

# State Route 1 (SR-1/Lincoln Boulevard) Multimodal Improvement Project

**NES**



## Natural Environment Study

Jefferson Boulevard to South of Fiji Way

City and County of Los Angeles, California

District 7-LA-1, PM 30.2/30.7

EA 07-33880

EFIS No. 0717000061

SCH No. 2018031048

**February 2024**





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STATE OF CALIFORNIA  
Department of Transportation

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## Summary

The City of Los Angeles (the City), in cooperation with the California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA), is currently leading planning efforts for the State Route 1 (Lincoln Boulevard) Multimodal Improvement Project (hereinafter referred to as the “Project”) at the intersection of the Palms-Mar Vista-Del Rey and Westchester-Playa Del Rey Community Plan areas in the City, and at the intersection of these plan areas with unincorporated Los Angeles County, California. The Project’s Build Alternative includes the replacement and widening of the Lincoln Boulevard Bridge over Ballona Creek, replacement and widening of the Culver Boulevard overcrossing over Lincoln Boulevard, replacement of the transition ramps between Lincoln Boulevard and Culver Boulevard, construction of bicycle and pedestrian facilities, addition of one southbound lane along Lincoln Boulevard to eliminate a lane drop, and installation of landscaping, lighting, signage, and water quality improvements. The Project would result in three southbound lanes and three northbound lanes and a 130-foot-wide right-of-way along Lincoln Boulevard within the Project site. The Project would also install a striped center median with space to accommodate a future proposed transit facility within the project limits. Overall, the project would include work along approximately 3,200 feet (0.61 mile) of Lincoln Boulevard within the City and unincorporated Los Angeles County, California from Post Mile 30.2 to Post Mile 30.7. The Project would require temporary construction easements from 17 parcels and partial right-of-way acquisitions from 12 parcels, which would include 4.60-acres of temporary construction easements and 1.17 acres of partial right-of-way acquisition from the Ballona Wetlands Ecological Reserve (BWER).

### Purpose

The purpose of this project is to create a new multi-modal corridor along Lincoln Boulevard between Fiji way and Jefferson Boulevard to improve traffic operations and to serve transit, bicyclists, and pedestrians while minimizing impacts to the BWER, Ballona Creek, and other environmental resources.

## Need

Lincoln Boulevard serves as a critical north-south connection on the Westside. There are few arterial connections that provide continuous access through the Westside of Los Angeles County, which results in Lincoln Boulevard being oversaturated during peak commute periods. Lincoln Boulevard narrows from three to two lanes in the southbound direction, approximately 1,050 feet north of the existing Lincoln Boulevard Bridge over Ballona Creek, and from four to three lanes in the northbound direction, approximately 320 feet north of the intersection with Jefferson Blvd, to the intersection with Fiji Way. These lane reductions create a major bottleneck.

The average vehicle travel speeds along Lincoln Boulevard are 15 mph during peak periods when measured between Ozone Ave in the City of Santa Monica and Sepulveda Boulevard while the design speed is 50 mph. Travel times are greatly impacted by bottlenecks resulting in slower speeds along much of the corridor.

In addition, access for pedestrians along Lincoln Boulevard is disjointed north and south of the Ballona Creek bridge which does not have sidewalks. Lincoln Boulevard also lacks bicycle facilities across the bridge. Pedestrian and bicycle facilities are also deficient along Culver Boulevard.

The Biological Study Area (BSA) for the Project includes all areas of potential direct impacts (temporary and permanent impacts) plus an adjacent 500-foot buffer around all permanent impact areas for potential indirect effects. The BSA has a total length of just over 0.61-miles along Lincoln Boulevard and a total area of approximately 131.81 acres. The BSA is shown in Figure 3.

The following vegetation communities and other landcovers were mapped in the BSA: California sagebrush scrub, coyote brush scrub, degraded coyote brush scrub, laurel sumac scrub, Menzies' golden bush scrub, quailbush scrub, annual non-native brome grassland, cudweed stand, hyssop-leaved, Bassia stand, semi-natural herbaceous stand, upland mustards, alkali weed playa, annual beard grass – bristly ox-tongue grassland, California bulrush marsh, cattail marsh, pickleweed mat, arroyo willow thicket, mulefat thicket, developed landcover, open water, and parks and landscaping. The Project would impact a total of 23.125 acres of total area (12.087 acres of permanent impacts; 0.731 acres of permanent shade impacts; and 10.317 acres of temporary impacts). Of the 23.125-acre project footprint, 12.111 acres are currently developed, 8.137 acres are currently vegetated, and 2.868 acres are open water, as shown in Table 6 and Figure 8.

Special status vegetation types that would be impacted by the Project include Menzies's goldenbush (0.016 acre permanent, 0.297 temporary), California bulrush marsh (0.001 acre permanent, 0.002 temporary), and arroyo willow thicket (0.286 acre permanent). Vegetation communities are shown in Figures 6 and 8.

A total of 21.753 acres of areas under the jurisdiction of the U.S. Army Corps of Engineers (USACE) and Regional Water Quality Control Board (RWQCB) occur within the BSA (Table ES-1). Of these, the Project would impact a total of 3.364 acres (0.470 acre permanent/piers, 0.731 acre permanent/shade, and 2.163 acres temporary), including 0.496 acre of wetlands (0.463 acre permanent and 0.033 acre temporary) under the jurisdiction of the USACE and RWQCB. USACE and RWQCB jurisdictional areas are shown in Figure 9a.

A total of 24.434 acres of resources under the jurisdiction of the California Department of Fish and Wildlife (CDFW) are within the BSA (Table ES-1). Of these, the Project would impact a total of 3.784 acres (0.470 acre permanent/piers, 0.731 acre permanent/shade, and 2.583 acres temporary) under the jurisdiction of the CDFW.

A total of 24.734 acres under the jurisdiction of the California Coastal Commission (CCC) occurs in the BSA (Table ES-1). Of this, the Project would impact a total of 3.784 acres (0.470 acre permanent/piers, 0.731 acre permanent/shade, and 2.583 acres temporary) under the jurisdiction of the CCC. CDFW and CCC jurisdictional areas are shown in Figure 9b.

**Table ES-1 – USACE, RWQCB, CDFW, and CCC Jurisdictional Waters Impacted by the Project**

Jurisdictional Features	Existing Resources (acres)	Permanent Impact/Piers (acres)**	Permanent Impact/Shade (acres)***	Temporary Impact (acres)****	Total Impact (acres)
<b>USACE Waters of the United States</b>					
Wetlands	11.805	0.463	-	0.033	<b>0.496</b>
Non-wetland Waters	9.948	0.007	0.731	2.130	<b>2.868</b>
Total USACE Waters of the United States	21.753	0.470	0.731	2.163	<b>3.364</b>
<b>RWCQB Waters of the State</b>					
Wetlands	11.805	0.463	-	0.033	<b>0.496</b>
Non-wetland Waters	9.948	0.007	0.731	2.130	<b>2.868</b>
Total RWQCB Waters of the State	21.753	0.470	0.731	2.163	<b>3.364</b>
Total CDFW Jurisdictional Resources*	24.434	0.470	0.731	2.583	<b>3.784</b>
Total CCC Jurisdictional Resources*	24.734	0.470	0.731	2.583	<b>3.784</b>
USACE: U.S. Army Corps of Engineers; RWQCB: Regional Water Quality Control Board; CDFW: California Department of Fish and Wildlife; CCC: California Coastal Commission * CDFW and CCC Jurisdictional Resources include wetland and non-wetland features. ** By building a three-span structure instead of a four-span structure and not constructing pier walls for the Lincoln Boulevard Bridge over Ballona Creek, the Project would reduce the amount of concrete and structural supports within the active Ballona Creek channel by approximately 701 square feet from 987 square feet in existing conditions to approximately 286 square feet with the Project, which represents a 71 percent reduction. *** The Project would result in 31,850 sf (0.7312 acres) of shading within Ballona Creek, which is an increase of 16,170 sf (0.3712 acres) from the 15,680 sf (0.3599 acres) of existing shading from the current bridge. **** Temporary impact acreage for Ballona Creek includes the permanent impact areas for piers and shading. Note: This table is the same as 8.					

Focused surveys for special status plant species were conducted in spring/summer 2017. One special status plant species, Lewis’ evening-primrose (*Camissoniopsis lewisii*), was observed in the BSA within two populations of approximately 100 individuals each, which are located along Culver Boulevard on either side of Lincoln Boulevard partially fall within the Project boundary. These populations will be partially impacted by the Project as shown in Figure 7. Additional focused surveys for special status plants are being conducted within the project site in the 2024 survey season. Information on the results of these surveys will be provided along with the Final EIR/EA.

A burrowing owl habitat assessment was conducted in April 2017 and focused surveys for special status bird species were conducted in spring/summer 2017. The federally and State-listed endangered least Bell’s vireo (*Vireo bellii pusillus*) was observed during focused surveys. The State-listed endangered Belding’s savannah sparrow (*Passerculus*



*sandwichensis beldingi*) has a high potential to forage and nest within the BSA and is known to occur in the BWER; however, this species was not observed during focused surveys. The federally and State-listed California least tern (*Sternula antillarum browni*) has a high potential to forage mainly in Ballona Creek. The Project would affect 2.868 acres of open water that may be used for foraging by the California least tern and 0.286 acres of arroyo willow thicket that may be used for foraging for the least Bell's vireo. The Project would not affect foraging or nesting habitat for the Belding's savannah sparrow. Additional focused surveys for special status birds are being conducted within the project site in the 2024 survey season. Information on the results of these surveys will be provided along with the Final EIR/EA.

To avoid or offset potential Project effects to biological resources, avoidance, minimization, and/or mitigation measures shall be implemented prior to Project construction to reduce impacts to biological resources. These measures are presented below in Chapter 5.

Several beneficial biological impacts would result from implementation of the Project, including:

- The Project would provide sidewalks and bicycle lanes, which would help to limit trespassing and trampling of plant communities along the edge of the roadways within the Project site;
- Temporary impact areas within the BWER would be re-planted with native plant species in consultation with CDFW after construction is completed which would improve habitat in areas currently supporting non-native plant species ;
- The Project would result in less square footage of concrete piers/footings in Ballona Creek when compared to existing conditions;
- The Project includes the necessary right-of-way for future transit improvements that are planned along the Project corridor, reducing the change of additional impacts by a future transportation project to the BWER and to biological resources; and
- The Project has been designed in consultation with CDFW and their restoration of the BWER to avoid any redundant work, and to provide bicycle and pedestrian connections to their planned circulation system within the BWER.

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## List of Abbreviated Terms

°F	degrees Fahrenheit
AOU	American Ornithologists' Union
BMP	Best Management Practice
BSA	Biological Study Area
BWER	Ballona Wetlands Ecological Reserve
Cal-IPC	California Invasive Plant Council
Caltrans	California Department of Transportation
CCC	California Coastal Commission
CCMP	California Coastal Management Program
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CDP	Coastal Development Permit
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRA	Coastal Resource Area
CRAM	California Rapid Assessment Method
CRPR	California Rare Plant Rank
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
CZMP	Coastal Zone Management Program
dB	decibels
EA	Environmental Assessment
EFH	Essential Fish Habitat
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
ESA	Environmentally Sensitive Area
ESHA	Environmentally Sensitive Habitat Area
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FMP	Fishery Management Plan
ft	feet

GPS	Global Positioning System
HMMP	Habitat Mitigation Monitoring Plan
IS	Initial Study
ITP	Incidental Take Permit
LCP	Local Coastal Program
Leq	equivalent sound level
MBTA	Migratory Bird Treaty Act
MMPA	Marine Mammal Protection Act
mph	miles per hour
msl	mean sea level
NEPA	National Environmental Policy Act
NES	Natural Environment Study
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NOP	Notice of Preparation
OHWM	Ordinary High Water Mark
PM	post mile
RWQCB	Regional Water Quality Control Board
SEA	Significant Ecological Area
SEL	sound exposure level
SLC	State Lands Commission
SR	State Route
SSC	Species of Special Concern
SWRCB	State Water Resources Control Board
TNW	Traditional Navigable Water
USACE	U.S. Army Corps of Engineers
USC	United States Code
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WDR	Waste Discharge Requirement

# Chapter 1. Introduction

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This Natural Environment Study (NES) has been prepared to support the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) documentation for the proposed State Route 1 (SR-1) Lincoln Boulevard Multimodal Improvement Project (hereinafter referred to as “the Project”), located partly in the City and partly in unincorporated Los Angeles County, California (Figure 1). This NES includes information on the current biological conditions at the Project site and meets the State of California Department of Transportation (Caltrans) requirements for an NES (Caltrans 2022a, 2022b). This information has been reported in accordance with accepted scientific and technical standards that are consistent with the requirements of the U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW),<sup>1</sup> California Coastal Commission (CCC) and Caltrans.

## 1.1. Project History

The Project occurs in the Westside of Los Angeles County along Lincoln Boulevard, which is designated as California State Route (SR) 1 within the Project limits. The Project is located in the Palms-Mar Vista-Del Rey and Westchester-Playa Del Rey Community Plan areas of the City and is partially within unincorporated Los Angeles County, California. The Project site is generally bound by the Lincoln Boulevard/Fiji Way intersection in the north and the Lincoln Boulevard/Jefferson Boulevard intersection in the south. Within the Project limits, Lincoln Boulevard crosses over Ballona Creek, beneath the Culver Boulevard overcrossing over Lincoln Boulevard, and through the BWER.

Another major action proposed in the vicinity of the Project is the Ballona Wetlands Restoration Project, which is being led by the CDFW. Also, Caltrans is implementing a pavement rehabilitation project north, south, and within the Project site along Lincoln Boulevard.

A prior road widening project was previously proposed by Caltrans with similar project limits, and an Initial Study/ Environmental Assessment (IS/EA) was circulated for that project in 2001. The California Coastal Commission denied that project a Coastal Development Permit and the project lost its funding. This prior project proposed widening Lincoln Boulevard from Jefferson to Fiji Boulevard to a total of eight to nine lanes, with minimal bicycle and pedestrian improvements.

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<sup>1</sup> The California Department of Fish and Game (CDFG) changed its name to the California Department of Fish and Wildlife (CDFW) effective January 1, 2013.

## **1.2. Project Purpose and Need**

### **1.2.1. Purpose**

The purpose of this project is to create a new multi-modal corridor along Lincoln Boulevard between Fiji way and Jefferson Boulevard to improve traffic operations and to serve transit, bicyclists, and pedestrians while minimizing impacts to the BWER, Ballona Creek, and other environmental resources.



## Regional Location

State Route 1 (Lincoln Boulevard)  
Multimodal Improvement Project

7-LA-1, PM 30.16/30.74

EA 07-33880

Aerial Source: Esri, Maxar 2022



Figure 1

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### **1.2.2. Need**

Lincoln Boulevard serves as a critical north-south connection on the Westside. There are few arterial connections that provide continuous access through the Westside of Los Angeles County, which results in Lincoln Boulevard being oversaturated during peak commute periods. Lincoln Boulevard narrows from three to two lanes in the southbound direction, approximately 1,050 feet north of the existing Lincoln Boulevard Bridge over Ballona Creek, and from four to three lanes in the northbound direction, approximately 320 feet north of the intersection with Jefferson Blvd, to the intersection with Fiji Way. These lane reductions create a major bottleneck.

The average vehicle travel speeds along Lincoln Boulevard are 15 mph during peak periods when measured between Ozone Ave in the City of Santa Monica and Sepulveda Boulevard while the design speed is 50 mph. Travel times are greatly impacted by bottlenecks resulting in slower speeds along much of the corridor.

In addition, access for pedestrians along Lincoln Boulevard is disjointed north and south of the Ballona Creek bridge which does not have sidewalks. Lincoln Boulevard also lacks bicycle facilities across the bridge. Pedestrian and bicycle facilities are also deficient along Culver Boulevard.

## **1.3. Project Description**

Caltrans, in cooperation with the City of Los Angeles, proposes to improve circulation and safety along Lincoln Boulevard by constructing an additional southbound lane, installing sidewalks and protected bicycle lanes, and implementing complete streets and other related improvements along an approximate 0.61-mile segment of Lincoln Boulevard between Jefferson Boulevard (PM 30.16) and just south of Fiji Way (PM 30.74). The project primarily occurs in the City of Los Angeles, with potential temporary construction easements and partial right-of-way acquisitions needed in the north and northwest within parcels that are located within unincorporated Los Angeles County.

### **1.3.1. Project Alternatives**

The alternatives that are being carried forward for analyses include one No Build Alternative (Alternative 1) and five build alternatives (Alternatives 2, 2A, 2B, 2C, and 2D). A summary of each alternative is provided below. In addition, several alternatives were considered but dismissed because they were not feasible or did not meet the purpose and need for the Project.

**Alternative 1 – No Build Alternative**

Alternative 1 is the No Build Alternative. Alternative 1 would involve the continued maintenance and operation of Lincoln Boulevard and Culver Boulevard within the Project site in their existing configurations. Alternative 1 would maintain operation of the existing Lincoln Boulevard bridge over Ballona Creek and the existing Culver Boulevard bridge over Lincoln Boulevard.

Alternative 1 would not provide any multimodal or public access improvements to Lincoln Boulevard or Culver Boulevard within the Project site, nor would any of the water quality best management practices be implemented that are proposed for the Project. Alternative 1 would not require the replacement of the Lincoln Boulevard Bridge over Ballona Creek; therefore, the bridge would not be reconstructed taller to accommodate anticipated sea level rise. Also, under Alternative 1, the Culver Boulevard bridge over Lincoln Boulevard would not be replaced, nor would any temporary or permanent effects to vegetation/communities/parcels be required. Alternative 1 would not reconstruct the transportation facilities within the Project site consistent with future transit improvements planned along Lincoln Boulevard, which would leave the potential for future effects to adjacent parcels, including the BWER, when the future transit project is built.

**Alternative 2 – Build Alternative**

Alternative 2 includes the realignment of the Lincoln Boulevard centerline approximately 50 feet to the east; the addition of one southbound lane along Lincoln Boulevard for a length of approximately 1,800 feet; demolition, replacement, and widening of the existing Lincoln Boulevard Bridge over Ballona Creek; demolition, replacement, and widening of the existing Culver Boulevard Bridge over Lincoln Boulevard; demolition, replacement, and realignment of the existing connector ramps between Lincoln Boulevard and Culver Boulevard; and construction of active transportation improvements including sidewalks and Class IV protected bicycle lanes on both sides of Lincoln Boulevard. Alternative 2 would also include utility relocation, landscaping, low-intensity street lighting, striping, signage, drainage, and water quality improvements<sup>2</sup>. Alternative 2 would install a striped center median that would allow space (130-feet) to accommodate a future center-running transit facility within the Project site. Alternative 2 has been designed to accommodate existing and future planned transit within the Project site. Construction of Alternative 2

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<sup>2</sup> Storm water generated from the widened roadway would be treated for anticipated roadway contaminants prior to the water discharging into Ballona Creek, Fiji Ditch, or other downstream receiving water bodies. Treatment methods could include practices such as bioinfiltration swales, detention basins, and/or media filters. Storm water generated on the bridge deck of the Lincoln Boulevard Bridge over Ballona Creek would be piped off the bridge and treated on either side of the bridge before it is allowed to outlet to Ballona Creek or other downstream receiving waterbodies.



would result in three through lanes in the northbound and southbound directions of Lincoln Boulevard between Fiji Way and Jefferson Boulevard, with left turn lanes at the intersections of Jefferson Boulevard, Culver Loop and Fiji Way. Figure 2 depicts the temporary and permanent impact boundaries for Alternative 2.

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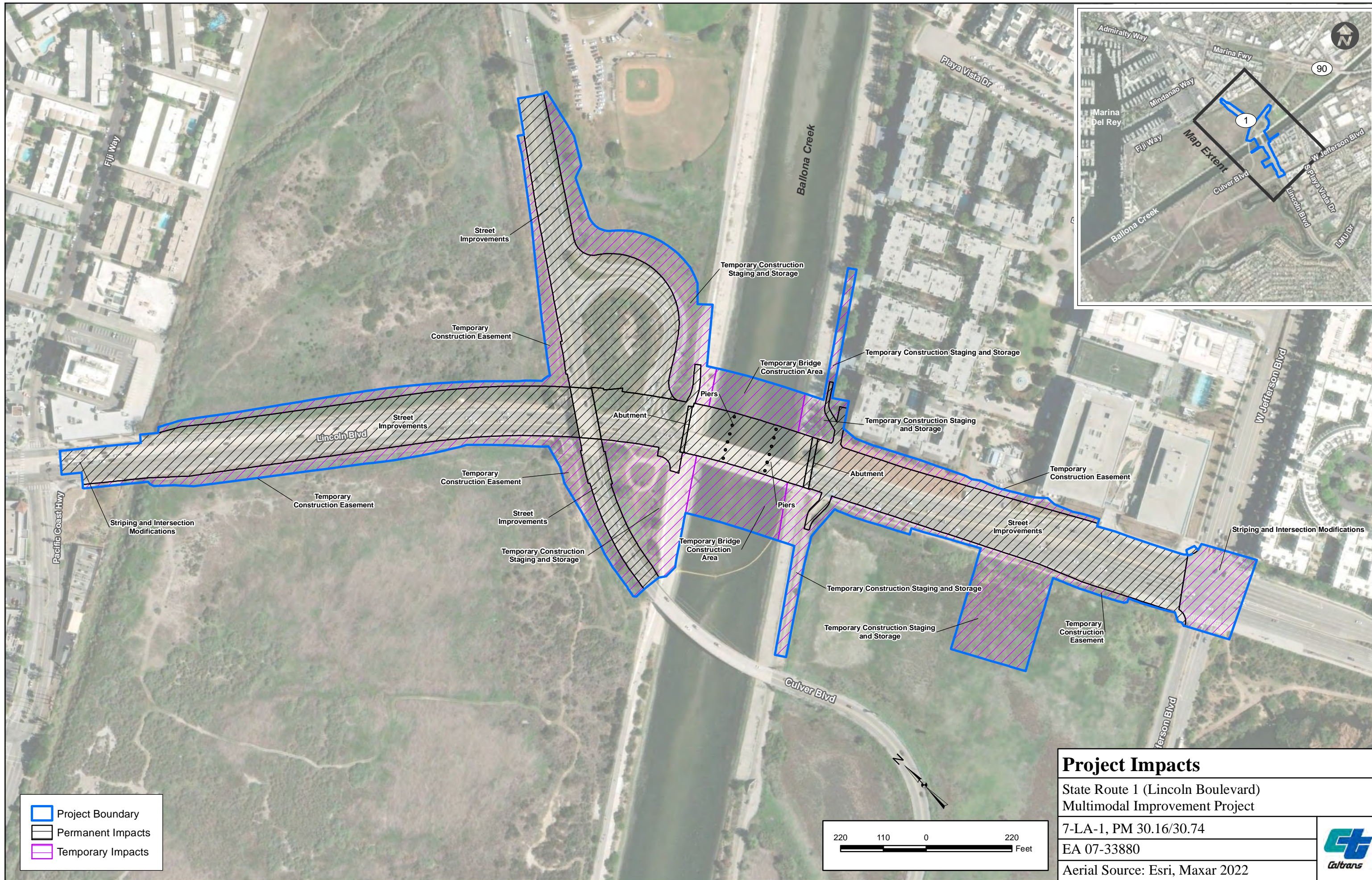


Figure 2



## **Chapter 2. Study Methods**

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This section discusses the methods used to determine the potential for special status species or their habitats to be present in or adjacent to the Biological Study Area (BSA). The data provided in this report were taken from biological studies conducted in spring/summer of 2017, as well as information obtained in the literature review from other nearby studies, as described below. In addition, pertinent information was obtained from studies and other documentation prepared by biologists who have previously conducted studies in the region. Additional focused biological surveys are being conducted within the project site in the 2024 survey season. Information on the results of these surveys will be provided along with the Final EIR/EA.

### **2.1. Regulatory Requirements**

#### **2.1.1. Federal Requirements**

##### **2.1.1.1. NATIONAL ENVIRONMENTAL POLICY ACT**

NEPA establishes a broad national framework for protecting the environment. NEPA's basic policy is to assure that all branches of government give proper consideration to the environment prior to undertaking any major federal action that significantly affects the environment (42 *United States Code* [USC] 4321-4347). NEPA established the U.S. Environmental Protection Agency (USEPA) with the following roles and functions: (1) to establish and enforce environmental protection standards consistent with national environmental goals; (2) to conduct research on the adverse effects of pollution and on methods and equipment for controlling it; the gathering of information on pollution; and the use of this information in strengthening environmental protection programs and recommending policy changes; (3) to assist, through grants, technical assistance, and other means, in arresting pollution of the environment; and (4) to assist the Council on Environmental Quality in developing and recommending to the President new policies for the protection of the environment.

##### **2.1.1.2. FEDERAL ENDANGERED SPECIES ACT**

The Federal Endangered Species Act (FESA) protects plants and animals that the USFWS has listed as "Endangered" or "Threatened". A federally listed species is protected from unauthorized "take," which is defined in the FESA as acts to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct" (16 USC Sections 1532[19] and 1538[a]). In this definition, "harm" includes "any act which actually kills or injures fish or wildlife and emphasizes that such acts may include significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife" (50 *Code of Federal Regulations* [CFR],

Title 50, Section 17.3). Unless performed for scientific or conservation purposes with the permission of the USFWS, take of listed species is only permissible if the USFWS issues an Incidental Take Permit (ITP). When issuing an ITP, all federal agencies, including the USFWS, must ensure that their activities are “not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species” (16 USC 1536[a]). Enforcement of the FESA is administered by the USFWS.

The FESA also provides for designation of Critical Habitat: specific areas within the geographical range occupied by a species where physical or biological features “essential to the conservation of the species” are found and “which may require special management considerations or protection” (16 USC 1538[5][A]). Critical Habitat may also include areas outside the current geographical area occupied by the species that are nonetheless essential for the conservation of the species.

#### **2.1.1.3. SECTIONS 404 AND 401 OF THE CLEAN WATER ACT**

The federal *Clean Water Act* (CWA) provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation’s waters. Section 404 of the CWA (33 USC 1251 et seq.) establishes a permit program administered by the USACE regulating the discharge of dredged or fill material into waters of the United States, including wetlands. All federal agencies are to avoid impacts to wetlands whenever there is a practicable alternative. This permitting authority applies to all waters of the United States where the material has the effect of (1) replacing any portion of waters of the United States with dry land or (2) changing the bottom elevation of any portion of waters of the United States. These fill materials would include sand, rock, clay, construction debris, wood chips, and materials used to create any structure or infrastructure in waters of the United States. Dredge and fill activities are typically associated with development Projects; water resource-related Projects; infrastructure development; and wetland conversion to farming, forestry, or urban development.

Section 401 of the CWA requires that an applicant for a federal license or permit that allows activities resulting in a discharge to waters of the United States must obtain a State Water Quality Certification (or waiver thereof) to ensure that the activity will comply with other provisions of the CWA. The State Water Resources Control Board (SWRCB), in conjunction with the nine California Regional Water Quality Control Boards (RWQCBs), is responsible for administering the Section 401 water quality certification program. These guidelines allow the discharge of dredged or fill material into the aquatic system only if there is no practicable alternative that would have less adverse impacts.

**2.1.1.4. RIVERS AND HARBORS APPROPRIATION ACT OF 1899**

Section 10 of the *Rivers and Harbors Act* (33 USC 403) requires authorization from the Secretary of the Army, acting through the USACE, for the construction of any structure (such as riprap) and activities (such as dredging) in or over any navigable water of the United States. Structures or work outside the limits defined for navigable waters of the United States require a Section 10 permit if the structure or work affects the course, location, or condition of the water body. The USACE grants or denies permits based on the effects on navigation. The law applies to any dredging or disposal of dredged materials, excavation, filling, re-channelization, or any other modification of a navigable water of the United States and applies to all structures, from the smallest floating dock to the largest commercial undertaking. It further includes, without limitation, any wharf, dolphin, weir, boom breakwater, jetty, groin, bank protection (e.g., riprap, revetment, bulkhead), mooring structures such as pilings, aerial or subaqueous power transmission lines, intake or outfall pipes, permanently moored floating vessel, tunnel, artificial canal, boat ramp, aids to navigation, and any other permanent or semi-permanent obstacle or obstruction.

**2.1.1.5. COASTAL ZONE MANAGEMENT ACT**

The *Coastal Zone Management Act* (CZMA) provides for the management of the nation's coastal resources, including the Great Lakes. The goal of the CZMA is to preserve, protect, develop, and where possible, to restore or enhance the resources of the nation's coastal zone. It outlines the Coastal Zone Management Program (CZMP), which aims to balance competing land and water issues through state and territorial coastal management programs.

The federal government certified the California Coastal Management Program (CCMP) in 1977. The enforceable policies of that document are Chapter 3 of the California Coastal Act of 1976. All documents are reviewed for consistency with these policies. For the entire California coast (except San Francisco Bay), the state agency responsible for implementing the CZMA is the CCC. The CCC is responsible for reviewing proposed federal and federally licensed or permitted activities to assess their consistency with the approved CCMP.

**2.1.1.6. MIGRATORY BIRD TREATY ACT OF 1918**

The *Migratory Bird Treaty Act* (MBTA) of 1918 (16 USC 703–711), as amended in 1972, makes it unlawful at any time, by any means or in any manner (unless permitted), to “pursue; hunt; take; capture; kill; attempt to take, capture, or kill; possess; offer for sale; sell; offer to barter; barter; offer to purchase; purchase; deliver for shipment; ship; export; import; cause to be shipped, exported or imported; deliver for transportation;

transport or cause to be transported; carry or cause to be carried; or receive for shipment, transportation, carriage, or export, any migratory bird; any part, nest, or eggs of any such bird; or any product, whether or not manufactured, which consists, or is composed in whole or part, of any such bird or any part, nest, or egg thereof. . . .” (16 USC 703).

The MBTA covers the taking of any nests or eggs of migratory birds, except as allowed by permit pursuant to 50 CFR, Part 21. This regulation seeks to protect migratory birds and active nests. The MBTA protects over 800 species, including geese, ducks, shorebirds, raptors, songbirds, and many relatively common species. Bird species protected under the provisions of the MBTA are identified by the List of Migratory Birds (50 CFR 10.13), as updated by the 1983 American Ornithologists’ Union (AOU) Checklist and published supplements by the USFWS.

In 1972, the MBTA was amended to include protection for migratory birds of prey (e.g., raptors). Six families of raptors occurring in North America were included in the amendment: *Accipitridae* (kites, hawks, and eagles); *Cathartidae* (New World vultures); *Falconidae* (falcons and caracaras); *Pandionidae* (ospreys); *Strigidae* (typical owls); and *Tytonidae* (barn owls). The provisions of the 1972 amendment to the MBTA protect all species and subspecies of these families.

On December 22, 2017, the Department of the Interior Office of the Solicitor released Memorandum M-37050 stating that the MBTA’s “taking” or “killing of migratory birds applies only to deliberate acts such as hunting intended to take a migratory bird. This administration will not seek criminal penalties against companies and individuals who incidentally take migratory birds through otherwise lawful activities.” This reverses the previous administration’s interpretation, which issued Memorandum M-37041 stating that the MBTA applied to both intentional and incidental take. However, because of the court’s split interpretation on the MBTA, it is recommended that companies continue to implement Best Management Practices (BMPs) to mitigate impacts on migratory birds (Perkins Coie 2018; USDOJ 2017).

#### **2.1.1.7. BALD AND GOLDEN EAGLE PROTECTION ACT**

The Bald and Golden Eagle Protection Act (16 USC 668) provides for the protection of the bald eagle (*Haliaeetus leucocephalus*) and the golden eagle (*Aquila chrysaetos*) by prohibiting, except under certain specified conditions, the taking, possession, and commerce of such birds. The 1972 amendments increased penalties for violating provisions of the Act and strengthened other enforcement measures. A 1978 amendment authorizes the Secretary of the Interior to permit the taking of golden eagle nests that interfere with resource development or recovery operations.



