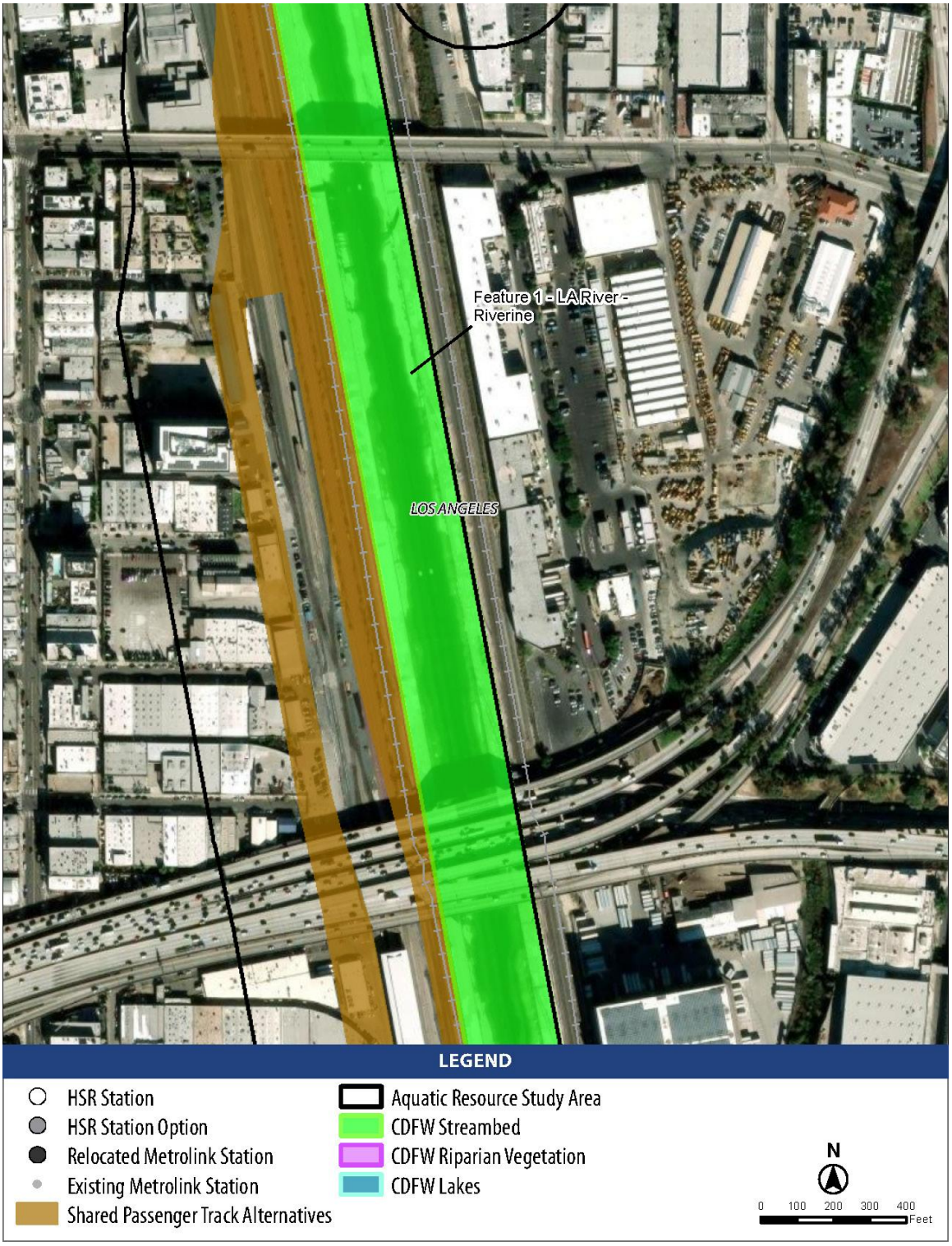
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Figure H-1 California Department of Fish and Wildlife Waters of the State, Sheet 1 of 19



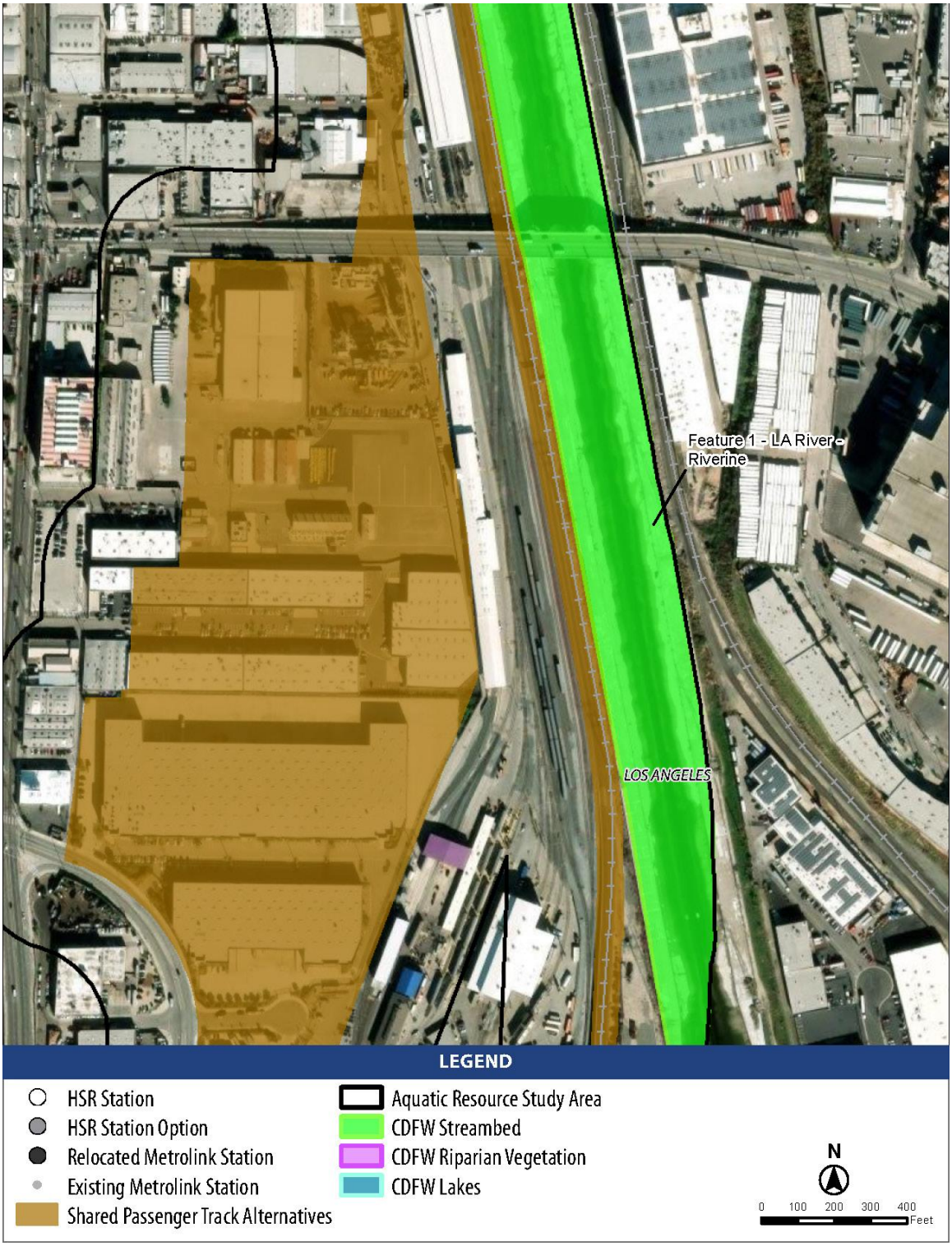
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Figure H-1 California Department of Fish and Wildlife Waters of the State, Sheet 2 of 19



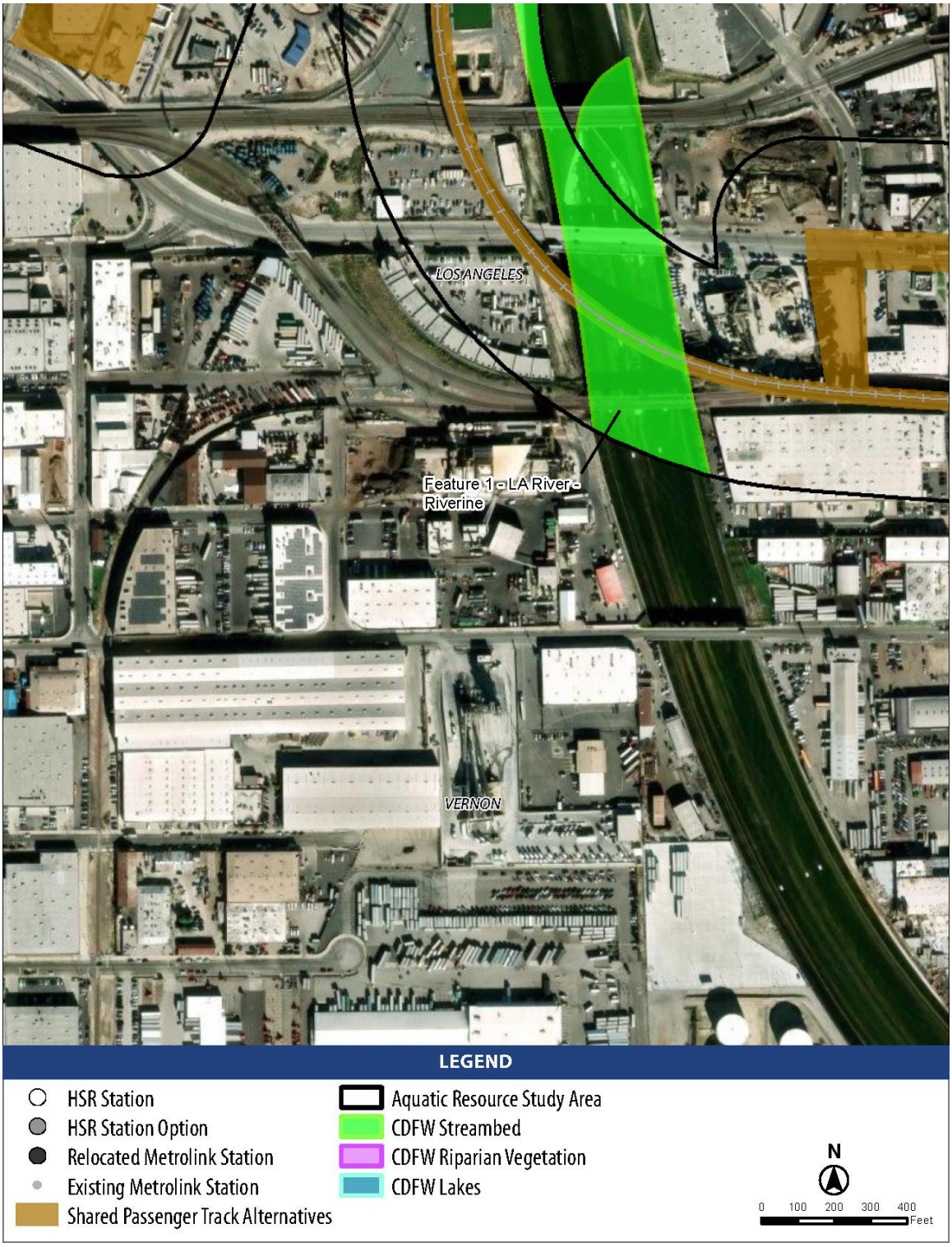
Sources: Authority 2023; ESRI World Imagery 2024; ESRI World Streetmap 2024

Figure H-1 California Department of Fish and Wildlife Waters of the State, Sheet 3 of 19



Sources: Authority 2023; ESRI World Imagery 2024; ESRI World Streetmap 2024

Figure H-1 California Department of Fish and Wildlife Waters of the State, Sheet 4 of 19



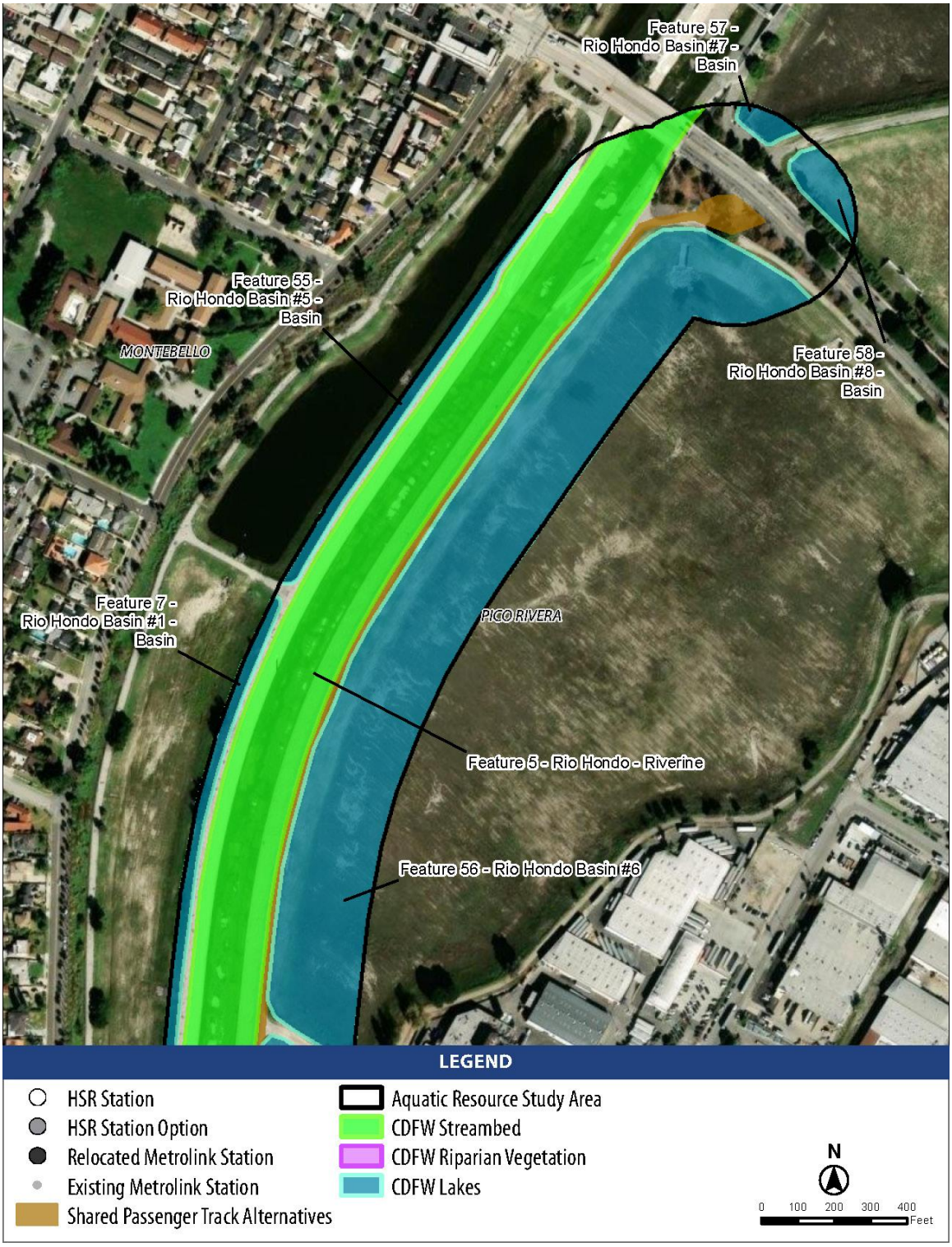
Sources: Authority 2023; ESRI World Imagery 2024; ESRI World Streetmap 2024

Figure H-1 California Department of Fish and Wildlife Waters of the State, Sheet 5 of 19



Sources: Authority 2023; ESRI World Imagery 2024; ESRI World Streetmap 2024

Figure H-1 California Department of Fish and Wildlife Waters of the State, Sheet 6 of 19



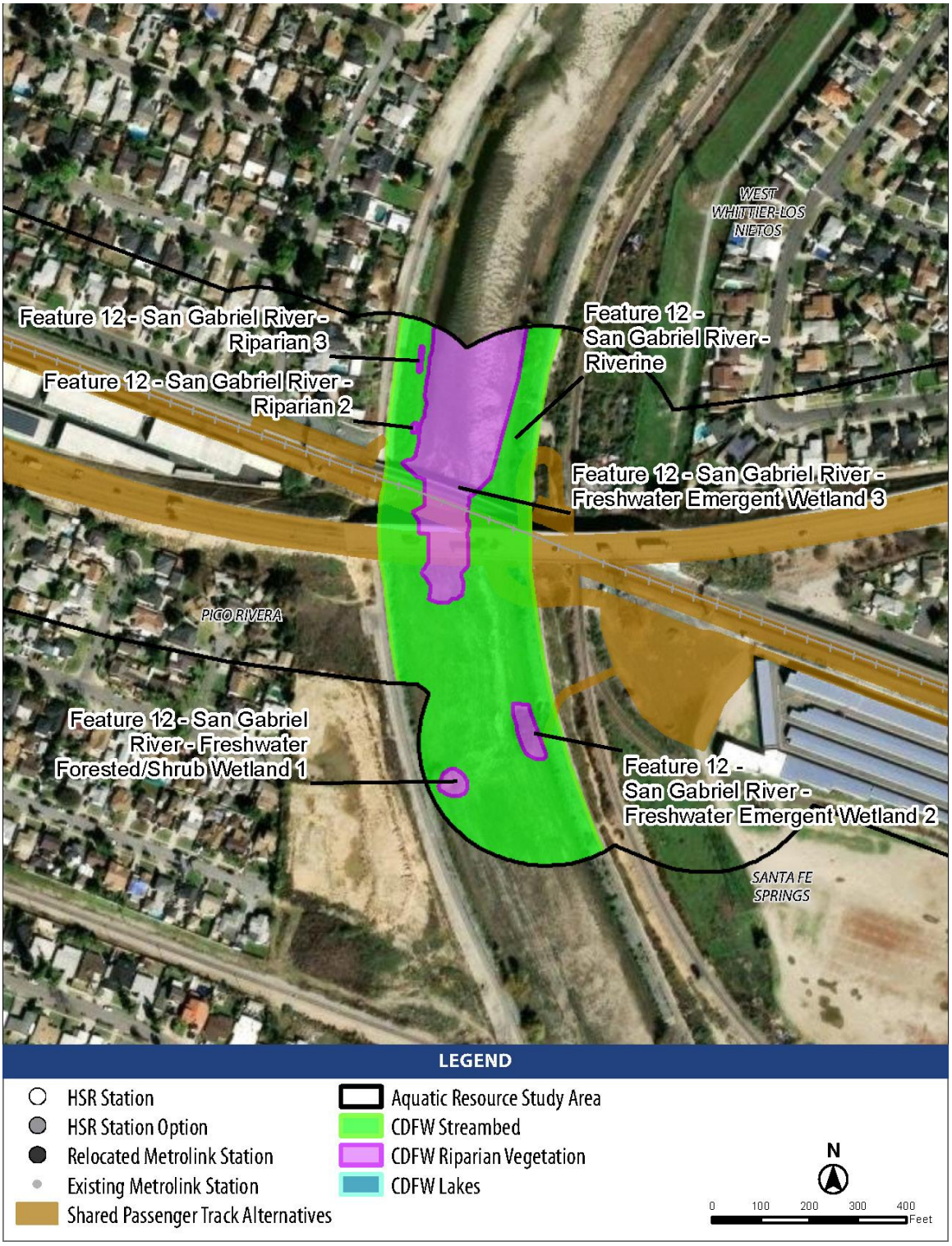
Sources: Authority 2023; ESRI World Imagery 2024; ESRI World Streetmap 2024

Figure H-1 California Department of Fish and Wildlife Waters of the State, Sheet 7 of 19



Sources: Authority 2023; ESRI World Imagery 2024; ESRI World Streetmap 2024

Figure H-1 California Department of Fish and Wildlife Waters of the State, Sheet 8 of 19



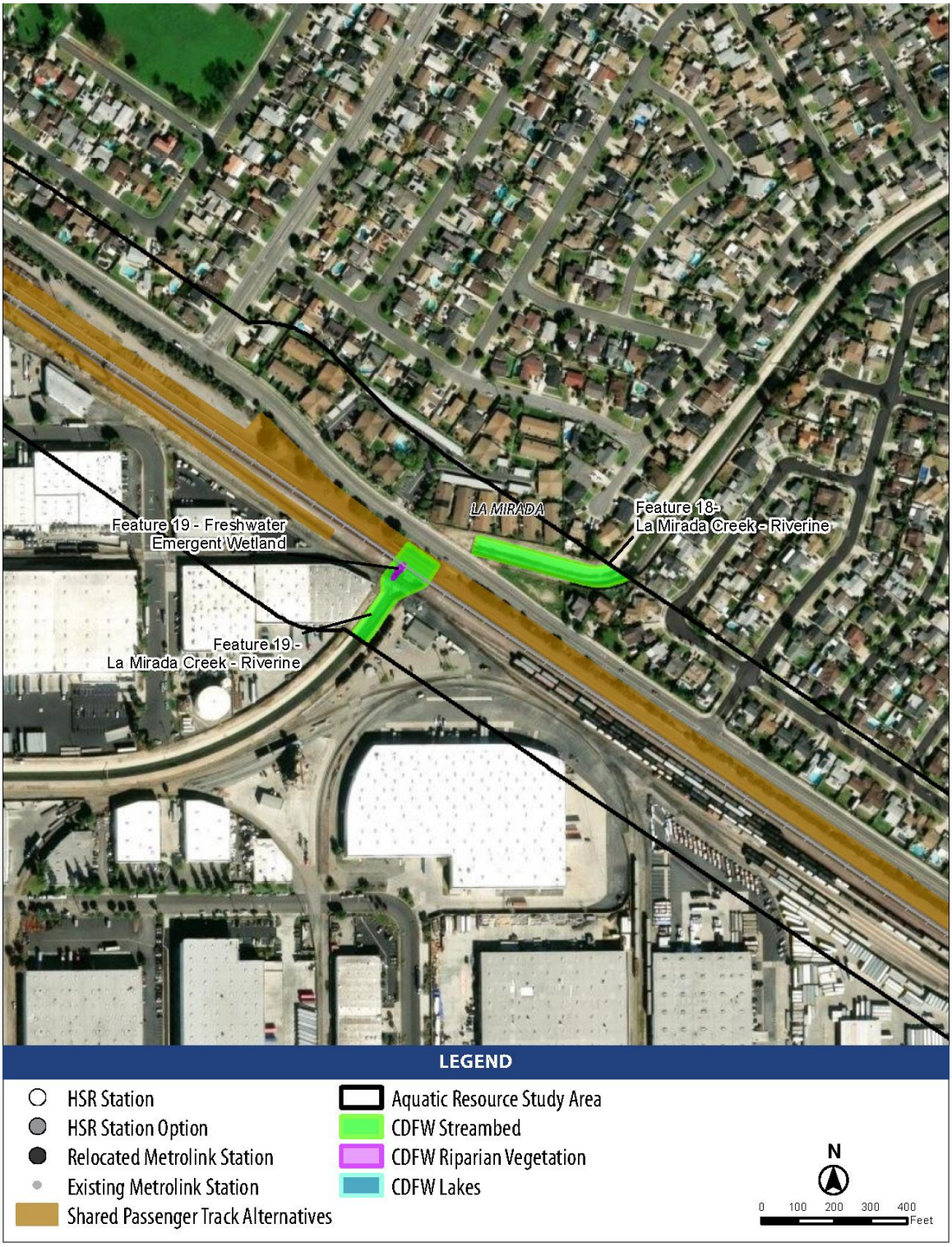
Sources: Authority 2023; ESRI World Imagery 2024; ESRI World Streetmap 2024

Figure H-1 California Department of Fish and Wildlife Waters of the State, Sheet 9 of 19



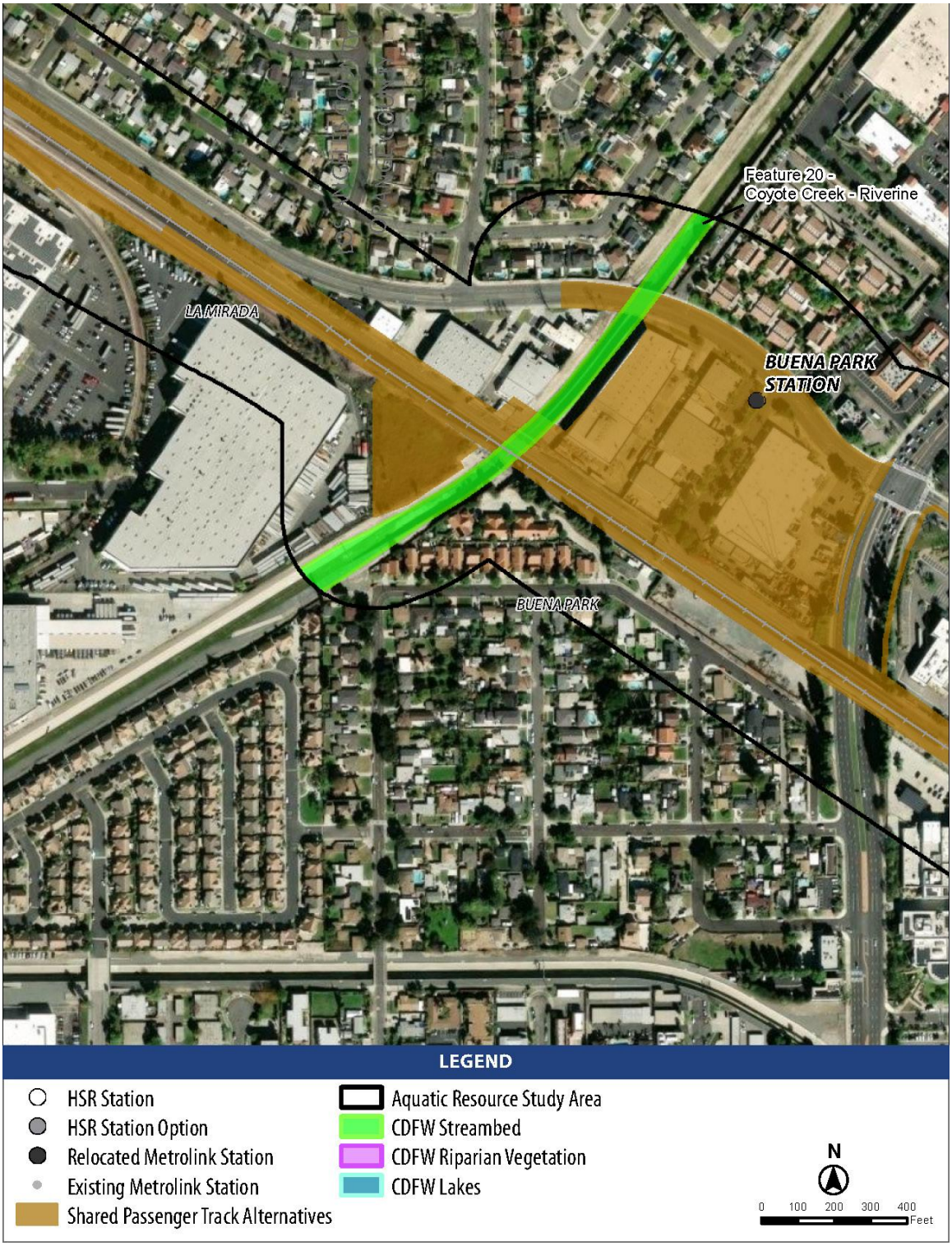
Sources: Authority 2023; ESRI World Imagery 2024; ESRI World Streetmap 2024

Figure H-1 California Department of Fish and Wildlife Waters of the State, Sheet 10 of 19



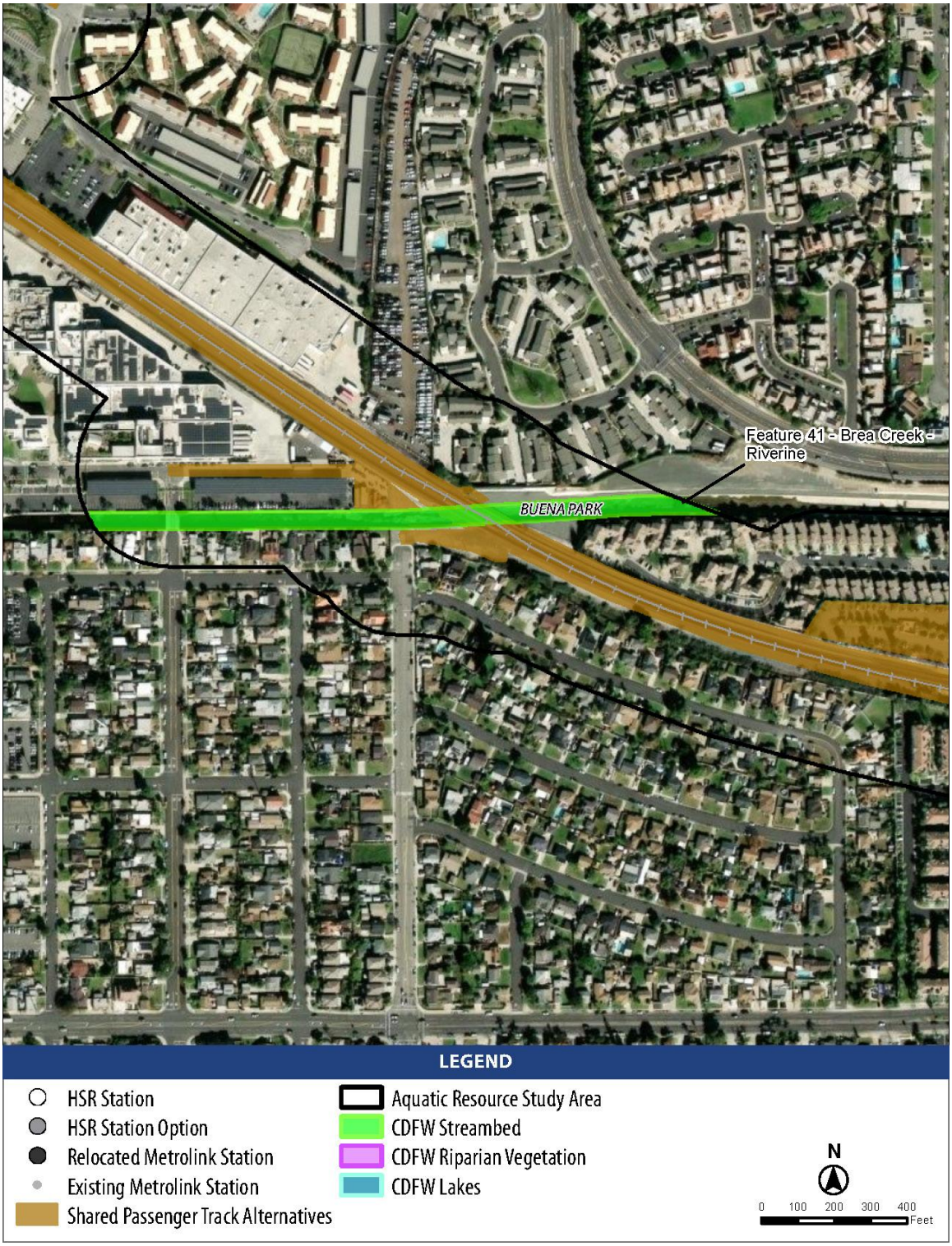
Sources: Authority 2023; ESRI World Imagery 2024; ESRI World Streetmap 2024