A 1994 Memorandum from President William Clinton to the heads of Executive Agencies and Departments establishes the policy concerning collection and distribution of eagle feathers for Native American religious purposes.

**2.1.1.8. EXECUTIVE ORDER 11990**

Executive Order 11990 establishes a national policy to avoid adverse impacts on wetlands whenever there is a practicable alternative. It directs federal agencies to (1) minimize the destruction, loss, or degradation of wetlands and (2) preserve and enhance the natural and beneficial values of wetlands in carrying out the agencies' responsibilities. The U.S. Department of Transportation promulgated DOT Order 5660.1A in 1978 to comply with this direction. On federally funded projects, impacts on wetlands must be identified. Alternatives that avoid wetlands must be considered. If wetland impacts cannot be avoided, then all practicable measures to minimize harm must be included. This must be documented in a specific Wetlands Only Practicable Alternative Finding. Early public involvement in projects affecting wetlands is also required. The Federal Highway Administration (FHWA) provides technical assistance (Technical Advisory 6640.8A) and review environmental documents for compliance.

**2.1.1.9. EXECUTIVE ORDER 13112**

On February 3, 1999, President William J. Clinton signed Executive Order 13112 requiring federal agencies to “prevent the introduction of invasive species and provide for their control and to minimize the economic, ecological, and human health impacts that invasive species [may] cause” (Clinton 1999). An invasive species is defined as “an alien species<sup>3</sup> whose introduction does or is likely to cause economic or environmental harm to harm to human health”. FHWA guidance issued August 10, 1999 directs the use of the State’s invasive species list, maintained by the California Invasive Species Council to define the invasive plants that must be considered as part of the NEPA analysis for a Project.

Under the Executive Order, federal agencies cannot authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species in the United States or elsewhere unless all reasonable measures to minimize risk of harm have been analyzed and considered.

**2.1.1.10. MAGNUSON-STEVENSON FISHERY CONSERVATION AND MANAGEMENT ACT**

The *Magnuson-Stevens Fishery Conservation and Management Act* of 1976 (Magnuson-Stevens Act), as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), established a requirement to describe and identify “essential fish habitat” (EFH) in

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<sup>3</sup> An alien species is “any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem” (Clinton 1999).

each federal fishery management plan (FMP). EFH is defined as “those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity” (16 USC Section 1802[10]). Only species in a fishery management unit managed under a federal FMP are covered under EFH. The Magnuson-Stevens Act requires federal agencies to consult with the National Oceanic and Atmospheric Administration (NOAA) Fisheries Service (also known as the National Marine Fisheries Service [NMFS]) when any activity proposed to be authorized, funded, or undertaken by a federal agency may adversely affect designated EFH. An adverse effect includes direct or indirect physical, chemical, or biological alteration and includes adverse changes to waters or substrate, species and their habitat, other ecosystem components, and quality and/or quantity of EFH.

#### **2.1.1.11. MARINE MAMMAL PROTECTION ACT**

The *Marine Mammal Protection Act* (MMPA) establishes a federal responsibility to conserve marine mammals, with management vested in the Department of Commerce [National Marine Fisheries Service] for cetaceans and pinnipeds other than walrus. The Department of the Interior [USFWS] is responsible for all other marine mammals, including sea otter, walrus, polar bear, dugong and manatee. The MMPA generally assigns identical responsibilities to the Secretaries of the two departments.

The MMPA is the main regulatory vehicle that protects marine mammal species and their habitats in an effort to maintain sustainable populations. In doing so, the MMPA outlines prohibitions, required permits, criminal and civil penalties, and international aspects in addressing marine mammals. The MMPA requires consultation on any action that may adversely affect marine mammals and provides a mechanism for an “incidental” take of species not listed under the FESA. “Take” is defined as “to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal” (16 USC 1362) and further defined by regulation (50 CFR 216.3) as “to harass, hunt, capture, collect, or kill, or attempt to harass, hunt, capture, collect, or kill any marine mammal”.

#### **2.1.1.12. FISH AND WILDLIFE COORDINATION ACT**

The *Fish and Wildlife Coordination Act* requires consultation with the USFWS and the fish and wildlife agencies of States where the “waters of any stream or other body of water are proposed or authorized, permitted or licensed to be impounded, diverted . . . or otherwise controlled or modified” by any agency under a federal permit or license. Consultation is to be undertaken for the purpose of “preventing loss of and damage to wildlife resources.”

## 2.1.2. State Requirements

### 2.1.2.1. CALIFORNIA ENVIRONMENTAL QUALITY ACT

The California Environmental Quality Act (CEQA) (13 *Public Resources Code* Sections 21000 et seq.) is a statute that requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible. The CEQA Guidelines (14 *California Code of Regulations* [CCR] Chapter 3) are the regulations that explain and interpret the law for both public agencies and private development required to administer CEQA.

With regards to plants and animals, Section 15380 of the CEQA Guidelines independently defines “endangered” and “rare” species separately from the definitions of the California Endangered Species Act (CESA). Under CEQA, endangered species of plants or animals are defined as those whose survival and reproduction in the wild are in immediate jeopardy, while rare species are defined as those that (1) have such low numbers that they could become endangered if their environment worsens or (2) are likely to become endangered within the foreseeable future (e.g., “threatened” as used in the FESA). In addition, a Lead Agency can consider a non-listed species (e.g., species with a California Rare Plant Rank [CRPR], California Species of Special Concern [SSC], or species of Local Concern) to be treated as if it were endangered, rare, or threatened for the purposes of CEQA if the species can be shown to meet the criteria in the definition of “rare” or “endangered” in the project region.

The CEQA Guidelines designates certain “trustee agencies” that have jurisdiction by law over natural resources affected by a project which are held in trust for the people of California. The CDFW is the trustee responsible for conservation, protection, and management of wildlife, native plants, and habitat necessary to maintain biologically sustainable populations. Trustee agencies are generally required to be notified of CEQA documents relevant to their jurisdiction, whether or not these agencies have actual permitting authority or approval power over aspects of the underlying project. The CDFW shall provide the requisite biological expertise to review and comment upon environmental documents and impacts arising from project activities and shall make recommendations regarding those resources held in trust for the people of California (*California Fish and Game Code* §1802).

### 2.1.2.2. CALIFORNIA ENDANGERED SPECIES ACT

The State of California implements the California Endangered Species Act (CESA) which is enforced by the CDFW. While the provisions of the CESA are similar to the FESA, CDFW also maintains a list of California Threatened and Endangered species, independent of the FESA Threatened and Endangered species list. It also lists species that

are considered Rare and Candidates for listing, which also receive protection. The California list of Endangered and Threatened species is contained in Title 14, Sections 670.2 (plants) and 670.5 (animals) of the *California Code of Regulations*.

State-listed Threatened and Endangered species are protected under provisions of the CESA. Activities that may result in take of individuals (defined in CESA as acts to “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill”) are regulated by the CDFW. While habitat degradation or modification is not included in the definition of take under CESA, the CDFW has interpreted take to include the destruction of nesting, denning, or foraging habitat necessary to maintain a viable breeding population of protected species.

If it is determined that the take would not jeopardize the continued existence of the species, an ITP can be issued by CDFW per Section 2081 of the *California Code of Regulations*. If a State-listed species is also federally listed, and the USFWS has issued an ITP that satisfies CDFW’s requirements, CDFW may issue a consistency finding in accordance with Section 2080.1 of the *California Fish and Game Code*.

#### **2.1.2.3. CALIFORNIA COASTAL ACT OF 1976**

The *California Coastal Act* of 1976 (Coastal Act) (*Public Resources Code* Sections 30000 et seq.) was enacted to establish policies and guidelines that provide direction for the conservation and development of the California coastline. The Coastal Act established the CCC and created a state and local government partnership to ensure that public concerns regarding coastal development are addressed. The CCC plans and regulates the use of land and water in the “coastal zone”, which was mapped by the California State Legislature and includes a three-mile-wide band of ocean and extends inland from several hundred feet in highly urbanized areas to five miles in certain rural areas. Pursuant to Section 30001.5, the State’s basic goals for the coastal zone are to:

- (a) Protect, maintain, and where feasible, enhance and restore the overall quality of the coastal zone environment and its natural and artificial resources.
- (b) Assure orderly, balanced utilization and conservation of coastal zone resources taking into account the social and economic needs of the people of the state.
- (c) Maximize public access to and along the coast and maximize public recreational opportunities in the coastal zone consistent with sound resources conservation principles and constitutionally protected rights of private property owners.
- (d) Assure priority for coastal-dependent and coastal-related development over other development on the coast.

- (e) Encourage state and local initiatives and corporation in preparing procedures to implement coordinated planning and development for mutually beneficial uses, including educational uses, in the coastal zone.

An environmentally sensitive habitat area (ESHA) is defined in Section 30107.5 of the Coastal Act as “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 which could easily be disturbed or degraded by human activities and development”. Section 30121 identifies wetlands, which often qualify as ESHAs, as “lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens”. Section 30240 of the Coastal Act requires that

- (a) environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas and
- (b) development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas and shall be compatible with the continuance of those habitat and recreation areas.

The Coastal Act includes specific policies that address issues such as shoreline public access and recreation; lower cost visitor accommodations; terrestrial and marine habitat protection; visual resources; landform alteration; agricultural lands; commercial fisheries; industrial uses; water quality; offshore oil and gas development; transportation; development design; power plants; ports; and public works. The policies of the Coastal Act constitute the statutory standards applied to planning and regulatory decisions made by the CCC and by local governments, pursuant to the Coastal Act.

Implementation of Coastal Act policies is accomplished primarily through the preparation of local coastal programs (LCPs) that are required to be completed by each of the 15 counties and 60 cities located in whole or in part in the coastal zone. Following certification of an LCP, regulatory responsibility is delegated to the local jurisdiction, but the CCC retains original permit jurisdiction over certain specified lands (such as tidelands and public trust lands). Development within the coastal zone may not commence until a Coastal Development Permit has been issued by either the CCC or a local government that has a Coastal Commission-certified LCP.

#### **2.1.2.4. CALIFORNIA PORTER-COLOGNE WATER QUALITY CONTROL ACT**

Pursuant to the *California Porter-Cologne Water Quality Control Act*, the SWRCB and the nine RWQCBs may require permits (known as “Waste Discharge Requirements” or WDRs) for the fill or alteration of the waters of the State. The term “waters of the State” is defined as “any surface water or groundwater, including saline waters, within the boundaries of the state” (*California Water Code*, Section 13050[e]). The State and Regional Boards have interpreted their authority to require WDRs to extend to any proposal to fill or alter waters of the State, even if those same waters are not under USACE jurisdiction (e.g., non-404/401 waters). Pursuant to this authority, the SWRCB and RWQCB may require the submission of a “report of waste discharge” under Section 13260, which is treated as an application for WDRs.

The Porter-Cologne Water Quality Control Act charges the SWRCB and the nine RWQCBs statewide with protecting water quality throughout California. Typically, the SWRCB and RWQCB act in concert with the USACE under Section 401 of the CWA in relation to permitting fill of federally jurisdictional waters. SWRCB and the RWQCBs may require permits (e.g., WDRs) for the fill or alteration of the waters of the State.

#### **2.1.2.5. CALIFORNIA FISH AND GAME CODE**

The CDFW administers the *California Fish and Game Code*. Particular sections of the Code are applicable to natural resource management.

##### ***Native Plant Protection***

Sections 1900–1913 of the *California Fish and Game Code* were developed to preserve, protect, and enhance Endangered and Rare plants in the State of California. The act requires all State agencies to use their authority to carry out programs to conserve Endangered and Rare native plants. Provisions of the *Native Plant Protection Act* prohibit the taking of listed plants from the wild and require notification of the CDFW at least ten days in advance of any change in land use that would adversely impact listed plants. This allows the CDFW to salvage listed plant species that would otherwise be destroyed.

##### ***Unlawful Take or Destruction of Nests or Eggs***

These sections duplicate federal protection under the MBTA. Section 3503 of the *California Fish and Game Code* makes it unlawful to take, possess, or destroy any bird’s nest or any bird’s eggs. Further, any birds in the orders *Falconiformes* or *Strigiformes* (birds of prey, such as hawks, eagles, and owls) and their nests and eggs are protected under Section 3503.5 of the *California Fish and Game Code*. Section 3513 of the *California Fish and Game Code* prohibits the take and possession of any migratory nongame bird, as designated in the MBTA.

### **California Fully Protected Species**

The State of California created the “Fully Protected” classification in an effort to identify and provide additional protection to those animals that are rare or that face possible extinction. Lists were created for fish, amphibians and reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under the CESA and/or FESA; however, some have not been formally listed.

Various sections of the *California Fish and Game Code* provide lists of Fully Protected reptiles and amphibians (§ 5050), bird (§ 3511), and mammal (§ 4700) species that may not be taken or possessed at any time, except as provided in Sections 2081.7, 2081.9, or 2835.

### **Sections 4150 through 4154**

*California Fish and Game Code* Sections 4150 through 4154 state that nongame mammals (e.g., all mammals occurring naturally in California which are not game mammals, fully protected mammals, or fur-bearing mammals) or parts thereof may not be taken or possessed except as provided in this code or in accordance with regulations adopted by the Fish and Game Commission.

### **Section 4500**

This section duplicates federal protection under the MMPA. Section 4500 of the *California Fish and Game Code* makes it unlawful to take any marine mammal, including sea otters, whales, dolphins, porpoises, seals, and sea lions.

### **Sections 1600 through 1616**

*California Fish and Game Code* Sections 1600 et seq. establish a process to ensure that projects conducted in and around lakes, rivers, or streams do not adversely impact fish and wildlife resources or, when adverse impacts cannot be avoided, ensures that adequate mitigation and/or compensation is provided.

*California Fish and Game Code* Section 1602 requires any person, State, or local governmental agency or public utility to notify the CDFW before beginning any activity that will do one or more of the following:

- substantially obstruct or divert the natural flow of a river, stream, or lake
- substantially change or use any material from the bed, channel, or bank of a river, stream, or lake
- deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake

Section 1602 of the *California Fish and Game Code* applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State. CDFW's regulatory authority extends to include riparian habitat (including wetlands) supported by a river, stream, or lake regardless of the presence or absence of hydric soils and saturated soil conditions. Generally, the CDFW takes jurisdiction to the top bank of the stream or to the outer limit of the adjacent riparian vegetation (outer drip line), whichever is greater. Notification is generally required for any project that will take place in or in the vicinity of a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life and watercourses having a surface or subsurface flow that support or have supported riparian vegetation. A Section 1602 Lake or Streambed Alteration Agreement would be required if impacts to identified CDFW jurisdictional areas occur.

### **2.1.3. Local Requirements**

#### **2.1.3.1. LOS ANGELES COUNTY GENERAL PLAN SIGNIFICANT ECOLOGICAL AREA PROGRAM**

The County of Los Angeles established Significant Ecological Areas (SEAs) in 1976 in order to designate areas with irreplaceable biological resources. Cumulatively, the 21 SEAs and 9 Coastal Resource Areas (CRAs) represent the wide-ranging biodiversity of Los Angeles County, and contain its most important biological resources. Individual SEAs include undisturbed or lightly disturbed habitat that support valuable and threatened species, linkages and corridors that facilitate species movement, and are sized to support sustainable populations of its component species. CRAs are located within the coastal zone and include biological resources equal in significance to SEAs. Protection of these areas must ultimately be determined by the CCC.

#### **2.1.3.2. CITY OF LOS ANGELES MUNICIPAL CODE**

The City of Los Angeles Municipal Code (Article 6 Preservation of Protected Trees Sections 46.00 to 46.06) provides for the protection of certain "protected trees", defined as certain southern California native tree species (e.g., all indigenous oak trees except scrub oak [*Quercus dumosa*], southern California black walnut [*Juglans californica* var. *californica*], western sycamore [*Platanus racemosa*], and California bay [*Umbellularia californica*]) which measure four inches or more in cumulative diameter, four and one-half feet above the ground level at the base of the tree. No protected tree may be relocated or removed except as provided by the municipal code. Removal of protected trees requires a permit by the Board of Public Works. The term "removed" includes any act that will cause a protected tree to die, including but not limited to acts that inflict damage upon the root system or other parts of the tree by fire, application of toxic substances,



operation of equipment or machinery, or by changing the natural grade of land by excavation or filling the drip line area around the trunk.

## **2.2. Studies Required**

### **2.2.1. Biological Study Area**

The BSA for the Project includes all areas of potential direct impacts (temporary and permanent impacts) plus an adjacent 500-foot buffer around all permanent impact areas for potential indirect effects. (Figure 3). The BSA has a total length of just over 0.61-miles along Lincoln Boulevard and a total area of approximately 131.81 acres.

### **2.2.2. Literature Review**

A literature review was conducted prior to the initiation of the general survey and was updated in 2023 to identify special status plant and wildlife species reported from the vicinity of the BSA. Sources reviewed include the database searches in the California Native Plant Society's (CNPS') Inventory of Rare and Endangered Plants (CNPS 2023) and the CDFW's California Natural Diversity Database (CDFW 2023) (Appendix A). Search criteria consisted of the U.S. Geological Survey's (USGS') Beverly Hills, Hollywood, Inglewood, Redondo Beach, Topanga, Torrance, and Venice 7.5-minute quadrangles. An official species list was obtained from the USFWS for the BSA (Appendix A).

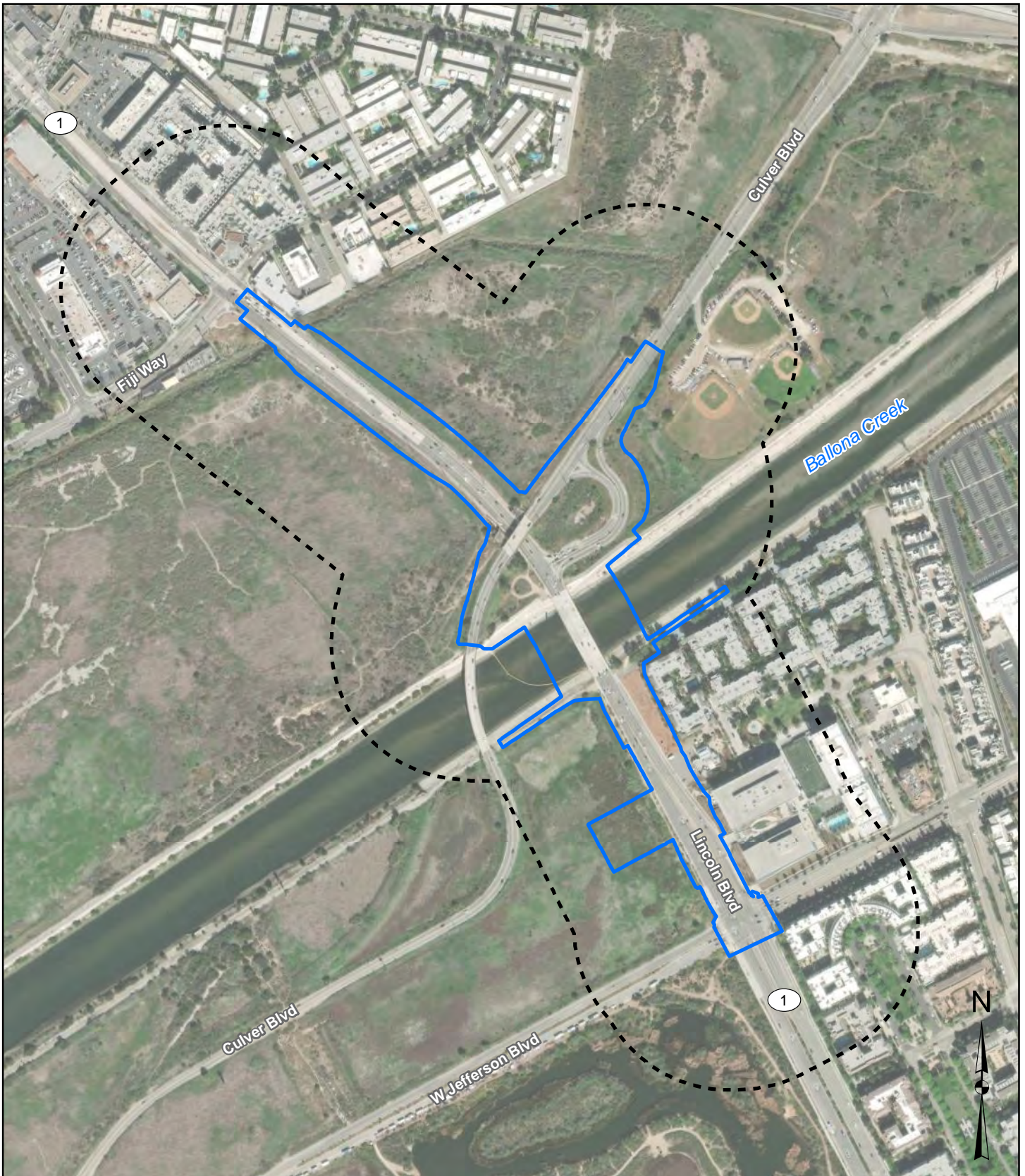
In addition, the *Ballona Wetlands Ecological Reserve Comprehensive 5-Year Monitoring Report* (The Bay Foundation 2015), the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* (USACE and CDFW 2017), and the *Final Ballona Wetlands Restoration Project EIR State Clearinghouse No. 2012071090* (CDFW 2019d) were reviewed.



### **2.2.3. Vegetation Mapping and General Plant Surveys**

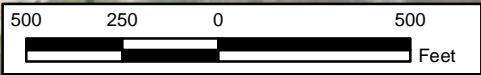
Vegetation mapping and general plant surveys were conducted in March 2017 to describe the vegetation present in the BSA and to evaluate the potential of the habitats to support special status plant species. As noted previously, additional focused surveys for special status plants are being conducted within the project site in the 2024 survey season. Information on the results of these surveys will be provided along with the Final EIR/EA. Vegetation was mapped in the field on an aerial photograph at a scale of 1-inch equals 300 feet (1":3600"). Vegetation communities and nomenclature generally follow guidelines established in *A Manual of California Vegetation* (CNPS 2019a), with deviations noted and explained in the descriptions. This provides the most current naming

scheme and is the classification currently used by the CDFW. Vegetation type names described for this Project were also cross-referenced with the vegetation type names previously described in the Environmental Impact Statement (EIS)/Environmental Impact Report (EIR) for the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* (USACE and CDFW 2017). Roadways and buildings with associated ornamental landscaping were mapped as “developed” for consistency with the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090*.

Plant species observed during the surveys were recorded in field notes and are listed in Appendix B (Plant Compendium). Plant species were identified in the field or collected for later identification. Plants were identified using taxonomic keys, descriptions, and illustrations in Baldwin et al. (2012), Hickman (1993), and Munz (1974). Plants were identified to the taxonomic level necessary to determine whether or not they are a special status species. Nomenclature of plant taxa conform to the *Special Vascular Plants, Bryophytes, and Lichens List* (CDFW 2019c) for special status species and the Jepson eFlora (Jepson Flora Project 2019) for all other taxa; ornamental species not listed in the Jepson eFlora are named based on the *Sunset Western Garden Book* (Brenzel 2007).



	Project Boundary
	Biological Study Area



### Biological Study Area

State Route 1 (Lincoln Boulevard)  
Multimodal Improvement Project

7-LA-1, PM 30.16/30.74

EA 07-33880

Aerial Source: Esri, Maxar 2022



Figure 3

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The vegetation map prepared for the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* (USACE and CDFW 2017) was cross-referenced as described above and incorporated into this NES report based on coordination with the CDFW (Brody 2017). The methods utilized by USACE and CDFW for their vegetation mapping is described below:

In 2013, biologists from the Bay Foundation updated the categorization and mapping of the major vegetation alliances and habitats on the Reserve. This information had not been updated since last performed by the [CDFW] in 2007. The field work for the update was conducted between May and October 2013 in accordance with methods created by the Vegetation and Classification Mapping Program with supplemental information derived from monitoring surveys conducted between 2009 and 2013 throughout the Reserve (Johnston et al. 2011, 2012). Habitat categories were classified on an individual basis based on geo-referenced polygons classifying dominant vegetation community and physical characteristics such as soil and hydrology. When applicable, categories are “crosswalked” [i.e., cross-referenced] from alliance and association types in accordance with the Manual of California Vegetation (Sawyer [et al.] 2009) and from previous site surveys. Additional habitat categories were identified to accurately reflect current site conditions (e.g., nonnative habitats).

Areas not mapped by the Bay Foundation (e.g., two potential well relocation sites) have since been characterized in accordance with habitat types based on the vegetation data provided in the Jurisdictional Delineation Report – Potential Well Sites, Playa Del Rey Storage Facility (ICF 2013). ... Plant community descriptions were characterized in the field in accordance with A Manual of California Vegetation, Second Edition (Sawyer et al. 2009) and based on the California Department of Fish and Game List of Vegetation Alliances and Associations (CDFG 2010); however, dominant species were used to characterize the habitat when neither of these plant descriptions accurately reflected the habitat type or function. ... The habitat types were combined or grouped into the 15 habitats identified in Table 3.4-1 [of the EIS/EIR] to reduce the number of habitat types where appropriate (e.g., pampas grass stand, ice plant stand, and non-native “tall” herbaceous were grouped into “invasive monoculture”). Habitat types also were changed to reflect the name of a

CDFW sensitive natural community when appropriate (e.g., mudflat was renamed to southern mud intertidal).

The *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* (USACE and CDFW 2017) vegetation map did not include classification of roadways and adjacent development east of Lincoln Boulevard and south of Ballona Creek. In addition, vegetation within the cloverleaf intersection of Culver Boulevard and Lincoln Boulevard was not mapped. These portions of the BSA were mapped by Psomas on March 15, 2017. As noted previously, additional focused surveys for special status plants are being conducted within the project site in the 2024 survey season. Information on the results of these surveys will be provided along with the Final EIR/EA.

#### **2.2.4. General Wildlife Surveys**

The general survey for wildlife species was conducted on March 15, 2017, to record species present in the BSA and to evaluate the BSA's potential to support special status wildlife species. All species observed during the general survey were documented in field notes and are listed in the wildlife compendium provided as Appendix C. Additional focused surveys for special status wildlife with potential to occur in the Project site are being conducted within the project site in the 2024 survey season. Information on the results of these surveys will be provided along with the Final EIR/EA.

During the 2017 survey, active searches for reptiles and amphibians were accomplished by systematic surveys through appropriate habitat. Active searches for reptiles and amphibians included lifting, overturning, and carefully replacing rocks and debris. Birds were identified by visual and auditory recognition. Mammals were identified by visual recognition or evidence of diagnostic sign, including scat, footprints, scratch-outs, dust bowls, burrows, and trails. Taxonomy and nomenclature for wildlife generally follows American Fisheries Society (1991) for fish; Crother (2017) and Stebbins and McGinnis (2012) for amphibians and reptiles; American Ornithological Society (2018) for birds; and Smithsonian National Museum of Natural History (2011) for mammals.

#### **2.2.5. Focused Surveys**

Focused surveys were conducted in the BSA in 2017. The methods for each survey are discussed below.

##### **2.2.5.1. SPECIAL STATUS PLANT SURVEYS**

Special status plant surveys were floristic in nature and were conducted consistent with the CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native

Plant Populations and Natural Communities (CDFG 2009). Psomas biologists performed surveys on March 15, April 18, May 16, and June 26, 2017. Additional focused surveys for special status plants are being conducted within the project site in the 2024 survey season. Information on the results of these surveys will be provided along with the Final EIR/EA. The 2017 surveys were conducted in areas of potential habitat for special status plant species in the BSA. Meandering transects were used to achieve 100 percent visual coverage of suitable habitat. The biologists modified the intensity of the survey effort in any given area based on microtopography, soil conditions, potential for rare plants, and density of the shrub layer. Inaccessible areas were surveyed with binoculars. Plant species were identified in the field or collected for later identification with the Jepson Manual (Baldwin et al. 2012). Nomenclature of plant taxa conform to the Special Vascular Plants, Bryophytes, and Lichens List (CDFW 2019c) for special status species and the Jepson eFlora (Jepson Flora Project 2019) for all other taxa; ornamental species not listed in the Jepson eFlora are named based on the Sunset Western Garden Book (Brenzel 2007). The results of this survey are included in Appendix D (Results of Special Status Plant Surveys). One special status plant species, Lewis' evening-primrose (*Camissoniopsis lewisii*) was observed in the BSA during the survey period. While not observed in the BSA during current surveys, suffrutescent wallflower (*Erysimum suffrutescens*), south coast branching phacelia (*Phacelia ramosissima* var. *australitoralis*), and woolly seablite (*Suaeda taxifolia*) have moderate potential to occur in the BSA since they have been reported recently from the BWER and the BSA contains suitable habitat (USACE and CDFW 2017).

#### **2.2.5.2. BURROWING OWL HABITAT ASSESSMENT**

A burrowing owl habitat assessment was conducted following the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012). The habitat assessment was conducted by Psomas on April 14, 2017, between 06:30 and 10:00 hours to determine the suitability of habitat for burrowing owls. Additional focused surveys for burrowing owl are being conducted within the project site in the 2024 survey season. Information on the results of these surveys will be provided along with the Final EIR/EA. During the 2017 surveys, biologists walked all suitable habitat (e.g., undeveloped areas) within the BSA in transects spaced 23 to 65 feet apart to achieve 100 percent visual coverage. Weather conditions during the survey ranged from 56 to 66 degrees Fahrenheit (°F) with clear and sunny skies, and no wind. The survey was not conducted within five days of rain, which could have washed away potential sign. At least every 100 meters (328 feet), the biologists scanned the BSA with binoculars to look for owls. Any natural or man-made cavities large enough to allow a burrowing owl to enter were inspected for evidence of occupation and mapped. Evidence of occupation may include prey remains, cast pellets, whitewash, feathers, and observations of owls adjacent to burrows. Binoculars and

mirrors were also used to inspect holes; crevices; and potential perches such as rocks, fence posts, and other elevated structures for the presence of owls while listening for owl calls. Active burrows and/or burrowing owl sightings, if present, would be mapped on an aerial photograph and recorded with a Global Positioning System (GPS) unit. The results of this survey are included in Appendix E (Results of a Habitat Assessment for Burrowing Owl). Because no suitable habitat was identified in the BSA at the time of the survey, no follow up focused survey was conducted. No burrowing owls or sign of their presence (e.g., feathers, pellets, whitewash, burrow ornaments) were observed in the BSA during the breeding season.

**2.2.5.3. COASTAL CALIFORNIA GNATCATCHER SURVEYS**

Focused surveys for coastal California gnatcatcher were conducted following the *Coastal California Gnatcatcher (Polioptila californica californica) Presence/Absence Survey Protocol* (USFWS 1997). This protocol recommends six visits to all potentially occupied habitat areas be conducted entirely within the breeding season, which extends from March 15 to June 30. All visits must take place at least 1 week apart during the morning hours, and no more than 80 acres of suitable habitat may be surveyed per visit. Following the USFWS protocol, a Psomas permitted biologist conducted surveys on April 6, 13, and 24 and May 5, 19, and 30, 2017 (Table 1). Surveys covered all potentially suitable habitats for the coastal California gnatcatcher in the BSA. Additional focused surveys for coastal California gnatcatcher are being conducted within the project site in the 2024 survey season. Information on the results of these surveys will be provided along with the Final EIR/EA.