Figure H-1 California Department of Fish and Wildlife Waters of the State, Sheet 11 of 19



Sources: Authority 2023; ESRI World Imagery 2024; ESRI World Streetmap 2024

Figure H-1 California Department of Fish and Wildlife Waters of the State, Sheet 12 of 19



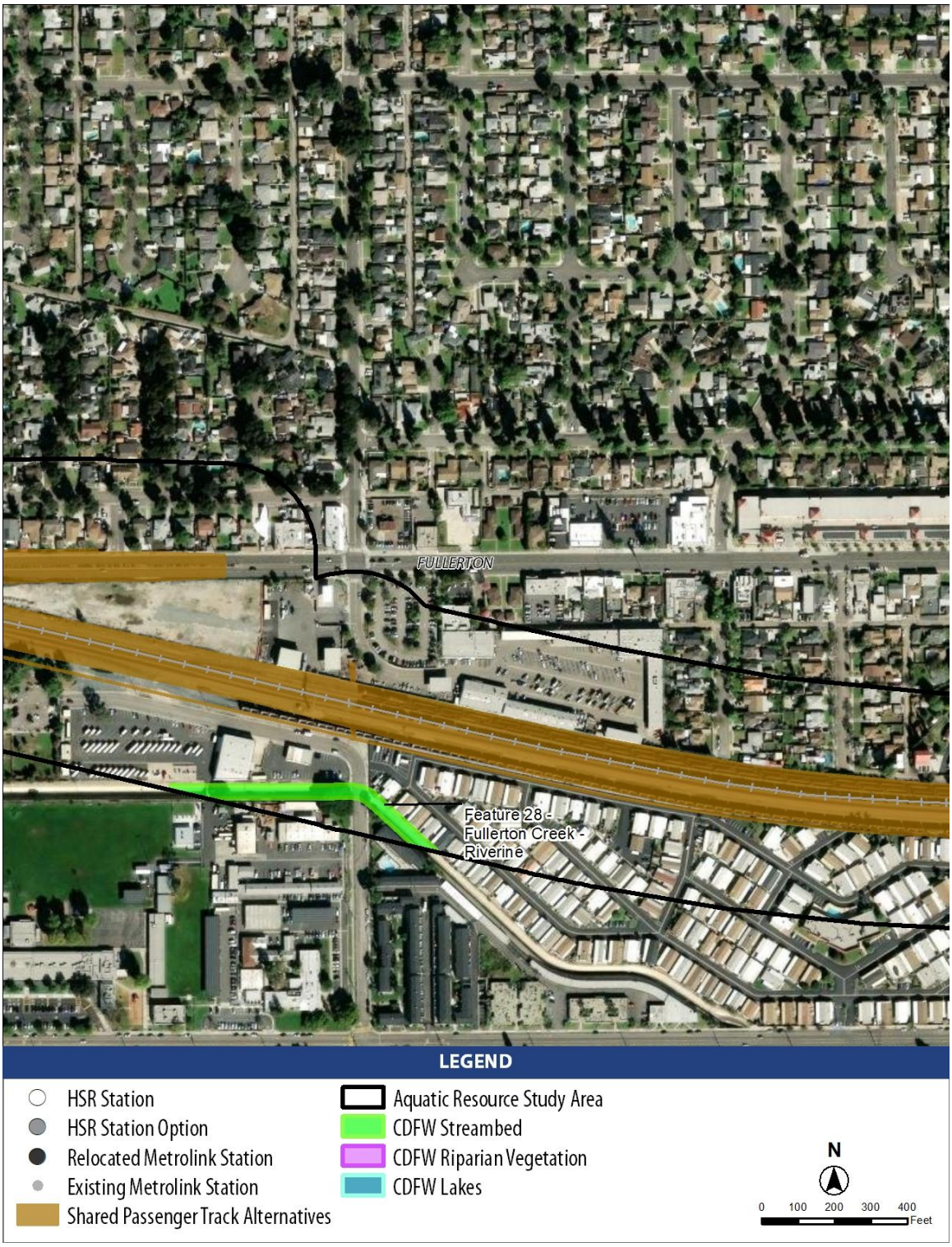
Sources: Authority 2023; ESRI World Imagery 2024; ESRI World Streetmap 2024

Figure H-1 California Department of Fish and Wildlife Waters of the State, Sheet 13 of 19



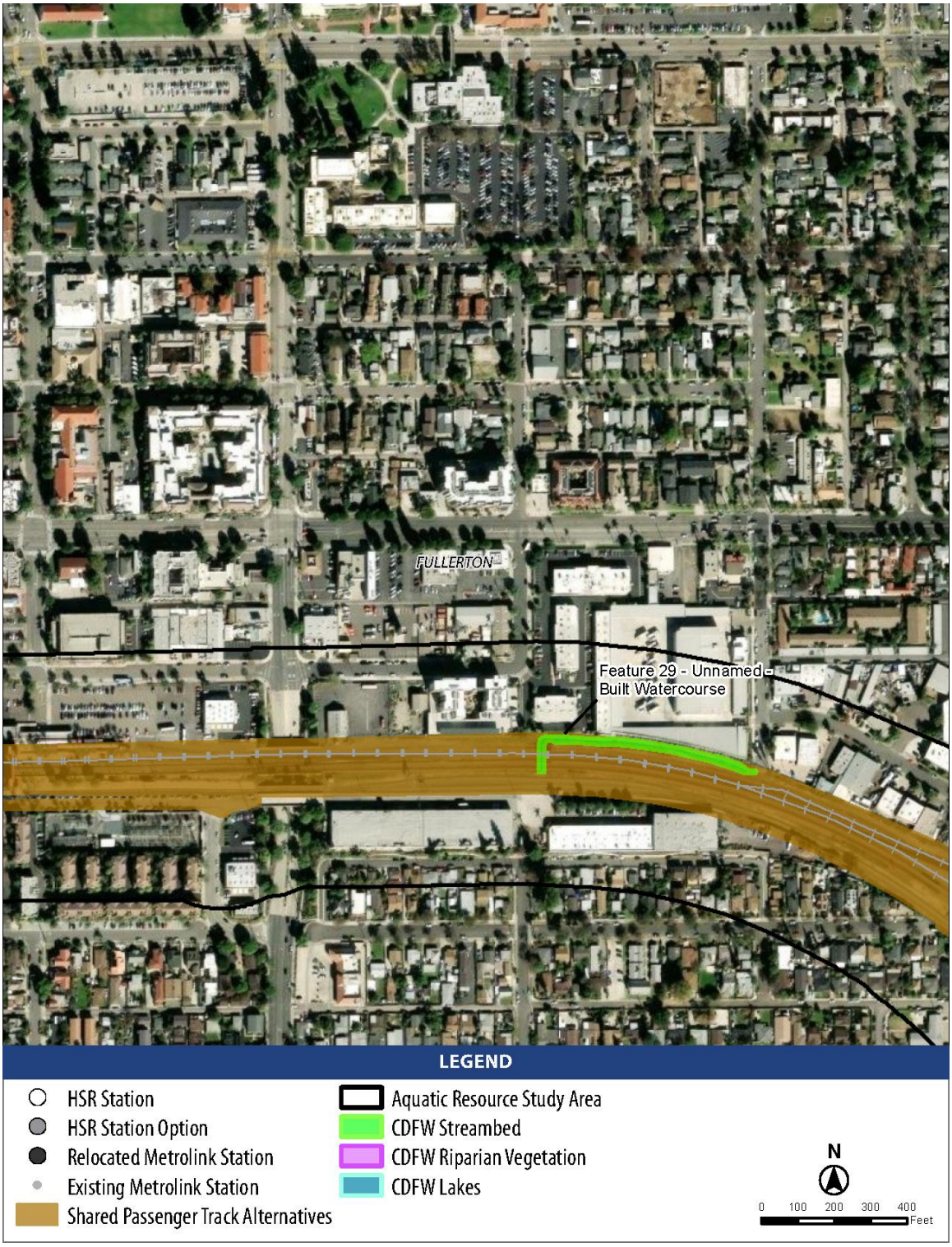
Sources: Authority 2023; ESRI World Imagery 2024; ESRI World Streetmap 2024

Figure H-1 California Department of Fish and Wildlife Waters of the State, Sheet 14 of 19



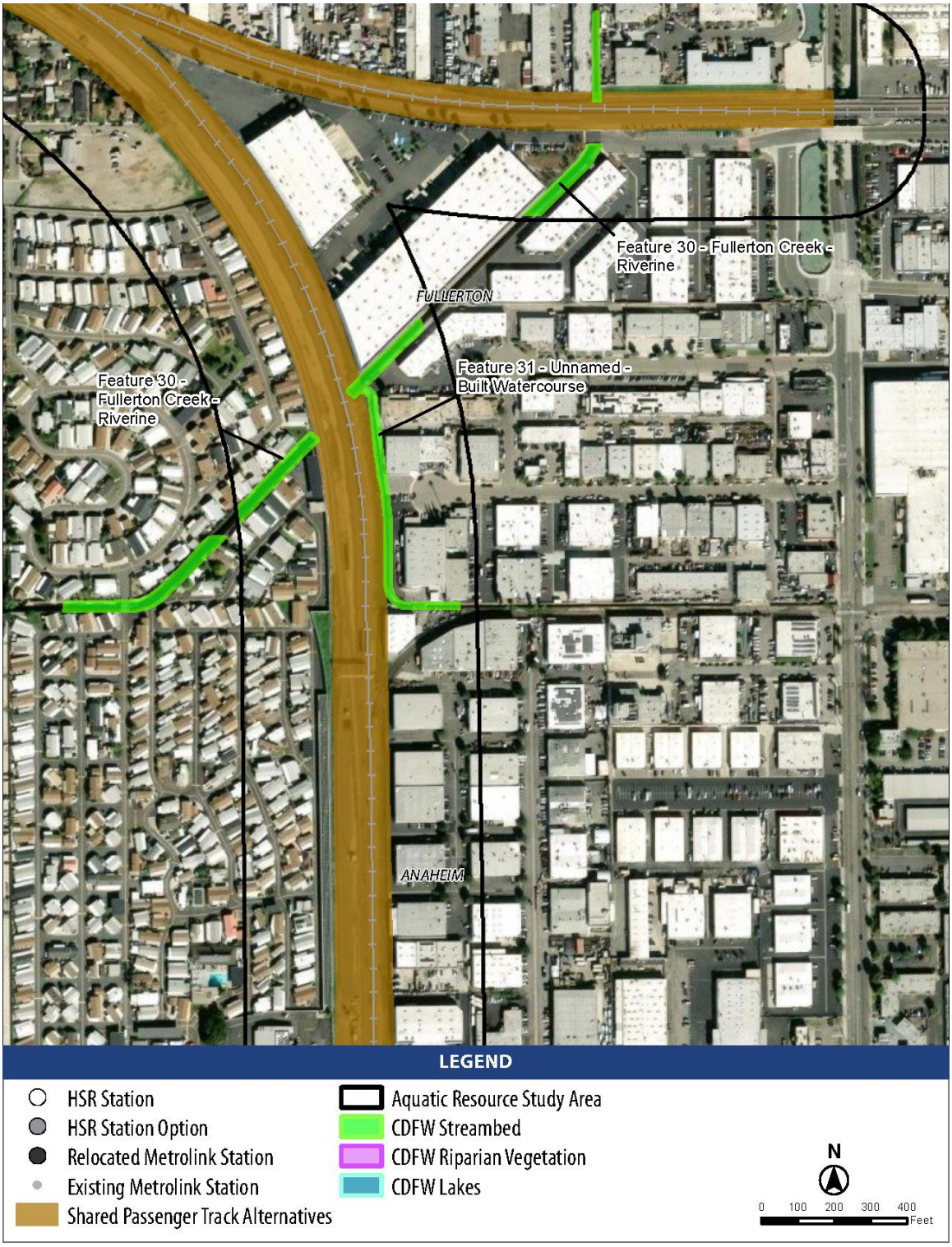
Sources: Authority 2023; ESRI World Imagery 2024; ESRI World Streetmap 2024

Figure H-1 California Department of Fish and Wildlife Waters of the State, Sheet 15 of 19



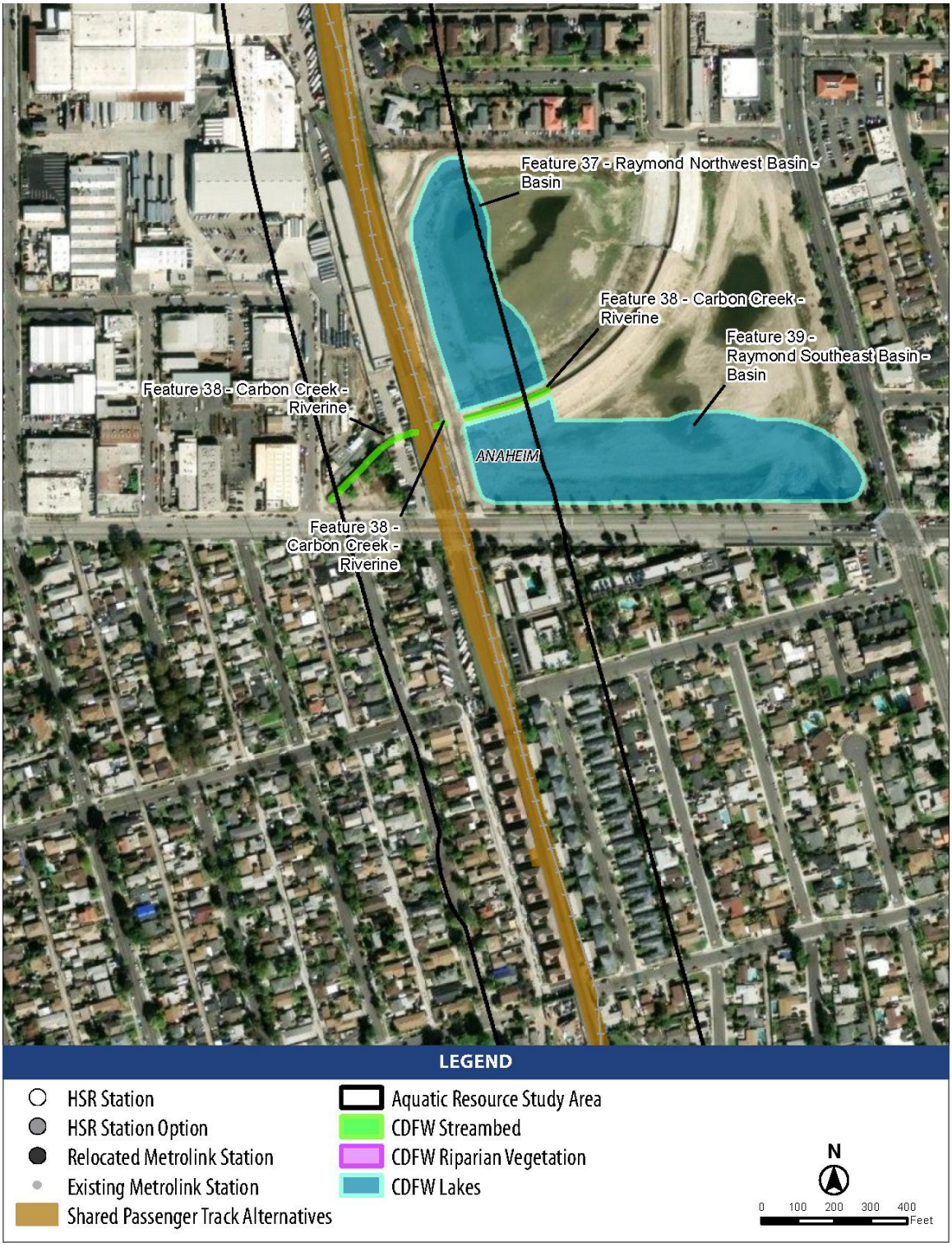
Sources: Authority 2023; ESRI World Imagery 2024; ESRI World Streetmap 2024

Figure H-1 California Department of Fish and Wildlife Waters of the State, Sheet 16 of 19



Sources: Authority 2023; ESRI World Imagery 2024; ESRI World Streetmap 2024

Figure H-1 California Department of Fish and Wildlife Waters of the State, Sheet 17 of 19



Sources: Authority 2023; ESRI World Imagery 2024; ESRI World Streetmap 2024

Figure H-1 California Department of Fish and Wildlife Waters of the State, Sheet 18 of 19



Sources: Authority 2023; ESRI World Imagery 2024; ESRI World Streetmap 2024

Figure H-1 California Department of Fish and Wildlife Waters of the State, Sheet 19 of 19

References

California High-Speed Rail Authority (Authority). 2023. Los Angeles to Anaheim Supplemental Alternatives Analysis alignment geographic information system files.

Cowardin, L. M., V. Carter, F. C. Golet, and E. T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. Prepared for U.S. Department of the Interior, Fish and Wildlife Service, Office of Biological Services.

Environmental Systems Research Institute (ESRI) World Imagery. 2024. Website. http://goto.arcgisonline.com/maps/World_Imagery.

Environmental Systems Research Institute (ESRI) World Streetmap. 2024. Website. http://www.arcgis.com/home/item.html?id=e8a316cc5ab44da8962108ff8c59dc6c.

U.S. Fish and Wildlife Service (USFWS). 2016. *National Wetlands Inventory Mapper*. www.fws.gov/wetlands/data/mapper.HTML (accessed May 2016).

———. 2024. *National Wetlands Inventory Mapper*. www.fws.gov/wetlands/data/mapper.HTML (accessed January 2024).

APPENDIX I-1: U.S. ARMY CORPS OF ENGINEERS-STATE WATER RESOURCES CONTROL BOARD WATERS OF THE U.S. AND STATE EFFECTS

APPENDIX I-1. PERMANENT AND TEMPORARY EFFECTS ON U.S. ARMY CORPS OF ENGINEERS/STATE WATER RESOURCES CONTROL BOARD WETLANDS AND NONWETLAND WATERS OF THE U.S. AND STATE [1]

Feature	Impact Type	Permanent Effect		Temporary Effect		Total Effect		Map Page Number[2]
		Linear Feet	Acreage	Linear Feet	Acreage	Linear Feet	Acreage	
Basin – Nonwetland Waters of the U.S.								
Feature 7 (Rio Hondo Basin #1)	N/A	--	--	--	--	--	--	9
Feature 8 (Rio Hondo Basin #2)	N/A	--	--	--	--	--	--	9
Feature 9 (Rio Hondo Basin #3)	N/A	--	--	--	--	--	--	9
Feature 10 (Rio Hondo Basin #4)	N/A	--	--	--	--	--	--	9
Feature 23 (Lakeside Residential Community Pond)	N/A	--	--	--	--	--	--	15
Feature 37 (Raymond NW Basin)	N/A	--	--	--	--	--	--	19
Feature 39 (Raymond SE Basin)	N/A	--	--	--	--	--	--	19
Feature 56 (Rio Hondo Basin #6)	N/A	--	--	--	--	--	--	8
Feature 57 (Rio Hondo Basin #7)	N/A	--	--	--	--	--	--	8
Feature 58 (Rio Hondo Basin #8)	N/A	--	--	--	--	--	--	8
Basin Total	***N/A***	***0***	***0***	***0***	***0***	***0***	***0***	***N/A***
Built Watercourse – Nonwetland Waters of the U.S.								
Feature 29 (unnamed)	Culvert modifications and temporary access	--	--	80	0.02	80	0.02	16
Feature 31 (unnamed)	N/A	--	--	--	--	--	--	17
Built Watercourse Total	***N/A***	***0***	***0***	***80***	***0.02***	***80***	***0.02***	***N/A***
Riverine – Nonwetland Waters of the U.S.								
Feature 1 (Los Angeles River, LAUS to 1st Street)	N/A	--	--	--	--	--	--	2

Feature	Impact Type	Permanent Effect		Temporary Effect		Total Effect		Map Page Number[2]
		Linear Feet	Acreage	Linear Feet	Acreage	Linear Feet	Acreage	
Feature 1 (Los Angeles River, 1st Street to Hobart Yard)	N/A	--	--	--	--	--	--	2–7
Feature 5 (Rio Hondo)	Bridge pier modification, in-kind access road and bike path improvements, and temporary access/staging	59	0.03	93	0.24	152	0.27	8-9
Feature 12 (San Gabriel River)	Bridge pier and pier wall modifications, new pier wall, new storm drain outlet, and temporary access/staging	106	0.02	256	0.64	362	0.66	10
Feature 14 (North Fork Coyote Creek)	Bridge pier modification, and temporary access/staging	77	0.01	116	0.17	193	0.18	11
Feature 15 (Milan Creek)	N/A	--	--	--	--	--	--	11
Feature 18 (La Mirada Creek)	N/A	--	--	--	--	--	--	12
Feature 19 (La Mirada Creek)	Bridge pier, headwall, and culvert modifications, and temporary access/staging	54	<0.01	18	0.03	72	0.03	12
Feature 20 (Coyote Creek)	Culvert and pier wall modifications, and temporary access/staging	28	<0.01	69	0.06	97	0.06	13
Feature 41 (Brea Creek)	Bridge pier modifications, and temporary access/staging	82	0.02	84	0.07	166	0.09	14-15
Feature 28 (Fullerton Creek)	N/A	--	--	--	--	--	--	16
Feature 30 (Fullerton Creek)	N/A	--	--	--	--	--	--	17
Feature 38 (Carbon Creek)	N/A	--	--	--	--	--	--	18
Feature 40 (Santa Ana River)	N/A	--	--	--	--	--	--	20

Feature	Impact Type	Permanent Effect		Temporary Effect		Total Effect		Map Page Number[2]
		Linear Feet	Acreage	Linear Feet	Acreage	Linear Feet	Acreage	
Riverine Total	***N/A***	***406***	***0.09***	***636***	***1.21***	***1,042***	***1.30***	***N/A***
Wetland Waters of the U.S.								
Freshwater Emergent Wetland 3 (Feature 12, San Gabriel River)	Bridge pier modifications, and temporary access/staging	55	0.01	161	0.29	216	0.30	10
Freshwater Forested/Shrub Wetland 1 (Feature 12, San Gabriel River)	N/A	--	--	--	--	--	--	10
Freshwater Emergent Wetland 2 (Feature 12, San Gabriel River)	Temporary access/staging	--	--	3	<0.01	3	<0.01	10
Wetland Waters of the U.S. Total	***N/A***	***55***	***0.01***	***164***	***0.29***	***219***	***0.30***	***N/A***
Wetland and Nonwetland Waters of the U.S. Grand Total	**N/A**	**461**	**0.10**	**800**	**1.52**	**1,261**	**1.62**	**N/A**

Source: Authority 2025

[1] Permanent and temporary effects are based on footprint/design dated 2023 (Authority 2023). A minimum of two decimal places are used for acreage calculations, with the last number rounded up or down depending on value.

[2] The map page number refers to the mapped delineated feature in Appendix F but does not depict the proposed impacts.

-- = No effect; LAUS = Los Angeles Union Station; N/A = not applicable; NW = northwest; SE = southeast; SWRCB = State Water Resources Control Board; USACE = U.S. Army Corps of Engineers

APPENDIX I-2: CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE LAKES, STREAMBEDS, AND ASSOCIATED RIPARIAN VEGETATION EFFECTS

APPENDIX I-2 PERMANENT AND TEMPORARY EFFECTS ON CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE WATERS OF THE STATE WITHIN THE AQUATIC RESOURCE STUDY AREA[1]

Feature	Impact Type	Permanent Effect		Temporary Effect		Total Effect		Map Page Number[6]
		Linear Feet[5]	Acreage[5]	Linear Feet	Acreage	Linear Feet	Acreage	
Basin – Regulated as "Lakes"								
Feature 7 (Rio Hondo Basin # 1)	N/A	--	--	--	--	--	--	8–9
Feature 8 (Rio Hondo Basin # 2)	N/A	--	--	--	--	--	--	9
Feature 9 (Rio Hondo Basin # 3 – SW Basin)	N/A	--	--	--	--	--	--	9
Feature 9 (Rio Hondo Basin # 3, Riparian 1 [Mulefat thicket])[2]	N/A	--	--	--	--	--	--	9
Feature 10 (Rio Hondo Basin # 4)	N/A	--	--	--	--	--	--	9
Feature 23 (Lakeside Residential Community Pond)	N/A	--	--	--	--	--	--	15
Feature 37 (Raymond Northwest Basin)	N/A	--	--	--	--	--	--	19
Feature 39 (Raymond Southeast Basin)	N/A	--	--	--	--	--	--	19
Feature 55 (Rio Hondo Basin # 5)[3]	N/A	--	--	--	--	--	--	8
Feature 56 (Rio Hondo Basin # 6)	N/A	--	--	--	--	--	--	8
Feature 57 (Rio Hondo Basin # 7)	N/A	--	--	--	--	--	--	8
Feature 58 (Rio Hondo Basin # 8)	N/A	--	--	--	--	--	--	8
Basin Total	***N/A***	**--**	**--**	**--**	**--**	**--**	**--**	***N/A***
Built Watercourse – Regulated as "Streambeds"								
Feature 29 (unnamed)	Culvert modifications and temporary access	--	--	80	0.03	80	0.03	16
Feature 31 (unnamed)	N/A	--	--	--	--	--	--	17

Feature	Impact Type	Permanent Effect		Temporary Effect		Total Effect		Map Page Number[6]
		Linear Feet[5]	Acreage[5]	Linear Feet	Acreage	Linear Feet	Acreage	
Built Watercourse Total	***N/A***	***--***	***--***	***80***	***0.03***	***80***	***0.03***	***N/A***
Riverine – Regulated as "Streambeds"								
Feature 1 (Los Angeles River, LAUS to 1st Street)	N/A	--	--	--	--	--	--	2
Feature 1 (Los Angeles River, 1st Street to Hobart Yard)	N/A	--	--	--	--	--	--	2–7
Feature 5 (Rio Hondo)	Bridge pier and abutment modifications, in-kind access road and bike path improvements, and temporary access/staging	101	0.07	304	0.61	405	0.68	8–9
Feature 12 (San Gabriel River, Riparian 2 [Mulefat thicket])[2]	N/A	--	--	--	--	--	--	10
Feature 12 (San Gabriel River, Riparian 3 [Mulefat thicket])[2]	N/A	--	--	--	--	--	--	10
Feature 12 (San Gabriel River)	Bridge pier, pier wall, and abutment modifications, new pier wall, new storm drain outlet, and temporary access/staging	237	0.09	305	0.88	542	0.97	10
Feature 14 (North Fork Coyote Creek)	Bridge pier modification, and temporary access/staging	127	0.02	204	0.32	331	0.34	11
Feature 15 (Milan Creek)	N/A	--	--	--	--	--	--	11
Feature 18 (La Mirada Creek)	N/A	--	--	--	--	--	--	12
Feature 19 (La Mirada Creek)	Bridge pier, headwall, and culvert modifications, and temporary access/staging	71	<0.01	18	0.04	89	0.04	12

Feature	Impact Type	Permanent Effect		Temporary Effect		Total Effect		Map Page Number[6]
		Linear Feet[5]	Acreage[5]	Linear Feet	Acreage	Linear Feet	Acreage	
Feature 20 (Coyote Creek)	Culvert and pier wall modifications, and temporary access/staging	28	<0.01	69	0.06	97	0.06	13
Feature 41 (Brea Creek)	Bridge pier modifications, and temporary access/staging	82	0.02	84	0.08	166	0.10	14–15
Feature 28 (Fullerton Creek)	N/A	--	--	--	--	--	--	16
Feature 30 (Fullerton Creek)	N/A	--	--	--	--	--	--	17
Feature 38 (Carbon Creek)	N/A	--	--	--	--	--	--	18
Feature 40 (Santa Ana River)	N/A	--	--	--	--	--	--	19
Riverine Total	***N/A***	***646***	***0.20***	***984***	***1.99***	***1,630***	***2.19***	***N/A***
Wetlands – Regulated as "Associated Riparian Vegetation"[2]								
Freshwater Emergent Wetland 3 (Feature 12, San Gabriel River)	Bridge pier modifications, and temporary access/staging	55	0.01	161	0.29	216	0.30	10
Freshwater Forested/Shrub Wetland 1 (Feature 12, San Gabriel River)	N/A	--	--	--	--	--	--	10
Freshwater Emergent Wetland 2 (Feature 12, San Gabriel River)	Temporary access/staging	--	--	3	<0.01	3	<0.01	10
Freshwater Emergent Wetland (Feature 19, La Mirada Creek)[4]	N/A	--	--	--	--	--	--	12
Wetland Total	***N/A***	***58***	***0.01***	***161***	***0.29***	***219***	***0.30***	***N/A***
CDFW Waters of the State Grand Total	**N/A**	**704**	**0.21**	**1,145**	**2.31**	**1,849**	**2.52**	**N/A**

Source: Authority 2025

[1] Permanent and temporary effects are based on footprint/design dated 2023 (Authority 2023). A minimum of two decimal places are used for acreage calculations, with the last number rounded up or down depending on value.

[2] Within the Aquatic RSA, associated riparian vegetation occurs within wetlands (freshwater emergent wetland, freshwater forested/shrub wetland) as well as nonwetland (basin, riverine) conditions, depending on the hydrologic, geomorphic, soils, and vegetative conditions. Refer to Section 6.4.1.1, Freshwater Emergent Wetland, Section 6.4.2.2, Riverine, and Section 6.4.2.1, Basins, for additional detail.

[3] Feature 55 (Rio Hondo Basin #5) falls within CDFW Section 1600 jurisdiction, but outside of USACE or SWRCB Clean Water Act Section 404/401 jurisdiction.

[4] The freshwater emergent wetland within Feature 19 (La Mirada Creek) is classified as associated riparian vegetation for purposes of CDFW Section 1600 jurisdiction and "riverine" for purposes of USACE or SWRCB Clean Water Act Section 404/401 jurisdiction, because this feature does not meet the USACE or SWRCB wetland definitions.
[5] Calculations do not currently include potential permanent shading effects at San Gabriel River occurring during operations, estimated at 0.09 acre. Values may be revised following consultation with CDFW.
[6] The map page number refers to the mapped delineated feature in Appendix H but does not depict the proposed impacts.
-- = No effect; CDFW = California Department of Fish and Wildlife; LAUS = Los Angeles Union Station; N/A = not applicable; RSA = resource study area; SW = southwest; SWRCB = State Water Resources Control Board; USACE = U.S. Army Corps of Engineers

REFERENCES

California High-Speed Rail Authority (Authority). 2023. Los Angeles to Anaheim Supplemental Alternatives Analysis alignment geographic information system files.

———. 2025. *Los Angeles to Anaheim Project Section Aquatic Resources Impacts Memorandum*.

APPENDIX J: SITE PHOTOGRAPHS



Photo 1. View of the Los Angeles River to the north, from East Washington Boulevard. California Department of Fish and Wildlife unvegetated streambed is depicted.