**Table 1 – Summary of Coastal California Gnatcatcher Surveys**

Date	Time (Start/End)	Temperature (°F) (Start/End)	Wind (mph) (Start/End)	Cloud Cover (%) (Start/End)
April 6, 2017	0700/1030	59/68	0–1/0–3	90/75
April 13, 2017	0700/0930	56/66	0–2/0–4	Clear/90
April 24, 2017	0700/0940	63/65	0–1/0–1	50/75
May 5, 2017	0730/0915	61/63	0–2/0–4	100/100
May 19, 2017	0700/0900	60/69	0–1/0–2	Clear/Clear
May 30, 2017	0715/0930	62/62	0–1/0–3	100/100

°F: degrees Fahrenheit; mph: miles per hour

Surveys were conducted during weather conditions that met the USFWS survey protocol requirements for optimal gnatcatcher detection. Weather conditions that were too cold (below 55°F), too hot (above 95°F), or too windy (wind speed greater than 15 miles per hour) were avoided. Surveys were conducted by slowly walking through all appropriate habitats while listening and watching for gnatcatcher activity. A combination of



recordings of gnatcatcher vocalizations and “pishing” sounds made by the Biologist was used to elicit responses from any gnatcatchers present. The frequency of vocalization playback and “pishing” varied depending on conditions such as habitat patch size and topography in each area. All wildlife species detected during the surveys were recorded, including notable observations of special status species. The results of this survey are included in Appendix F (Results of Focused Breeding Season Presence/Absence Surveys for Coastal California Gnatcatcher). No coastal California gnatcatchers were observed or detected in the survey area during the focused surveys.

#### **2.2.5.4. LEAST BELL’S VIREO SURVEYS**

Focused surveys for least Bell’s vireo were conducted following the *Least Bell’s Vireo Survey Guidelines* (USFWS 2001). These guidelines require at least eight surveys be conducted from April 10 to July 31 with a ten-day interval between each site visit. The survey area for the least Bell’s vireo consists of all areas of the BSA where suitable habitat for this species (e.g., arroyo willow thicket and mule fat thicket) is present. Following the USFWS survey guidelines, a Psomas biologist conducted surveys on April 13 and 24; May 5, 19, and 30; June 15 and 29; and July 14, 2017. Additional focused surveys for least Bell’s vireo are being conducted within the project site in the 2024 survey season. Information on the results of these surveys will be provided along with the Final EIR/EA.

Surveys were conducted by walking slowly and methodically along the margins of riparian habitat or by using meandering transects through riparian habitat. As the survey guidelines do not require the playback of least Bell’s vireo vocalizations, recorded least Bell’s vireo vocalizations were not used during the surveys. “Pishing” sounds were used opportunistically to elicit responses from any least Bell’s vireos present. Observed least Bell’s vireo locations were recorded with a GPS unit; territories were numbered chronologically as they were detected. All surveys were conducted under optimal weather conditions and during early morning hours when bird activity is at its peak (Table 2). All wildlife species detected during the surveys were recorded, including notable observations of special status species. The results of this survey are included in Appendix G (Results of Focused Breeding Season Presence/Absence Surveys for the Least Bell’s Vireo). One least Bell’s vireo was detected in the survey area during the focused surveys. A male least Bell’s vireo was detected through vocalization in the arroyo willow thicket vegetation located in the southern portion of the survey area during the first four focused surveys. However, no least Bell’s vireos were observed or detected during the last four focused surveys.

**Table 2 – Summary of Least Bell’s Vireo Surveys**

Date	Time (Start/End)	Temperature (°F) (Start/End)	Wind (mph) (Start/End)	Cloud Cover (%) (Start/End)
April 13, 2017	0930/1100	66/69	0–4/0–2	90/75
April 24, 2017	0940–1115	65/69	0–1/0–2	75/80
May 5, 2017	0915/1100	63/66	0–4/0–2	100/100
May 19, 2017	0900/1110	69/73	0–2/0–1	clear/clear
May 30, 2017	0930/1115	62/64	0–3/0–3	100/100
June 15, 2017	0700/0945	66/75	0–3/0–6	clear/clear
June 29, 2017	0710/0930	64/70	0–3/0–1	100/40
July 14, 2017	0715/0940	64/69	0–4/0–2	60/30

°F: degrees Fahrenheit; mph: miles per hour

**2.2.6. Jurisdictional Delineation**

A jurisdictional delineation was conducted to determine the type and extent of wetland and non-wetland waters of the United States under the regulatory authority of the USACE, waters of the State under the regulatory authority of the RWQCB, waters under the regulatory authority of the CDFW, and wetland waters in the Coastal Zone under the regulatory authority of the CCC.

Non-wetland waters of the United States were delineated based on the limits of the Ordinary High Water Mark (OHWM), which was assessed by looking for the presence of a clear, natural line impressed on the bank; shelving; changes in the character of the soil; destruction of terrestrial vegetation; and the presence of litter and debris. Wetland waters of the United States were delineated using a two-parameter approach based on vegetation and hydrology criteria defined by the USACE (2008). A two-parameter approach was used because the digging of soil test pits (used to determine the presence of hydric soils) was not authorized due to the sensitive nature of the BSA and the surrounding BWER.

The limits of waters of the State were determined based on the methods described for USACE jurisdiction, above. The RWQCB shares USACE jurisdiction unless isolated conditions are present, in which case the RWQCB takes jurisdiction using the USACE’s definition of OHWM and/or the three-parameter wetlands method. Water resources lacking connectivity to a Traditional Navigable Water<sup>4</sup> (TNW), whether by definition or through a significant nexus analysis, are considered isolated.

<sup>4</sup> Traditional Navigable Waters are all waters that are 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.

The limits of CDFW jurisdictional waters were defined by the top of the stream or waterbody bank or, if present, the outer limit of riparian vegetation located within or immediately adjacent to the feature.

The CCC boundaries were delineated based on the outer extent of predominantly hydrophytic vegetation, hydric soil, or land that is flooded or saturated at some time during years of normal rainfall.

Psomas performed a jurisdictional delineation on March 15, 2017, with additional follow-up field visits on April 18 and May 15, 2017. An updated jurisdictional delineation is being conducted in 2024. Information on the results of these surveys will be provided along with the Final EIR/EA. The 2017 jurisdictional delineation mapped jurisdictional waters using a 1-inch equals 250 feet (1" = 250') scale aerial photograph. All jurisdictional features were delineated as polygons which were taken either from measurements during the field visit or from the vegetation map that was created concurrently with the delineation. Vegetation and hydrologic data were summarized for each jurisdictional feature. The field survey included the collection of vegetation and hydrologic data from 8 sampling points in the BSA in Wetland Determination Data Forms (Sampling Points 1, 2, 4, 6, 7, 8, 9, and 10). Soil data was not collected at any sample site.

### **2.3. Personnel and Survey Dates**

The following Psomas (and former Psomas) personnel performed surveys for the Project. Their relevant experience and qualifications are provided below. Surveyor information for the Ballona Wetlands Restoration Project is included in the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* (USACE and CDFW 2017).

Agnieszka Napiatek performed the following surveys: (1) special status plant surveys on April 18 and May 16, 2017; (2) a burrowing owl habitat assessment on April 14, 2017; and (3) a jurisdictional delineation on April 18 and May 15, 2017. She is a biologist with over 12 years of experience performing surveys in Southern California.

Allison Rudalevige performed special status plant surveys on June 26, 2017. She is a Senior biologist with over 14 years of experience performing surveys in Southern California. She holds a rare plant voucher collecting permit from the CDFW.

Ian Cain performed the following surveys: (1) vegetation mapping and general plant and wildlife surveys on March 15; (2) special status plant surveys on March 15, April 18, and May 16, 2017; and (3) a jurisdictional delineation on March 15, April 18, and May 15,

2017. He is a Botanist with over 11 years of experience performing surveys in Southern California. He holds a rare plant voucher collecting permit from the CDFW and is trained in California Rapid Assessment Method (CRAM) for riverine and depressional modules.

Irena Mendez performed the following surveys: (1) vegetation mapping and general plant and wildlife surveys on March 15, 2017; (2) special status plant surveys on March 15 and June 26, 2017; and (3) a jurisdictional delineation on March 15, 2017. She is a Senior biologist with over 20 years of experience performing surveys in Southern California. She is trained in CRAM for the riverine module.

Lindsay Messett performed the following surveys: (1) focused surveys for coastal California gnatcatcher on April 6, 13, and 24 and May 5, 19, and 30, 2017, and (2) focused surveys for least Bell's vireo on April 13 and 24; May 5, 19, and 30; June 15 and 29; and July 14, 2017. She is a Senior biologist and Certified Wildlife Biologist<sup>®</sup> with over 18 years of experience performing surveys in Southern California. She holds a federal 10(a)(1)(A) permit from the USFWS covering coastal California gnatcatcher and is an Independent Researcher on Psomas' CDFW Entity Scientific Collecting Permit covering special status bird species.

Steve Morris performed a burrowing owl habitat assessment on April 14, 2017. He is a biologist with over 24 years of experience performing bird surveys in Southern California. He is an Independent Researcher on Psomas' CDFW Entity Scientific Collecting Permit covering special status bird species.

## **2.4. Agency Coordination and Professional Contacts**

### **2.4.1. California Department of Fish and Wildlife**

On February 10, 2017, Sean Haeri with the City of Los Angeles Department of Transportation sent a written request to CDFW requesting permission to enter the CDFW's BWER. On February 24, 2017, Rick Mayfield of the CDFW sent a letter back granting permission to enter BWER subject to the terms and conditions of this letter. Access to the BWER was restricted to areas detailed in the study area map provided and for the sole purpose of conducting general biological surveys, vegetation mapping, focused plant surveys, and protocol-level coastal California gnatcatcher surveys.

On March 7, 2017, via phone call with Richard Brody of CDFW, Psomas coordinated with Mr. Brody regarding survey dates, access, and parking instructions to the BWER, and "crosswalking" current vegetation classification to the vegetation types provided in the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* (USACE and CDFW 2017). Mr. Brody requested a minimum of 72 hours

notification prior to the field surveys and for the biologists to carry access letters with them at all times while conducting the surveys. As mentioned above, field surveys were completed in 2017.

In March 2018, CDFW was provided the Project's Notice of Preparation (NOP). On April 17, 2018, CDFW submitted a scoping comment letter.

In May 2019, Psomas contacted Richard Brody of CDFW to get an update related to the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* (USACE and CDFW 2017) response to comments and next steps. During the call, Psomas also provided Mr. Brody with an update on the Project.

Subsequently, in 2021, 2022, and 2023, the PDT have met with CDFW on a number of occasions to discuss the status of the project, the status of their restoration project, and other related matters.

#### **2.4.2. California Coastal Commission**

The PDT and staff from the CCC have met on several occasions to discuss the Project between 2021 and 2023.

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

Rainfall received in the winter and spring determines the germination of many annual and perennial herb species. The Santa Monica region received approximately 17.8 inches of precipitation between June 2016 and May 2017 (data taken from Santa Monica Station No. 99). The average annual precipitation for this period (between 1937 and 2016) is 12.6 inches (WRCC 2017). Reference populations were monitored to identify the appropriate timing of surveys when special status species would be detectable. A reference population of Orcutt's pincushion (*Chaenactis glabriuscula* var. *orcuttii*) was observed blooming at the west end of the BWER on May 3, 2017, and a population of southern tarplant (*Centromadia parryi* ssp. *australis*) was observed blooming at Madrona Marsh on June 21, 2017. Although reference populations and regional rainfall amounts were monitored to ensure the scientific adequacy of special status plant surveys, there is always a potential for false negative survey results as species could possibly be present on a site but not detectable at the time of the survey.

Access to portions of the site were limited due to dense vegetation, existing fences, and traffic. Due to safety concerns, the vegetation inside the cloverleaf intersection of Culver Boulevard and Lincoln Boulevard was observed through binoculars. Dense mustard east

of Lincoln Boulevard and north of Ballona Creek limited access to that portion of the BSA.

Although the burrowing owl habitat assessment concluded that suitable habitat was not present in the BSA at the time of the survey, 2017 experienced above average precipitation and the BSA was overgrown with dense vegetation. During a dry year, the condition of the BSA will likely change, and less vegetative cover is expected. This would expose bare ground, making it more suitable for burrowing owls. Therefore, future site conditions may be favorable for burrowing owl and owls may move into the site during the wintering season or a future breeding season.

All surveys specific to this Project were conducted more than 5 years ago. The population numbers and exact distribution of the species determined to be present onsite during those surveys are no longer accurate. Therefore, in addition to the surveys conducted for this Project, this NES is also based on biological surveys conducted on behalf of CDFW within the BWER and other documentation as described herein. Additional focused biological surveys are being conducted in the 2024 survey season.

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

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

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

The BSA is located between the communities of Marina del Rey, Del Rey, and Playa Vista in the City of Los Angeles, Los Angeles County, California (Figure 1). The Project occurs primarily within existing State and City right-of-way areas; however, portions of the BSA are within and adjacent to the BWER. CDFW manages the entire BWER and owns most of the 577-acre BWER, with a 24-acre portion owned by the California State Lands Commission (CSLC). The areas that would be impacted by the Project are owned by CDFW. The BSA includes the portion of Lincoln Boulevard that crosses Ballona Creek between the intersections with Fiji Way to the north and West Jefferson Boulevard to the south. It also includes a portion of Culver Boulevard that intersects with Lincoln Boulevard, as depicted on Figure 3. The BSA occurs on the USGS' Venice 7.5-minute topographic quadrangle of the San Bernardino Meridian at Township 02 South, Range 15 West, Sections 22, 23, 26, and 27 (Figure 4). The physical extent of the BSA is described in more detail above in Chapter 2.

As identified in the County of Los Angeles General Plan as amended, the BSA is partially located within the Ballona Wetlands CRA. This area is a CRA because it contains habitat that hosts breeding for the federally-listed endangered least Bell's vireo; biotic communities, vegetative associations, and habitat of plant and animal species that are unique and are restricted in distribution in the County and regionally; and concentrated breeding, feeding, resting, and migrating grounds, which are limited in availability in the County; and biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or represent unusual variation in a population or community (Los Angeles County 2015).

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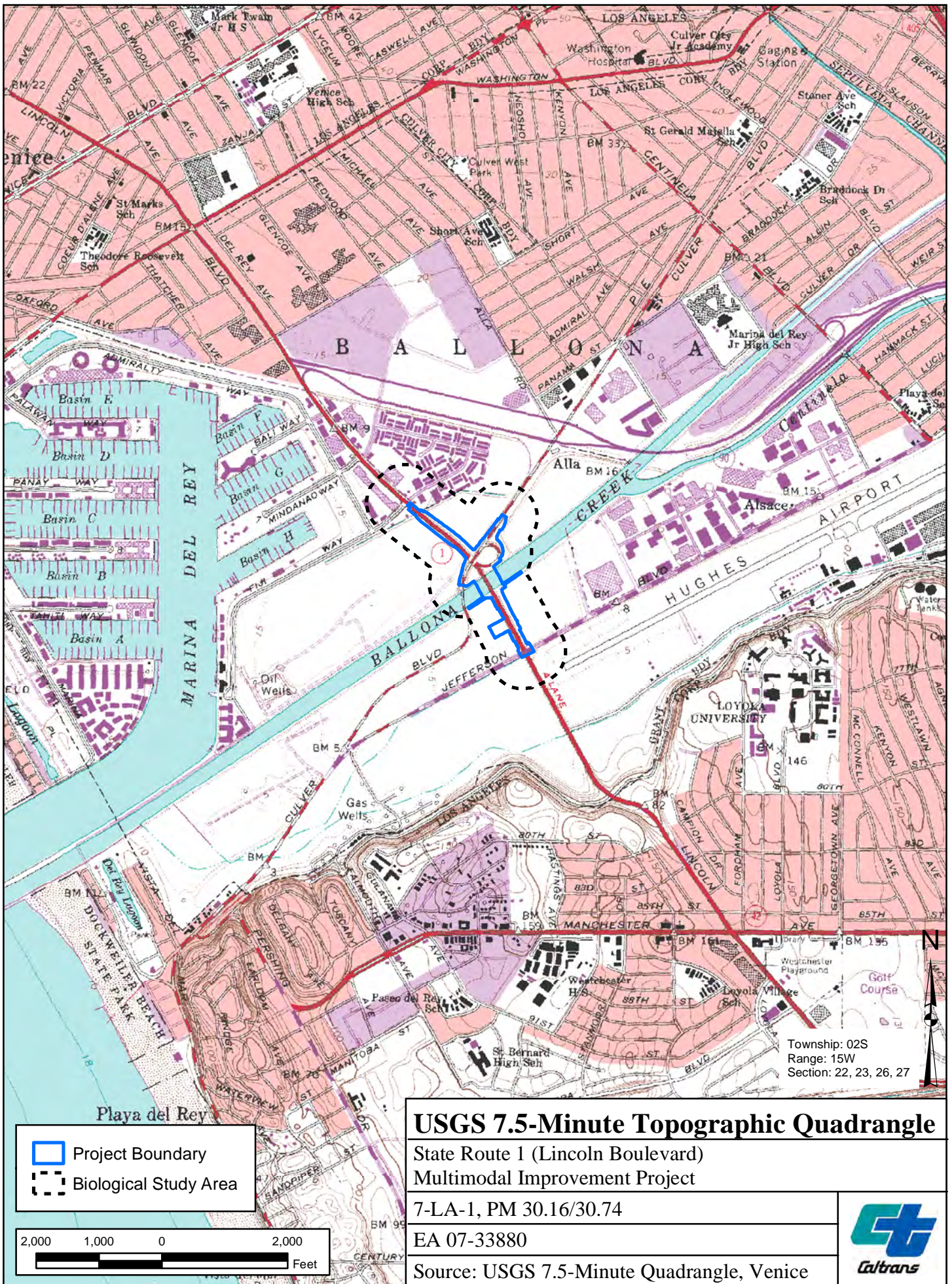


Figure 4

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### 3.1.2. Physical Conditions

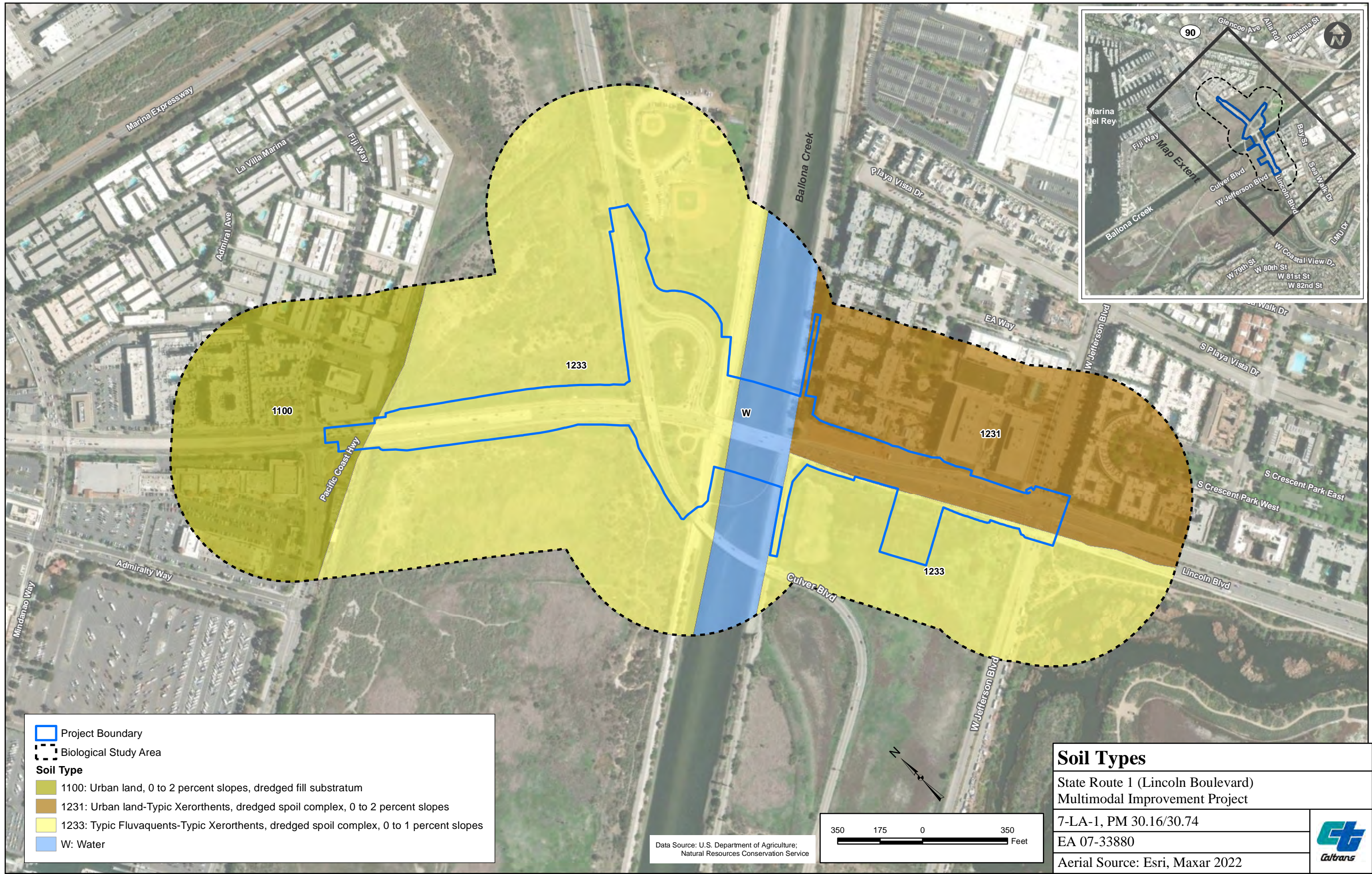
The BSA is in the South Coast subregion of the California Floristic Province, which extends along the Pacific Coast from Point Conception to Mexico (Jepson Flora Project 2019). It is similar to the North Coast and Central Coast subregions of the Northwestern and Central Western regions but is hotter and drier. It extends inland to the San Geronio Pass in the City of Banning, which represents the boundary between the California Floristic Province and the Desert Province. Coastal dunes, sage scrub, and chaparral vegetation characterized this subregion prior to urbanization.

The BSA is located in the 128-square mile Ballona Creek sub-watershed (Hydrologic Unit Code 12 18070104003). The headwaters of this watershed are located in the Santa Monica Mountains to the north and the Baldwin Hills to the south. The urbanized areas account for 80 percent of the watershed area and the partially developed foothills and mountains (Santa Monica Mountains) make up the remaining 20 percent. While some of the headwaters remain in their natural form, the majority of the drainage network has been modified into storm drains, underground culverts, and open concrete channels to provide drainage and flood management.

Ballona Creek runs through the center of the BSA flowing east to west where it discharges into Marina Del Rey's south entrance channel and Santa Monica Bay. It is an open, trapezoidal channel from the intersection of Venice Boulevard and Pickford Street to its mouth at the Santa Monica Bay. Within the BSA, Ballona Creek contains water throughout the year and has concrete-lined side slopes with a soft-bottom channel with widths varying from 80 to 200 feet and depths varying from 19 to 23 feet from the top of the levee (ICF 2013). The freshwater marsh in the southern portion of the BSA was created as part of a restoration effort that occurred between 2001 and 2003. Also, two unnamed blueline streams also occur in the southwest corner of the BSA.


Topography in the BSA is generally flat with minor slopes along paved roads. Elevation ranges from sea level to approximately 31 feet above mean sea level (msl). The following soil types have been mapped in the BSA: Urban land, 0 to 2 percent slopes, dredged fill substratum; Urban land-Typic Xerorthents, dredged spoil complex, 0 to 2 percent slopes; and Typic Fluvaquents-Typic Xerorthents, dredged spoil complex, 0 to 1 percent slopes (Figure 5). The parent material consists of dredge spoils and/or human-transported material over mixed alluvium. Of these soils, the Typic Fluvaquents-Typic Xerorthents are listed as hydric on the National Hydric Soils List for the Los Angeles County, California, Southeastern Part soil survey area (USDA NRCS 2017).

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Project Boundary  
 Biological Study Area  
**Soil Type**  
 1100: Urban land, 0 to 2 percent slopes, dredged fill substratum  
 1231: Urban land-Typic Xerorthents, dredged spoil complex, 0 to 2 percent slopes  
 1233: Typic Fluvaquents-Typic Xerorthents, dredged spoil complex, 0 to 1 percent slopes  
 W: Water

**Soil Types**  
 State Route 1 (Lincoln Boulevard)  
 Multimodal Improvement Project  
 7-LA-1, PM 30.16/30.74  
 EA 07-33880  
 Aerial Source: Esri, Maxar 2022



Data Source: U.S. Department of Agriculture; Natural Resources Conservation Service

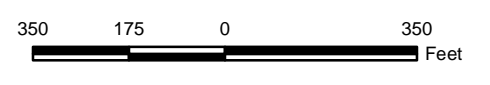


Figure 5



### 3.1.3. Biological Conditions in the Biological Study Area

The following vegetation communities and other landcovers were mapped in the BSA: California sagebrush scrub, coyote brush scrub, degraded coyote brush scrub, laurel sumac scrub, Menzies' golden bush scrub, quailbush scrub, annual brome grassland, cudweed stand, hyssop-leaved *Bassia* stand, semi-natural herbaceous stand, upland mustards, alkali weed playa, annual beard grass – bristly ox-tongue grassland, California bulrush marsh, cattail marsh, pickleweed mat, arroyo willow thicket, mulefat thicket, developed landcover, open water, and parks and landscaping (Figure 6). Table 3 provides a “crosswalk” of the vegetation classification used by Psomas (which was based on Sawyer et al. [2009]) to the vegetation types provided in the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* (USACE and CDFW 2017). A description of each vegetation community or other landcover observed in the BSA is provided below.

**Table 3 – Vegetation Types and Other Areas in the Biological Study Area**

<b>Psomas Mapping Based on CNPS (2019a)</b>	<b>USACE and CDFW (2017) Classification</b>	<b>Amount in the BSA (acres)</b>	<b>Sensitive Natural Community<sup>a</sup></b>
California Sagebrush Scrub	Coastal Scrub	3.533	No
Coyote Brush Scrub	Coastal Scrub	4.485	No
Degraded Coyote Brush Scrub	Coastal Scrub (some areas mapped as Stabilized Dune in the EIS/EIR)	2.637	No
Laurel Sumac Scrub	Coastal Scrub	1.265	No
Menzies's Golden Bush Scrub	Coastal Scrub	2.158	Yes
Quailbush Scrub	Saltbush Scrub	4.145	No
Annual Brome Grassland	Annual Grassland (some areas mapped as Invasive Monoculture in the EIS/EIR)	0.493	No
Cudweed Stand	Annual Grassland	0.874	No <sup>b</sup>
Hyssop-Leaved Bassia Stand	Disturbed Non-tidal Marsh	3.056	No <sup>b</sup>
Semi-Natural Herbaceous Stand	Invasive Monoculture	4.646	No
Upland Mustards	Invasive Monoculture	24.872	No
Alkali Weed Playa	Non-tidal Salt Marsh	1.108	Yes
Annual Beard Grass – Bristly Ox-tongue Grassland	Non-tidal Salt Marsh and Disturbed Non-tidal Marsh	2.682	No <sup>b</sup>
California Bulrush Marsh	not mapped in the EIS/EIR	0.689	Yes
Cattail Marsh	not mapped in the EIS/EIR	0.313	No
Pickleweed Mat	Non-tidal Salt Marsh and Disturbed Non-tidal Marsh	1.196	Yes
Arroyo Willow Thicket	Willow/Mulefat Thicket	2.039	Yes
Mulefat Thicket	Willow/Mulefat Thicket	0.685	No
Developed	Developed	56.015	No
Open Water	Open Water	9.268	No
Parks and Landscaping	Developed	5.650	No
<b>Total</b>		<b>131.809</b>	

EIS/EIR: *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* (USACE and CDFW 2017).

<sup>a</sup> Sensitivity based on the California Natural Community List (CDFW 2018a).

<sup>b</sup> Not a named vegetation Alliance or Association in CNPS (2019a). Not considered to have special status because the dominant or characteristic species is/are not special status plant species.

### **3.1.3.1. SCRUB COMMUNITIES**

Scrub communities occur in upland areas of the BSA. This vegetation is characterized by low to moderate-sized, often drought-deciduous shrubs (e.g., California sagebrush [*Artemisia californica*]) with some larger, emergent, sclerophyllous shrubs (e.g., laurel sumac [*Malosma laurina*]).

#### **California Sagebrush Scrub**

California sagebrush scrub (3.533 acres) occurs north of the Culver Boulevard Bridge and surrounding the basin within the connector of Culver Boulevard and Lincoln Boulevard. This community is dominated by California sagebrush in the shrub layer. The



patch north of Culver Boulevard is co-dominated by Menzies' coastal goldenbush (*Isocoma menziesii* var. *menziesii*), with a small amount of laurel sumac in the shrub layer. The herbaceous layer is dominated by black mustard (*Brassica nigra*) along with lesser amounts of crown daisy (*Glebionis coronaria*) and petty spurge (*Euphorbia peplus*). The small patch of California sagebrush scrub surrounded by the Lincoln Boulevard/Culver Boulevard connector has a greater assemblage of native shrub species such as laurel sumac, leafy California buckwheat (*Eriogonum fasciculatum* var. *foliolosum*), mule fat (*Baccharis salicifolia*), and coyote brush (*Baccharis pilularis* ssp. *consanguinea*).

This on-site community is consistent with the *Artemisia californica* Association provided by CNPS (2019a) and can be cross-referenced to the coastal scrub classification used in the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* (USACE and CDFW 2017). Most of the California sagebrush scrub in the BSA was mapped as coastal scrub in the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090*, which includes California sagebrush as a dominant species. However, some areas were mapped as invasive monoculture or stabilized dune. In the case of the former, the difference in classification between the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* and the current mapping effort is likely the result of changes in vegetative cover over time, seasonal timing of the surveys, or surveyor interpretation of the community. In the case of the latter, the area in question is composed of fill material that was excavated from the area to the north during the construction of the Marina del Rey Harbor (USACE and CDFW 2017). At one time, this area may have supported sand dunes; however, this landform does not currently resemble a stabilized sand dune. Vegetation is composed of coastal sage scrub species that are not characteristic of dune habitats. In addition, the substrate is relatively gravelly and compacted.

### **Coyote Brush Scrub**

Coyote brush scrub (4.485 acres) occurs in a patch in the northern portion of the BSA and around the freshwater marsh in the southern portion of the BSA. This community is dominated by coyote brush in the shrub layer. California sagebrush, laurel sumac, California encelia (*Encelia californica*), and mule fat co-occur in lower cover; however, their presence is sporadic and not present in every stand of coyote brush scrub. The herbaceous layer is comprised of a number of species such as variable burclover (*Medicago polymorpha*), petty spurge, black mustard, Geraldton carnation weed (*Euphorbia terracina*), and pleasant-scented cudweed (*Pseudognaphalium beneolens*).

This on-site community is consistent with the *Baccharis pilularis* Association provided by CNPS (2019a) and can be cross-referenced to the coastal scrub classification used in the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* (USACE and CDFW 2017). Most of the coyote brush scrub in the BSA was mapped as coastal scrub in the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090*, which includes coyote brush as a dominant species. However, the strip along Lincoln Boulevard was included with the adjacent invasive monoculture, disturbed non-tidal marsh, and saltbrush scrub vegetation types. This is likely due to surveyor interpretation of the narrow strip of vegetation and differences in minimum mapping unit.

### **Degraded Coyote Brush Scrub**

Degraded coyote brush scrub (2.637 acres) occurs adjacent to coyote brush scrub in the northern portion of the BSA. This community is dominated by coyote brush in the shrub layer with almost no co-occurring shrub species. The herbaceous layer is comprised of a relatively high cover of non-native species such as variable burclover, petty spurge, black mustard, and Geraldton carnation weed. This community is considered “degraded” because it has at least three times as much non-native cover as native cover.

This on-site community is consistent with a degraded form of the *Baccharis pilularis* Association provided by CNPS (2019a) and can be cross-referenced to the coastal scrub classification used in the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* (USACE and CDFW 2017). The *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* mapped this area as a combination of coastal scrub, annual grassland, invasive monoculture, and stabilized dune. This is likely due to changes in vegetation cover over time and differences in minimum mapping unit and surveyor interpretation of the community.