Photo 2. View of Rio Hondo to the north with the resource study area in the background.



Photo 3. View to the north of habitat on the east side of San Gabriel River.



Photo 4. View to the north of the San Gabriel River. California Department of Fish and Wildlife unvegetated streambed and associated riparian vegetation in river are depicted.

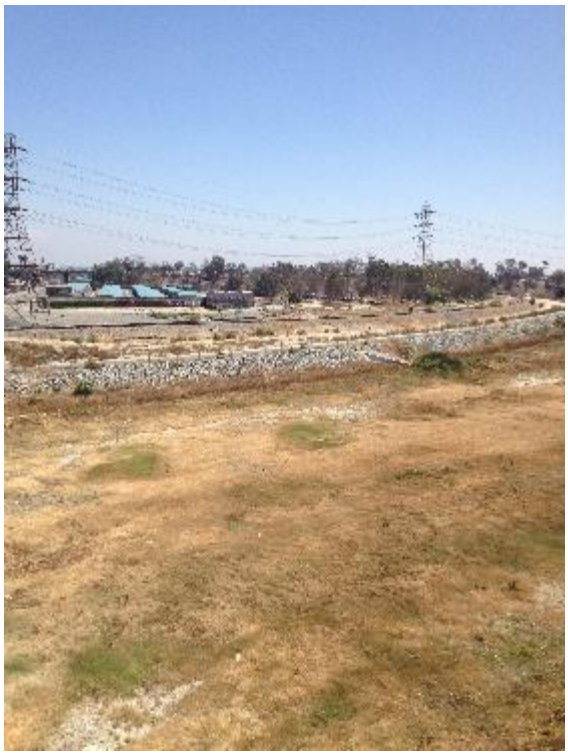


Photo 5. View of the San Gabriel River to the southeast. California Department of Fish and Wildlife unvegetated streambed and associated riparian vegetation in the river are depicted. Eucalyptus – Tree of Heaven – Black Locust Woodland Seminatural Alliance is visible in the background.



Photo 6. View of San Gabriel River bird and bat roosting habitat.



Photo 7. View of annual grassland habitat near Imperial Highway.



Photo 8. View to the north of North Fork Coyote Creek. California Department of Fish and Wildlife unvegetated streambed is depicted.



Photo 9. View to the east of Coyote Creek. Potential bat roosting habitat is present in the palms in the background.



Photo 10. View of Fullerton Creek, facing north. California Department of Fish and Wildlife unvegetated streambed is depicted.



Photo 11. View of Raymond Basin to the west.



Photo 12. View of Raymond Basin to the south.



Photo 13. View to the south of annual grassland adjacent to the Santa Ana River.



Photo 14. View to north of the Santa Ana River. California Department of Fish and Wildlife unvegetated streambed is depicted.



Photo 15. View to the east of the Santa Ana River. California Department of Fish and Wildlife unvegetated streambed is depicted, as well as potential bat and bird roosting/nesting habitat under the bridge.



Photo 16. View of the San Gabriel River to the south. California Department of Fish and Wildlife riparian vegetation and unvegetated streambed are depicted.



Photo 17. View of the Los Angeles River, south end of the Wildlife resource study area, view to the south.



Photo 18. View of the Rio Hondo basin, west side, view to south from south end of Wildlife resource study area.



Photo 19. View of the Rio Hondo River, view to south from south end of Wildlife resource study area.



Photo 20. Potential bat roost site under train bridge at Rio Hondo, at southwest end of Wildlife resource study area.

APPENDIX K: SUMMARY OF REGIONAL AND LOCAL LAWS AND REGULATIONS AND PROTECTED TREES ORDINANCES AND LAWS

APPENDIX K: SUMMARY OF REGIONAL AND LOCAL LAWS AND REGULATIONS AND PROTECTED TREE ORDINANCES AND LAWS

Table K-1 Summary of Regional and Local Laws and Regulations (excludes Tree Ordinances and Laws)

Policy Title	Summary
Southern California	
SCAG Regional Comprehensive Plan (2008)	SCAG adopted the *2008 Regional Comprehensive Plan* in 2008. The plan includes the following policies: ▪ Open Space and Habitat – Natural Lands Goals: Ensure a sustainable ecology by protecting and enhancing the region's open space infrastructure and mitigate growth and transportation related impacts to natural lands by: – Conserving natural lands that are necessary to preserve the ecological function and value of the region's ecosystems; – Conserving wildlife linkages as critical components of the region's open space infrastructure; – Coordinating transportation and open space to reduce transportation impacts to natural lands ▪ Open Space and Habitat – Community Open Space Goals: Enhance the region's parks, trails, and community open space infrastructure to support the aesthetic, recreational and quality-of-life needs, providing the highest level of service to our growing region by: – Improving existing community open space through urban forestry and other programs that provide environmental benefits.
SCAG 2024–2050 Connect SoCal Regional Transportation Plan/ Sustainable Communities Strategy (2024)	SCAG adopted the 2024–2050 Connect SoCal Regional Transportation Plan/Sustainable Communities Strategy in 2024. The plan includes the following policies that are relevant to this project: ▪ Policy 58. Prioritize the climate mitigation, adaptation, resilience, and economic benefits of natural and agricultural lands in the region ▪ Policy 59. Support conservation of habitats that are prone to hazards exacerbated by climate change, such as wildfires and flooding ▪ Policy 60. Support regional conservation planning and collaboration across the region ▪ Policy 61. Encourage the protection and restoration of natural habitat and wildlife corridors ▪ Policy 62. Encourage the conservation and viability of agricultural lands to protect the regional and local food supply and ensure the sustainability of local agriculture as a vital part of the region's economy ▪ Policy 63. Encourage policy development of the link between natural and agricultural conservation with public health

Policy Title	Summary
Los Angeles County	
Los Angeles County 2035 General Plan (2025)	Policies set forth by the county in the general plan are intended to protect significant agricultural resource areas, preserve SEAs, and protect the quality of the coastal environment. The general plan includes a Conservation and Natural Resources Element that addresses open space resources, biological resources, local water resources, agricultural resources, mineral and energy resources, scenic resources, and historic, cultural, and paleontological resources. The general plan also aims to protect watersheds, streams, and riparian vegetation and maintain natural watershed processes by regulating development in tributary watersheds. The County of Los Angeles SEA was established by the *Los Angeles County General Plan* and additionally by the Hillside Management and Significant Ecological Areas Ordinance in 1982. In 2015, the Board of Supervisors approved the Antelope Valley Area Plan and the General Plan 2035, which created the final boundaries and categories for the SEAs. The SEA is intended to aid applicants and staff with implementation of the general plan goals and policies, zoning code regulations, and Department of Regional Planning procedures. The general plan establishes the location of the SEAs, the description of SEAs (e.g., habitat types, unique resources), and program policies. The SEA Ordinance, a component of the county zoning code (Title 22), is the implementation tool of the SEA Program, which establishes the permitting standards and process for development within SEAs. The general plan has identified 21 SEAs and seven Coastal Resource Areas that represent a wide range of biotic communities and have stringent development standards. The Wildlife RSA does not occur in or adjacent to designated County SEAs, Coastal Resource Areas, or other open space–related resources.
LA River Master Plan (2022)	The *LA River Master Plan* was adopted by the Los Angeles County Board of Supervisors in 1996 and revised in 2022 to address the entire 51-mile Los Angeles River. This update is designed to have flexibility in the placement of proposed project elements. The goal of the *LA River Master Plan* is to reimagine the Los Angeles River from a single-use corridor to a tangible, multibenefit resource that connects people, culture, water, open space, and wildlife. The relevant goal is: ▪ Support healthy connected ecosystems Near the Shared Passenger Track Alternatives, which run adjacent to the Los Angeles River from River Mile 22 to River Mile 19.9, the *LA River Master Plan* includes plans for two proposed project sites. At River Mile 21.5, in downtown Los Angeles near the intersection of Santa Fe Ave and 4th St, the First St to Sixth St River Loop project site is proposed. At River Mile 19.9, where E Washington Blvd crosses the Los Angeles River, the E Washington Blvd project site is proposed. Plans for these sites have not been finalized.

Policy Title	Summary
City of Los Angeles	
City of Los Angeles General Plan Framework Element, Chapter 6, Open Space and Conservation (2024)	The City of Los Angeles General Plan Framework Element, Chapter 6, Conservation and Open Space includes the provision, management, and conservation of the city's open space resources, including natural habitats and wildlife. Relevant goals and policies include: Goals: ▪ Protect the City's natural settings from encroachment of urban development Policies: ▪ Protect remaining open space, mitigate for environmental hazards such as flooding, tax incentives for landowners to preserve their lands ▪ Preserving habitat linkages to preserve wildlife corridors, preserving natural viewsheds, water re-use technology ▪ Reassess environmental importance of SEAs and evaluate potential inclusion of other areas ▪ Conserve and manage undeveloped parts of the City's watersheds as open spaces to protect, conserve, and enhance natural resources ▪ On-site evaluation of sites evaluated as sensitive habitats or for wildlife movement in the Framework Element's Technical Background Report and Environmental Impact Report ▪ Preservation of private land open space to the maximum extent feasible ▪ Encourage increase of open space where opportunities exist to protect wild areas such as the Sepulveda Basin and Chatsworth Reservoir ▪ The amount of earth moved in grading operations within desirable open space areas should be limited and closely controlled. Aesthetic consideration should be incorporated into the City's approval of grading plans in these areas, ▪ The designation of an area as either open space land or desirable open space is not intended to preclude the development of needed transportation facilities. Such transportation facilities traversing public park properties are subject to various laws controlling development.
Los Angeles Municipal Code, Chapter VI: Public Works and Property, Article 4.4: Stormwater and Urban Runoff Pollution Control (2025)	Ordinance number 172,176. (b) No person shall discharge, cause, or permit the discharge of untreated runoff from the washing of impervious surfaces into the storm drain system. This provision shall apply unless the washing is specifically required by State or local health and safety codes or unless the discharge is conditionally exempt as street or sidewalk washing as provided in Subdivision 2, Subsection A of Section 64.70.03 of this article. C. Controlling Spills, Dumping or Disposal of Materials to the Storm Drain System. This subsection applies to all persons within the City of Los Angeles and is in addition to any other anti-littering provisions provided in this Code, including, without limitation, Sections 56.08, 57.21.06, 62.54, 66.04 and 66.25. (Amended by Ord. No. 183,833, Eff. 10/3/15.) 1. The following prohibitions apply to all persons within the City of Los Angeles and any violation of this subdivision shall be punishable as a misdemeanor: (a) No person shall throw, deposit, leave, cause or permit to be thrown, deposited, placed, or left, any refuse, rubbish, garbage, or other discarded or abandoned objects, articles, and accumulations, in or upon any street, gutter, alley, sidewalk, storm drain, inlet, catch basin, conduit or other drainage structures, business place, or upon any public or private lot of land in the City so that such materials, when exposed to stormwater or any runoff, become a pollutant in the storm drain system. (b) No person shall intentionally dispose or cause the disposal of leaves, dirt, or other landscape debris into the storm drain system.

Policy Title	Summary
	(c) No person shall spill, dump, or dispose any pesticide, fungicide, or herbicide, into the storm drain system. (d) No person shall leave, dispose, cause or permit the disposal of a hazardous substance in a manner that results or potentially could result in a spill, leak or drainage of such onto any sidewalk, street or gutter that discharges into or flows with any other runoff into the storm drain system. (Amended by Ord. No. 183,833, Eff. 10/3/15.) (e) No person shall store fuels, chemicals, fuel or chemical wastes, animal wastes, garbage, batteries, and any toxic materials in a manner that causes or potentially could cause the runoff of pollutants from these materials or wastes into the storm drain system. (Amended by Ord. No. 183,833, Eff. 10/3/15.) (f) No person shall dispose, discharge, or permit the discharge of any sanitary or septage wastes from any source into the storm drain system. D. Requirement to Prevent, Control, and Reduce Stormwater Pollutants. Any owner or operator of a facility or business within the City of Los Angeles engaged in activities or operations as listed in the Critical Sources Categories, Section III of the Board's Rules and Regulations shall be required to implement Best Management Practices (BMPs) as promulgated in the Rules and Regulations. Any owner/developer of a property under construction within the City of Los Angeles or his designated representative shall be required to implement the stormwater pollution control requirements for construction activities as depicted in the project plans approved by the Department of Building and Safety. In the event a specified BMP proves to be ineffective or infeasible, the Director may require additional and/or alternative, site-specific BMPs or conditions deemed appropriate to achieve the objectives of this ordinance as defined in Subsection B of LAMC Section 64.70. Any violation or failure to implement a BMP in a timely manner shall be punishable as an infraction unless the violation or failure is declared in this Code to be a misdemeanor. (Added by Ord. No. 175,026, Eff. 2/2/03.) E. Controlling Pollutants from Parking Lots. Any owner or operator of industrial/commercial motor vehicle parking lots with more than twenty-five (25) parking spaces that are in areas potentially exposed to storm water shall be required through regular sweeping or other effective measures to remove all debris during the period between October 1 and April 15. Violation of this subsection shall be punishable as an infraction. (Former Subsection D. re-designated Subsection E. by Ord. No. 175,026, Eff. 2/2/03.)
Los Angeles Municipal Code, Chapter I: General Provisions and Zoning. Article 3: Specific Plan – Zoning Supplemental Use Districts, Sec. 13.17: "Rio" River Improvement Overlay District (2025)	The purpose of the River Improvement Overlay District is to support the goals of the *Los Angeles River Revitalization Master Plan* and contribute to the environmental and ecological health of the city's watersheds by establishing a positive interface between river-adjacent property and river parks and greenways and to provide native habitat and support local species.

Policy Title	Summary
City of Los Angeles, Stormwater Program, Department of Public Works, Bureau of Sanitation Requirements (2016)	Where environmentally sensitive areas occur, stormwater BMPs will be required by the City of Los Angeles Department of Public Works. The Los Angeles Municipal Code is effective from October 24, 2016. *Environmentally sensitive area* means any area in which plant or animal life, or their habitats, are either rare or especially valuable because of their special nature or role in an ecosystem and that would be easily disturbed or degraded by human activities and developments. Environmentally sensitive areas include, but are not limited to, areas designated as SEAs by the County of Los Angeles, areas designated as Significant Natural Areas by the CDFW Significant Natural Areas Program and field verified by CDFW, and areas listed in the Basin Plan as supporting the "Rare, Threatened, or Endangered Species" beneficial use. The requirements include: 1. Implement stormwater BMPs to retain or treat the runoff from a storm event producing 1/2 inch of rainfall in a 24-hour period. A signed certificate from California licensed civil engineer or licensed architect that the proposed BMPs meet this numerical threshold standard is required. 2. Post development peak stormwater runoff discharge rates shall not exceed the estimated pre-development rate for developments where the increase peak stormwater discharge rate will result in increased potential for downstream erosion. 3. Concentrate or cluster development on portions of a site while leaving the remaining land in a natural undisturbed condition. 4. Limit clearing and grading of native vegetation at the project site to the minimum needed to build lots, allow access, and provide fire protection. 5. Maximize trees and other vegetation at each site by planting additional vegetation, clustering tree areas and promoting the use of native and/or drought tolerant plants. 6. Promote natural vegetation by using parking lot islands and other landscaped areas. 7. Preserve riparian areas and wetlands. 8. The owner(s) of the property will prepare and execute a covenant and agreement (Planning Department General Form CP-6770) satisfactory to the Planning Department binding the owners to post construction maintenance of the structural BMPs in accordance with the Standard Urban Stormwater Mitigation Plan and or per manufacturer's instructions (obtain clearance letter from Watershed Protection Division, Bureau of Sanitation).

Policy Title	Summary
Los Angeles River Ecosystem Restoration Project (2015)	The City of Los Angeles, in conjunction with USACE, has prepared a Final Integrated Feasibility Report and EIS/EIR (USACE and City of Los Angeles 2015) for the proposed Los Angeles River Ecosystem Restoration Project. This project involves restoring 11 miles of the Los Angeles River from approximately Griffith Park to downtown Los Angeles, while maintaining existing levels of flood risk management. Los Angeles River Ecosystem Restoration Project activity in the vicinity of the Shared Passenger Track Alternatives includes Reach 8 – Union Pacific LATC Intermodal Facility. The Los Angeles River in this area is concrete lined, with existing rail lines adjacent to the channel on both banks. This section of the river would be restored to a historic wash and riparian habitat. The restoration would use existing culverts to allow flows from the ephemeral wash to enter the Los Angeles River under the railroad lines. Invasive vegetation would be removed throughout the project footprint, including the river and tributary channel bottom areas. This plan includes a proposal to restore floodplain functions and create recreation, open space, and residential elements within the 125-acre BNSF Railway Piggyback Yard. Existing railroad tracks would be elevated on trestles to allow flow-through connection of the riparian zone and marsh habitat (also known as Mission Yard or LATC). The Shared Passenger Track Alternatives are approximately 1,500 feet to the west of Piggyback Yard. Farther south, reach 8 is directly adjacent to the northern end of the Shared Passenger Track Alternatives as the reach continues south of E Cesar E. Chavez Ave, past U.S. Highway 101 and to First St.
City of Vernon	
City of Vernon General Plan, Resources Element (2023)	The City of Vernon adopted the Resources Element of the *City of Vernon General Plan* in 2015 and last amended the general plan in 2023. The general plan element contains the following goal: ▪ Goal R-3: Preserve established open spaces and look for opportunities to create new open space areas that can benefit the health and welfare of workers and residents in Vernon.
City of Bell	
City of Bell 2030 General Plan, Resource Management Element (2022)	The City of Bell adopted the Resource Management Element of the *City of Bell 2030 General Plan* in 2020 and last updated the general plan in 2022. The Resource Management Element focuses on five key issue areas: recreational resources, ecological resources, cultural resources, air quality, and water resources. The city of Bell is highly urbanized, and no ecologically sensitive habitat for plants or animals is present in the city. The Los Angeles River has been channelized through the city, which has resulted in a loss of riparian habitat.
City of Commerce	
City of Commerce 2020 General Plan, Resource Management Element (2008)[1]	The *City of Commerce 2020 General Plan* (2008) Resource Management Element seeks to increase the city's plant resources by implementing a definitive street tree program that, at a minimum, calls for landscaping along major rights-of-way and within industrial and commercial developments. This landscaping is to be conducted by the city.

Policy Title	Summary
City of Montebello	
City of Montebello General Plan, Our Natural Community, Conservation and Open Space Element (2024)	The *City of Montebello General Plan* (2024) Our Natural Community chapter includes the Conservation Open Space Element, which includes the topics of air and water, greenhouse gases, open space, hillsides, watersheds, riparian areas, and plants and animals. The Rio Hondo and spreading grounds occur in Montebello. To the north of the Shared Passenger Track Alternatives on the west side of the Rio Hondo, there is a plan for enhancement of the existing Rio Hondo connector by adding Bluff Park at the end of Sycamore St at De Paul Center and bluff-top trail. This is a recreational park and will not change the quality of biological resources present.
City of Santa Fe Springs	
Re-Imagine Santa Fe Springs 2040 General Plan, Open Space and Conservation Element (2022)	The *Re-Imagine Santa Fe Springs 2040 General Plan* Open Space and Conservation Element sets forth policies to increase the amount of open space throughout the city. The Open Space and Conservation Element lists the rail corridor and area adjacent to the San Gabriel River as potential open space use areas. ▪ Goal COS-1: A Vibrant Park System that Meets Evolving Community Needs – Policy COS 1.1: Parkland Acreage and Access. Strive to maintain a parkland to population ratio of at least 4.0 acres per 1,000 residents and park facilities located so every resident lives within a 10-minute walk to a park or other recreation facility. – Policy COS 1.2: Use of Unique Property. Utilize remnant properties along freeways, utility easements, or other corridors for use as recreational amenities or innovative urban open spaces. – Policy COS-5.1: Native Plants. Encourage the use of native and climate-appropriate tree and plant species. – Policy COS-5.4: Green Buffers: Expand trees and landscaping to build an extensive green buffer between residential neighborhoods and freeways, rail corridors, and industrial zones to help reduce air pollution impacts. Prioritize residential neighborhoods that are designated as disadvantaged communities. – Policy COS-5.5: Environmental Benefits. Expand urban greening to reduce air and noise pollution, reduce and clean urban runoff, increase groundwater recharge, improve ecological diversity, and help cool neighborhoods by minimizing heat island effects. – Policy COS-5.6: Bird Nesting. Protect migratory and native bird nesting sites on trees and landscaping during construction and/or tree removal or trimming, with special considerations during the bird nesting season and within parkland, easements, or flood control areas along the San Gabriel River and tributaries.
City of La Mirada	
City of La Mirada General Plan, Open Space and Conservation Element (2003)	Addresses existing and future opportunities for improving and maintaining the quality of parks, trails, and the natural environment. ▪ Goal 2.0 is to preserve and enhance trails and passive open space, which includes La Mirada Creek Park as a trail-oriented and natural open space resource for the community, and to work cooperatively with surrounding jurisdictions to create and maintain the Coyote Creek Multi-Use Trail.

Policy Title	Summary
Orange County	
County of Orange General Plan, Land Use Element, (2025)	The *County of Orange General Plan* was last amended in 2025. The Land Use Element, updated in 2024, includes an Open Space land use category and OSR land use overlays. The Open Space category is most often zoned agricultural and indicates that in the current or near term the land will be used as open space or for agriculture, but there is not a long-term commitment to open space or agricultural uses, except where one of the three overlay categories apply. The OSR overlay identifies lands of scenic or natural attraction and areas of ecological, cultural, historical, and recreational significance that are permanently preserved as and restricted to open space and compatible uses. ▪ OSR designation is intended to reflect lands that are prioritized in the Resources and Recreation Elements of the General Plan that are to remain open space in perpetuity. OSR lands may also include recreational trails and similar facilities. The OSR depiction on the General Plan Land Use Element Map presents generalized reserve boundaries that are for informational purposes only and may not include private in-holding land.
County of Orange General Plan, Resources Element (2025)	Wildlife Habitat Areas (Generalized) are mapped in the 2015 Resources Element, Figure VI-4 of the general plan.
City of Fullerton	
The Fullerton Plan (2025)	*The Fullerton Plan* Goal 24: Responsible management of open spaces balanced with the healthy functioning of environmental systems is to be achieved through specific policies. P24.1 includes maintenance of regional open spaces and P24.2 encourages the preservation of significant open spaces within the region. P24.3 supports increasing access to open spaces while respecting the natural environment. P24.7 supports the creation of open space. P24.8 supports the preservation of ESAs in public open space. P24.9 supports the encouragement of diverse environmentally sensitive passive open spaces. P24.10 supports linking open spaces to public areas and neighborhoods. P24.11.1 supports the management of wildfire areas. P24.13 supports the maintenance of ESAs. P24.13.1 supports the increase in resilience of open space and natural areas to increased risk of fire, flood, and geological hazards. P25.1 supports conservation of sensitive natural resources for sensitive species and plant communities. P25.2 supports projects to pursue restoration of channelized portions of Brea Creek and Fullerton Creek. P25.3 supports regulations to promote trees throughout the city. P25.4 supports the promotion of respecting the natural environment and wildlife inhabiting or migrating to the city's open spaces. P25.5 supports management of development in areas containing significant or rare biological resources. P25.7 includes mitigation of impacts for these resources. P25.8 supports mitigation of impacts on waterways.
City of Anaheim	
City of Anaheim General Plan, Green Element (2025)	The City of Anaheim General Plan was last amended in 2025. The general plan's 2004 Green Element sets policies for the conservation of biological resources and public landscaping. Public Landscaping and Street Trees Policy 1.1 requires that street trees be preserved where practical.

Policy Title	Summary
City of Anaheim General Plan and Zoning Code Update EIR No. 330 (2004) Mitigation Measures 5.3-1 and 5.3-8	The *City of Anaheim General Plan and Zoning Code Update Environmental Impact Report* No. 330 includes mitigation measures for the protection of rare plant and wildlife communities including oak, riparian, wetland, walnut woodland, and coastal sage scrub vegetation communities (Mitigation Measures 5.3-1 and 5.3-8). The City of Anaheim is in the process of updating its general plan.
City of Orange	
Orange General Plan, Natural Resources Element (2025)	The City of Orange adopted the *Orange General Plan* in 2010 and amended it in 2025. The Natural Resources Element contains the following policies: ▪ Goal 1.0: Provide recreational use, scenic enjoyment, and the protection of natural resources and features in open space areas. – Policy 1.1: Conserve open space through various public-private funding mechanisms and management strategies including, but not limited to, conservation easements ▪ Goal 2.0: Protect air, water, and energy resources from pollution and overuse – Policy 2.11: Protect the ecological integrity and overall health of Orange's watersheds – Policy 2.13: Control surface runoff water discharges into the stormwater conveyance system to comply with the City's National Pollutant Discharge Elimination System (NPDES) Municipal Permit and other regional permits issued by the Santa Ana Regional Water Quality Control Board – Policy 2.16: Protect in-stream habitat and natural stream and channel features ▪ Goal 4.0: Conserve and protect wildlife habitat, plant and animal species of concern and general biodiversity. – Policy 4.1: Preserve and protect native and habitat-supporting plant resources throughout the City. – Policy 4.3: Reduce the impact of urban development of important ecological and biological resources. – Policy 4.4: Repair or improve ecological and biological conditions in the urban and natural environments when reviewing proposals for site development and redevelopment, as well as public improvements. – Policy 4.5: Protect the Santiago Creek and Santa Ana River corridors from premature urbanization to ensure the continued availability of important sand and gravel, flood control, water recharge, biological, and open space resources.

Sources: City of Anaheim 2004, 2025a; City of Bell 2022; City of Commerce 2008; City of Fullerton 2025a; City of La Mirada 2003; City of Los Angeles 2016, 2024, 2025a, 2025b; City of Montebello 2024a; City of Orange 2025; City of Santa Fe Springs 2022; City of Vernon 2023; County of Los Angeles 2025a; County of Los Angeles and Los Angeles County Public Works 2022; County of Orange 2025; SCAG 2008, 2024; USACE and City of Los Angeles 2015

[1] This plan is currently undergoing an update as of July 2025.

CDFW = California Department of Fish and Wildlife; EIR = environmental impact report; ESA = environmentally sensitive area; HSR = high-speed rail; LA = Los Angeles; OSR = Open Space Reserve; RSA = resource study area; SCAG = Southern California Association of Governments; SEA = Significant Ecological Area; USACE = U.S. Army Corps of Engineers

Table K-2 Tree Ordinances and Laws

Policy Title	Summary
Los Angeles County	
Los Angeles County Code of Ordinances 22.174 Oak Tree Permits (2025)	The Los Angeles County Oak Tree Ordinance applies to all of the unincorporated areas of the county and its goal is to create favorable conditions for the preservation and propagation of healthy oak trees. Under the ordinance, a person shall not cut, destroy, remove, relocate, inflict damage, or encroach into the protected zone of any tree of the oak tree genus (*Quercus*) that is 8 inches or more in diameter (measured at 4.5 feet above mean natural grade) or, in the case of oaks with multiple trunks, a combined diameter of 12 inches or more of the two largest trunks, without first obtaining a permit.
Los Angeles County Code of Ordinances Chapter 22.126 Tree Planting Requirements (2025)	The County of Los Angeles Tree Planting Requirements are a part of the Urban Greening Program to provide environmental benefits. Planted trees will reduce greenhouse gases by absorbing carbon dioxide, reduce water pollution, and reduce urban heat islands by shading impervious surfaces. This requirement applies to any project that includes a new principal-use building or additions to buildings where the addition adds a cumulative floor area of at least 50 percent of the total existing building floor area or new uncovered surface parking lots with a minimum of 15 parking spaces or existing uncovered surface parking lots expanded to have more than 15 or more parking spaces. For nonresidential or mixed-use projects, a minimum of three trees shall be planted for every 10,000 square feet of developed lot area. Any existing tree within the project site with a minimum trunk diameter of 0.75 inch measured 6 inches above the soil line may count toward meeting the requirement. For parking lots, a shade plan, meeting the specifications in the Tree Planting Guide, is required. The minimum shade coverage will be 50 percent of the uncovered parking area within 15 years of planting the required trees. Tree species will provide adequate shade, are not invasive, and are resistant to local pests and diseases, are adaptable to local climate, and are appropriate for the planting location. The required trees will be a minimum size of 15 gallons and shall have a trunk diameter of 0.75 to 1.5 inches measured 6 inches above the soil line at the time of planting.

Policy Title	Summary
Los Angeles County Code of Ordinances (2025)	The applicable ordinances of the Los Angeles County Code of Ordinances are: ▪ Chapter 12.28, Brush and Vegetation, Section 12.28.030: states that no person shall remove or destroy, or cause the removal or destruction of, natural vegetation on sloping terrain within the unincorporated territory of the County of Los Angeles without first obtaining written approval from the county engineer of the county to do so or in compliance with Section 12.28.040 – Exceptions to chapter applicability. – Section 17.04.340: States that a person shall not dig, remove, destroy, injure, mutilate, or cut any tree, plant, shrub, grass, fruit, or flower, or any portion thereof, growing in a park. Any removal of wood, turf, grass, soil, rock, sand, or gravel from any park is unlawful. – Section 17.04.470: States that a person shall not molest, hunt, disturb, injure, shoot at, take, net, poison, wound, harm, kill, or remove from any park or riding and hiking trail any kind of animal. ▪ Title 22, Planning and Zoning, Section 22.56.2060: States that no person shall cut, destroy, remove, relocate, inflict damage, or encroach into a protected zone of any tree in the oak genus that is 8 inches in diameter or greater measured at 4.5 feet above mean natural grade. ▪ Section 22.126 Tree Planting Requirements – applies to any project that includes new uncovered surface parking lots with a minimum of 15 parking spaces. For projects that are non-residential or mixed-use, a minimum of three trees shall be planted for every 10,000 square feet of developed lot area. The number of trees required on that shade plan shall anticipate a minimum of 50 percent shade coverage of the uncovered parking area within 15 years of planting the required trees. Size, species, location, and maintenance will be as described in Section 22.126.030. The Los Angeles County Oak Tree Ordinance (Section 22.174.010) applies to all areas of the unincorporated areas of the county and its goal is to create favorable conditions for the preservation and propagation of healthy oak trees. A person will not cut, destroy, remove, relocate, inflict damage, or encroach into the protected zone of any tree of the oak tree genus that is more than 8 inches in diameter at 4.5 feet above the mean natural grade (or a combined diameter of 12 inches or more for multiple trunks) without first obtaining a permit. If oak trees are present, an Oak Tree Report per Section 22.174.040 is required. Oak trees are to be protected as much as possible and if removal is needed, replacement will be required.
City of Los Angeles	
Los Angeles Municipal Code Section 41.14i (2025)	Section 41.14i of the City of Los Angeles Municipal Code prohibits any person from cutting, breaking, destroying, removing, defacing, tampering with, marring, injuring, disfiguring, interfering with, damaging, tearing, or altering any tree, shrub, tree stake, or guard in any public street, or affixing or attaching in any manner any other thing whatsoever, including any guy wire or rope, to any tree, shrub, tree stake, or guard, except for the purpose of protecting it.
Los Angeles Municipal Code Section 41.31 Trees – Injury To (2025)	Section 41.31 of the City of Los Angeles Municipal Code prohibits any person from (a) dumping, pouring, or spilling any oil, salt, or salt water or other deleterious matter upon any tree space in any street, or keep or maintain any sidewalk within ten feet of any such trees space on any street any receptacle from which oil or salt water leaks or drips, or pour oil or salt water onto any parking or concrete gutter so as to injure any tree on any street; and (b) piling building material or other material, about any tree, plant, or shrub in a street in any manner that will in any way injure such tree, plant, or shrub.