### **Laurel Sumac Scrub**

Laurel sumac scrub (1.265 acres) occurs along the eastern edge of the BSA north of Ballona Creek. This community is dominated laurel sumac in the shrub layer with lower cover of Menzies’ coastal goldenbush. The herbaceous layer is dominated by black mustard with lesser amounts of petty spurge and common horehound (*Marrubium vulgare*).

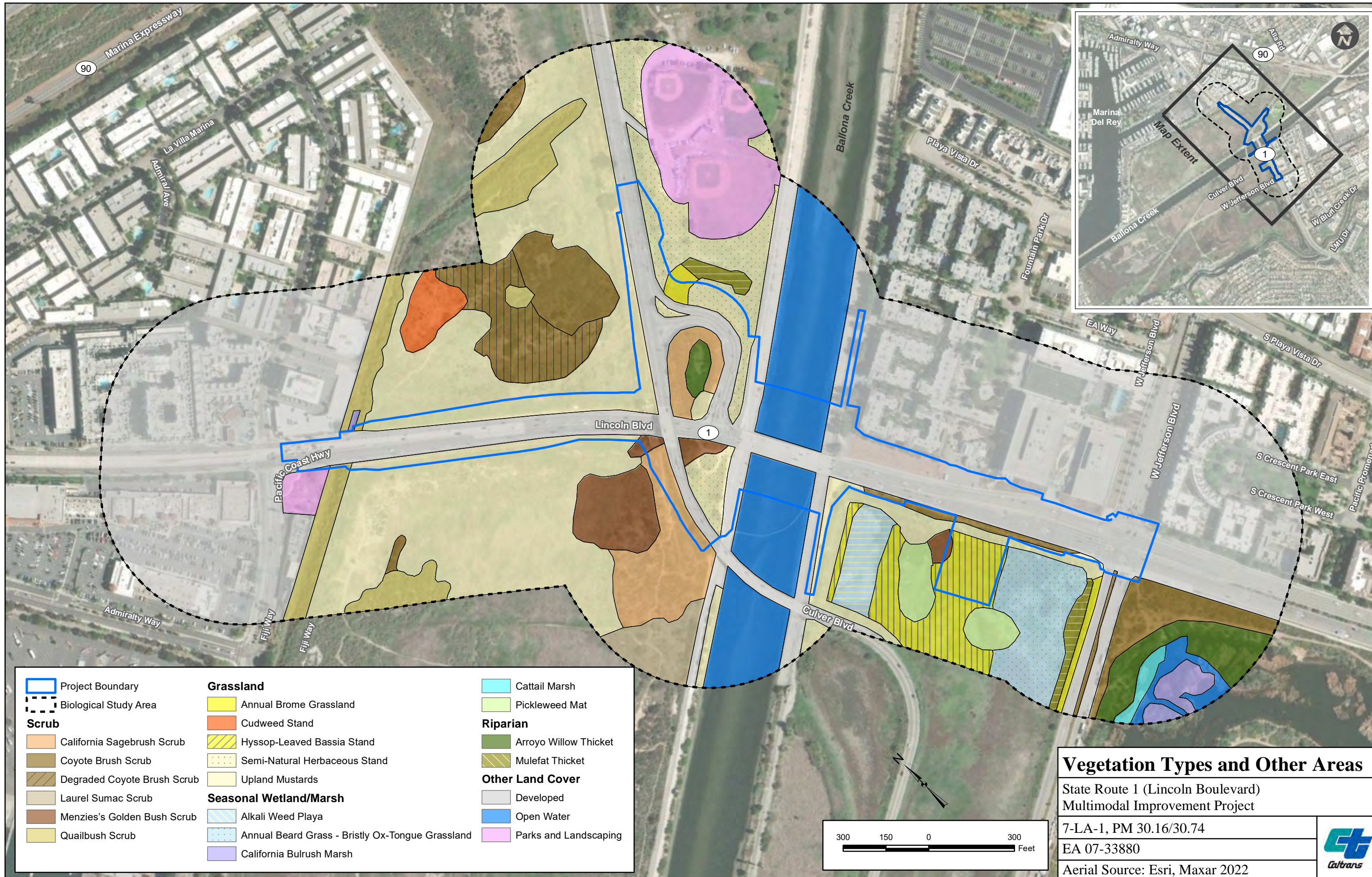


Figure 6



This on-site community is consistent with the *Malosma laurina* Association provided by CNPS (2019a) and can be cross-referenced to the coastal scrub classification used in the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* (USACE and CDFW 2017). The laurel sumac scrub in the BSA was mapped as coastal scrub in the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090*, which includes laurel sumac as a dominant species.

### **Menzies's Golden Bush Scrub**

Menzies's golden bush scrub (2.158 acres) occurs in patches in the center of the BSA north of Culver Boulevard and in a small patch south of Ballona Creek. This community is dominated by Menzies' coastal goldenbush in the shrub layer with lower cover of laurel sumac. The herbaceous layer is dominated by black mustard, petty spurge, crown daisy, and patches of freeway ice plant (*Carpobrotus edulis*). Menzie's golden bush scrub is a sensitive natural community (CDFW 2018a).

This on-site community is consistent with the *Isocoma menziesii* Association provided by CNPS (2019a) and can be cross-referenced to the coastal scrub classification used in the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* (USACE and CDFW 2017). Most of the Menzies's golden bush scrub in the BSA was mapped as coastal scrub in the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090*, though Menzies' coastal goldenbush is not listed as a dominant species of coastal scrub. The patch north of Culver Boulevard was mapped as invasive monoculture, likely the result of a change in vegetation over time.

### **Quailbush Scrub**

Quailbush scrub (4.145 acres) occurs along the blueline stream and in a patch surrounded by coyote brush scrub in the northern portion of the BSA. This community is dominated by big saltbush (*Atriplex lentiformis*) in the shrub layer with a lower cover of black mustard and crown daisy in the herbaceous layer. Pacific pickleweed (*Salicornia pacifica*) is also present in the portion of quailbush scrub in the northwest corner of the BSA.

This on-site community is consistent with the *Atriplex lentiformis* Association provided by CNPS (2019a) and can be cross-referenced to the saltbrush scrub classification used in the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* (USACE and CDFW 2017). Most of the quailbush scrub mapped in the BSA was mapped as saltbrush scrub in the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090*, though the EIS/EIR mapping was at a finer scale along the blueline stream and mapped some areas as marsh.

### 3.1.3.2. GRASSLAND/RUDERAL COMMUNITIES

Grassland/ruderal communities are dominated by grasses, forbs, and herbs. While some areas consist of native vegetation, other areas are primarily composed of non-native, weedy plant species that may be invasive.

#### **Annual Brome Grassland**

Annual brome grassland (0.493-acre) occurs in a small patch adjacent to Culver Boulevard and along West Jefferson Boulevard. This community is dominated by ripgut grass (*Bromus diandrus*) in the herbaceous layer. Other non-native, weedy species occurring at lower cover include Geraldton carnation weed, redstem filaree (*Erodium cicutarium*), and sourclover (*Melilotus indicus*).

This on-site community is consistent with the *Bromus diandrus* – mixed herbs Association provided by CNPS (2019a) and can be cross-referenced to the annual grassland classification used in the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* (USACE and CDFW 2017). The patch adjacent to Culver Boulevard was mapped as invasive monoculture in the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090*, while the strip along West Jefferson Boulevard was included with the adjacent disturbed non-tidal marsh. This is likely due to changes in vegetation over time and surveyor interpretation of the narrow strip of vegetation and differences in minimum mapping unit.

#### **Cudweed Stand**

Cudweed stand (0.874-acre) occurs as a single patch in the northern portion of the BSA. This community is dominated by pleasant-scented cudweed in the herbaceous layer with lower cover of small-flowered camissoniopsis (*Camissoniopsis micrantha*) and sparse tocalote (*Centaurea melitensis*). Small patches of coyote brush and California sagebrush occur along the margin of this community. As this community is dominated by native herbaceous species, the ground cover can be variable as it relates to dominance depending on the time of year. Pleasant-scented cudweed was observed to be the dominant species during the initial vegetation mapping effort in March 2017 and during the last special status plant survey in late June 2017. Given that pleasant-scented cudweed can persist in the environment beyond a single growing season (Baldwin et al. 2012), the plant community is being named for this species. The amount of bare ground is also variable within this community based on the season. Additional focused surveys for special status plants are being conducted within the project site in the 2024 survey season. Information on the results of these surveys will be provided along with the Final EIR/EA.

This community is not defined by CNPS (2019a), meaning that no named Alliance is dominated or characterized by this species. This patch was mapped as annual grassland in the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* (USACE and CDFW 2017). However, grasses were not a major component of the vegetation. To be considered a grassland by CNPS (2019a), the relative cover of grasses in the herbaceous layer would be between 50 and 80 percent.

### ***Hyssop-leaved Bassia Stand***

Hyssop-leaved Bassia stand (3.056 acres) occurs over a large portion of the flat playa south of Ballona Creek. It is co-dominated by hyssop-leaved Bassia and sourclover in the herb layer, with lesser amounts of alkali-mallow (*Malvella leprosa*) and saltmarsh sand spurrey (*Spergularia marina*). It is included with the grassland/ruderal vegetation types instead of the seasonal wetland/marsh communities because hyssop-leaved Bassia is a facultative upland species and not a wetland species.

This community is not defined by CNPS (2019a), meaning that no named Alliance is dominated or characterized by this species. It contains some species found in the alkali weed–salt grass playa and sink classification but does not meet the membership rule of having abundant alkali weed (*Cressa truxillensis*), swamp prickly grass (*Crypsis schoenoides*), or salt grass (*Distichlis spicata*). This patch was mapped as disturbed non-tidal marsh in the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* (USACE and CDFW 2017), which includes hyssop-leaved Bassia as a dominant species.

### ***Semi-natural Herbaceous Stand***

Semi-natural herbaceous stands (4.646 acres) occur between Culver Boulevard and Ballona Creek. This community is defined by a number of non-native herbaceous species with no single species dominant. Species present include redstem filaree, black mustard, variable burclover, crown daisy, red brome, and petty spurge. These species are intermixed in varying relative cover, with no individual species comprising more than 15 percent cover.

This community is not defined by CNPS (2019a). It would be functionally equivalent to other stands strongly dominated by annual or short-lived non-native plants, such as upland mustards and annual brome grassland, but is not classified as such due to the diversity of species. This patch was mapped as invasive monoculture in the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* (USACE and CDFW 2017), which is dominated by a variety of non-native species.

### **Upland Mustards**

Upland mustards (24.872 acres) occur across much of the area north of Culver Boulevard and bordering the playa south of Ballona Creek. This community is dominated by black mustard in the herbaceous layer with lower cover of crown daisy, radish (*Raphanus sativus*), petty spurge, and common castor bean (*Ricinus communis*). Isolated patches of California sagebrush and coyote brush occur with cover of less than five percent. A moderate amount of bare ground is present in some patches of upland mustard, though the mustard cover is relatively dense overall.

This on-site community is consistent with the *Brassica nigra* Association provided by CNPS (2019a) and can be cross-referenced to the invasive monoculture classification used in the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* (USACE and CDFW 2017). Black mustard is not listed as a dominant species in invasive monoculture in the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090*; it is assumed that black mustard has spread and dominated the landscape since the original surveys or was especially abundant during the current surveys due to above normal precipitation.

#### **3.1.3.3. SEASONAL WETLAND/MARSH COMMUNITIES**

The seasonal wetlands and marsh communities in the BSA are located in areas of depression topography or historical or restored marshes. Areas with higher concentrations of salt (e.g., alkaline soils) contain halophytic (e.g., “salt-loving”) plant species while areas of low salinity contain plant species associated with freshwater conditions.

### **Alkali Weed Playa**

Alkali weed playa (1.108 acres) occurs at the northern end of the playa south of Ballona Creek. This community is dominated almost exclusively by alkali weed (*Cressa truxillensis*). Species such as hyssop-leaved Bassia, black mustard, and bristly ox-tongue co-occur at low cover. Alkali weed playa is a sensitive natural community (CDFW 2018a).

This on-site community is consistent with the *Cressa truxillensis* Association provided by CNPS (2019a). It can be cross-referenced to the non-tidal salt marsh classification used in the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* (USACE and CDFW 2017), which includes alkali weed as a dominant species.



### **Annual Beard Grass – Bristly Ox-Tongue Grassland**

Annual beard grass – bristly ox-tongue grassland (2.682 acres) occurs at the southern end of the playa south of Ballona Creek. This community is co-dominated by annual beard grass and bristly ox-tongue, with a total cover of 80 percent or higher, depending on the patch. Other species, such as sourclover, alkali weed, and saltmarsh sand-spurrey, also occur at low cover.

This community is not defined by CNPS (2019a). It contains some species found in the alkali weed–salt grass playa and sink classification but does not meet the membership rule of having abundant alkali weed, swamp prickly grass (*Crypsis schoenoides*), or salt grass (*Distichlis spicata*). This patch was mapped as non-tidal salt marsh and disturbed non-tidal marsh in the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* (USACE and CDFW 2017), the latter of which includes bristly ox-tongue as a dominant species.

### **California Bulrush Marsh**

California bulrush marsh (0.689-acre) occurs along the blueline stream in the northern portion of the BSA and as islands of vegetation in the freshwater marsh in the southern portion of the BSA. This vegetation type is dominated almost exclusively by southern bulrush (*Schoenoplectus californicus*). The portion of California bulrush marsh in the northern portion of the BSA has a low cover of big saltbush. California bulrush marsh is a sensitive natural community (CDFW 2018a).

This on-site community is consistent with the *Schoenoplectus californicus* Association provided by CNPS (2019a). The patches of California bulrush marsh in the BSA were not mapped in the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* (USACE and CDFW 2017). While the EIS/EIR includes descriptions of tidal, brackish, and nontidal salt marshes, it does not include a freshwater marsh classification.

### **Cattail Marsh**

Cattail marsh (0.313-acre) occurs at the edge of open water in the freshwater marsh in the southern portion of the BSA. This vegetation type is dominated exclusively by southern cattail (*Typha cf. domingensis*).

This on-site community is consistent with the *Typha domingensis* Association provided by CNPS (2019a). The patches of cattail marsh in the BSA were not mapped in the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* (USACE and CDFW 2017). While the EIS/EIR includes descriptions of tidal, brackish, and nontidal salt marshes, it does not include a freshwater marsh classification.

### **Pickleweed Mat**

Pickleweed mat (1.196 acres) occurs in patches in the playa south of Ballona Creek. This community is dominated by Pacific pickleweed, with lower cover of species such as alkali-mallow, saltmarsh sand-spurrey, and sourclover. Pickleweed mat is a sensitive natural community (CDFW 2018a).

This on-site community is consistent with the *Salicornica pacifica* tidal Association provided by CNPS (2019a). It can be cross-referenced to the non-tidal salt marsh and disturbed non-tidal marsh classification used in the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* (USACE and CDFW 2017), the former of which includes pickleweed as a dominant species.

#### **3.1.3.4. RIPARIAN COMMUNITIES**

Riparian areas are typically associated with natural watercourses or waterbodies. Riparian vegetation in the BSA is dominated by shrubby species such as arroyo willow (*Salix lasiolepis*) and mule fat.

### **Arroyo Willow Thicket**

Arroyo willow thicket (2.039 acres) occurs along the margins of the freshwater marsh in the southern portion of the BSA and in the basin within the cloverleaf intersection of Culver Boulevard and Lincoln Boulevard. This community is dominated by arroyo willow in the upper layer with a lower cover of mule fat and Hinds' willow (*Salix exigua* var. *hindsiana*) in the shrub layer. The herbaceous layer contains species such as mugwort (*Artemisia douglasiana*), English plantain (*Plantago lanceolata*), ripgut grass, and southern bulrush (*Schoenoplectus californicus*). Arroyo willow thicket is a sensitive natural community (CDFW 2018a).

This on-site community is consistent with the *Salix lasiolepis* Association provided by CNPS (2019a). The patches of arroyo willow thicket in the BSA were not mapped in the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* (USACE and CDFW 2017); however, they could be cross-referenced to willow-mulefat thicket (USACE and CDFW 2017).

### **Mulefat Thicket**

Mulefat thicket (0.685-acre) occurs in a low point in the landscape between Culver Boulevard and Ballona Creek and along West Jefferson Boulevard. This community is dominated by mulefat in the shrub layer along with some isolated patches of big saltbush. Ripgut grass and Geraldton carnation weed comprise most of the herbaceous layer.

This on-site community is consistent with the *Baccharis salicifolia* Association provided by CNPS (2019a). It can be cross-referenced to the willow-mulefat thicket classification used in the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* (USACE and CDFW 2017). The northern patch of mulefat was mapped willow-mulefat thicket in the EIS/EIR; however, the strip along Lincoln Boulevard was included with the adjacent disturbed non-tidal marsh vegetation type. This is likely due to surveyor interpretation of the narrow strip of vegetation and differences in minimum mapping unit.

### **3.1.3.5. OTHER LANDCOVER**

Areas lacking vegetation or consisting exclusively of ornamental plantings and landscaping are considered “other landcover”.

#### ***Developed***

Much of the Project site consists of developed lands (56.015 acres), which occur primarily at the northern and southeastern ends of the BSA, though also crossing areas of vegetation. This landcover includes all areas that have been graded and built upon with hard, impermeable surfaces such as roads, buildings, and sidewalks. Ornamental vegetation closely associated with these structures is included in this landcover.

CNPS (2019a) does not include a classification of unvegetated areas. Most of these areas were excluded from the mapping in the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* (USACE and CDFW 2017); however, the lined banks of Ballona Creek were considered developed.

#### ***Open Water***

Open water (9.268 acres) occurs in the Ballona Creek channel and the freshwater marsh at the southern end of the BSA. This landcover includes all areas of standing or flowing water that are not vegetated.

CNPS (2019a) does not include a classification of unvegetated areas. Some of these areas were excluded from the mapping in the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* (USACE and CDFW 2017); however, Ballona Creek was considered open water.

#### ***Parks and Landscaping***

Parks and landscaping (5.650 acres) occur northwest of the intersection of Lincoln Boulevard and Fiji Way and on the derelict ball fields between Culver Boulevard and Ballona Creek. This landcover includes areas that are dominated by non-native, ornamental species, such as turf grass (*Festuca* sp.), fountain grass (*Pennisetum* sp.), and

African iris (*Dietes* sp.). These areas are manicured and maintained in an artificial manner. Small artificial structures, such as light fixtures, fencing, and abandoned buildings have not been mapped separately.

CNPS (2019a) does not include a classification of parks and manicured areas. The derelict ball fields were included with developed landcover in the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* (USACE and CDFW 2017).

### **3.1.4. Common Animal Species**

Animal species that were observed within the BSA during past field surveys are listed in Appendix C (Wildlife Compendium). The Wildlife Compendium identifies which species observed are non-native or invasive species.

#### **3.1.4.1. FISH**

Permanent water is present within Ballona Creek, with connectivity to the Pacific Ocean. Permanent water is also present in the freshwater marsh that is located outside of the Project footprint in the southwestern portion of the BSA. Fish that could be expected to occur in the BSA include those previously observed in the tide channels, Fiji Ditch, and Ballona Creek as part of the monitoring program (The Bay Foundation 2015) in the vicinity of the BSA, which include arrow goby (*Clevelandia ios*), bat ray (*Myliobatis californica*), California halibut (*Paralichthys californicus*), California killifish (*Fundulus parvipinnis*), California lizardfish (*Synodus lucioceps*), diamond turbot (*Hypsopsetta guttulata*), giant kelpfish (*Heterostichus rostratus*), kelp bass (*Paralabrax clathratus*), longjaw mudsucker (*Gillichthys mirabilis*), pacific staghorn sculpin (*Leptocottus armatus*), round stingray (*Urolophus halleri*), specklefin midshipman (*Porichthys myriaster*), striped mullet (*Mugil cephalus*), topsmelt (*Atherinops affinis*), and western mosquitofish (*Gambusia affinis*).

#### **3.1.4.2. AMPHIBIANS**

Amphibians require moisture for at least a portion of their life cycle, and many require standing or flowing water for reproduction. Terrestrial species may or may not require standing water for reproduction; they survive in dry areas by aestivating (e.g., remaining beneath the soil in burrows or under logs and leaf litter and emerging only when temperatures are low, and humidity is high). Many of these species' habitats are associated with water, and they emerge to breed once the rainy season begins. Soil moisture conditions can remain high throughout the year in some habitat types, depending on factors such as amount of vegetation cover, elevation, and slope/aspect.

Amphibians observed in the BSA include American bullfrog (*Lithobates catesbeianus*), which is invasive, and Baja California treefrog (*Pseudacris hypochondriaca*). Another amphibian observed during a nearby monitoring program (Bay Foundation 2015) include garden slender salamander (*Batrachoseps major major*). Another amphibian expected to occur is western toad (*Anaxyrus boreas*).

#### **3.1.4.3. REPTILES**

Reptiles are well-adapted to life in arid habitats. They have several physiological adaptations that allow them to conserve water. Reptiles can also become dormant during weather extremes, allowing them to survive prolonged droughts and paucity of food (Ruben and Hillenius 2005). Reptilian diversity and abundance typically varies with vegetation type and character.

Reptiles observed in the BSA include western fence lizard (*Sceloporus occidentalis*) and common side-blotched lizard (*Uta stansburiana*). Other reptiles expected to occur and observed during a nearby monitoring program (The Bay Foundation 2015) include red-eared slider (*Trachemys scripta elegans*), southern alligator lizard (*Elgaria multicarinata*), San Bernardino ring-necked snake (*Diadophis punctatus modestus*), California kingsnake (*Lampropeltis californiae*), gophersnake (*Pituophis catenifer*), and southern pacific rattlesnake (*Crotalus oreganus helleri*).

#### **3.1.4.4. BIRDS**

Several bird species are expected to occur in the BSA and to use the habitats throughout the year. Bird species observed in the BSA during surveys include Canada goose (*Branta canadensis*), blue-winged teal (*Spatula discors*), cinnamon teal (*Spatula cyanoptera*), gadwall (*Mareca strepera*), mallard (*Anas platyrhynchos*), ruddy duck (*Oxyura jamaicensis*), mourning dove (*Zenaidura macroura*), white-throated swift (*Aeronautes saxatalis*), Anna's hummingbird (*Calypte anna*), Allen's hummingbird (*Selasphorus sasin*), sora (*Porzana carolina*), American coot (*Fulica americana*), killdeer (*Charadrius vociferous*), willet (*Tringa semipalmata*), western gull (*Larus occidentalis*), double-crested cormorant (*Phalacrocorax auritus*), great blue heron (*Ardea herodias*), great egret (*Ardea alba*), snowy egret (*Egretta thula*), green heron (*Butorides virescens*), black-crowned night-heron (*Nycticorax nycticorax*), belted kingfisher (*Megaceryle alcyon*), black phoebe (*Sayornis nigricans*), Say's phoebe (*Sayornis saya*), ash-throated flycatcher (*Myiarchus cinerascens*), Cassin's kingbird (*Tyrannus vociferans*), western kingbird (*Tyrannus verticalis*), least Bell's vireo, American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), tree swallow (*Tachycineta bicolor*), northern rough-winged swallow (*Stelgidopteryx serripennis*), barn swallow (*Hirundo rustica*), bushtit (*Psaltriparus minimus*), Bewick's wren (*Thryomanes bewickii*), northern mockingbird

(*Mimus polyglottos*), European starling (*Sturnus vulgaris*), which is invasive, house sparrow (*Passer domesticus*), which is invasive, American pipit (*Anthus rubescens*), house finch (*Haemorhous mexicanus*), lesser goldfinch (*Spinus psaltria*), spotted towhee (*Pipilo maculatus*), California towhee (*Melospiza crissalis*), song sparrow (*Melospiza melodia*), yellow-breasted chat (*Icteria virens*), red-winged blackbird (*Agelaius phoeniceus*), great-tailed grackle (*Quiscalus mexicanus*), orange-crowned warbler (*Oreothypis celata*), common yellowthroat (*Geothlypis trichas*), yellow warbler (*Setophaga petechia*), and yellow-rumped warbler (*Setophaga coronata*). European starling and house sparrow are both considered invasive species.

Other species are expected to be present within the BSA only during certain seasons. For example, the white-crowned sparrow (*Zonotrichia leucophrys*) is expected to occur in the BSA during the winter and migrates to the northern forests for breeding in the spring. Various migrant species are expected to occur in the BSA and are present for only part of the year. For example, the Bullock's oriole (*Icterus bullockii*) is expected to occur as a migrate into the region for breeding.

Raptor species observed in the BSA include northern harrier (*Circus cyaneus*), Cooper's hawk (*Accipiter cooperii*), red-tailed hawk (*Buteo jamaicensis*), and American kestrel (*Falco sparverius*). Other raptors expected to occur in the BSA include turkey vulture (*Cathartes aura*), osprey (*Pandion haliaetus*), white-tailed kite (*Elanus leucurus*), barn owl (*Tyto alba*), and great horned owl (*Bubo virginianus*).

#### **3.1.4.5. MAMMALS**

Small or medium-sized mammals observed in the BSA include California ground squirrel (*Otospermophilus beecheyi*) and desert cottontail (*Sylvilagus audubonii*). Small mammal species observed during the monitoring program (Bay Foundation 2015) near the BSA include western harvest mouse (*Reithrodontomys megalotis*) and south coast marsh vole (*Microtus californicus stephensi*). Medium and large mammal species expected to occur and observed during the monitoring program (Bay Foundation 2015) near the BSA include Virginia opossum (*Didelphis virginiana*), eastern fox squirrel (*Sciurus niger*), coyote (*Canis latrans*), striped skunk (*Mephitis mephitis*), and northern raccoon (*Procyon lotor*).

Bats occur throughout most of Southern California and may use any portion of the BSA as foraging habitat. Most of the bats that could potentially occur in the BSA are inactive during the winter and either hibernate or migrate, depending on the species. Bats observed during the monitoring program (The Bay Foundation 2015) near the BSA include Brazilian free-tailed bat (*Tadarida brasiliensis*), hoary bat (*Lasiurus cinereus*),

silver-haired bat (*Lasionycteris noctivagans*), and Yuma bat (*Myotis yumanensis*). Bats may roost in trees or in structures including buildings and under bridges.

### 3.1.5. Wildlife Movement

Wildlife corridors link together areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated “islands” of wildlife habitat. In the absence of habitat linkages that allow movement to adjoining open space areas, various studies have concluded that some wildlife species, especially the larger and more mobile mammals, will not likely persist over time in fragmented or isolated habitat areas because they prohibit the infusion of new individuals and genetic information (MacArthur and Wilson 1967; Soule 1987; Harris and Gallagher 1989; Bennett 1990). Corridors mitigate the effects of this fragmentation by (1) allowing animals to move between remaining habitats, thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (such as fire or disease) will result in population or local species extinction; and (3) serving as travel routes for individual animals as they move in their home ranges in search of food, water, mates, and other necessary resources (Noss 1983; Farhig and Merriam 1985; Simberloff and Cox 1987; Harris and Gallagher 1989).

Wildlife movement activities usually fall into one of three movement categories: (1) dispersal (e.g., juvenile animals from natal areas or individuals extending range distributions); (2) seasonal migration; and (3) movements related to home range activities (e.g., foraging for food or water; defending territories; or searching for mates, breeding areas, or cover). A number of terms such as “wildlife corridor,” “travel route,” “habitat linkage,” and “wildlife crossing” have been used in various wildlife movement studies to refer to areas in which wildlife move from one area to another. To clarify the meaning of these terms and to facilitate the discussion on wildlife movement in this analysis, these terms are defined as follows:

- **Travel route** – a landscape feature (such as a ridgeline, drainage, canyon, or riparian strip) within a larger natural habitat area that is used frequently by animals to facilitate movement and to provide access to necessary resources (e.g., water, food, cover, den sites). The travel route is generally preferred because it provides the least amount of topographic resistance in moving from one area to another. It contains adequate food, water, and/or cover while moving between habitat areas; and it provides a relatively direct link between target habitat areas.

- **Wildlife corridor** – a piece of habitat, usually linear in nature, that connects two or more habitat patches that would otherwise be fragmented or isolated from one another. Wildlife corridors are usually bound by urban land areas or other areas unsuitable for wildlife. The corridor generally contains suitable cover, food, and/or water to support species and to facilitate their movement while in the corridor. Larger, landscape-level corridors (often referred to as “habitat linkages” or “landscape linkages”) can provide both transitory and resident habitat for a variety of species.
- **Wildlife crossing** – a small, narrow area, relatively short in length and generally constricted in nature that allows wildlife to pass under or through an obstacle or barrier that otherwise hinders or prevents movement. Crossings typically are man-made and include culverts, underpasses, drainage pipes, and tunnels to provide access across or under roads, highways, pipelines, or other physical obstacles. These often represent “choke points” along a movement corridor, which may impede wildlife movement and increase the risk of predation.

It is important to note that in a large, open space area with few or no man-made or naturally occurring physical constraints to wildlife movement, wildlife corridors (as defined above) may not yet exist. Given an open space area that is both large enough to maintain viable populations of species and to provide a variety of travel routes (e.g., canyons, ridgelines, trails, riverbeds, and others), wildlife will use these “local” routes while searching for food, water, shelter, and mates and will not need to cross into other large, open space areas. Based on their size, location, vegetative composition, and availability of food, some of these movement areas (e.g., large drainages and canyons) are used for longer lengths of time and serve as source areas for food, water, and cover, particularly for small- and medium-sized animals. This is especially true if the travel route is within a larger open space area. However, once open space areas become constrained and/or fragmented as a result of urban development or construction of physical obstacles (such as roads and highways), the remaining landscape features or travel routes that connect the larger open space areas become corridors as long as they provide adequate space, cover, food, and water and do not contain obstacles or distractions (e.g., man-made noise, lighting) that would generally hinder wildlife movement.

In general, wildlife corridor discussions typically focus on larger, more mobile mammal species such as southern mule deer (*Odocoileus hemionus*), mountain lion (*Puma concolor*), and coyote. Discussing the needs of larger mammal species typically also captures the needs of mid-sized mammals such as foxes (*Vulpes* sp.), northern raccoon, striped skunk, and American badger (*Taxidea taxus*). Most mammal species have



relatively large home ranges through which they move to find adequate food, water, and breeding and wintering habitat. It is assumed that corridors that serve larger, more mobile mammal species also serve as corridors for many smaller, less mobile species, such as reptiles, amphibians, and rodents. Regional movement for these species facilitates gene flow and requires at least some local “steppingstone” movement of individuals between populations.

Discussions of wildlife corridors generally focus less on bird species because they are more mobile and can fly over inhospitable habitat. Long-distance migrants are able to move great distances over unsuitable habitat; however, they must have stopover sites to rest and forage in order to continue their migration. Many resident species are habitat-specific, moving only through their preferred habitat type(s), or similar adjacent habitat; wildlife corridors would be more important for these bird species.

Ideally, an open space corridor should encompass a heterogeneous mix of vegetation types to accommodate the ecological requirements of a wide variety of resident species in any particular region. Most species typically prefer adequate vegetation cover during movement, which can serve as both a food source and as protection from weather and predators. Drainages, riparian areas, and forested canyon bottoms typically serve as natural movement corridors because these features provide cover, food, and often water for a variety of species. Very few species will move across large expanses of open, uncovered habitat unless it is the only option available to them. Landscape linkages must also provide “live-in” habitat (food and cover) to support smaller and less mobile species, such as amphibians, reptiles, and rodents, that require longer periods to traverse a corridor.

#### **3.1.5.1. REGIONAL MOVEMENT**

The BSA is located in an isolated fragment of coastal open space (e.g., the BWER) within a highly urbanized landscape. The BWER is entirely surrounded by development, including high-density residential, commercial areas, and a marina. The BWER is an important stopover for migratory birds traveling the Pacific Flyway migration route but does not fall within any identified terrestrial movement routes for wildlife (Los Angeles County 2015). Regional terrestrial wildlife movement outside the BWER is very limited. The only semi-natural features that could act as wildlife corridors consist of Ballona Creek and an approximate 300-foot-wide strip of vegetation along Cabora Drive. Neither of these areas connect the BSA to larger areas of open space east of the BSA. Ballona Creek would offer limited opportunities for wildlife movement because it has concrete banks and abuts development for much of its length; it also goes underground at Venice Boulevard, approximately seven miles upstream of Lincoln Boulevard. The only open

space area along Ballona Creek consists of the Blair Hills, but Jefferson Boulevard acts as a barrier to movement between the creek and that open space. The strip of vegetation along Cabora Drive extends east approximately 2.5 miles to I-405; however, it is entirely surrounded by development. West of the BSA, Ballona Creek and the BWER connect to the beach and Pacific Ocean. Wildlife may move along the beach south to open space in the El Segundo Blue Butterfly Habitat Restoration Area adjacent to Los Angeles International Airport. The airport is approximately 3,500 acres.

#### **3.1.5.2. LOCAL MOVEMENT**

Locally, wildlife may move within the approximately 577-acre BWER. This area is generally undeveloped and contains a variety of vegetation such as estuarine and brackish marsh, freshwater marsh and riparian habitats, seasonal wetlands, and uplands. Wildlife movement within this area is relatively unhindered. However, the existing roads (e.g., Lincoln Boulevard, Culver Boulevard, and Jefferson Boulevard) and associated chain link fencing provide a barrier to wildlife movement. Note, the fencing will be removed and replaced as part of the Project, in part to minimize wildlife mortalities from vehicle strikes on the roadway. Roads and vehicle traffic may result in direct mortalities, habitat fragmentation, and behavioral changes in wildlife (e.g., road avoidance due to visual disturbance, traffic noise, pollutants, etc.) (Forman and Alexander 1998, Coffin 2007, Charry and Jones 2009).

A study of vehicle hits on the BWER found a total of 654 kills over the three-year survey period (Johnston et al. 2014). Desert cottontail experienced the highest mortality (29.4%), with other small mammals making up the majority of the losses (unknown 23.9%, small animal 17.0%, squirrel 8.7%, and Virginia opossum 5.0%). Birds accounted for 5.7% of mortalities while medium and large animals and miscellaneous other species accounted for fewer than 5% of the mortalities.

#### **3.1.5.3. FISH PASSAGE**

Fish movement within Ballona Creek in the BSA is generally unrestricted. There are two existing bridges over the creek in the BSA, which include Culver Boulevard and Lincoln Boulevard, and one downstream at Pacific Avenue. Each of these existing bridges have three elongated, concrete piers in the channel and an abutment at the top of each bank. There is also a debris boom spanning the channel between the Culver Boulevard and Lincoln Boulevard bridges over Ballona Creek. The piers do not constrain fish movement and the debris boom floats thereby allowing for fish movement underneath the skirt.

#### **3.1.5.4. INVASIVE SPECIES**

Sixty non-native plant species occur throughout the BSA (see plant compendium provided as Appendix B). Many of these are scattered and have low coverage. However,

others such as grayish shortpod mustard (*Hirschfeldia incana*), black mustard, crown daisy, and various annual grasses dominate patches of vegetation. Forty-four of these species are listed as invasive weeds by the California Invasive Plant Council (Cal-IPC 2019). Five species have high ratings, meaning they have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Nineteen species have moderate ratings, meaning they have substantial and apparent—but generally not severe—ecological impacts. Twenty of these species have limited ratings, meaning they are invasive, but their ecological impacts are minor on a statewide level. Six of these species on the Cal-IPC list were also listed as noxious weeds on the California Department of Food and Agriculture Noxious Weed List (CDFA 2019). No species on the Federal Weed List (USDA NRCS 2012) were identified within the BSA. Standard Condition BIO-9 includes creation and implementation of a Noxious Weed Control Plan as part of the Project.

## **3.2. Regional Species and Habitats and Natural Communities of Concern**

### **3.2.1. Special Status Biological Resources**

The following section addresses special status biological resources reported from the region. These resources include plant and wildlife species that have been afforded special status and/or are recognized by federal and State resource agencies, as well as private conservation organizations. In general, the principal reason an individual taxon (e.g., species, subspecies, or variety) is given such recognition is the documented or perceived decline or limitations of its population size, geographic range, and/or distribution resulting in most cases from habitat loss. This list includes species reported by the CDFW’s California Natural Diversity Database (CNDDDB), CNPS, and USFWS Information for Planning and Consultation (IPaC) and is supplemented with species from the author’s experience that could occur based on the presence of suitable habitat. In addition, special status biological resources include vegetation types and habitats that are either unique, of relatively limited distribution in the region, or of particularly high wildlife value. These resources have been defined by federal, State, and local government conservation programs. Sources used to determine the special status of biological resources are listed below.

- **Habitats** – CNDDDB (CDFW 2023) and CDFW’s *California Natural Communities List* (CDFW 2018a).
- **Plants** – Electronic Inventory of Rare and Endangered Vascular Plants of California (CNPS 2023); CNDDDB (CDFW 2023); various USFWS *Federal*

Register notices regarding listing status of plant species; CDFW's *Special Vascular Plants, Bryophytes and Lichens List* (CDFW 2022c); and USFS IPaC (USFWS 2022).

- **Wildlife** – CNDDDB (CDFW 2023); various USFWS *Federal Register* notices regarding listing status of wildlife species; USFWS IPaC Official Species List (USFWS 2024); and CDFW's *List of Special Animals* (CDFW 2022b).

### **Definitions of Special Status Biological Resources**

A federally Endangered species is one facing extinction throughout all or a significant portion of its geographic range. A federally Threatened species is one likely to become Endangered within the foreseeable future throughout all or a significant portion of its range. The presence of any federally Threatened or Endangered species within a Project impact area generally imposes severe constraints on development, particularly if a Project would result in “take” of the species or its habitat. The FESA defines the term “take” as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct. Harm, in this sense, can include any disturbance of habitats used by the species during any portion of its life history.

Proposed species or Candidate species are those officially proposed by the USFWS for addition to the federal Threatened and Endangered species list. Because proposed species may soon be listed as Threatened or Endangered, the presence of a Proposed or Candidate species may impose constraints on development if they are listed prior to Project implementation, particularly if the Project would result in “take” of the species or its habitat.

The State of California considers an Endangered species as one whose prospects of survival and reproduction are in immediate jeopardy; a Threatened species as one present in such small numbers throughout its range that it is likely to become an Endangered species in the near future in the absence of special protection or management; and a Rare species as one present in such small numbers throughout its range that it may become Endangered if its present environment worsens. Rare species applies only to California native plants; these species are treated as State-listed species. State-listed Threatened and Endangered species are fully protected against take unless an Incidental Take Permit is obtained from the resource agencies. The presence of any State-listed Rare, Threatened, or Endangered species generally imposes constraints on Project development, particularly if the Project would result in “take” of the species or its habitat.

SC is an informal designation used by the CDFW for some declining wildlife species that are not yet State Candidates. This designation does not provide legal protection but signifies that these species are being tracked by CDFW.

Species that are Fully Protected include those protected by special legislation for various reasons, such as the white-tailed kite (*Elanus leucurus*). Fully Protected species may not be taken or possessed at any time except under special permit from CDFW issued pursuant to the *California Code of Regulations* (Title 14, Sections 650, 670.7) or Section 2081 of the *California Fish and Game Code*.

The California Rare Plant Rank (CRPR), formerly known as CNPS List, is a ranking system by the Rare Plant Status Review group<sup>5</sup> and managed by the CNPS and the CDFW. A CRPR summarizes information on the distribution, rarity, and endangerment of California's vascular plants. Plants with a CRPR of 1A are presumed extinct in California because they have not been seen in the wild for many years. Plants with a CRPR of 1B are rare, threatened, or endangered throughout their range. Plants with a CRPR of 2A are presumed extirpated from California but are more common elsewhere. Plants with a CRPR of 2B are considered rare, threatened, or endangered in California, but are more common elsewhere. Plants with a CRPR of 3 require more information before they can be assigned to another rank or rejected; this is a "review" list. Plants with a CRPR of 4 are of limited distribution or infrequent throughout a broader area in California; this is a "watch" list. The Threat Rank is an extension added onto the CRPR to designate the level of endangerment by a 1 to 3 ranking. An extension of .1 is assigned to plants that are considered to be "seriously threatened" in California (e.g., over 80 percent of the occurrences are threatened or having a high degree and immediacy of threat). Extension .2 indicates the plant is "fairly threatened" in California (e.g., between 20 and 80 percent of the occurrences are threatened or have a moderate degree and immediacy of threat). Extension .3 is assigned to plants that are considered "not very threatened" in California (e.g., less than 20 percent of occurrences are threatened or have a low degree and immediacy of threat or no current threats known). The absence of a threat code extension indicates plants lacking any threat information.

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<sup>5</sup> A group of over 300 botanical experts from the government, academia, non-governmental organizations, and the private sector.

### 3.2.2. Special Status Plants

Table 4 provides a summary of special status plant species and sensitive natural communities reported to occur in the vicinity of the BSA and includes information on the status, general habitat description, habitat suitability of the BSA, and potential for the species to occur; species observed during surveys are noted. This list includes species reported by the CNDDDB and the CNPS, those on the USFWS official species list, and species considered in the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* (USACE and CDFW 2017); it is supplemented with species from the Project biologist's experience that either occur nearby or could occur based on the presence of suitable habitat. Note that these species are listed alphabetically according to their scientific name. Figure 7 shows the locations of special status species observed during surveys.

**Table 4 – Listed, Proposed Species, Natural Communities, and Critical Habitat Potentially Occurring or Known to Occur in the Project Area**

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent	Rationale
red sand-verbena	<i>Abronia maritima</i>	4.2	Perennial herb. Coastal dunes; 0–328 ft. Southern California County Distribution: Los Angeles, Orange, San Diego, Ventura. Blooming period: February–November.	A	Not expected to occur. No suitable dune habitat in the BSA; historically reported from the BWER (CCH 2017; 1901 record), but not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
Aphanisma	<i>Aphanisma blitoides</i>	1B.2	Annual herb. Sandy soils in coastal bluff scrub, coastal dunes, and coastal scrub; 3–1,000 ft. Southern California County Distribution: Los Angeles, Orange, San Diego, Ventura. Blooming period: March–June.	HP	Not expected to occur. Suitable habitat in the BSA, but not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
marsh sandwort	<i>Arenaria paludicola</i>	FE; SE; 1B.1	Perennial stoloniferous herb. Sandy soils in marshes and swamps with brackish freshwater; 10–558 ft. Southern California County Distribution: Los Angeles, San Bernardino (Presumed extirpated). Blooming period: May–August.	HP	Not expected to occur. Suitable habitat in the BSA, but County records are historic (CCH 2017; 1900 record) and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
Braunton's milk-vetch	<i>Astragalus brauntonii</i>	FE; 1B.1	Perennial herb. Recently burned and disturbed areas, usually in sandstone and carbonite soils, in chaparral, coastal scrub, and grasslands; 13–2,099 ft. Southern California County Distribution: Los Angeles, Orange, Riverside, Ventura. Blooming period: January–August.	A	Not expected to occur. No suitable sandstone or carbonate soils in the BSA and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
Ventura Marsh milk-vetch	<i>Astragalus pycnostachyus</i> var. <i>lanosissimus</i>	FE; SE; 1B.1	Perennial herb. Coastal dunes and scrub, marshes and swamps at ocean edges; 3–115 ft. Southern California County Distribution: Los Angeles (Presumed extirpated), Orange (Presumed extirpated), Ventura. Blooming period: June–October.	HP	Not expected to occur. Suitable habitat in the BSA, but presumed extirpated from the County; historically reported from the BWER (Read 2015; 1882 record), but not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.

**Table 4 – Listed, Proposed Species, Natural Communities, and Critical Habitat Potentially Occurring or Known to Occur in the Project Area**

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent	Rationale
coastal dunes milk-vetch	<i>Astragalus tener</i> var. <i>titi</i>	FE; SE; 1B.1	Annual herb. Often in vernal mesic areas in sandy coastal bluff scrub, coastal dunes, and mesic coastal prairie; 3–164 ft. Southern California County Distribution: Los Angeles (Presumed extirpated), San Diego (Presumed extirpated; Occurrence confirmed, but possibly extirpated). Blooming period: March–May.	HP	Not expected to occur. Suitable habitat in the BSA, but presumed extirpated from the County; historically reported from the BWER (Read 2015; 1891 record), but not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
Coulter's saltbush	<i>Atriplex coulteri</i>	1B.2	Perennial herb. Alkaline or clay soils in coastal bluff scrub, coastal dunes, coastal scrub, and grassland; 9–1,509 ft. Southern California County Distribution: Los Angeles, Orange, San Bernardino, San Diego, Ventura. Blooming period: March–October.	HP	Not expected to occur. Suitable habitat in the BSA, but nearby record is historic (CCH 2017; 1881 record) and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
south coast saltscale	<i>Atriplex pacifica</i>	1B.2	Annual herb. Coastal bluff scrub, coastal dunes, coastal scrub, playas; 0–459 ft. Southern California County Distribution: Los Angeles, Orange, Riverside, San Diego, Ventura (Presumed extirpated). Blooming period: March–October.	HP	Not expected to occur. Suitable habitat in the BSA, but nearby record is historic (CCH 2017; 1881 record) and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
Parish's brittlescale	<i>Atriplex parishii</i>	1B.1	Annual herb. Alkaline soils in chenopod scrub, playas, and vernal pools; 82–6,232 ft. Southern California County Distribution: Los Angeles (Presumed extirpated), Orange (Presumed extirpated), Riverside, San Bernardino (Presumed extirpated), San Diego. Blooming period: June–October.	A	Not expected to occur. Suitable habitat in the BSA, but presumed extirpated from the County and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
Davidson's saltscale	<i>Atriplex serenana</i> var. <i>davidsonii</i>	1B.2	Annual herb. Alkaline conditions in coastal bluff scrub and coastal scrub; 32–656 ft. Southern California County Distribution: Los Angeles (Presumed	HP	Not expected to occur. Suitable habitat in the BSA, but presumed extirpated from the County and not observed during recent surveys of the BWER (USACE



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Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent	Rationale
			extirpated; Occurrence confirmed, but possibly extirpated), Orange, Riverside, San Diego, Ventura. Blooming period: April–October.		and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
Nevin’s barberry	<i>Berberis nevinii</i>	FE; SE; 1B.1	Evergreen shrub. Sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian scrub; 898–2,707 ft. Southern California County Distribution: Los Angeles, Riverside, San Bernardino, San Diego. Blooming period: March–June.	HP	Not expected to occur. Suitable habitat in the BSA, but outside the elevation range and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
Brewer’s calandrinia	<i>Calandrinia breweri</i>	4.2	Annual herb. Sandy or loamy soils, disturbed and/or burned sites in chaparral and coastal scrub; 32–4,001 ft. Southern California County Distribution: Los Angeles, Orange, Riverside, San Bernardino, San Diego, Ventura. Blooming period: March–June.	HP	Not expected to occur. Suitable habitat in the BSA, but nearby record is historic (CCH 2017; 1928 record) and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
Catalina mariposa-lily	<i>Calochortus catalinae</i>	4.2	Perennial bulbiferous herb. Chaparral, cismontane woodland, coastal scrub, and grassland; 49–2,296 ft. Southern California County Distribution: Los Angeles, Orange, San Bernardino, San Diego, Ventura. Blooming period: February–June.	HP	Not expected to occur. Suitable habitat in the BSA, but not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
slender mariposa-lily	<i>Calochortus clavatus</i> var. <i>gracilis</i>	1B.2	Perennial bulbiferous herb. Chaparral, coastal scrub, grassland; 1,050–3,280 ft. Southern California County Distribution: Los Angeles, Ventura. Blooming period: March–June.	HP	Not expected to occur. Suitable habitat in the BSA, but BSA is outside the known elevation range and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
Plummer’s mariposa-lily	<i>Calochortus plummerae</i>	4.2	Perennial bulbiferous herb. Granitic and rocky areas in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and grassland; 328–	HP	Not expected to occur. Suitable habitat in the BSA, but BSA is outside the known elevation range and not observed during recent surveys of the BWER (USACE

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Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent	Rationale
			5,576 ft. Southern California County Distribution: Los Angeles, Orange, Riverside, San Bernardino, Ventura. Blooming period: May–July.		and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
lucky morning-glory	<i>Calystegia felix</i>	1B.1	Annual rhizomatous herb. Currently known from irrigated landscapes, but historically from meadows and seeps that are sometimes alkaline and alluvial riparian scrub; 98–705 ft. Southern California County Distribution: Los Angeles (Presumed extirpated), Riverside (Presumed extirpated), San Bernardino. Blooming period: March–September.	HP	Not expected to occur. Suitable habitat in the BSA, but nearby record is historic (CCH 2017), presumed extirpated from the County, and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
Peirson’s morning-glory	<i>Calystegia peirsonii</i>	4.2	Perennial rhizomatous herb. Chaparral, chenopod scrub, cismontane woodland, coastal scrub, lower montane coniferous forest, grassland; 98–4,920 ft. Southern California County Distribution: Los Angeles. Blooming period: April–June.	HP	Not expected to occur. Suitable habitat in the BSA, but BSA is outside the known elevation range and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
Santa Barbara morning-glory	<i>Calystegia sepium</i> ssp. <i>binghamiae</i>	1A	Perennial rhizomatous herb. Coastal marshes and swamps, riverbanks; 0–65 ft. Southern California County Distribution: Los Angeles, San Bernardino (Presumed extirpated; rediscovery in 2011 classified as <i>Calystegia felix</i> ). Blooming period: April–June, August.	HP	Not expected to occur. Suitable habitat in the BSA, but nearby records are historic (CCH 2017; 1899 and 1904 records), presumed extirpated, and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
Lewis’ evening-primrose	<i>Camissoniopsis lewisii</i>	3	<b>Annual herb. Sandy or clay soils in coastal bluff scrub, Cismontane woodland, coastal dunes, coastal scrub, and grassland; 0–984 ft. Southern California County Distribution: Los Angeles, Orange</b>	<b>P</b>	<b>Observed in the BSA during focused surveys.</b>

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Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent	Rationale
			<b>(Presumed extirpated), San Diego. Blooming period: March–June.</b>		
southern tarplant	<i>Centromadia parryi</i> ssp. <i>australis</i>	1B.1	Annual herb. Found within the margin of marshes and swamps, vernal mesic soils in grassland, and vernal pools; 0–1,574 ft. Southern California County Distribution: Los Angeles, Orange, San Diego, Ventura. Blooming period: May–November.	HP	Not expected to occur. Suitable habitat in the BSA; historically reported from the BWER (Read 2015; 1890 record) but not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
island mountain-mahogany	<i>Cercocarpus betuloides</i> var. <i>blancheae</i>	4.3	Evergreen shrub. Closed-cone coniferous forests and chaparral; 98–1,968 ft. Southern California County Distribution: Los Angeles, Ventura. Blooming period: February–May.	A	Not expected to occur. No suitable forest or chaparral habitat in the BSA and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA; the species is a large tree that would be observed if present in the BSA.
Orcutt's pincushion	<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>	1B.1	Annual herb. Sandy soils in coastal bluff scrub and coastal dunes; 0–328 ft. Southern California County Distribution: Los Angeles, Orange (Presumed extirpated), San Diego, Ventura. Blooming period: January–August.	A	Not expected to occur. No suitable bluff or dune habitat in the BSA; reported from restored coastal dune habitat in the western end of the BWER (USACE and CDFW 2017), but not observed during current surveys of the BSA.
coastal goosefoot	<i>Chenopodium littoreum</i>	1B.2	Annual herb. Coastal dunes; 33–98 ft. Southern California County Distribution: Los Angeles. Blooming period: April–August.	A	Not expected to occur. No suitable dune habitat in the BSA and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.

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Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent	Rationale
salt marsh bird's-beak	<i>Chloropyron maritimum</i> <i>ssp. maritimum</i>	FE; SE; 1B.2	Hemiparasitic annual herb. Coastal dunes and coastal salt marshes and swamps; 0–98 ft. Southern California County Distribution: Los Angeles, Orange, San Bernardino, San Diego, Ventura. Blooming period: May–October.	HP	Not expected to occur. Suitable habitat in the BSA; historically reported from the BWER (Read 2015; 1901 record), but not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
San Fernando Valley spineflower	<i>Chorizanthe parryi</i> var. <i>fernandina</i>	PT; SE; 1B.1	Annual herb. Sandy soil in coastal scrub and grassland; 492–4,002 ft. Southern California County Distribution: Los Angeles, Orange (Presumed extirpated), Ventura. Blooming period: April–July.	HP	Not expected to occur. Suitable habitat in the BSA; historically reported from the BWER (Read 2015; 1901 record), but not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
seaside cistanthe	<i>Cistanthe maritima</i>	4.2	Annual herb. Sandy soils in coastal bluff scrub, coastal scrub, and grassland; 16–984 ft. Southern California County Distribution: Los Angeles, Orange, San Diego, Ventura. Blooming period: February–August.	HP	Not expected to occur. Suitable habitat in the BSA, but nearby record is historic (CCH 2017; 1881 record) and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
small-flowered morning-glory	<i>Convolvulus simulans</i>	4.2	Annual herb. Friable clay soils or serpentine seeps in chaparral openings, coastal scrub, and grassland; 98–2,297 ft. Southern California County Distribution: Kern, Los Angeles, Orange, Riverside, San Diego. Blooming period: March–July.	A	Not expected to occur. No suitable clay or serpentine soils in the BSA and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.

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Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent	Rationale
Santa Susana tarplant	<i>Deinandra minthornii</i>	SR; 1B.2	Deciduous shrub. Rocky soils in Chaparral and coastal scrub; 918–2,493 ft. Southern California County Distribution: Los Angeles, Ventura. Blooming period: July–November.	A	Not expected to occur. No suitable rocky soils in the BSA, the BSA is outside the known elevation range, and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
paniculate tarplant	<i>Deinandra paniculata</i>	4.2	Annual herb. Usually found in vernal mesic soils in coastal scrub, grassland, and vernal pools; 82–3,084 ft. Southern California County Distribution: Orange, Riverside, San Bernardino, San Diego. Blooming period: April–November.	HP	Not expected to occur. Suitable habitat in the BSA, but not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys in 1991 and 2002 reporting presence are likely misidentifications of fascicled tarplant) or current surveys of the BSA.
western dichondra	<i>Dichondra occidentalis</i>	4.2	Perennial rhizomatous herb. Chaparral, cismontane woodland, coastal scrub, grassland; 164–1,640 ft. Southern California County Distribution: Los Angeles (Uncertain about distribution or identity), Orange, San Diego, Ventura. Blooming period: January–July.	HP	Not expected to occur. Suitable habitat in the BSA; reported from the BWER in 1991 and 2002, but not observed during recent surveys (USACE and CDFW 2017; surveys between 2010 and 2011) or current surveys of the BSA.
beach spectaclepod	<i>Dithyrea maritima</i>	ST; 1B.1	Perennial rhizomatous herb. Coastal dunes and sandy coastal scrub; 10–164 ft. Southern California County Distribution: Los Angeles (Presumed extirpated), Ventura. Blooming period: March–May.	HP	Not expected to occur. Suitable habitat in the BSA, but nearby record is historic (CCH 2017; 1903 record) and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.

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Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent	Rationale
Santa Monica dudleya	<i>Dudleya cymosa</i> ssp. <i>ovatifolia</i>	FT; 1B.1	Perennial herb. Volcanic or sedimentary rocky soils in Chaparral and coastal scrub; 492–5,494 ft. Southern California County Distribution: Los Angeles, Orange. Blooming period: March–June.	A	Not expected to occur. No suitable rocky soils in the BSA, the BSA is outside the known elevation range, and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
many-stemmed dudleya	<i>Dudleya multicaulis</i>	1B.2	Perennial herb. Often in heavy clay soils or sandstone outcrops in chaparral, coastal scrub, and grassland; 49–2,591 ft. Southern California County Distribution: Los Angeles, Orange, Riverside, San Bernardino, San Diego. Blooming period: April–July.	A	Not expected to occur. No suitable clay soils or sandstone outcrops in the BSA and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
island green dudleya	<i>Dudleya virens</i> ssp. <i>insularis</i>	1B.2	Perennial herb. Rocky soil in coastal bluff scrub and coastal scrub; 16–984 ft. Southern California County Distribution: Los Angeles, Ventura. Blooming period: April–June.	A	Not expected to occur. No suitable rocky soils or bluffs in the BSA and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
San Diego button-celery	<i>Eryngium aristulatum</i> var. <i>parishii</i>	FE; SE; 1B.1	Annual/perennial herb. Mesic soils in coastal scrub, grassland, and vernal pools; 65–2,034 ft. Southern California County Distribution: Los Angeles, Orange, Riverside, San Diego. Blooming period: April–June.	HP	Not expected to occur. Suitable habitat in the BSA, but nearby record is historic (CCH 2017; 1901 record) and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.

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Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent	Rationale
island wallflower	<i>Erysimum insulare</i>	1B.3	Perennial herb. Coastal bluff scrub and coastal dunes; 0–950 ft. Southern California County Distribution: Los Angeles. Blooming period: March–July.	A	Not expected to occur. No suitable bluff or dune habitat in the BSA, the BSA is outside the current known range, and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
suffrutescent wallflower	<i>Erysimum suffrutescens</i>	4.2	Perennial herb. Maritime chaparral, coastal bluff scrub, coastal scrub, and coastal dunes; 0–492 ft. Southern California County Distribution: Los Angeles, Ventura. Blooming period: January–July.	HP	Moderate potential to occur. Suitable habitat in the BSA and reported from restored coastal dune habitat in the western end of the BWER (USACE and CDFW 2017), but not observed during current surveys of the BSA.
Los Angeles sunflower	<i>Helianthus nuttallii</i> ssp. <i>parishii</i>	1A	Perennial rhizomatous herb. Coastal salt and freshwater marshes and swamps; 33–5,494 ft. Southern California County Distribution: Los Angeles (Presumed extirpated), Orange (Presumed extirpated), San Bernardino (Presumed extirpated). Blooming period: August–October.	HP	Not expected to occur. Suitable habitat in the BSA, but presumed extirpated and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
vernal barley	<i>Hordeum intercedens</i>	3.2	Annual herb. Coastal dunes, coastal scrub, saline flats and depressions in grassland, and vernal pools; 16–3,280 ft. Southern California County Distribution: Kern, Los Angeles, Orange, Riverside, San Diego, Ventura. Blooming period: March–June.	HP	Not expected to occur. Suitable habitat in the BSA and historically reported from the BWER (Read 2015; 1901 record), but not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.

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Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
mesa horkelia	<i>Horkelia cuneata</i> var. <i>puberula</i>	1B.1	Perennial herb. Sandy and gravelly soils within maritime chaparral, cismontane woodland, and coastal scrub; 229–2,657 ft. Southern California County Distribution: Los Angeles, Orange, Riverside (Presumed extirpated), San Bernardino, San Diego (Presumed extirpated), Ventura. Blooming period: February–September.	HP	Not expected to occur. Suitable habitat in the BSA, but nearby record is historic (CCH 2017; 1932 record) and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
southern California black walnut	<i>Juglans californica</i>	4.2	Deciduous tree. Alluvial areas in chaparral, cismontane woodland, and coastal scrub; 164–2,952 ft. Southern California County Distribution: Los Angeles, Orange, Riverside, San Bernardino, San Diego, Ventura. Blooming period: March–August.	HP	Not expected to occur. Marginally suitable habitat in the BSA, not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA; the species is a large tree that would be observed if present in the BSA.
southwestern spiny rush	<i>Juncus acutus</i> ssp. <i>leopoldii</i>	4.2	Perennial rhizomatous herb. Mesic soils in coastal dunes, alkaline seeps in meadows and seeps, and coastal salt marshes and swamps; 9–2,953 ft. Southern California County Distribution: Imperial, Los Angeles, Orange, San Diego, Ventura. Blooming period: (March) May–June.	HP	Not expected to occur. Suitable habitat in the BSA, but not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
Coulter's goldfields	<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	1B.1	Annual herb. Coastal salt marsh, coastal salt swamps, playas, vernal pools; 3–4,001 ft. Southern California County Distribution: Kern (Presumed extirpated), Los Angeles (Presumed extirpated), Orange, Riverside, San Bernardino (Presumed extirpated), San Diego, Ventura. Blooming period: February–June.	HP	Not expected to occur. Suitable habitat in the BSA, but nearby record is historic (CCH 2017; 1881 record) and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.



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Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent	Rationale
sea dahlia	<i>Leptosyne maritima</i>	2B.2	Perennial herb. Coastal bluff scrub and coastal scrub; 16-492 ft. Southern California County Distribution: San Diego. Blooming period: March–May.	HP	Not expected to occur. Suitable habitat in the BSA, but most occurrences are in San Diego County and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
white-veined monardella	<i>Monardella hypoleuca</i> ssp. <i>hypoleuca</i>	1B.3	Perennial herb. Chaparral and cismontane woodland; 164–5,002 ft. Southern California County Distribution: Los Angeles, Ventura. Blooming period: April–December.	A	Not expected to occur. No suitable chaparral or woodland habitat in the BSA, the BSA is outside the known elevation range, and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
California spineflower	<i>Mucronea californica</i>	4.2	Annual herb. Sandy soils in chaparral, cismontane woodland, coastal dunes, coastal scrub, and grassland; 0–4,592 ft. Southern California County Distribution: Kern, Los Angeles, Riverside, San Bernardino, San Diego, Ventura. Blooming period: March–August.	HP	Not expected to occur. Suitable habitat in the BSA; historically reported from the BWER (Read 2015; 1899 record), but not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
mud nama	<i>Nama stenocarpa</i>	2B.2	Annual/perennial herb. Marshes and swamps, also riverbanks and lake margins; 16–1,640 ft. Southern California County Distribution: Imperial (Presumed extirpated), Los Angeles (Presumed extirpated), Orange, Riverside, San Diego. Blooming period: January–July.	HP	Not expected to occur. Suitable habitat in the BSA, but presumed extirpated from the County and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.

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Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent	Rationale
Gambel's water cress	<i>Nasturtium gambelii</i>	FE; ST; 1B.1	Perennial rhizomatous herb. Freshwater or brackish marshes and swamps; 16–1,000 ft. Southern California County Distribution: Los Angeles, Orange, San Bernardino (Presumed extirpated), San Diego. Blooming period: April–October.	HP	Not expected to occur. Suitable habitat in the BSA, but nearby records are historic (CCH 2017; 1885 and 1904 records) and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
spreading navarretia	<i>Navarretia fossalis</i>	FT; 1B.1	Annual herb. Chenopod scrub, assorted freshwater marshes and swamps, playas, and vernal pools; 98–2,149 ft. Southern California County Distribution: Los Angeles, Riverside, San Diego. Blooming period: April–June.	HP	Not expected to occur. Suitable habitat in the BSA, but nearby record is historic (CCH 2017; 1906 record) and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
prostrate vernal pool navarretia	<i>Navarretia prostrata</i>	1B.1	Annual herb. Mesic coastal scrub, meadows and seeps, alkaline grassland, and vernal pools; 49–3,968 ft. Southern California County Distribution: Los Angeles, Orange, Riverside, San Bernardino (Presumed extirpated; Occurrence confirmed, but possibly extirpated), San Diego. Blooming period: April–July.	HP	Not expected to occur. Suitable habitat in the BSA, but nearby records are historic (CCH 2017; 1899, 1906, and 1944 records) and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
coast woolly-heads	<i>Nemacaulis denudata</i> var. <i>denudata</i>	1B.2	Annual herb. Coastal dunes; 0–328 ft. Southern California County Distribution: Los Angeles, Orange, San Diego. Blooming period: April–September.	A	Not expected to occur. No suitable dune habitat in the BSA and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.