Policy Title	Summary
Los Angeles Municipal Code, Section 1, Subdivision 12 of Subsection A Protected Tree and Shrub Relocation and Replacement 186873 (2025)	An ordinance amending provisions of the Los Angeles Municipal Code to include Mexican elderberry (*Sambucus mexicana*) and toyon (*Heteromeles arbutifolia*) shrubs in the class of protected trees and update regulations. All existing protected trees and shrubs and relocation of replacement trees and shrubs shall be indicated on a plot plan attached to the building permit. A report prepared by a certified arborist will be required if there are protected trees present. Any of the following protected indigenous tree or shrub species, measuring 4 inches or more in cumulative diameter, 4.5 feet above ground level are protected: Protected Trees (1) Oak trees including valley oak (*Quercus lobata*), California live oak (*Quercus agrifolia*) or any other oak tree indigenous to Southern California, excluding scrub oak (*Quercus berberidifolia*) (2) Southern California black walnut (*Juglans californica* var. *californica*) (3) western sycamore (*Platanus racemosa*) (4) California bay (*Umbellularia californica*) Protected Shrubs (5) Mexican Elderberry (6) Toyon The protected tree or shrub will be replaced within the property by at least four specimens of a protected variety except where the protected species is relocated. A protected tree will only be replaced by protected trees and not protected shrubs. A protected shrub will only be replaced by protected shrubs. When replacement concerns more than two protected trees or shrubs, the permit will be considered at a full public hearing at the Board. Grading may be prohibited in the drip line of a protected tree or shrub.
City of Montebello	
Montebello Municipal Code 12.08.090 (2024)	The Montebello Municipal Code is current through Ordinance 2475, passed March 27, 2024. Section 12.08.090 prohibits any person from removing, trimming, pruning, or cutting any tree planted or maintained by the city. No person shall injure or destroy any tree planted or maintained by the city, by any means.
City of Pico Rivera	
Pico Rivera Municipal Code (2025)	Section 12.40.020 of the code requires a permit for any person, other than a city officer or contractual agent of the city, intending to plant, cut down, pull up, burn, destroy, remove, trim, skin, deface, or remove the outer trunk surface or bark of any roadside tree, or trim or prune such roadside tree so as to deface, injure, destroy, or endanger the life or uniform growth of such roadside tree. The Public Works Department would issue this permit.
City of Santa Fe Springs	
Code of Santa Fe Springs (2025)	Section 96.133 of the Code of Santa Fe Springs prohibits cutting, trimming, pruning, planting, removing, injuring, or interfering with any tree, shrub, or plant upon any street, alley, or public right-of-way within the city without a permit. This permit can be acquired from the Director of Public Works and is valid for 30 days from the date of issuance.
City of La Mirada	
La Mirada Code of Ordinances (2024)	Ordinance 556, Section 2 of the La Mirada Code of Ordinances prohibits injuring or destroying any parkway tree by any means without a permit.

Policy Title	Summary
City of Buena Park	
Buena Park Municipal Code (2025)	Section 12.20.010 of the Buena Park Municipal Code prohibits any person other than a city employee in any public street, alley, parkway, thoroughfare, or place within the city other than a parkway abutting property owned or occupied by such person from planting, or cutting down, injuring, girdling, or removing any tree, shrub, bush or other vegetation; or installing, damaging, or destroying any ornament or improvement. Section 12.20.020 of the Buena Park Municipal Code prohibits any person other than a city employee in any public street, alley, parkway, thoroughfare, or place within the city in and from parkways abutting cutting down, injuring, girdling, destroying, or removing any standing or growing trees or shrubbery or any ornament or improvement in any public park or street of the city without first being issued a permit. The permit for the removal of any tree may require the replanting of another tree after the removal.
City of Fullerton	
City of Fullerton Municipal Code (2025)	According to Section 9.06.090 of the City of Fullerton Municipal Code, developers must submit a plot plan of proposed development to the city so the Director of Development Services can determine the tree requirements for site development. Any proposed change in the direction or width of a public street must incorporate a consideration of street trees within the right-of-way as part of the general plan of improvements.
City of Fullerton Municipal Code (2025)	Section 9.06.100 of the City of Fullerton Municipal Code states that it is also unlawful for any person to alter or remove any tree in Fullerton within a public area or right-of-way without a permit.
City of Anaheim	
City of Anaheim General Plan and Zoning Code Update EIR No. 330 (2004) Mitigation Measures 5.3-1 and 5.3-8	The *City of Anaheim General Plan and Zoning Code Update Environmental Impact Report* No. 330 includes mitigation measures for the protection of rare plant and wildlife communities including oak, riparian, wetland, walnut woodland, and coastal sage scrub vegetation communities (Mitigation Measures 5.3-1 and 5.3-8). The City of Anaheim is in the process of updating its general plan.
Anaheim Municipal Code (2025)	The Anaheim Municipal Code Section 13.12.080 states, “no person shall top or in any other manner injure or damage any street tree. No person shall cut, trim, prune, plant, remove, spray, or in any other manner interfere with any street tree within the City of Anaheim without first having secured written permission from the Director of Community Services or his or her designee.” Any street tree removed must be replaced if a replacement is deemed possible and in accordance with the Official Tree Species List and Tree Master Plan.

Sources: City of Anaheim 2004, 2025b; City of Buena Park 2025; City of Fullerton 2025b; City of La Mirada 2024; City of Los Angeles 2025c, 2025d, 2025e; City of Montebello 2024b; City of Pico Rivera 2025; City of Santa Fe Springs 2025; County of Los Angeles 2025b

[1] This plan is currently undergoing an update as of July 2025.

CDFW = California Department of Fish and Wildlife; EIR = environmental impact report; ESA = environmentally sensitive area; HSR = high-speed rail; LA = Los Angeles; OSR = Open Space Reserve; RPOSD = Regional Park and Open Space District; RSA = resource study area; SEA = Significant Ecological Area

REFERENCES

City of Anaheim. 2004. *Final Anaheim General Plan and Zoning Code Update Environmental Impact Report No. 330*. May. www.anaheim.net/932/Volume-I-Final-EIR-Number-330 (accessed February 2024).

———. 2025a. *City of Anaheim General Plan*, Green Element. October. https://www.anaheim.net/DocumentCenter/View/9521/F-Green-Element (accessed July 2025).

———. 2025b. *Anaheim Municipal Code*. Section 13.12.080. https://codelibrary.amlegal.com/codes/anaheim/latest/anaheim_ca/0-0-0-51668 (accessed August 2025).

City of Bell. 2022. *City of Bell 2030 General Plan*, Housing Element. https://www.hcd.ca.gov/housing-elements/docs/bell-5th-adopted070620.pdf (accessed July 2025).

City of Buena Park. 2025. *Buena Park Municipal Code.* Section 12.20.010, Section 12.20.020. https://ecode360.com/42923016#42923016 (accessed October 2024).

City of Commerce. 2008. *City of Commerce 2020 General Plan,* Resource Management Element. Commerce, CA: January. https://www.ci.commerce.ca.us/Home/ShowDocument?id=76 (accessed October 2024).

City of Fullerton. 2025a. *The Fullerton Plan*, Natural Environment. Fullerton, California. https://www.cityoffullerton.com/home/showpublisheddocument/1055/637436165087430000 (accessed August 2025).

———. 2025b. *City of Fullerton Municipal Code.* Section 9.06.090, Section 9.06.100. https://codelibrary.amlegal.com/codes/fullerton/latest/fullerton_ca/0-0-0-6387 (accessed August 2025).

City of La Mirada. 2003. *City of La Mirada General Plan*, Open Space and Conservation Element. March 25. https://www.cityoflamirada.org/home/showpublisheddocument/914/635804281735200000 (accessed October 2024).

———. 2024. *La Mirada Code of Ordinances.* Ordinance 556, Section 2.

City of Los Angeles. 2016. Stormwater Program, Department of Public Works, Bureau of Sanitation Requirements.

———. 2024. *City of Los Angeles General Plan,* Framework Element, Chapter 6, Open Space and Conservation Element. https://planning.lacity.gov/cwd/framwk/chapters/06/06.htm (accessed October 2024).

———. 2025a. *Los Angeles Municipal Code.* Originally adopted November 12, 1936, with revisions adopted through 2025. ARTICLE 4.4 STORMWATER AND URBAN RUNOFF POLLUTION CONTROL. https://codelibrary.amlegal.com/codes/los_angeles/latest/lamc/0-0-0-162590 (accessed July 2025).

———. 2025b. *Los Angeles Municipal Code.* Originally adopted November 12, 1936, with revisions adopted through 2025. SEC. 13.17. “RIO” RIVER IMPROVEMENT OVERLAY DISTRICT. https://codelibrary.amlegal.com/codes/los_angeles/latest/lamc/0-0-0-285227 (accessed July 2025).

———. 2025c. *Los Angeles Municipal Code.* Originally adopted November 12, 1936, with revisions adopted through 2025. SEC. 41.14. INJURY TO PUBLIC PROPERTY. https://codelibrary.amlegal.com/codes/los_angeles/latest/lamc/0-0-0-128473 (accessed July 2025).

———. 2025d. *Los Angeles Municipal Code.* Originally adopted November 12, 1936, with revisions adopted through 2025. SEC. 41.31. TREES – INJURY TO. https://codelibrary.amlegal.com/codes/los_angeles/latest/lamc/0-0-0-128703 (accessed July 2025).

———. 2025e. *Los Angeles Municipal Code.* Originally adopted November 12, 1936, with revisions adopted through 2025. SEC. 46.00. PROTECTED TREE AND SHRUB REGULATIONS. https://codelibrary.amlegal.com/codes/los_angeles/latest/lamc/0-0-0-132254 (accessed July 2025).

City of Montebello. 2024a. *City of Montebello General Plan*. https://cdnsm5-hosted2.civiclive.com/UserFiles/Servers/Server_58672/File/Departments/Planning%20&%20Comm.%20Dev/Planning%20Division/General%20Plan/Montebello-General-Plan.pdf (accessed October 2024).

———. 2024b. *Montebello Municipal Code*. Section 12.08.090. https://library.municode.com/ca/montebello/codes/code_of_ordinances (accessed October 2024).

City of Orange. 2025. *Orange General Plan,* Natural Resources Element. Adopted March 2010; last updated 2025. https://www.cityoforange.org/our-city/departments/community-development/general-plan (accessed July 2025).

City of Pico Rivera. 2025. *Pico Rivera Municipal Code*. Section 12.40.020. https://ecode360.com/PI4985 (accessed August 2025).

City of Santa Fe Springs. 2022. *Re-Imagine Santa Fe Springs 2040 General Plan*, Conservation and Open Space Element. https://www.santafesprings.org/departments/planning_and_development_department/planning/planning_handouts_and_maps.php#outer-136 (accessed October 2024).

———. 2025. *Code of Santa Fe Springs*. Section 96.133. https://library.municode.com/ca/santa_fe_springs/codes/code_of_ordinances?nodeId=TITIXGERE_CH96STSI_STTR_S96.133PERECUPRTRTRSHPL (accessed July 2025).

City of Vernon. 2023. *City of Vernon General Plan.* Vernon, California. Adopted December 3, 2007; amended July 18, 2023. https://www.cityofvernon.org/home/showpublisheddocument/1306/637635880850570000 (accessed September 2024).

County of Los Angeles. 2025a. *Los Angeles County 2035 General Plan.* Prepared by County of Los Angeles Department of Regional Planning, adopted October 6, 2015; most recently updated March 11, 2025. http://planning.lacounty.gov/generalplan (accessed April 2025).

———. 2025b. *Los Angeles County Code of Ordinances*. Through ordinance No. 2025-0039, adopted July 29, 2025. Section 12.28.030, Section 17.04.340, Section 17.04.470, Section 22.56.2060, Section 22.126, Section 22.174.010. https://library.municode.com/ca/los_angeles_county/codes/code_of_ordinances (accessed August 2025).

County of Los Angeles and Los Angeles County Public Works. 2022. *LA River Master Plan*. June. https://pw.lacounty.gov/uploads/swp/LARiverMasterPlan-FINAL-DIGITAL-COMPRESSED.pdf (accessed October 2024).

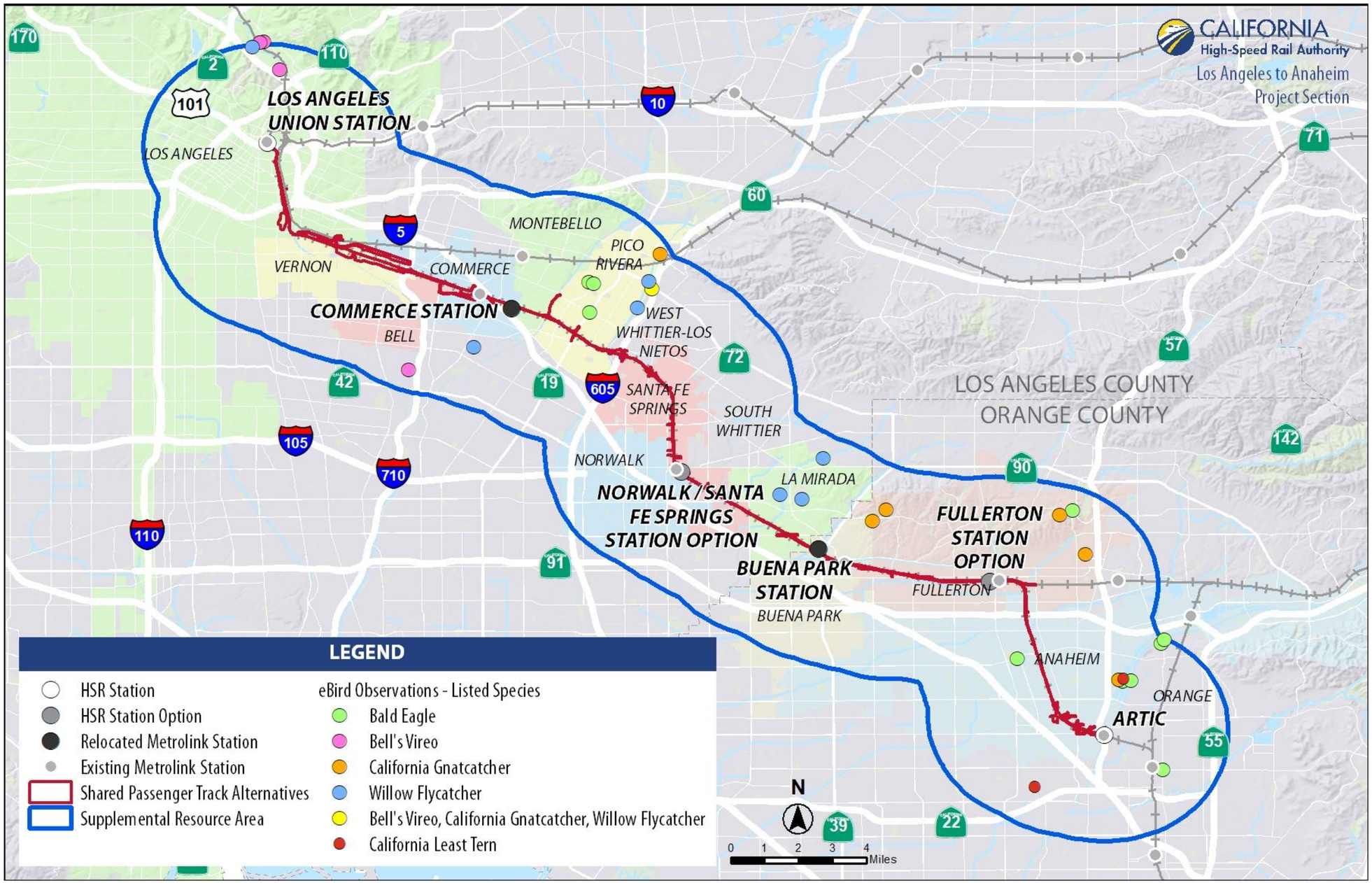
County of Orange. 2025. *County of Orange General Plan*. With updates through February 2025. https://ocds.ocpublicworks.com/service-areas/oc-development-services/planning-development/codes-and-regulations/general-plan (accessed April 2025).