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Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent	Rationale
California Orcutt grass	<i>Orcuttia californica</i>	FE; SE; 1B.1	Annual herb. Vernal pools; 49–2,165 ft. Southern California County Distribution: Los Angeles, Orange, Riverside, San Diego, Ventura. Blooming period: April–August.	A	Not expected to occur. No suitable dune habitat in the BSA and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
Lyon’s pentachaeta	<i>Pentachaeta lyonii</i>	FE; SE; 1B.1	Annual herb. Rocky or clay soils in coastal scrub, grassland, and openings in chaparral; 98–2,066 ft. Southern California County Distribution: Los Angeles, Ventura. Blooming period: March–August.	A	Not expected to occur. No suitable rocky or clay soils in the BSA and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
Hubby’s phacelia	<i>Phacelia hubbyi</i>	4.2	Annual herb. Gravelly to rocky soil or talus in chaparral, coastal scrub, grassland; 0–3,280 ft. Southern California County Distribution: Kern, Los Angeles, Ventura. Blooming period: April–July.	A	Not expected to occur. No suitable rocky soils or talus in the BSA and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
south coast branching phacelia	<i>Phacelia ramosissima</i> <i>var. austrolitoralis</i>	3.2	Perennial herb. Sandy, sometimes rocky soils in chaparral, coastal dunes, coastal scrub, coastal salt marshes and swamps; 16–984 ft. Southern California County Distribution: Orange, Los Angeles, San Diego, Ventura. Blooming period: March–August.	HP	Moderate potential to occur. Suitable habitat in the BSA and reported from restored coastal dune habitat in the western end of the BWER (USACE and CDFW 2017), but not observed during current surveys of the BSA.
Brand’s star phacelia	<i>Phacelia stellaris</i>	1B.1	Annual herb. Coastal dunes, coastal scrub; 3–1,312 ft. Southern California County Distribution: Los Angeles (Presumed extirpated; Occurrence confirmed, but possibly extirpated), Orange, Riverside, San Bernardino, San Diego. Blooming period: March–June.	HP	Not expected to occur. Suitable habitat in the BSA, but nearby record is historic (CCH 2017; 1943 record) and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.

**Table 4 – Listed, Proposed Species, Natural Communities, and Critical Habitat Potentially Occurring or Known to Occur in the Project Area**

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent	Rationale
Ballona cinquefoil	<i>Potentilla multijuga</i>	1A	Perennial herb. Meadows and seeps in brackish water; 0–7 ft. Southern California County Distribution: Los Angeles (Presumed extirpated). Blooming period: June–August.	HP	Not expected to occur. Suitable habitat in the BSA and historically reported from the BWER (Read 2015; 1890 record), but presumed extirpated and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
white rabbit-tobacco	<i>Pseudognaphalium leucocephalum</i>	2B.2	Perennial herb. Sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian woodland; 0–6,888 ft. Southern California County Distribution: Los Angeles, Orange, Riverside, San Diego. Blooming period: July–December.	HP	Not expected to occur. Suitable habitat in the BSA, but not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
Nuttall's scrub oak	<i>Quercus dumosa</i>	1B.1	Perennial evergreen shrub. Sandy or clay loam in closed-cone coniferous forest, chaparral, and coastal scrub; 49–1,312 ft. Southern California County Distribution: Los Angeles, Orange, San Diego, Ventura. Blooming period: February–August.	HP	Not expected to occur. Suitable habitat in the BSA, but not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA; the species is a large shrub that would be observed if present in the BSA.
salt spring checkerbloom	<i>Sidalcea neomexicana</i>	2B.2	Perennial herb. Alkaline and mesic soils within chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, and playas; 49–5,020 ft. Southern California County Distribution: Kern, Los Angeles (Presumed extirpated), Orange, Riverside, San Bernardino, San Diego, Ventura. Blooming period: March–June.	HP	Not expected to occur. Suitable habitat in the BSA, but nearby records are historic (CCH 2017) and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.

**Table 4 – Listed, Proposed Species, Natural Communities, and Critical Habitat Potentially Occurring or Known to Occur in the Project Area**

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent	Rationale
western bristly scaleseed	<i>Spermolepis lateriflora</i>	2A	Annual herb. Sandy or rocky Sonoran desert scrub; 1,198–2,198 ft. Southern California County Distribution: Los Angeles (Occurrence confirmed, but possibly extirpated), San Diego. Blooming period: March–April.	A	Not expected to occur. No suitable desert scrub habitat in the BSA, outside the known elevation range, last reported from California in 1952 (CNPS 2019b), and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
estuary seablite	<i>Suaeda esteroa</i>	1B.2	Perennial herb. Coastal salt marshes and swamps; 0–16 ft. Southern California County Distribution: Los Angeles, Orange, San Diego, Ventura. Blooming period: May–January.	HP	Not expected to occur. Suitable habitat in the BSA, but not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
woolly seablite	<i>Suaeda taxifolia</i>	4.2	Evergreen shrub. Coastal bluff scrub, coastal dunes, and the margins of coastal salt marshes and swamps; 0–164 ft. Southern California County Distribution: Los Angeles, Orange, San Diego, Ventura. Blooming period: January–December.	HP	Moderate potential to occur. Suitable habitat in the BSA and reported from coastal brackish marsh habitat in the western end of the BWER (USACE and CDFW 2017), but not observed during current surveys of the BSA.
San Bernardino aster	<i>Symphotrichum defoliatum</i>	1B.2	Perennial rhizomatous herb. Near ditches, streams, and springs in cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, and vernal mesic grassland; 7–6,693 ft. Southern California County Distribution: Imperial, Kern, Los Angeles, Orange, Riverside, San Bernardino, San Diego. Blooming period: July–November.	HP	Not expected to occur. Suitable habitat in the BSA, but not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.

**Table 4 – Listed, Proposed Species, Natural Communities, and Critical Habitat Potentially Occurring or Known to Occur in the Project Area**

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent	Rationale
Greata's aster	<i>Symphotrichum greatae</i>	1B.3	Perennial rhizomatous herb. Mesic soils in chaparral, cismontane and riparian woodland, broadleaved upland and lower montane coniferous forest; 984–6,593 ft. Southern California County Distribution: Los Angeles, San Bernardino, Ventura. Blooming period: June–October.	A	Not expected to occur. No suitable chaparral, woodland, or forest habitat in the BSA; outside the current known range; and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
Sonoran maiden fern	<i>Thelypteris puberula</i> var. <i>sonorensis</i>	2B.2	Perennial rhizomatous herb. Meadows, seeps, and streams; 164–2,001 ft. Southern California County Distribution: Los Angeles, Riverside, San Bernardino. Blooming period: January–September.	HP	Not expected to occur. Suitable habitat in the BSA, but outside the elevation range and not observed during recent surveys of the BWER (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
<b>Sensitive Natural Communities</b>					
California walnut grove	<i>Juglans californica</i> Alliance	SNC	<i>Juglans californica</i> is dominant or co-dominant in the tree canopy. Occurs in riparian corridors, but most stands cover all hillslopes.	A	Not observed during the survey effort and not expected to occur in the BSA.
Southern coast live oak riparian forest	<i>Quercus agrifolia</i> Alliance	SNC	<i>Quercus agrifolia</i> is dominant or co-dominant in the upland tree canopy. Associated with fresh water drainage features. Occurs canyon bottoms, slopes, flats. Soils are deep; sandy or loamy with high organic matter.	A	Not observed during the survey effort and not expected to occur in the BSA.
Southern coastal salt marsh	<i>Arthrocnemum subterminale</i> Alliance	SNC	<i>Arthrocnemum subterminale</i> is dominant or co-dominant in the herbaceous and subshrub layers. Occurs in coastal salt marshes.	A	Not observed in the BSA during the survey effort and not expected to occur in the BSA.

**Table 4 – Listed, Proposed Species, Natural Communities, and Critical Habitat Potentially Occurring or Known to Occur in the Project Area**

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent	Rationale
Southern dune scrub	<i>Deinandra clementina</i> - <i>Eriogonum giganteum</i> , <i>Eriogonum arborescens</i> - <i>Eriogonum grande</i> , or <i>Lupinus chamissonis</i> - <i>Ericameria ericoides</i> Alliances	SNC	Either <i>Deinandra clementina</i> - <i>Eriogonum giganteum</i> , <i>Eriogonum arborescens</i> - <i>Eriogonum grande</i> , or <i>Lupinus chamissonis</i> - <i>Ericameria ericoides</i> are dominant, co-dominant, or characteristically present in the shrub canopy. Occurs in stabilized dunes of coastal bars, river mouths, spits along coastlines, and coastal bluffs and terraces.	A	Not observed in the BSA during the survey effort and not expected to occur in the BSA.
Southern sycamore alder riparian woodland	<i>Alnus rhombifolia</i> , <i>Fraxinus latifolia</i> , or <i>Platanus racemosa</i> - <i>Quercus agrifolia</i> Alliance	SNC	<i>Alnus rhombifolia</i> , <i>Fraxinus latifolia</i> , or <i>Platanus racemosa</i> - <i>Quercus agrifolia</i> dominant or co-dominant in the tree canopy. Occurs in gullies, riparian corridors, incised canyons, seeps, stream banks, mid-channel bars, floodplains, and terraces.	A	Not observed in the BSA during the survey effort and not expected to occur in the BSA.
Menzies's golden bush scrub	<i>Isocoma menziesii</i> Association	SNC	Dominated by <i>Isocoma menziesii</i> in the shrub layer	Present	Observed within the BSA.
Alkali Weed Playa	<i>Cressa truxillensis</i> Association	SNC	Dominated by <i>Cressa truxillensis</i> .	Present	Observed within the BSA.
California Bulrush Marsh	<i>Schoenoplectus californicus</i> Association	SNC	Dominated by <i>Schoenoplectus californicus</i> .	Present	Observed within the BSA.
Pickleweed Mat	<i>Salicornia pacifica</i> tidal Association	SNC	Dominated by <i>Salicornia pacifica</i> .	Present	Observed within the BSA.
Arroyo Willow Thicket	<i>Salix lasiolepis</i> Association	SNC	Dominated by <i>Salix lasiolepis</i> in the upper canopy.	Present	Observed within the BSA.

**Table 4 – Listed, Proposed Species, Natural Communities, and Critical Habitat Potentially Occurring or Known to Occur in the Project Area**

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
<p>USFWS: U.S. Fish and Wildlife Service; CDFW: California Department of Fish and Wildlife; CRPR: California Rare Plant Rank; msl: mean sea level; ft: feet; HP: habitat present, species may or may not be present; A: species absent, no habitat present; P: species present; BSA: Biological Study Area</p> <p><b><u>STATUS DESIGNATIONS</u></b></p> <p><b>Federal (USFWS) Designations:</b>                      FE Listed by the federal government as an Endangered species                      FT Listed by the federal government as a Threatened species</p> <p><b>State (CDFW) Designations:</b>                      SE Listed as Endangered by the State of California                      ST Listed as Threatened by the State of California                      SR Listed as Rare by the State of California                      SNC Listed as a Sensitive Natural Community by the State of California</p> <p><b>California Rare Plant Rank (CRPR)</b>                      1A. Presumed extirpated in California and rare or extinct elsewhere                      1B. Rare, Threatened, or Endangered in California and elsewhere                      2A. Presumed extirpated in California, but more common elsewhere                      2B. Rare, Threatened, or Endangered in California, but more common elsewhere                      3. Plants for which we need more information - Review list                      4. Plants of limited distribution - Watch list</p> <p><b>CRPR Threat Rank Extensions</b>                      None Plants lacking any threat information                      .1 Seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat)                      .2 Fairly threatened in California (20-80% of occurrences threatened; moderate degree and immediacy of threat)                      .3 Not very threatened in California (&lt;20% of occurrences threatened; low degree and immediacy of threat or no current threats known)</p> <p><b>Sources:</b>                      General Habitat Description: California Native Plant Society (CNPS). 2017. <i>Inventory of Rare and Endangered Plants of California</i> (online edition, v8-03). Sacramento, CA: CNPS. <a href="http://www.rareplants.cnps.org">http://www.rareplants.cnps.org</a>.                      Status: California Department of Fish and Wildlife (CDFW). 2019. <i>Special Vascular Plants, Bryophytes, and Lichens List</i>. Sacramento, CA: CDFW, Natural Heritage Division.</p>					



### 3.2.3. Special Status Wildlife

Table 5 provides a summary of special status wildlife species reported to occur in the vicinity of the BSA and includes information on the status, general habitat description, habitat suitability of the BSA, and potential for the species to occur; species observed during surveys are noted. This list includes species reported by the CNDDDB, those on the USFWS official species list, and species considered in the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* (USACE and CDFW 2017); it is supplemented with species from the Project biologist's experience that either occur nearby or could occur based on the presence of suitable habitat. Note that these species are listed alphabetically according to their scientific name. Figure 7 shows the locations of special status species observed during surveys.

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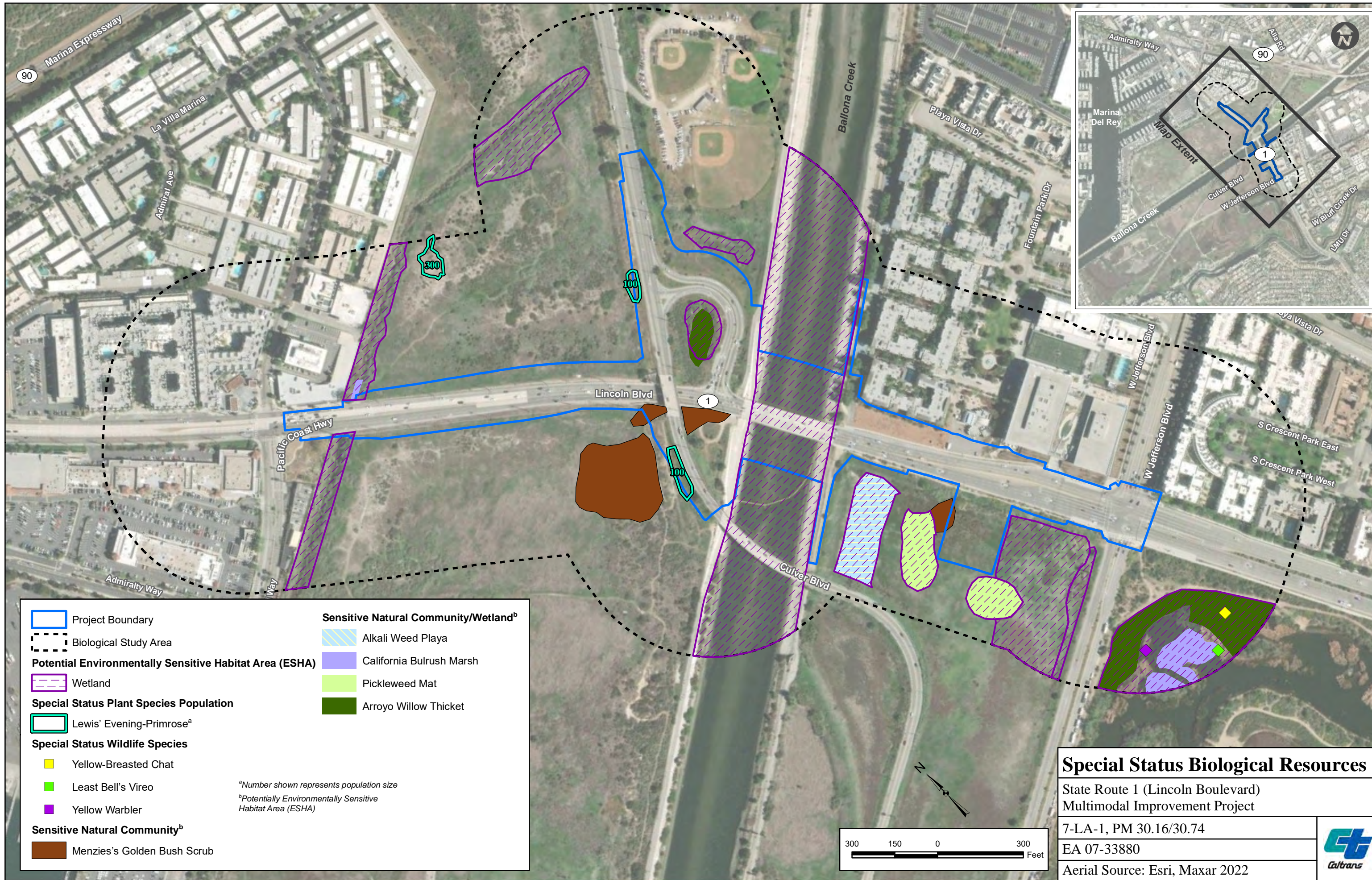


Figure 7



**Table 5 – Listed, Proposed Species, Natural Communities, and Critical Habitat Potentially Occurring or Known to Occur in the Project Area**

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/Species Present (HP/P); Habitat Present/Species Presence Unknown (HP); Habitat Absent (A)	Rationale (Potential for Species to Occur); Results of Focused Surveys
<b>Invertebrates</b>					
<i>Aglaothorax longipennis</i>	Santa Monica shieldback katydid	SA	Occur nocturnally in chaparral and canyon stream bottom vegetation, in the Santa Monica Mountains of Southern California. Inhabit introduced ice plant and native chaparral plants.	A	Not expected to occur. No suitable habitat in the BSA and the only known occurrence/population occurs in the Santa Monica mountains (1975 record, CDFW 2023).
<i>Bombus crotchii</i>	Crotch bumble bee	SA; CE	Coastal California east to the Sierra-Cascade crest and south into Mexico. Occurs in grassland and scrub habitats. Food plant genera include <i>Antirrhinum</i> , <i>Phacelia</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , and <i>Eriogonum</i> .	HP	Moderate potential to occur. Suitable habitat in the BSA and reported at BWER, just southwest of the BSA (1981 record, CDFW 2023).
<i>Branchinecta sandiegonensis</i>	San Diego fairy shrimp	FE	Endemic to San Diego and Orange County mesas. Occurs in vernal pools and ponding areas.	A	Not expected to occur. No suitable habitat in the BSA and no known occurrences in the county (CDFW 2023).
<i>Brennania belkini</i>	Belkin's dune tabanid fly	SA	Inhabits coastal sand dunes of Southern California.	A	Not expected to occur. No suitable habitat (e.g., sand dune) in the BSA.

**Table 5 – Listed, Proposed Species, Natural Communities, and Critical Habitat Potentially Occurring or Known to Occur in the Project Area**

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/Species Present (HP/P); Habitat Present/Species Presence Unknown (HP); Habitat Absent (A)	Rationale (Potential for Species to Occur); Results of Focused Surveys
<i>Carolella busckana</i>	Busck's gallmoth	SA	Occurs in coastal dunes and coastal scrub.	HP	Low potential to occur. Suitable coastal scrub habitat in the BSA but not observed during terrestrial invertebrate surveys of the BWER (USACE and CDFW 2017).
<i>Cicindela gabbii</i>	western tidal-flat tiger beetle	SA	Inhabits estuaries and mudflats along the coast of Southern California. Generally found on dark-colored mud in the lower zone; occasionally found on dry saline flats of estuaries.	HP	Low Potential to occur. Suitable habitat in the BSA but both CNDDDB occurrences for the county are believed to be extirpated or presumably extirpated (CDFW 2023).
<i>Cicindela hirticollis gravida</i>	sandy beach tiger beetle	SA	Inhabits clean, dry, light-colored sand in the upper zone, adjacent to non-brackish water along the coast of California.	HP	Low potential to occur. Suitable habitat in the BSA but all reported CNDDDB occurrences for the county are believed to be extirpated (CDFW 2023).
<i>Cicindela senilis frosti</i>	senile tiger beetle	SA	Inhabits marine shoreline to salt marshes.	HP	Low potential to occur. Suitable habitat in the BSA but all reported CNDDDB occurrences for the county are believed to be extirpated (CDFW 2023).

**Table 5 – Listed, Proposed Species, Natural Communities, and Critical Habitat Potentially Occurring or Known to Occur in the Project Area**

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/Species Present (HP/P); Habitat Present/Species Presence Unknown (HP); Habitat Absent (A)	Rationale (Potential for Species to Occur); Results of Focused Surveys
<i>Coelus globosus</i>	globose dune beetle	SA	Inhabitant of coastal sand dune habitat. Inhabits foredunes and sand hummocks; it burrows beneath the sand surface and is most common beneath dune vegetation.	A*	Not expected to occur. No suitable habitat (e.g., sand dune) in the BSA but observed during terrestrial invertebrate surveys of the BWER (USACE and CDFW 2017; 2001 record, CDFW 2023), in an area west of the BSA.
<i>Danaus plexippus</i> pop. 1	monarch - California overwintering	SA	Winter roost sites extend along the coast. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	A*	Not expected to occur. Observed during surveys of the BWER (USACE and CDFW 2017), southwest of the BSA; however, no narrow-leaved milkweed or suitable overwintering habitat was observed within the BSA.
<i>Eucosma henei</i>	Hen's eucosman moth	SA	Endemic to the El Segundo Dunes. Larval food plant is <i>Phacelia ramosissima</i> var. <i>australitoralis</i> ; larvae can be found on woody stems and upper root parts.	A	Not expected to occur. No suitable habitat (e.g., sand dune, host plants) in the BSA and not observed during terrestrial invertebrate surveys of the BWER (USACE and CDFW 2017).

**Table 5 – Listed, Proposed Species, Natural Communities, and Critical Habitat Potentially Occurring or Known to Occur in the Project Area**

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/Species Present (HP/P); Habitat Present/Species Presence Unknown (HP); Habitat Absent (A)	Rationale (Potential for Species to Occur); Results of Focused Surveys
<i>Euphilotes battoides allyni</i>	El Segundo blue butterfly	FE	Restricted to remnant coastal dune habitat. Host plant is <i>Eriogonum parvifolium</i> ; larvae feed only on the flowers and seeds; used by adults as major nectar source.	A*	Not expected to occur. No suitable habitat (e.g., coastal dune, host plants) in the BSA but observed during surveys of the BWER (USACE and CDFW 2017), in an area west of the BSA. Otherwise, the other nearest known population is located approximately 2 miles southwest of the BSA (2005 record, CDFW 2023).
<i>Euphydryas editha quino</i>	Quino checkerspot butterfly	FE	Sunny openings within chaparral & coastal sage shrublands in parts of Riverside & San Diego counties. Hills and mesas near the coast. Need high densities of food plants <i>Plantago erecta</i> , <i>Plantago insularis</i> , and <i>Orthocarpus purpureus</i> .	A	Not expected to occur. No suitable habitat and not observed during terrestrial invertebrate surveys of the BWER (USACE and CDFW 2017). This species is considered extirpated from Los Angeles County (CDFW 2023).



**Table 5 – Listed, Proposed Species, Natural Communities, and Critical Habitat Potentially Occurring or Known to Occur in the Project Area**

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/Species Present (HP/P); Habitat Present/Species Presence Unknown (HP); Habitat Absent (A)	Rationale (Potential for Species to Occur); Results of Focused Surveys
<i>Glaucopsyche lygdamus palosverdesensis</i>	Palos Verdes blue butterfly	FE	Restricted to the cool, fog-shrouded, seaward side of Palos Verdes Hills, Los Angeles County. Host plant is <i>Astragalus trichopodus</i> var. <i>lonchus</i> (locoweed).	A	Not expected to occur. Restricted to Palos Verdes Hills (approximately 13 miles south of the BSA). No suitable habitat and no host plants present, and not observed during terrestrial invertebrate surveys of the BWER (USACE and CDFW 2017).
<i>Onychobaris langei</i>	Lange's El Segundo Dune weevil	SA	Known from El Segundo Dunes.	A*	Not expected to occur. No suitable habitat (e.g., sand dune) in the BSA but observed during terrestrial invertebrate surveys in the dune system at BWER (USACE and CDFW 2017).
<i>Panoquina errans</i>	wandering (=saltmarsh) skipper	SA	Occurs in coastal salt marshes. Requires moist saltgrass for larval development.	HP	High potential to occur. Suitable habitat in the BSA and reported at BWER (2010 record, CDFW 2023), west of the BSA.

**Table 5 – Listed, Proposed Species, Natural Communities, and Critical Habitat Potentially Occurring or Known to Occur in the Project Area**

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/Species Present (HP/P); Habitat Present/Species Presence Unknown (HP); Habitat Absent (A)	Rationale (Potential for Species to Occur); Results of Focused Surveys
<i>Rhaphiomidas terminatus</i>	El Segundo flower-loving fly	SA	Occurs in coastal dunes. Presumed extinct but recently discovered on Malaga Dunes, Los Angeles County.	A	Not expected to occur. No suitable habitat (e.g., sand dune) in the BSA and not observed during terrestrial invertebrate surveys for the BWER (USACE and CDFW 2017).
<i>Socalchemmis gertschi</i>	Gertsch's socalchemmis spider	SA	Occurs in sage scrub, chaparral, oak woodland, coniferous forest, generally in rocky outcrops or talus slopes in non-arid climates. Known from only 2 localities in Los Angeles County: Brentwood (type locality) and Topanga Canyon.	HP	Low potential to occur. Suitable habitat in the BSA but not observed during terrestrial invertebrate surveys for the BWER (USACE and CDFW 2017).
<i>Streptocephalus woottoni</i>	Riverside fairy shrimp	FE	Endemic to Western Riverside, Orange, and San Diego counties in areas of tectonic swales/earth slump basins in grassland and coastal sage scrub. Inhabit seasonally astatic pools filled by winter/spring rains.	A	Not expected to occur. No suitable habitat in the BSA. The nearest known occurrence is located approximately 1.3 miles southwest of the BSA (2005 record, CDFW 2023) and this occurrence/species is believed to be extirpated.

**Table 5 – Listed, Proposed Species, Natural Communities, and Critical Habitat Potentially Occurring or Known to Occur in the Project Area**

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/Species Present (HP/P); Habitat Present/Species Presence Unknown (HP); Habitat Absent (A)	Rationale (Potential for Species to Occur); Results of Focused Surveys
<i>Trigonoscuta dorothea</i>	Dorothy's El Segundo Dune weevil	SA	Occurs in coastal sand dunes in Los Angeles County.	A*	Not expected to occur. No suitable habitat (e.g., sand dune) in the BSA but observed in 1995, 1996, and 2001 terrestrial invertebrate surveys in the dune system at BWER (USACE and CDFW 2017). Was not detected in 2009 and 2011 terrestrial invertebrate surveys (USACE and CDFW 2017).
<i>Tryonia imitator</i>	mimic tryonia (=California brackish snail)	SA	Inhabits coastal lagoons, estuaries and salt marshes. Found only in permanently submerged areas in a variety of sediment types; able to withstand a wide range of salinities.	HP	Moderate potential to occur. Suitable habitat in the BSA and has been reported along Ballona Creek, just southwest of the BSA (1974 record, CDFW 2023), but this record is considered possibly extirpated.

**Table 5 – Listed, Proposed Species, Natural Communities, and Critical Habitat Potentially Occurring or Known to Occur in the Project Area**

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/Species Present (HP/P); Habitat Present/Species Presence Unknown (HP); Habitat Absent (A)	Rationale (Potential for Species to Occur); Results of Focused Surveys
<b>Fish</b>					
<i>Catostomus santaanae</i>	Santa Ana sucker	FT	Endemic to Los Angeles Basin south coastal streams. Habitat generalists, but prefer sand-rubble-boulder bottoms, cool, clear water, and algae. Although Santa Ana sucker has generalized stream habitat requirements, it is intolerant of polluted or highly modified streams (Moyle et al. 1995).	A	Not expected to occur. No suitable freshwater aquatic habitat in the BSA but BSA outside of current known range (Moyle 2002). Nearest known occurrence is approximately 21 miles northeast of the BSA (2007 record, CDFW 2023).
<i>Eucyclogobius newberryi</i>	tidewater goby	FE; SSC	Brackish water habitats along California. Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	A	Not expected to occur. No suitable freshwater aquatic habitat in the BSA but the only known occurrence for the county is approximately 15 miles northwest of the BSA (1995 record, CDFW 2023), this population was once extirpated but reintroduced in 1991.

**Table 5 – Listed, Proposed Species, Natural Communities, and Critical Habitat Potentially Occurring or Known to Occur in the Project Area**

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/Species Present (HP/P); Habitat Present/Species Presence Unknown (HP); Habitat Absent (A)	Rationale (Potential for Species to Occur); Results of Focused Surveys
<i>Gasterosteus aculeatus williamsoni</i>	unarmored threespine stickleback	FE; SE; FP	Occurs in weedy pools, backwaters, and among emergent vegetation at the stream edge in small Southern California streams.	A	Not expected to occur. No suitable freshwater aquatic habitat in the BSA but no known occurrences in the vicinity of the BSA (CDFW 2023). Nearest known occurrence is approximately 30 miles north of the BSA (1999 record, CDFW 2023).
<i>Gila orcuttii</i>	arroyo chub	SSC	Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mojave and San Diego River basins. Occurs in slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	A	Not expected to occur. No suitable freshwater aquatic habitat in the BSA but no known occurrences in the vicinity of the BSA (CDFW 2023). Nearest known occurrence is approximately 17 miles north of the BSA (1975 record, CDFW 2023).

**Table 5 – Listed, Proposed Species, Natural Communities, and Critical Habitat Potentially Occurring or Known to Occur in the Project Area**

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/Species Present (HP/P); Habitat Present/Species Presence Unknown (HP); Habitat Absent (A)	Rationale (Potential for Species to Occur); Results of Focused Surveys
<i>Oncorhynchus mykiss irideus</i> population 10	steelhead - southern California DPS	FE	Found in pools, lagoons, streams.	HP	Low potential to occur. Limited suitable aquatic habitat but no spawning conditions in the BSA. Observed within Ballona Creek approximately 2.5 miles upstream of the Marina Freeway overpass in 2008; however, focused aquatic surveys from 2009-2011 have not detected this species on the Project site (Johnston et al. 2012; 2015b). The nearest known occurrences/populations occur in the Santa Monica Mountains (CDFW 2023).
<i>Rhinichthys osculus</i>	Santa Ana speckled dace	SSC	Requires permanent flowing streams with summer water temps of 17-20 C. Usually inhabits shallow cobble and gravel riffles.	A	Not expected to occur. No suitable freshwater habitat in the BSA but no known occurrences in the vicinity of the BSA (CDFW 2023) and currently have a limited distribution in headwaters of the Santa Ana and San Gabriel Rivers (Moyle et al. 1995).

**Table 5 – Listed, Proposed Species, Natural Communities, and Critical Habitat Potentially Occurring or Known to Occur in the Project Area**

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/Species Present (HP/P); Habitat Present/Species Presence Unknown (HP); Habitat Absent (A)	Rationale (Potential for Species to Occur); Results of Focused Surveys
<i>Siphateles bicolor mohavensis</i>	Mohave tui chub	FE; SE, FP	Endemic to the Mojave River basin, adapted to alkaline, mineralized waters. Needs deep pools, ponds, or slough-like areas. Needs vegetation for spawning.	A	Not expected to occur. BSA outside of current known range. No known occurrences in the vicinity of the BSA (CDFW 2023).
<b>Amphibians</b>					
<i>Anaxyrus californicus</i>	arroyo toad	FE; SSC	Occurs in semi-arid regions near washes or intermittent streams. Requires shallow, slow-moving stream and riparian habitat (Thomson, Wright and Shaffer 2016).	A	Not expected to occur. No suitable habitat in the BSA, BSA outside of current known range (Thomson, Wright and Shaffer 2016), and not observed during surveys for the BWER (USACE and CDFW 2017).

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Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/Species Present (HP/P); Habitat Present/Species Presence Unknown (HP); Habitat Absent (A)	Rationale (Potential for Species to Occur); Results of Focused Surveys
<i>Rana draytonii</i>	California red-legged frog	FT; SSC	Occurs in lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Chiefly inhabits ponds, although it also uses marshes, streams, lagoons, and other waterways throughout most of its range (Thomson, Wright and Shaffer 2016). In southern California it seems to favor slow-flowing streams rather than ponds or pools (Thomson, Wright and Shaffer 2016).	HP	Not expected to occur. Suitable habitat in the BSA but has not been reported in the vicinity (Thomson, Wright and Shaffer 2016) and not observed during surveys for the BWER (USACE and CDFW 2017). Nearest known occurrence/population is approximately 20 miles northwest of the BSA (2000 and 2009 records, CDFW 2023).
<i>Spea hammondi</i>	western spadefoot	SSC	Occurs in grasslands, oak woodlands, coastal sage scrub, and chaparral vegetation in washes, floodplains, alluvial fans, playas, and alkali flats (Stebbins 2003). Vernal pools are essential for breeding and egg-laying.	HP	Low potential to occur. Limited suitable breeding habitat with suitable upland habitat in the BSA but has not been reported in the vicinity, and not observed during surveys for the BWER (USACE and CDFW 2017).



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<b>Reptiles</b>					
<i>Anniella stebbinsi</i>	southern California legless lizard	SSC	Occurs in variety of habitats; generally, in moist, loose soil under sparse vegetation. They prefer soils with a high moisture content.	HP	High potential to occur. Suitable habitat in the BSA and observed during surveys of the BWER; however, not observed in BSA during surveys conducted for this Project (USACE and CDFW 2017).
<i>Aspidoscelis tigris stejnegeri</i>	coastal whiptail	SSC	Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland & riparian areas.	HP	Low potential to occur. Suitable habitat in the BSA but has not been reported in the vicinity and BSA outside of current known range (Thomson, Wright and Shaffer 2016).
<i>Chelonia mydas</i>	green sea turtle	FT	Marine. Completely herbivorous, needs adequate supply of sea grasses and algae.	HP	Low potential to occur in Ballona Creek. Limited suitable habitat in Ballona Creek. While Pacific greens commonly occur from San Diego southward, they have an established population at the Los Cerritos Wetlands, 30 miles to the south. Rare sightings are reported in Ballona Creek (CDFW 2017).

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Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/Species Present (HP/P); Habitat Present/Species Presence Unknown (HP); Habitat Absent (A)	Rationale (Potential for Species to Occur); Results of Focused Surveys
<i>Diadophis punctatus modestus</i>	San Bernardino ringneck snake	SA	Most common in open, relatively rocky areas. Often in somewhat moist microhabitats near intermittent streams.	HP	High potential to occur. Suitable habitat in the BSA and observed during surveys of the BWER; however, not observed in BSA during surveys conducted for this Project (USACE and CDFW 2017).
<i>Emys marmorata</i>	western pond turtle	SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6,000 feet elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 kilometer from water for egg-laying.	HP	Low potential to occur. Suitable habitat in the BSA but not observed during recent surveys of the BWER (USACE and CDFW 2017). Historically reported from the BWER of the BSA (1941 record, CDFW 2023), but this population is considered possibly extirpated.
<i>Phrynosoma blainvillii</i>	coast horned lizard	SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	HP	Low potential to occur. Suitable habitat in the BSA. Known to occur at El Segundo Dunes.

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<i>Thamnophis hammondi</i>	two-striped garter snake	SSC	Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	HP	Low potential to occur. Suitable habitat in the BSA but has not been reported in the vicinity (Thomson, Wright and Shaffer 2016) and not observed during surveys for the BWER (USACE and CDFW 2017).
<i>Thamnophis sirtalis</i> ssp.	south coast garter snake	SSC	It is restricted to marsh and upland habitats near permanent water with good strips of riparian vegetation where adequate prey and refuge can be found.	HP	Moderate potential to occur. Suitable habitat in the BSA and has been reported in the vicinity (Thomson, Wright and Shaffer 2016) but not observed during surveys for the BWER (USACE and CDFW 2017).
<b>Birds</b>					
<i>Accipiter cooperii</i>	Cooper's hawk	WL (nesting)	Woodland, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks. Has become increasingly suburban-tolerant (Allen, Garrett, and Wimer 2016).	HP/P (foraging and nesting)	<b>Observed.</b> Suitable foraging and nesting habitat in the BSA.

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Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/Species Present (HP/P); Habitat Present/Species Presence Unknown (HP); Habitat Absent (A)	Rationale (Potential for Species to Occur); Results of Focused Surveys
<i>Accipiter striatus</i>	sharp-shinned hawk	WL (nesting)	Ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats. Prefers riparian areas. North-facing slopes with plucking perches are critical requirements. Nests usually within 275 feet of water.	HP (foraging) A (nesting)	High potential to occur for foraging, mainly expected occur in the winter but not expected to occur for nesting. Suitable foraging habitat in the BSA but no suitable nesting habitat. Nests outside the BSA region.
<i>Aimophila ruficeps canescens</i>	southern California rufous-crowned sparrow	WL	Resident in Southern California coastal sage scrub and sparse mixed chaparral. Throughout this bird's breeding range, acceptable breeding habitat shares two characteristics: rocky hillsides with moderate to steep slope, and an open mix of short perennial plants interspersed with patches of grass, rock, or bare ground (Allen, Garrett, and Wimer 2016).	HP (foraging) A (nesting)	Low potential to occur for foraging but not expected to occur for nesting. Suitable foraging habitat in the BSA but no suitable nesting habitat and has not been reported breeding in the vicinity (Allen, Garrett, and Wimer 2016).

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<i>Ammodramus savannarum</i>	grasshopper sparrow	SSC (nesting)	Occurs in dense grasslands on rolling hills, lowland plains, in valleys & on hillsides on lower mountain slopes. Prefers native grasslands with a mix of grasses, forbs and scattered shrubs. Loosely colonial when nesting.	HP (foraging) A (nesting)	Moderate potential to occur for foraging, mainly expected to occur as a vagrant but not expected to occur for nesting. Limited suitable foraging and nesting habitat in the BSA but has not been reported breeding in the vicinity (Allen, Garrett, and Wimer 2016).
<i>Agelaius tricolor</i>	tricolored blackbird	ST, SSC (nesting colony)	Requires open water, protected nesting substrate, and foraging area with insect prey within a few kilometers of the colony.	HP (foraging) A (nesting)	Low potential to occur for foraging, mainly expected to occur as a vagrant but not expected to occur for nesting. Suitable habitat in the BSA but has not been reported breeding in the vicinity (Allen, Garrett, and Wimer 2016). This species has been very nearly extirpated as a breeder on the coastal slope of the county (Allen, Garrett, and Wimer 2016).

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<i>Artemisospiza belli belli</i>	Bell's sage sparrow	WL	Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range.	HP (foraging) A (nesting)	Low potential to occur for foraging but not expected to occur for nesting. Limited suitable foraging habitat in the BSA but has not been reported breeding in the vicinity (Allen, Garrett, and Wimer 2016).
<i>Asio flammeus</i>	short-eared owl	SSC (nesting)	Found in swamp lands, both fresh and salt; lowland meadows; irrigated alfalfa fields. Tule patches/tall grass needed for nesting/daytime seclusion. Nests on dry ground in depression concealed in vegetation.	HP (foraging) A (nesting)	Low potential to occur for foraging but not expected to occur for nesting. Suitable habitat in the BSA but has not been reported breeding in the vicinity (Allen, Garrett, and Wimer 2016). BSA outside of current breeding range (Shuford and Gardali 2008).
<i>Asio otus</i>	long-eared owl	SSC (nesting)	Occurs in riparian bottomlands grown to tall willows and cottonwoods; also, belts of live oak paralleling stream courses. Require adjacent open land, productive of mice and the presence of old nests of crows, hawks, or magpies for breeding.	HP (foraging) A (nesting)	Low potential to occur for foraging but not expected to occur for nesting. Limited suitable habitat in the BSA but has not been reported breeding in the vicinity (Allen, Garrett, and Wimer 2016). BSA outside of current breeding range (Shuford and Gardali 2008).

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<i>Athene cunicularia</i>	burrowing owl	SSC (burrow sites and wintering sites with burrow)	Occurs in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	HP (foraging and wintering) A (nesting – burrow sites)	Moderate potential to occur for foraging, mainly expected to occur as a migrant but low to moderate potential to occur for wintering. Suitable foraging habitat in the BSA.

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<i>Aythya americana</i>	redhead	SSC (nesting)	Usually nest in freshwater emergent wetlands where dense stands of cattails ( <i>Typha</i> spp.) and tules ( <i>Scirpus</i> spp.) are interspersed with areas of deep, open water (Shuford and Gardali 2008). When nesting they prefer relatively deep permanent or semipermanent wetlands (Shuford and Gardali 2008). The majority of the county breeders occupy larger permanent lakes in the interior, heavily bordered by emergent vegetation (Allen, Garrett, and Wimer 2016). This species was once completely extirpated as a breeder in the county as its coastal-slope wetland habitats were drained, it now breeds at several locations in the interior (Allen, Garrett, and Wimer 2016).	HP (foraging) A (nesting)	High potential to occur for foraging but not expected to occur for nesting. Suitable habitat in the BSA but has not been reported breeding in the vicinity (Allen, Garrett, and Wimer 2016). BSA outside of current breeding range (Shuford and Gardali 2008).



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<i>Brachyramphus marmoratus</i>	marbled murrelet	FT (nesting); SE (nesting)	Feeds near-shore; nests inland along coast from Eureka to Oregon border and from Half Moon Bay to Santa Cruz. Nests in old-growth redwood-dominated forests, up to six miles inland, often in Douglas-fir.	HP (foraging) A (nesting)	Low potential to occur for foraging but not expected to occur for nesting. Suitable foraging habitat in the BSA but no suitable nesting habitat.
<i>Branta bernicla</i>	brant	SSC (wintering and staging)	Requires well-protected, shallow marine waters with intertidal eel-grass beds, primarily within bays and estuaries. At high tide they need sheltered open water or protected beaches for loafing. During the nonbreeding season, Brant require well-protected, shallow marine waters with intertidal eel-grass beds, primarily within bays and estuaries (Shuford and Gardali 2008).	HP (foraging and wintering)	Moderate potential to occur for foraging, mainly expected to occur as a migrant but low potential to occur for wintering and staging. Suitable foraging habitat but limited wintering habitat in the BSA.

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<i>Botaurus lentiginosus</i>	American bittern	SA	Occurs in freshwater and slightly brackish marshes. Also in coastal saltmarshes.	HP (foraging) A (nesting)	Moderate potential to occur for foraging but not expected to occur for nesting. Suitable foraging and nesting habitat in the BSA this species is presumed extirpated as a breeder from the county (Allen, Garrett, and Wimer 2016).
<i>Buteo regalis</i>	ferruginous hawk	WL (wintering)	Occurs in open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and juniper habitats.	HP (foraging and wintering)	Low potential to occur for foraging, mainly expected to occur as a vagrant. Limited suitable foraging and wintering habitat in the BSA but has not been reported in the vicinity as wintering occurrence.
<i>Buteo swainsoni</i>	Swainson's hawk	ST (nesting)	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	HP (foraging) A (nesting)	Low potential to occur for foraging, mainly expected to occur as a vagrant but not expected to occur for nesting. Limited suitable foraging habitat in the BSA but presumed extirpated as a breeder from the coastal slope of the county (Allen, Garrett, and Wimer 2016).

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<i>Cerorhinca monocerata</i>	rhinoceros auklet	WL (nesting colony)	Off-shore islands and rocks along the California coast. Nests in a burrow on undisturbed, forested and unforested islands, and probably in cliff caves on the mainland.	A (foraging and nesting)	Not expected to occur. No suitable foraging or nesting habitat.
<i>Chaetura vauxi</i>	Vaux's swift	SSC (nesting)	Breeds in redwood, Douglas-fir, and other coniferous forests. Nests in large hollow trees and snags. Often nests in flocks. Forages over most terrains and habitats but shows a preference for foraging over rivers and lakes.	HP (foraging) A (nesting)	Moderate potential to occur for foraging, mainly expected to occur as a migrant but not expected to occur for nesting. Suitable foraging habitat in the BSA but no suitable nesting habitat. BSA outside of current breeding range (Shuford and Gardali 2008).
<i>Charadrius alexandrinus nivosus</i>	western snowy plover	FT (nesting); SSC (nesting)	Sandy beaches, salt pond levees and shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting.	HP (foraging) A (nesting)	Low potential to occur for foraging, mainly expected to occur as a migrant but not expected to occur for nesting. Limited suitable foraging habitat in the BSA mostly along Ballona Creek but no suitable nesting habitat.

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<i>Charadrius montanus</i>	mountain plover	SSC (wintering)	Occurs in short grasslands, freshly plowed fields, newly sprouting grain fields, and sometimes sod farms. Prefers grazed areas and areas with burrowing rodents.	HP (foraging and wintering)	Low potential to occur. Limited suitable foraging and wintering habitat in the BSA.
<i>Chlidonias niger</i>	black tern	SSC (nesting colony)	Freshwater lakes, ponds, marshes and flooded agricultural fields. Occurs at coastal lagoons and estuaries during migration. Breeds primarily in Modoc Plateau region, with some breeding in Sacramento and San Joaquin valleys.	HP (foraging) A (nesting)	Low potential to occur for foraging but not expected to occur for nesting. Limited suitable foraging habitat in the BSA but no suitable nesting habitat and has not been reported breeding in the vicinity. BSA outside of current breeding range (Shuford and Gardali 2008).

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<i>Circus hudsonius</i>	northern harrier	SSC (nesting)	Forages and nests in open habitats, making use of freshwater or brackish marshes, wet meadows or pastures, grasslands, and cold-desert scrublands (Allen, Garrett, and Wimer 2016).	HP/P (foraging and nesting)	Observed. Low potential to occur for nesting, mostly expected to occur as a migrant. Suitable foraging and nesting habitat in the BSA but has been nearly eradicated from the coastal slope of the County over the course of the 20 <sup>th</sup> century, but small numbers seem to be breeding in the Antelope Valley (Garrett and Dunn 1981; Allen, Garrett, and Wimer 2016). BSA outside of current breeding range (Shuford and Gardali 2008).
<i>Cistothorus palustris clarkae</i>	Clark's marsh wren	SSC	Restricted to freshwater and brackish marshes dominated by bulrushes ( <i>Scirpus</i> spp.) or cattails ( <i>Typha</i> spp.).	HP (foraging and nesting)	Moderate potential to occur for foraging and nesting, mainly expected to be wintering. Suitable foraging and nesting habitat in the BSA.
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo	FT (nesting); SE (nesting)	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	HP (foraging) A (nesting)	Low potential to occur for foraging, mainly expected to occur as a vagrant but not expected to occur for nesting. Limited suitable foraging habitat but no suitable nesting habitat in the BSA.

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<i>Contopus cooperi</i>	olive-sided flycatcher	SSC (nesting)	Most numerous in montane conifer forests where tall trees overlook canyons, meadows, lakes or other open terrain. Nesting habitats are mixed conifer, montane hardwood-conifer, Douglas-fir, redwood, red fir and lodgepole pine.	HP (foraging) A (nesting)	Low potential to occur for foraging but not expected to occur for nesting. Suitable foraging habitat in the BSA but no suitable nesting habitat. BSA outside of current breeding range (Shuford and Gardali 2008).
<i>Coturnicops noveboracensis</i>	yellow rail	SSC	Occurs in freshwater marshlands. Occurs year round in California, but in two primary seasonal roles: currently as a very local breeder in the northeastern interior and as a winter visitor on the coast (Shuford and Gardali 2008).	HP (foraging) A (nesting)	Low potential to occur for foraging but not expected to occur for nesting. Suitable foraging habitat in the BSA but not known to breed in the county. Only 2 known CNDDB occurrences for the county, none for breeding (CDFW 2023).
<i>Cypseloides niger</i>	black swift	SSC (nesting)	Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea-bluffs above the surf; forages widely.	HP (foraging) A (nesting)	Low potential to occur for foraging, mainly expected to occur as a migrant but not expected to occur for nesting. Suitable foraging habitat in the BSA but no suitable nesting habitat.

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<i>Dendrocygna bicolor</i>	fulvous whistling-duck	SSC (nesting)	Fresh-water marsh. Occurs only as a very rare vagrant to Los Angeles County, with recent records from Piute Ponds in May 1981 and the San Gabriel River near El Monte in December 2005 (Allen, Garrett, and Wimer 2016).	HP (foraging) A (nesting)	Low potential to occur for foraging but not expected to occur for nesting. Suitable foraging habitat in the BSA but not known to breed in the county. Has been extirpated as a breeder in the county (Allen, Garrett, and Wimer 2016).
<i>Elanus leucurus</i>	white-tailed kite	FP (nesting)	Occurs in rolling foothills and valley margins with scattered oaks & river bottomlands or marshes next to deciduous woodland. Prefers open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	HP (foraging and nesting)	High potential to occur for foraging but low potential to occur for nesting. Suitable foraging habitat in the BSA and observed during surveys of the BWER (USACE and CDFW 2017) but limited suitable nesting habitat in the BSA, expected mainly as a post-breeding visitor.

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<i>Empidonax traillii extimus</i>	southwestern willow flycatcher	FE (nesting); SE (nesting)	Occurs in riparian woodlands in Southern California. Breeding birds have nearly been extirpated from the county, but recent records come from riparian groves in Soledad Canyon and San Gabriel Canyon (Allen, Garrett, and Wimer 2016). Migrants are fairly common through the coastal slope of the county (Allen, Garrett, and Wimer 2016).	HP (foraging) A (nesting)	Low potential to occur for foraging, mainly expected to occur as a migrant but not expected to occur for nesting. Suitable foraging habitat in the BSA but no suitable nesting habitat. Not currently known to nest in this area and believed to be absence for breeding from the coastal slope of the county (Allen, Garrett, and Wimer 2016).
<i>Eremophila alpestris actia</i>	California horned lark	WL	Short-grass prairie, “bald” hills, mountain meadows, open coastal plains, fallow grain fields, and alkali flats. A few coastal-breeding birds may persist in grasslands above Santa Clarita, but the species is now difficult to find on the coastal slope of the county (Allen, Garrett, and Wimer 2016).	HP (foraging and nesting)	Moderate potential to occur for foraging but low potential to occur for nesting. Suitable foraging and nesting habitat in the BSA but has not been reported breeding in the vicinity.
<i>Falco columbarius</i>	merlin	WL (wintering)	Occurs in seacoast, tidal estuaries, open woodlands, savannahs, edges of grasslands and deserts, farms and ranches.	HP (foraging and wintering)	High potential to occur. Suitable foraging and wintering habitat in the BSA.



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<i>Falco peregrinus anatum</i>	American peregrine falcon	FP (nesting)	Found near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Optimum habitats encompass cliff faces for nesting and open areas for foraging (Allen, Garrett, and Wimer 2016). Historically, county breeders have frequented areas with high cliffs, with most known nestings on the islands (Allen, Garrett, and Wimer 2016). Recent county nesters are concentrated in built-up areas containing taller buildings (Allen, Garrett, and Wimer 2016).	HP (foraging) A (nesting)	Moderate potential to occur for foraging but not expected to occur for nesting. Suitable foraging habitat in the BSA but no suitable nesting habitat.

**Table 5 – Listed, Proposed Species, Natural Communities, and Critical Habitat Potentially Occurring or Known to Occur in the Project Area**

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/Species Present (HP/P); Habitat Present/Species Presence Unknown (HP); Habitat Absent (A)	Rationale (Potential for Species to Occur); Results of Focused Surveys
<i>Falco mexicanus</i>	prairie falcon	WL (nesting)	Inhabits dry, open terrain, either level or hilly. Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores. County breeders forage over creosote bush scrub, juniper scrub, open chaparral, and grasslands, and nest at scattered cliffside locations along the county's mountain spine.	HP (foraging) A (nesting)	Low potential to occur for foraging, mainly expected to occur as a vagrant but not expected to occur for nesting. Limited suitable foraging habitat but no suitable nesting habitat in the BSA. Has not been reported in the vicinity.
<i>Fratercula cirrhata</i>	tufted puffin	SSC (nesting colony)	Open-ocean bird; nests along the coast on islands, islets, or (rarely) mainland cliffs.	A (foraging and nesting)	Not expected to occur for foraging or nesting but has potential to occur as a vagrant. No suitable foraging or nesting habitat in the BSA.
<i>Gavia immer</i>	common loon	SSC (nesting)	Bodies of water regularly frequented are extensive, fairly deep, and produce quantities of large fish. Nesting locations at certain large lakes and reservoirs in interior of state, primarily in northeastern plateau region.	HP (foraging) A (nesting)	Moderate potential to occur for foraging mainly on Ballona Creek but not expected to occur for nesting. Suitable foraging habitat in the BSA but no suitable nesting habitat.

**Table 5 – Listed, Proposed Species, Natural Communities, and Critical Habitat Potentially Occurring or Known to Occur in the Project Area**

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/Species Present (HP/P); Habitat Present/Species Presence Unknown (HP); Habitat Absent (A)	Rationale (Potential for Species to Occur); Results of Focused Surveys
<i>Grus canadensis tabida</i>	greater sandhill crane	ST; FP (nesting and wintering)	Nests in wetland habitats in northeastern California; winters in the Central Valley. Prefers grain fields within 4 miles of a shallow body of water used as a communal roost site; irrigated pasture used as loafing sites.	HP (foraging) A (nesting)	Low potential to occur for foraging but not expected to occur for nesting. Suitable foraging and nesting habitat in the BSA but has not been reported breeding in the vicinity. Nests in northeastern California.
<i>Haliaeetus leucocephalus</i>	bald eagle	Federally Delisted; SE; FP (nesting and wintering)	Occurs in ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine.	HP (foraging and wintering) A (nesting)	Low potential to occur for foraging and wintering, mainly expected to occur as a vagrant but not expected to occur for nesting. Limited suitable foraging habitat in the BSA but no suitable nesting habitat.
<i>Histrionicus histrionicus</i>	harlequin duck	SSC (nesting)	Breeds on west slope of the Sierra Nevada, nesting along shores of swift, shallow rivers.	HP (foraging) A (nesting)	Low potential to occur for foraging, mainly expected to occur as a vagrant but not expected to occur for nesting. Suitable foraging habitat in the BSA but has not been reported breeding in the vicinity. Nests outside the BSA region.

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Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/Species Present (HP/P); Habitat Present/Species Presence Unknown (HP); Habitat Absent (A)	Rationale (Potential for Species to Occur); Results of Focused Surveys
<i>Hydroprogne caspia</i>	Caspian tern	SA (nesting colony)	Inland freshwater lakes and marshes; also, brackish or salt waters of estuaries and bays. Nests on sandy or gravelly beaches and shell banks in small colonies inland and along the coast.	HP (foraging) A (nesting)	High potential to occur for foraging but not expected to occur for nesting. Suitable foraging habitat in the BSA but no suitable nesting habitat. Not a historic breeder in the county (Allen, Garrett, and Wimer 2016).
<i>Icteria virens</i>	yellow-breasted chat	SSC (nesting)	Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 feet of ground.	<b>HP/P (foraging and nesting)</b>	<b>Observed.</b> Suitable foraging and nesting habitat in the BSA.
<i>Ixobrychus exilis</i> -	least bittern	SSC (nesting)	Colonial nester in marshlands and borders of ponds and reservoirs which provide ample cover. Nests usually placed low in tules, over water.	HP (foraging and nesting)	Moderate potential to occur for foraging but low potential to occur for nesting. Suitable foraging and nesting habitat in the BSA.

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Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/Species Present (HP/P); Habitat Present/Species Presence Unknown (HP); Habitat Absent (A)	Rationale (Potential for Species to Occur); Results of Focused Surveys
<i>Lanius ludovicianus</i>	loggerhead shrike	SSC (nesting)	Occurs in broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub and washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	HP (foraging and nesting)	High potential to occur for foraging and moderate potential to occur for nesting. Suitable foraging and nesting habitat in the BSA.
<i>Larus californicus</i>	California gull	WL (nesting colony)	Littoral waters, sandy beaches, waters and shorelines of bays, tidal mud-flats, marshes, lakes, etc. Colonial nester on islets in large interior lakes, either fresh or strongly alkaline.	HP (foraging) A (nesting)	High potential to occur for foraging but not expected to occur for nesting. Suitable foraging habitat in the BSA but no suitable nesting habitat.
<i>Laterallus jamaicensis coturniculus</i>	California black rail	ST; FP	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	HP (foraging and nesting)	Low potential to occur for foraging and nesting, mainly expected to occur as a migrant. Suitable foraging and nesting habitat in the BSA and historically reported in the vicinity of the BSA (1895 and 1928 record, CNDDDB 2018) but no recent breeding records.

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Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/Species Present (HP/P); Habitat Present/Species Presence Unknown (HP); Habitat Absent (A)	Rationale (Potential for Species to Occur); Results of Focused Surveys
<i>Leucophaeus atricilla</i>	laughing gull	WL (nesting colony)	Once a regular nester at the south end of the Salton Sea.	HP (foraging) A (nesting)	Low potential to occur for foraging, mainly expected to occur as a vagrant but not expected to occur for nesting. Limited suitable habitat in the BSA but has not been reported in the vicinity.
<i>Mycteria americana</i>	wood stork	SSC	Freshwater and saltwater sloughs, lagoons, shallow ponds and marshes.	HP (foraging) A (nesting)	Low potential to occur for foraging, mainly expected to occur as a vagrant but not expected to occur for nesting. Suitable habitat in the BSA but has not been reported in the vicinity <sup>a</sup> . BSA outside of current post-breeding range (Shuford and Gardali 2008).
<i>Numenius americanus</i>	long-billed curlew	WL (nesting)	Breeds in upland shortgrass prairies and wet meadows in northeastern California.	HP (foraging) A (nesting)	High potential to occur for foraging, mainly expected to occur as a migrant but not expected to occur for nesting. Suitable foraging habitat in the BSA but no suitable nesting habitat.
<i>Oceanodroma furcata</i>	fork-tailed storm-petrel	SSC (nesting colony)	Colonial nester on small, offshore islets. Forages over the open ocean, usually well off-shore.	A (foraging and nesting)	Not expected to occur for foraging or nesting but has potential to occur as a vagrant. No suitable foraging or nesting habitat in the BSA.

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Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/Species Present (HP/P); Habitat Present/Species Presence Unknown (HP); Habitat Absent (A)	Rationale (Potential for Species to Occur); Results of Focused Surveys
<i>Oceanodroma homochroa</i>	ashy storm-petrel	SSC (nesting colony)	Colonial nester on off-shore islands. Usually nests on driest part of islands. Forages over open ocean.	A (foraging and nesting)	Not expected to occur for foraging or nesting but has potential to occur as a vagrant. No suitable foraging or nesting habitat in the BSA.
<i>Oceanodroma melania</i>	black storm-petrel	SSC (nesting colony)	Colonial nester on Santa Barbara Island. Forages in open ocean, in channel waters, and also far off-shore.	A (foraging and nesting)	Not expected to occur for foraging or nesting but has potential to occur as a vagrant. No suitable foraging or nesting habitat in the BSA.
<i>Oreothlypis luciae</i>	Lucy's warbler	SSC (nesting)	Occurs primarily along lower Colorado River Valley and the washes and arroyos emptying into it, with occasional occurrences throughout the Sonoran and Mojave deserts. Partial to thickets of mesquite, riparian scrub and even stands of tamarisk.	HP (foraging) A (nesting)	Low potential to occur for foraging, mainly expected to occur as a vagrant but not expected to occur for nesting. Suitable foraging habitat in the BSA but outside of current breeding range (Shuford and Gardali 2008).

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Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/Species Present (HP/P); Habitat Present/Species Presence Unknown (HP); Habitat Absent (A)	Rationale (Potential for Species to Occur); Results of Focused Surveys
<i>Oreothlypis virginiae</i>	Virginia's warbler	WL (nesting)	East slope of Southern Sierra Nevada to San Bernardino Mountains. In arid, shrubby, mixed-conifer, pinyon-juniper, montane-chaparral. 7000-9000 feet. Nests on arid slopes with stands of tall shrubs/scattered trees; also, riparian thickets of willow/wild rose along streams. It is a rare fall migrant along the coast with most occurring in September (Allen, Garrett, and Wimer 2016). Few county breeding season records have come from montane chaparral mixed with arid pine-oak woodland (Allen, Garrett, and Wimer 2016).	HP (foraging) A (nesting)	Low potential to occur for foraging, mainly expected to occur as a vagrant or migrant but not expected to occur for nesting. Suitable habitat in the BSA but has not been reported in the vicinity.
<i>Pandion haliaetus</i>	osprey	WL (nesting)	Ocean shore, bays, freshwater lakes, and larger streams. Large nests built in tree-tops within 15 miles of a good fish-producing body of water.	HP (foraging and nesting)	High potential to occur for foraging and low potential to occur for nesting. Suitable habitat in the BSA but has not been reported breeding in the vicinity (Allen, Garrett, and Wimer 2016).



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Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/Species Present (HP/P); Habitat Present/Species Presence Unknown (HP); Habitat Absent (A)	Rationale (Potential for Species to Occur); Results of Focused Surveys
<i>Passerculus sandwichensis beldingi</i>	Belding's savannah sparrow	SE	Inhabits coastal salt marshes, from Santa Barbara south through San Diego County. Nests in <i>Salicornia</i> on and about margins of tidal flats.	HP (foraging and nesting)	High potential to occur for foraging and nesting. Suitable habitat in the BSA and observed during recent surveys of the BWER (USACE and CDFW 2017).
<i>Passerculus sandwichensis rostratus</i>	large-billed savannah sparrow	SSC (wintering)	Breeds along the Colorado River delta in Mexico; winters at the Salton Sea. Inhabits saline emergent wetlands at the Salton Sea and southern coast.	HP (foraging and wintering)	Low potential to occur for foraging but low potential to occur wintering. Suitable foraging habitat in the BSA but BSA is outside of current winter and post-breeding range (Shuford and Gardali 2008).
<i>Pelecanus erythrorhynchos</i>	American white pelican	SSC (nesting colony)	Nests on large lakes, providing safe roosting and breeding places in the form of well-sequestered islets.	HP (foraging) A (nesting)	Moderate potential to occur for foraging on Ballona Creek but not expected to occur for nesting. Suitable foraging habitat in the BSA but no suitable nesting habitat. BSA outside of current breeding range (Shuford and Gardali 2008).
<i>Pelecanus occidentalis californicus</i>	California brown pelican	FP (nesting colony and communal roosts)	Colonial nester on coastal islands just outside the surf line.	HP (foraging and roosting) A (nesting)	High potential to occur for foraging and roosting but not expected to occur for nesting. Suitable foraging habitat in the BSA but no suitable nesting habitat.

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Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/Species Present (HP/P); Habitat Present/Species Presence Unknown (HP); Habitat Absent (A)	Rationale (Potential for Species to Occur); Results of Focused Surveys
<i>Phalacrocorax auritus</i>	double-crested cormorant	WL (nesting colony)	Colonial nester on coastal cliffs, offshore islands, and along lake margins in the interior of the state. Nests along coast on sequestered islets, usually on ground with sloping surface, or in tall trees along lake margins.	HP/P (foraging and nesting)	<b>Observed.</b> Suitable foraging and nesting habitat in the BSA.
<i>Piranga rubra</i>	summer tanager	SSC (nesting)	Summer resident of desert riparian along lower Colorado River, and locally elsewhere in California deserts. Requires cottonwood-willow riparian for nesting and foraging; prefers older, dense stands along streams.	HP (foraging) A (nesting)	Low potential to occur for foraging, mainly expected to occur as a vagrant but not expected to occur for nesting. Limited suitable foraging habitat in the BSA but BSA outside of current breeding range (Shuford and Gardali 2008).
<i>Plegadis chihi</i>	white-faced ibis	WL (nesting colony)	Shallow freshwater marsh. Dense tule thickets for nesting, interspersed with areas of shallow water for foraging.	HP (foraging and nesting)	High potential to occur for foraging but low potential to occur for nesting. Suitable habitat in the BSA and historically known to breed in the Ballona marshes (Allen, Garrett, and Wimer 2016) but now only known to be breeding at Piute Ponds for the entirety of the county's breeding season population (Allen, Garrett, and Wimer 2016).