Southern California Association of Governments (SCAG). 2008. *SCAG 2008 Regional Comprehensive Plan*. www.scag.ca.gov/NewsAndMedia/Pages/RegionalComprehensivePlan.aspx (accessed May 2017).

———. 2024. *Connect SoCal: The Southern California Association of Governments' 2024–2050 Regional Transportation Plan/Sustainable Communities Strategy*. April. scag.ca.gov/sites/main/files/file-attachments/23-2987-connect-socal-2024-final-complete-040424.pdf?1714175547 (accessed August 2024).

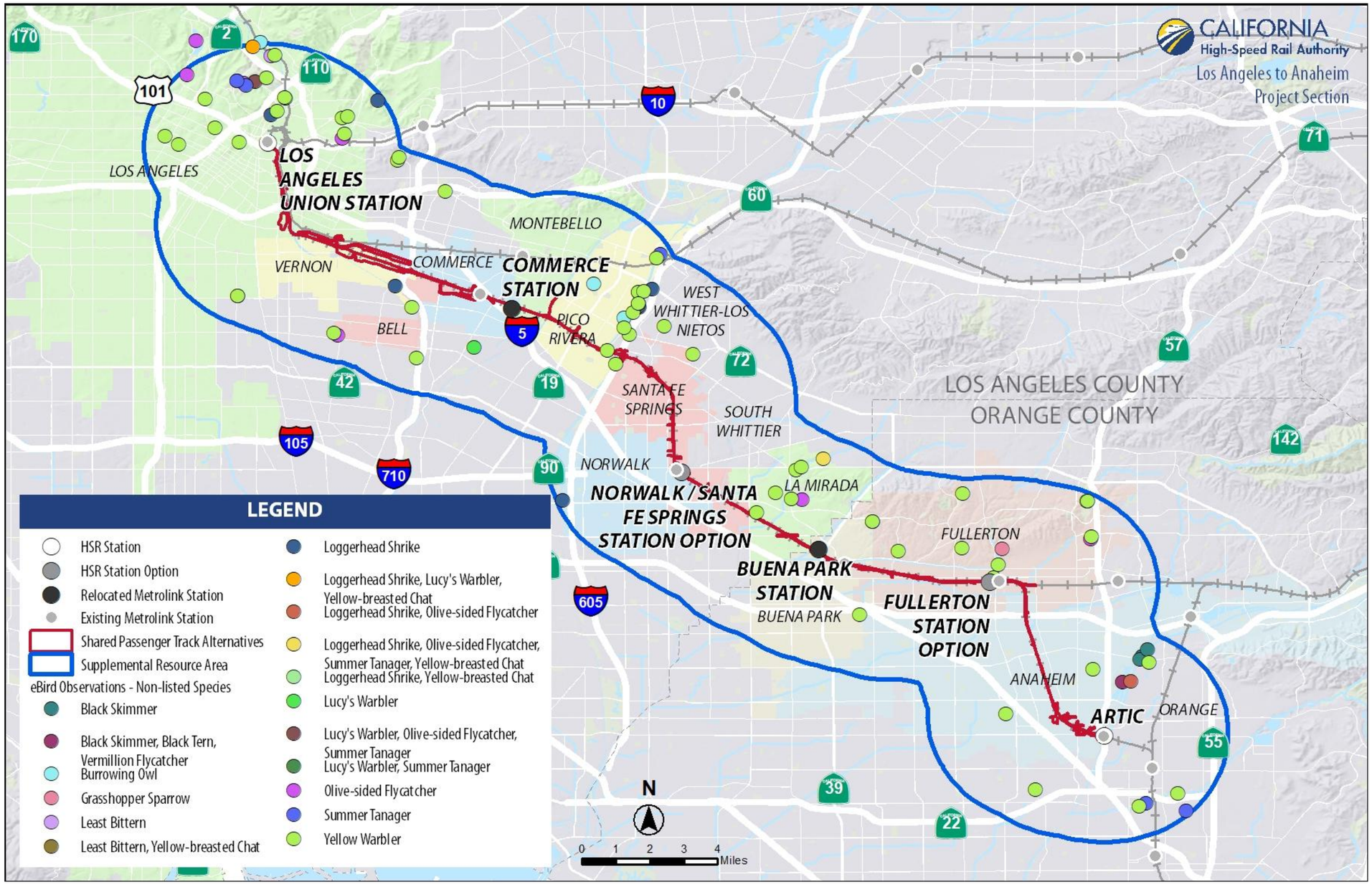
U.S. Army Corps of Engineers (USACE) and City of Los Angeles. 2015. *Los Angeles River Ecosystem Restoration Integrated Feasibility Report: Final Feasibility Report and Environmental Impact Statement/Environmental Report*. September. Los Angeles District. https://apps.engineering.lacity.gov/techdocs/emg/docs/lariver/LAR_Vol%201_Integrated%20Feasibility%20Report.pdf (accessed April 2025).

APPENDIX L: EBIRD SIGHTINGS WITHIN THE SUPPLEMENTAL RESOURCE STUDY AREA



Sources: eBird 2024; Authority 2023; ESRI World Imagery 2024; ESRI Streetmap 2024

Figure L-1 Listed Species eBird Sightings within the Supplemental Resource Study Area



Sources: eBird 2024; Authority 2023; ESRI World Imagery 2024; ESRI Streetmap 2024

Figure L-2 Special-Status Species eBird Sightings within the Supplemental Resource Study Area

REFERENCES

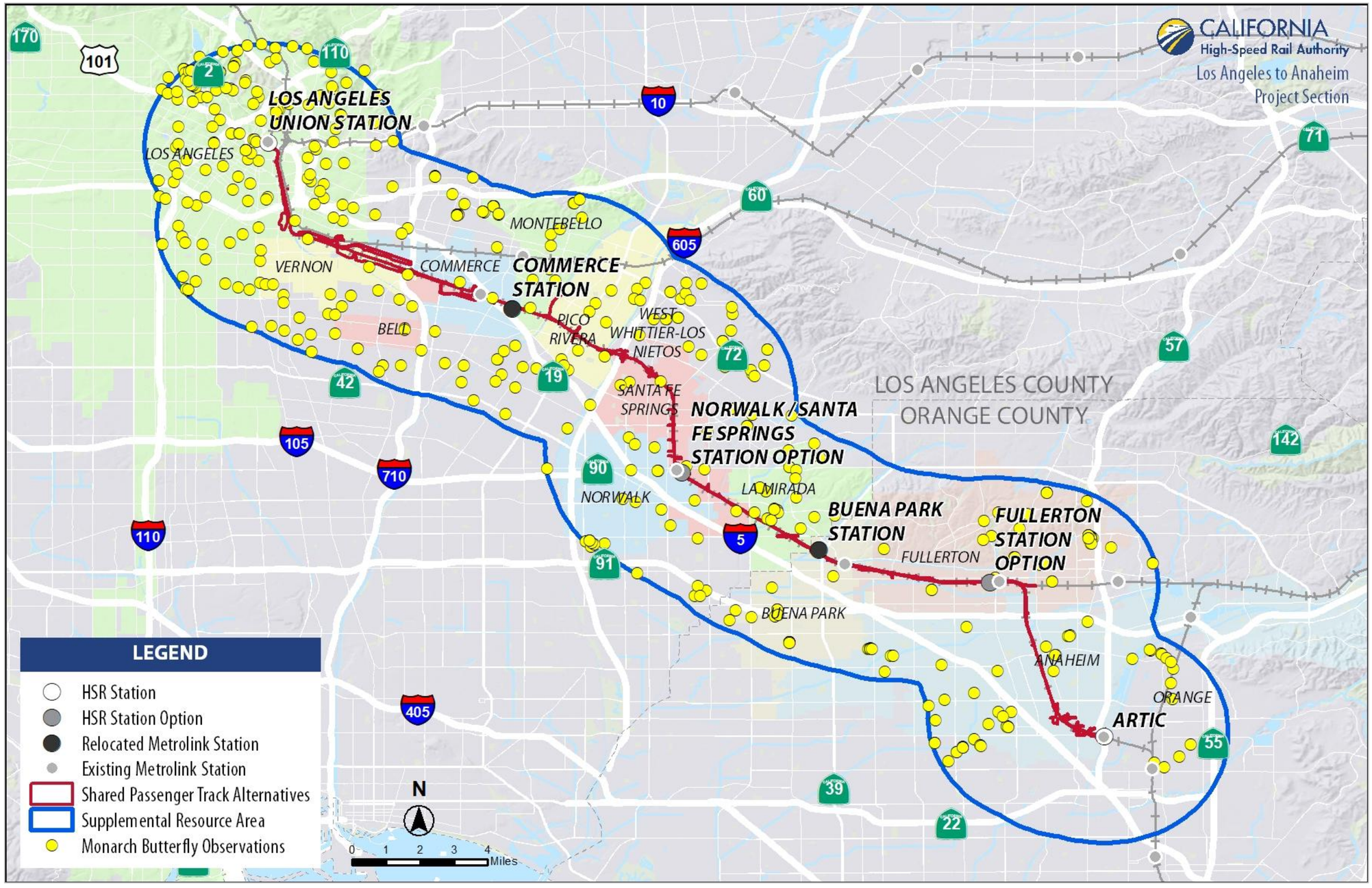
California High-Speed Rail Authority (Authority). 2023. *California High-Speed Train Project Anaheim to Los Angeles Section Supplemental Alternatives Analysis Report.* November. https://hsr.ca.gov/wp-content/uploads/2023/11/231025-LA-A-SAA-Final-Version11-clean-A11Y.pdf (accessed December 2023).

eBird. 2024. eBird: An Online Database of Bird Distribution and Abundance (web application). eBird, Ithaca, New York. www.ebird.org (accessed January, September, and October 2024).

Environmental Systems Research Institute (ESRI) World Imagery. 2024. Website. http://goto.arcgisonline.com/maps/World_Imagery.

Environmental Systems Research Institute (ESRI) World Streetmap. 2024. Website. http://www.arcgis.com/home/item.html?id=e8a316cc5ab44da8962108ff8c59dc6c.

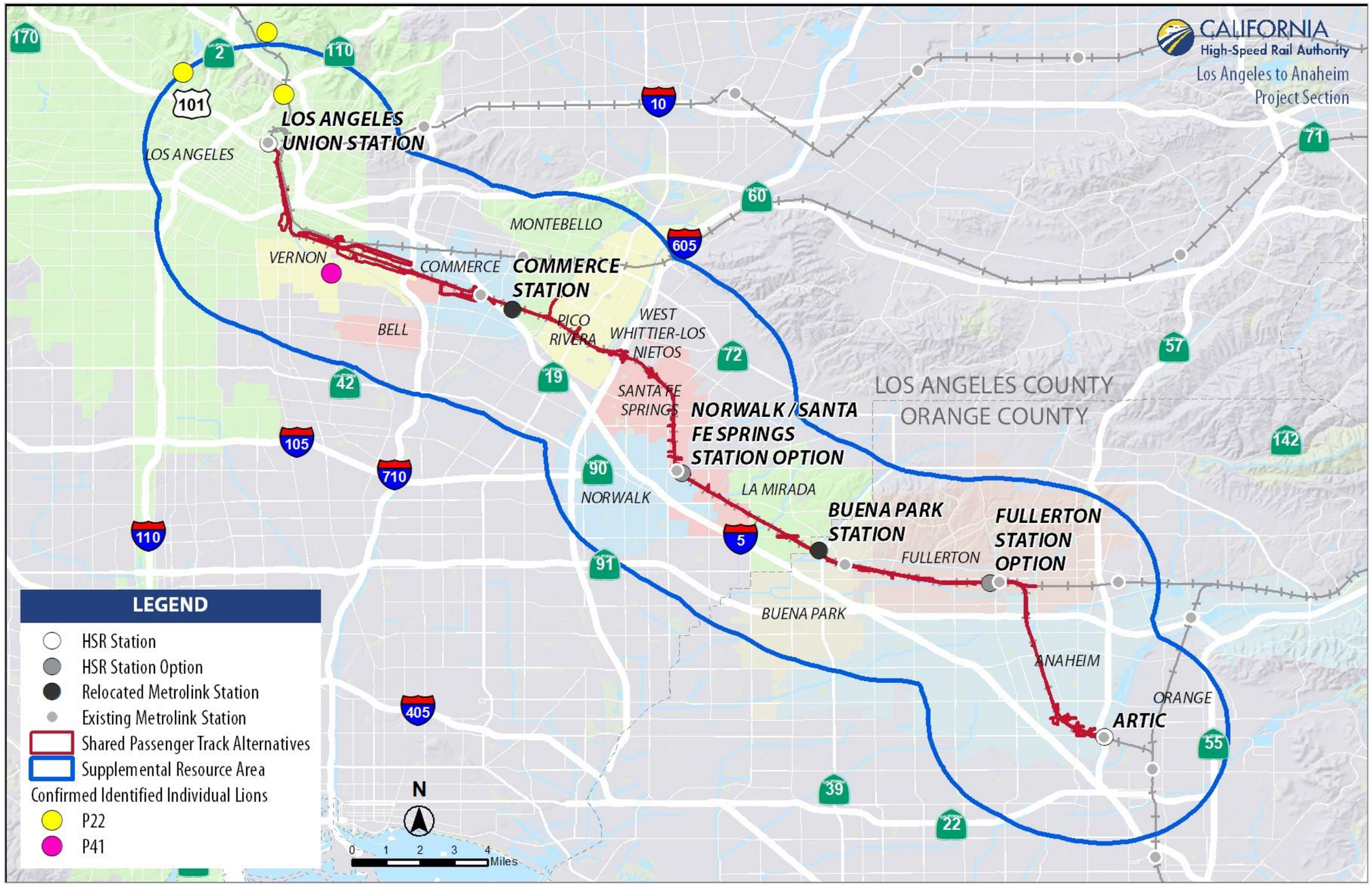
APPENDIX M-1: MONARCH BUTTERFLY MAP



Sources: iNaturalist 2022; ESRI World Imagery 2024

Figure M-1 iNaturalist Monarch Butterfly Sightings in the Supplemental Resource Study Area

APPENDIX M-2: MOUNTAIN LION MAP



Sources: iNaturalist 2022; ESRI World Imagery 2024

Figure M-2 iNaturalist Mountain Lion Sightings in the Supplemental Resource Study Area

REFERENCES

Environmental Systems Research Institute (ESRI) World Imagery. 2024. Website. http://goto.arcgisonline.com/maps/World_Imagery.

iNaturalist. 2022. iNaturalist: A Community for Naturalists (web application). iNaturalist, Berkeley, California. https://www.inaturalist.org/ (accessed May 2022).