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<i>Polioptila californica californica</i>	coastal California gnatcatcher	FT; SSC	Obligate permanent resident of coastal sage scrub below 2,500 feet in Southern California. Occurs in low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	HP (foraging and nesting)	Moderate potential to occur for foraging and low potential to occur for nesting. Not detected in the BSA during focused surveys. Limited suitable habitat in the BSA.
<i>Poocetes gramineus affinis</i>	Oregon vesper sparrow	SSC (wintering)	An obligate grassland species. Winters mainly on open ground with little vegetation or short grass and low annuals (Shuford and Gardali 2008).	HP (foraging) A (nesting)	Low potential to occur for foraging and wintering but not expected to occur for nesting. BSA outside of current breeding range (Shuford and Gardali 2008). Suitable foraging and wintering habitat in the BSA.
<i>Progne subis</i>	purple martin	SSC (nesting)	Inhabits woodlands, low elevation coniferous forest of Douglas-fir, ponderosa pine, and Monterey pine. Nests in old woodpecker cavities mostly; also in human-made structures. Nest often located in tall, isolated tree/snag. It is extremely rare as a breeding bird and perhaps now extirpated from the county (Allen, Garrett, and Wimer 2016).	HP (foraging) A (nesting)	Low potential to occur for foraging, mainly expected to occur as a vagrant but not expected to occur for nesting. Suitable foraging habitat in the BSA but BSA outside of current breeding range (Shuford and Gardali 2008).

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<i>Ptychoramphus aleuticus</i>	Cassin's auklet	SSC (nesting colony)	Offshore islands with enough soil for burrowing. Will also nest in rock crevices, under buildings and in debris.	A (foraging and nesting)	Not expected to occur for foraging or nesting but has potential to occur as a vagrant. No suitable foraging or nesting habitat in the BSA.
<i>Pyrocephalus rubinus</i>	vermilion flycatcher	SSC (nesting)	During nesting, inhabits desert riparian adjacent to irrigated fields, irrigation ditches, pastures, and other open, mesic areas. Nests in cottonwood, willow, mesquite, and other large desert riparian trees.	HP (foraging) A (nesting)	Moderate potential to occur for foraging, mainly expected to occur as a vagrant but not expected to occur for nesting. Suitable foraging habitat in the BSA but BSA outside of current breeding range (Shuford and Gardali 2008). An extremely rare breeder in the county (Allen, Garrett, and Wimer 2016).

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<i>Rallus obsoletus levipes</i>	light-footed Ridgway's rail	FE; SE; FP	Found in salt marshes traversed by tidal sloughs, where cordgrass and pickleweed are the dominant vegetation. Requires dense growth of either pickleweed or cordgrass for nesting or escape cover.	HP (foraging) A (nesting)	Low potential to occur for foraging but not expected to occur for nesting. Limited suitable foraging habitat in the BSA but only a few occurrences have been noted. Two recent records from the Ballona Wetlands on August 25, 2008 and in late 1994/early 1995 have been reported (Cooper 2011). Presumed extirpated as a breeder from the county (Garret and Dunn 1981, Allen, Garrett, and Wimer 2016).

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<i>Riparia riparia</i>	bank swallow	ST (nesting)	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole. Migrants utilize a variety of lowland and coastal habitats; wintering birds seem to preferentially forage over open water, less often over fields, wetlands, and beaches (Garrison 1999).	HP (foraging) A (nesting)	Low potential to occur for foraging, mainly expected to occur as a migrant but not expected to occur for nesting. Suitable foraging habitat in the BSA but no suitable nesting habitat. Presumed extirpated as a breeder from the county (Allen, Garrett, and Wimer 2016).
<i>Rynchops niger</i>	black skimmer	SSC (nesting colony)	Forages over calm, shallow water, typically at the mouths of rivers and channels. Nests on gravel bars, low islets, and sandy beaches, in unvegetated sites.	HP (foraging) A (nesting)	Moderate to high potential to occur for foraging on Ballona Creek but not expected to occur for nesting. Suitable foraging habitat in the BSA but no suitable nesting habitat. BSA outside of current breeding range (Shuford and Gardali 2008).

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<i>Setophaga petechia</i>	yellow warbler	SSC (nesting)	Occurs in riparian plant associations in close proximity to water. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	HP/P	<b>Observed.</b> Suitable foraging and nesting habitat in the BSA, mainly expected to occur as a migrant.
<i>Synthliboramphus scrippsi</i>	Scripps's murrelet	FC (nesting colony); ST (nesting colony)	Open ocean except during breeding season. Breeds on offshore islands in Southern California. Breeding in the county is restricted to the vicinity of the San Clemente and Santa Catalina Islands (Allen, Garrett, and Wimer 2016).	A (foraging and nesting)	Not expected to occur for foraging or nesting but has potential to occur as a vagrant. No suitable foraging or nesting habitat in the BSA.
<i>Spizella breweri</i>	Brewer's sparrow	SA (nesting)	East of Cascade-Sierra Nevada crest, mountains and high valleys of Mojave Desert, and mountains at southern end of San Joaquin Valley. For nesting they prefer high sagebrush plains, slopes and valley with Great Basin sagebrush and antelope brush.	HP (foraging) A (nesting)	Low potential to occur for foraging but not expected to occur for nesting. Suitable foraging habitat but no suitable nesting habitat in the BSA.

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Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/Species Present (HP/P); Habitat Present/Species Presence Unknown (HP); Habitat Absent (A)	Rationale (Potential for Species to Occur); Results of Focused Surveys
<i>Sternula antillarum browni</i>	California least tern	FE (nesting colony); SE; FP (nesting colony)	Colonial breeder on bare or sparsely vegetated, flat substrates: sand beaches, alkali flats, landfills, or paved areas.	HP (foraging) A (nesting)	High potential to occur for foraging mainly on Ballona Creek but not expected to occur for nesting. Suitable foraging habitat in the BSA but no suitable nesting habitat. A known breeding colony at Venice Beach is located approximately 1.5 miles west of the BSA (1996 record, CDFW 2023).
<i>Thalasseus elegans</i>	elegant tern	WL (nesting colony)	The only known breeding colony in Los Angeles County occurs on sandy dredge spoil in Los Angeles Harbor (Allen, Garrett, and Wimer 2016). Nests on open, sandy, undisturbed beaches and on salt-evaporating pond dikes (San Diego) in association with Caspian tern.	HP (foraging) A (nesting)	High potential to occur for foraging but not expected to occur for nesting. Suitable foraging habitat in the BSA but no suitable nesting habitat.



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<i>Vireo bellii pusillus</i>	least Bell's vireo	FE (nesting); SE (nesting)	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs Projecting into pathways, usually willow, Baccharis, mesquite.	HP/P	<b>Observed during focused surveys. High</b> potential to occur for foraging and moderate potential to occur for nesting. Suitable foraging and nesting habitat in the BSA.
<i>Xanthocephalus xanthocephalus</i>	yellow-headed blackbird	SSC (nesting)	Nests in freshwater emergent wetlands with dense vegetation and deep water. Often along borders of lakes or ponds.	HP (foraging and nesting)	Moderate potential to occur for foraging, mainly expected to occur as a migrant but low potential to occur for nesting. Suitable foraging and nesting habitat in the BSA. Breeding in the county is believed to be restricted to the Antelope Valley (Allen, Garrett, and Wimer 2016).
<b>Mammals</b>					
<i>Antrozous pallidus</i>	pallid bat	SSC	Occurs in deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	HP	Low potential to occur. Suitable foraging and roosting habitat in the BSA but not observed during 2014 bat surveys for BWER (ESA 2015).

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<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	SSC	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings.	HP	Low potential to occur. Suitable foraging habitat but not expected to occur for roosting in the BSA. Not observed during 2014 bat surveys for BWER (ESA 2015).
<i>Eumops perotis californicus</i>	western mastiff bat	SSC	Occurs in many open, semi-arid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees and tunnels.	HP	Low potential to occur. Suitable foraging but not expected to occur for roosting in the BSA. Not observed during 2014 bat surveys for BWER (ESA 2015).
<i>Lasionycteris noctivagans</i>	silver-haired bat	SA	Primarily a coastal and montane forest dweller, feeding over streams, ponds & open brushy areas. Roosts in hollow trees, beneath exfoliating bark, abandoned woodpecker holes, and rarely under rocks. Needs drinking water.	HP	Moderate potential to occur. Suitable foraging and roosting habitat in the BSA and observed during 2014 bat surveys for BWER (ESA 2015).

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<i>Lasiurus blossevillii</i>	western red bat	SSC	Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging. Roosts primarily in trees, 2-40 ft above ground, from sea level up through mixed conifer forests.	HP	Low potential to occur. Suitable foraging and roosting habitat in the BSA but not observed during 2014 bat surveys for BWER (ESA 2015).
<i>Lasiurus xanthinus</i>	western yellow bat	SSC	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	HP	Low potential to occur. Suitable foraging and roosting habitat in the BSA but not observed during 2014 bat surveys for BWER (ESA 2015).
<i>Lasiurus cinereus</i>	hoary bat	SA	Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.	HP	High potential to occur. Suitable foraging and roosting habitat in the BSA, and observed during 2014 bat surveys for BWER (ESA 2015).

**Table 5 – Listed, Proposed Species, Natural Communities, and Critical Habitat Potentially Occurring or Known to Occur in the Project Area**

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/Species Present (HP/P); Habitat Present/Species Presence Unknown (HP); Habitat Absent (A)	Rationale (Potential for Species to Occur); Results of Focused Surveys
<i>Myotis yumanensis</i>	Yuma myotis	SA	Optimal habitats are open forests and woodlands with sources of water over which to feed. Distribution is closely tied to bodies of water. Maternity colonies in caves, mines, buildings or crevices, and occasionally in swallow nests and under bridges.	HP	High potential to occur. Suitable foraging and roosting habitat in the BSA, and observed during 2014 bat surveys for BWER (ESA 2015).
<i>Microtus californicus stephensi</i>	south coast marsh vole	SSC	Tidal marshes in Los Angeles, Orange and Southern Ventura Counties.	HP	High potential to occur. Suitable habitat present and observed during surveys of the BWER (USACE and CDFW 2017).
<i>Nyctinomops femorosaccus</i>	pocketed free-tailed bat	SSC	Occurs in a variety of arid areas in Southern California; pine-juniper woodlands, desert scrub, palm oasis, desert wash, desert riparian, etc. Prefers rocky areas with high cliffs.	HP	Low potential to occur. Suitable foraging and limited roosting habitat in the BSA but not observed during 2014 bat surveys for BWER (ESA 2015).
<i>Nyctinomops macrotis</i>	big free-tailed bat	SSC	Occurs in low-lying arid areas in southern California. Need high cliffs or rocky outcrops for roosting sites. Feeds principally on large moths.	HP	Low potential to occur. Suitable foraging and limited roosting habitat in the BSA but not observed during 2014 bat surveys for BWER (ESA 2015).

**Table 5 – Listed, Proposed Species, Natural Communities, and Critical Habitat Potentially Occurring or Known to Occur in the Project Area**

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/Species Present (HP/P); Habitat Present/Species Presence Unknown (HP); Habitat Absent (A)	Rationale (Potential for Species to Occur); Results of Focused Surveys
<i>Perognathus longimembris pacificus</i>	Pacific pocket mouse	FE; SSC	Inhabits the narrow coastal plains from the Mexican border north to El Segundo, Los Angeles County. Prefers soils of fine alluvial sands near the ocean.	HP	Not expected to occur. Limited suitable habitat in the BSA; however, it has not been observed or captured since 1938 despite multiple trapping efforts within the greater Ballona wetlands inclusive of the BSA (trapping efforts occurred 1996, 2000, 2007, 2009, 2010, and 2011 (USACE and CDFW 2017)). Further, no source populations of species are known within an area connected to the BSA or the greater Ballona wetlands (historically occurred 2.5 miles south of the BSA (CDFW 2023); however, believed to be extirpated.)
<i>Sorex ornatus salicornicus</i>	southern California saltmarsh shrew	SSC	Coastal marshes in Los Angeles, Orange and Ventura Counties. Requires dense vegetation and woody debris for cover.	HP	High potential to occur. Suitable habitat present in the BSA and observed during past surveys of the BWER (USACE and CDFW 2017).

**Table 5 – Listed, Proposed Species, Natural Communities, and Critical Habitat Potentially Occurring or Known to Occur in the Project Area**

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/Species Present (HP/P); Habitat Present/Species Presence Unknown (HP); Habitat Absent (A)	Rationale (Potential for Species to Occur); Results of Focused Surveys
<i>Taxidea taxus</i>	American badger	SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground.	HP	Low potential to occur. Limited suitable habitat but not observed during surveys of the BWER (USACE and CDFW 2017). No known occurrences in the vicinity of the BSA (CDFW 2023). Nearest known occurrence is approximately 12 miles northeast of the BSA (CDFW 2019a).
<p>USFWS: U.S. Fish and Wildlife Service; CDFW: California Department of Fish and Wildlife; HP/P: Habitat Present/Species Present; HP: Habitat Present/Species Presence Unknown; HA: Habitat Absent; BSA: Biological Study Area.</p> <p>* An asterisk denotes species that do not have habitat present in the BSA (Habitat Absent), but which were previously documented as occurring in adjacent portions of the BWER in CDFW 2017.</p> <p><b><u>STATUS DEFINITIONS</u></b></p> <p><b>Federal (USFWS) Designations:</b>  FE Listed by the federal government as an Endangered species  FT Listed by the federal government as a Threatened species  FC Federal Candidate</p> <p><b>State (CDFW) Designations:</b>  SE Listed as Endangered by the State of California  ST Listed as Threatened by the State of California  CE Candidate Endangered  SSC Species of Special Concern  FP Fully Protected  WL Watch List  SA Special Animal (tracked by the CDFW)</p>					

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

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The determination of impacts in this analysis is based on a comparison of maps depicting the Project limits (including permanent and temporary impacts) and maps of biological resources in the BSA. All construction activities (including borrow, disposal, staging, and access areas) are assumed to be contained within the permanent or temporary impact areas or within existing roadways.

The Project effects on vegetation types and other areas are summarized in Table 6 and Figure 8. The Project would result in temporary effects to vegetation communities associated with construction access, storage, staging, and grading. These areas would be re-planted with native plant species in consultation with each property owner. Also, the Project would result in permanent effects to vegetation communities in areas of the BSA where Lincoln Boulevard would be widened and re-aligned, primarily on the east side of the existing Lincoln Boulevard alignment north of Ballona Creek.

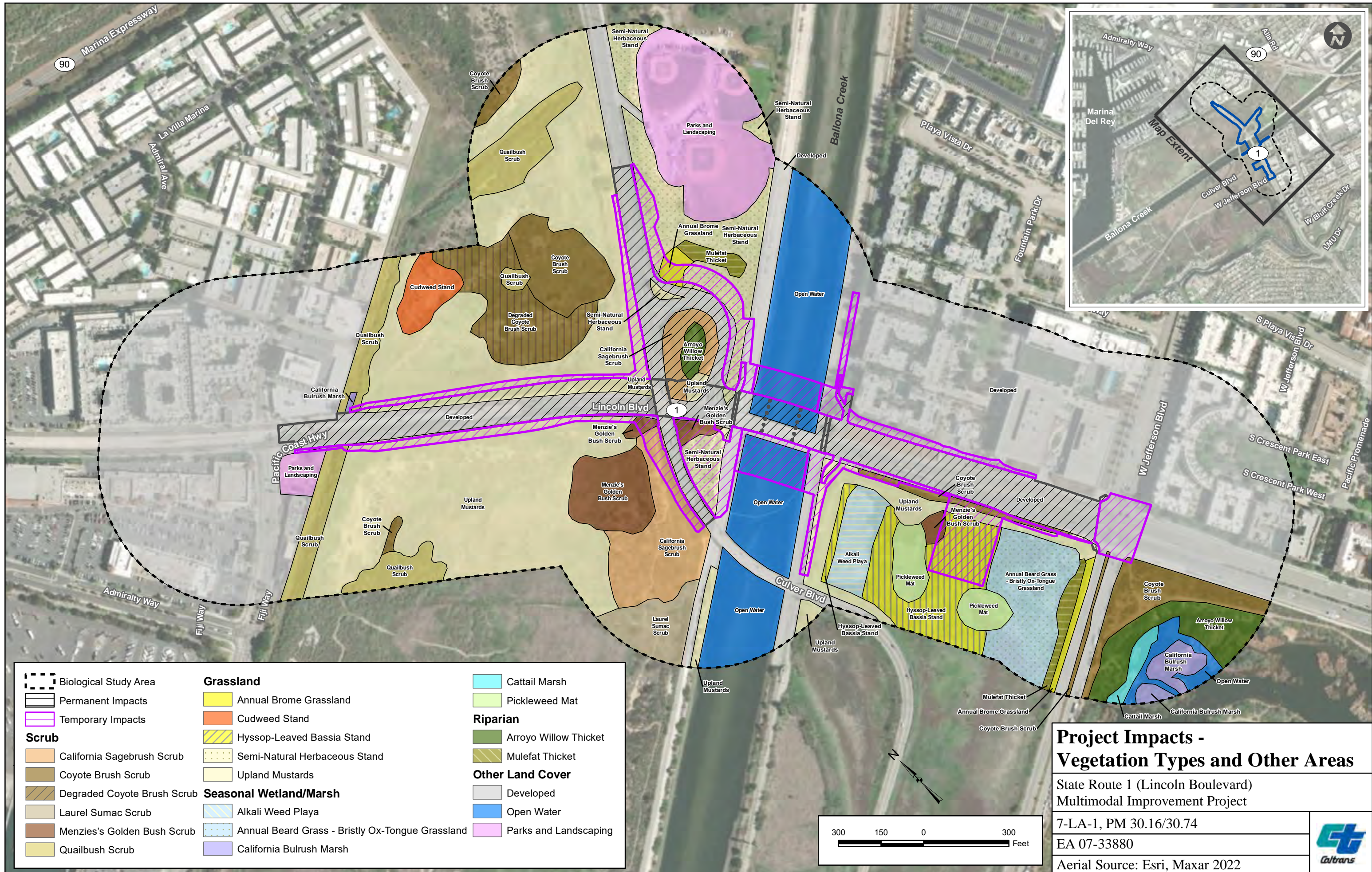
The Project would remove the existing four-span Lincoln Boulevard Bridge over Ballona Creek as well as the three sets of piers/piles that support the existing bridge, which include 987 square feet of existing structural footprint within Ballona Creek. The Project would construct a new, wider Lincoln Boulevard Bridge that would only have three spans. The structural supports for the replacement Lincoln Boulevard Bridge in Ballona Creek would consist of two piers (each consisting of six, 66-inch diameter concrete piles) with no pier walls. By modifying the bridge from a four-span to a three-span structure and not constructing pier walls, the Project would reduce the amount of concrete and structural supports within Ballona Creek by approximately 701 square feet from 987 square feet in existing conditions to approximately 286 square feet, which represents a 71 percent reduction.

Permanent shading within Ballona Creek would increase with the Project, which includes the replacement of a 64-foot-wide existing bridge structures with a new 130-foot-wide bridge structure. With the widened structure, the Project would result in 31,850 sf (0.7312 acres) of shading, which is an increase of 16,170 sf (0.3712 acres) from the 15,680 sf (0.3599 acres) of existing shading.

Temporary impacts within Ballona Creek would also be required to demolish the existing Lincoln Boulevard Bridge over Ballona Creek, and for access and staging needed to construct a replacement bridge over Ballona Creek.

Both direct and indirect effects on biological resources have been evaluated in this NES. Direct effects are those that involve the initial loss of biological resources due to grading, vegetation removal, and construction. Indirect effects are impacts on species and/or their habitat that may occur some distance away from the Project site or may occur later in time. Indirect effects may include areas not directly impacted by the Project. Examples of indirect effects include noise; night lighting; vehicular-related mortality from increased traffic; changes in drainage or erosion patterns; or introduction of invasive or exotic species.





**Project Impacts -  
Vegetation Types and Other Areas**

State Route 1 (Lincoln Boulevard)  
Multimodal Improvement Project

7-LA-1, PM 30.16/30.74

EA 07-33880

Aerial Source: Esri, Maxar 2022



**Figure 8**



**Table 6 – Vegetation Types and Other Areas that would be Impacted by the Project**

Vegetation Types and Other Areas	Existing (acres)	Permanent Impact/ Structural (acres)	Permanent Impact/Shade (acres)	Temporary Impact (acres)	Total Impact (acres)
<b>Scrub Communities</b>					
California Sagebrush Scrub	3.533	0.835	0.000	0.381	1.216
Coyote Brush Scrub	4.485	0.042	0.000	0.248	0.290
Degraded Coyote Brush Scrub	2.637	0.000	0.000	0.000	0.000
Laurel Sumac Scrub	1.265	0.000	0.000	0.000	0.000
Menzies's Golden Bush Scrub	2.158	0.016	0.000	0.297	0.313
Quailbush Scrub	4.145	0.004	0.000	0.031	0.035
<b>Grassland Communities</b>					
Annual Brome Grassland	0.493	0.015	0.000	0.131	0.146
Cudweed Stand	0.874	0.000	0.000	0.000	0.000
Hyssop-Leaved Bassia Stand	3.056	0.000	0.000	0.952	0.952
Semi-Natural Herbaceous Stand	4.646	0.200	0.000	1.564	1.764
Upland Mustards	24.872	1.215	0.000	1.918	3.133
<b>Seasonal Wetland/Marsh Communities</b>					
Alkali Weed Playa	1.108	0.000	0.000	0.000	0.000
Annual Beard Grass-Bristly Ox-tongue Grassland	2.682	0.000	0.000	0.000	0.000
California Bulrush Marsh	0.689	0.000	0.000	0.002	0.002
Cattail Marsh	0.313	0.000	0.000	0.000	0.000
Pickleweed Mat	1.196	0.000	0.000	0.000	0.000
<b>Riparian Communities</b>					
Arroyo Willow Thicket	2.039	0.286	0.000	0.000	0.286
Mulefat Thicket	0.685	0.000	0.000	0.000	0.000
<b>Other Landcover</b>					
Developed	56.015	9.467	0.000	2.654	12.111
Open Water	9.268	0.007**	0.731*	2.130	2.868
Parks and Landscaping	5.650	0.000	0.000	0.009	0.009
<b>Total</b>	<b>131.809</b>	<b>12.087</b>	<b>0.731</b>	<b>10.317</b>	<b>23.135</b>
<p>* This impact represents the footprint of the new bridge over open water. The area will also be temporarily impacted for construction access. There will be no permanent loss of open water in this area – these areas of Ballona Creek would just be permanently shaded. Existing shaded areas have not been deducted from this calculation, so the actual increase in shading is less than existing conditions.</p> <p>**The Project involves the replacement of the three existing bridge piers in Ballona Creek that support the existing bridge with two bridge piers to support the proposed replacement bridge. The permanent structural footprint within Ballona Creek would be less than the existing conditions.</p>					

Biological impacts associated with the Project were evaluated with respect to the following:

- Federally or State-listed Endangered or Threatened species of plant or wildlife.
- Non-listed species that meet the criteria in the definition of “Rare” or “Endangered” in the CEQA Guidelines (e.g., 14 California Code of Regulations 15380).<sup>6</sup>
- Species designated as California Species of Special Concern.
- Streambeds, wetlands, and their associated vegetation.
- Habitats suitable to support a federally or State-listed Endangered or Threatened species of plant or wildlife.
- Habitats, other than wetland, considered special status by regulatory agencies (e.g., the USFWS, the CDFW) or resource conservation organizations.
- Other species or issues of concern to regulatory agencies or conservation organizations.

The criteria for determining adverse effects on biological resources were developed based on Caltrans’ Guidelines for an NES. In accordance, the following language will be used to describe the magnitude of impacts in this document:

- No effect;
- May affect, not likely to adversely affect;
- May affect, likely to adversely affect.

**Standard Conditions**

As part of the Project’s construction, the following standard conditions would be implemented which are applicable to many of the impacts described in this Chapter.

- **SC BIO-1:** Prior to construction, highly visible barriers (e.g., orange construction fencing) shall be installed along the boundaries of the Project footprint to designate the limits of disturbance for the Project under the direction of a qualified biologist. No Project activity of any type shall be conducted outside of the Project’s limits of disturbance. The City shall be responsible for ensuring that

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<sup>6</sup> Section 15380 of the State CEQA Guidelines indicates that a lead agency can consider a non-listed species (e.g., CRPR 1B plants) to be Endangered, Rare, or Threatened if the species can be shown to meet the criteria in the definition of Rare or Endangered. For the purposes of this discussion, the current scientific knowledge on the population size and distribution for each special status species was considered in determining if a non-listed species meets the definitions for Rare and Endangered according to Section 15380 of the State CEQA Guidelines.

the protective barrier/fencing remains in place throughout construction and that it is removed upon completion of construction.

- **SC BIO-2:** A qualified biological monitor approved by USFWS and CDFW shall monitor construction activities for the duration of the Project. The biological monitor shall monitor all vegetation clearing activities, work during the avian nesting season, work during measurable rain events, and during work within jurisdictional waters, and shall visit the Project site on a weekly basis otherwise throughout construction. The biological monitor shall have the authority to temporarily stop and divert work in coordination with the contractor as needed to minimize impacts to biological resources and/or water quality and to prevent disturbance of habitat and special-status species within and adjacent to Project work areas to the extent practicable. The biological monitor shall inspect the ESA fencing and other construction BMPs associated with protecting plants and wildlife during each site visit and shall provide monitoring reports following site visits to the City and Caltrans. The biological monitor shall work with Project construction staff during biological monitoring to salvage native wildlife species of low mobility that may be killed or injured prior to and during Project-related vegetation or ground disturbances. To the extent feasible, salvaged species shall be relocated to adjacent suitable habitat not subject to Project ground disturbance. Any non-native flora or fauna can be abated by the biologist through any legal means available. Ongoing monitoring and weekly reporting shall occur for the duration of the construction activity to document implementation of BMPs and mitigation measures, and to ensure that the Project is constructed within the temporary and permanent impact limits established for the Project.
- **SC BIO-3:** Prior to construction, a Worker Environmental Awareness Program (WEAP) shall be implemented for work crews by qualified biologist(s). The WEAP training shall be presented to all construction personnel. Training materials and briefings shall include but not be limited to, discussion of the Federal and state Endangered Species Acts, the consequences of noncompliance with Project permitting requirements, identification and values of sensitive plant and wildlife species and significant natural plant community habitats, the limits of construction activities, fire protection measures, hazardous substance spill prevention and containment measures, a contact person in the event of the discovery of dead or injured wildlife, and review of mitigation requirements. Training materials and a course outline shall be provided to the CDFW for review and approval at least 30 days prior to the start of project construction. Maps showing the location of sensitive wildlife or populations of rare plants, exclusion areas, or other construction limitations (i.e., limited operating periods) shall be

provided to the environmental monitors and work crews prior to ground disturbance.

- **SC BIO-4:** All construction equipment shall be operated in a manner to prevent accidental damage to areas outside of the limits of disturbance. No structure of any kind, vegetation removal, ground disturbance, or incidental storage of equipment or supplies, shall be allowed outside of the limits of disturbance.
- **SC BIO-5:** To ensure the minimization of impacts to nesting avian species, the following measures shall be implemented pursuant to the MBTA and California Fish and Game Code.
  - Prior to construction, a qualified biologist shall prepare a site-specific Nesting Bird Management Plan for CDFW approval. The plan shall detail methods and definitions to enable a qualified biologist to monitor and implement nest-specific buffers based on topography, vegetation, species, and individual bird behavior. The plan shall include requirements for a nest log, which would track each nest and its outcome. The nest log would be submitted to CDFW at the end of each work week for the duration of the avian nesting seasons when construction activities are occurring.
  - For Project activities that will occur during the avian nesting season (generally February 1 – September 1), a qualified biologist shall conduct pre-construction nesting avian surveys no more than three days prior to the initiation of Project construction activities to determine the presence or absence of active nests. The survey shall encompass the Project site and a 500-foot-buffer. If a lapse in work of three days or longer occurs during the avian nesting season, another survey shall be conducted prior to ground disturbing work being reinitiated. Further, a qualified biologist shall survey the vegetation removal area every subsequent 72 hours during the avian nesting season until vegetation grubbing and removal is complete. Surveys shall include any potential habitat within 500 feet of active construction activities, including trees, shrubs, and on the ground, or on nearby structures that might be directly or indirectly impacted by Project activities.
  - If active nests are observed, a no-disturbance buffer marked with exclusion fencing or other similarly effective means will be established and maintained until the qualified biologist determines that the nest has fledged or failed. The no-disturbance buffer shall conform to distances

identified in the site-specific Nesting Bird Management Plan approved for this project.

- **SC BIO-6:** The Contractor shall develop a Storm Water Pollution Prevention Plan (SWPPP) that shall specify appropriate best management practices to avoid and minimize storm water pollution by construction activities. The Contractor shall implement the SWPPP throughout construction.

To demonstrate compliance with all required permits, the contractor shall submit the Project's SWPPP to the CDFW and RWQCB. Many commonly employed BMPs that would likely be included in the Project's SWPPP can be found in the Caltrans' Stormwater Quality Handbooks, Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual (Caltrans 2007). These BMPs, including their implementation and an evaluation of their effectiveness, shall be detailed in the SWPPP and associated logbook and shall include, but not be limited to, measures to minimize sedimentation such as a) the installation of a 500-foot floating boom and turbidity curtain prior to the start of construction, b) the removal of floating debris upstream of the boom, c) use of sediment mats downstream of the work area, d) use of geotextile roads/mats and e) gravel construction entrances. Under the SWPPP, the contractor shall maintain a logbook of all precipitation events and all instances of BMP implementation at all soil-disturbance sites. The logbook shall contain the date and time of the precipitation event, as well as the duration and intensity of the precipitation. Additionally, the logbook shall record all BMPs that were implemented prior to and/or following the precipitation, as well as a narrative evaluation (and/or a non-narrative evaluation, as required by the jurisdictional agency) of the erosion-prevention effectiveness of those BMPs. The logbook shall also include photographs taken from pre-established photo locations. Site-specific characteristics shall determine the choice of BMPs to be employed. The SWPPP shall include a proposed schedule for the implementation and maintenance of erosion control measures and a description of the erosion control practices, including appropriate design details and a time schedule. The contractor shall consider the full range of erosion control BMPs. The contractor also shall consider any additional site-specific and seasonal conditions when selecting and implementing appropriate BMPs.

- **SC BIO-7:** Sediment resuspension shall be minimized by implementation of construction measures, which would contain resuspended sediment onsite until it settles. These measures would include the following or their equivalent:

- Cofferdam and/or turbidity curtains during pile-driving;
- Turbidity curtains that are constructed of a permeable material allowing water to flow through the membrane while trapping suspended sediment shall be used during underwater construction.
- **SC BIO-8:** To reduce effects to channel water quality from lead compounds in paint during bridge demolition, the following shall be implemented:
  - The Contractor shall develop and implement a Bridge Removal Plan. The plan shall be submitted to the City for review and approval prior to implementation. The plan shall include applicable bridge debris containment measures to collect debris and prevent it from falling into the creek. The plan would include water quality monitoring requirements for work within and above Ballona Creek. The plan would include measures such as:
    - Use of attachments on construction equipment to catch debris;
    - Use of heavy-duty tarps or netting suspended below the existing bridge deck;
    - Use of platforms built below the existing bridge deck;
    - Use of turbidity curtains in lieu of silt curtains. Silt curtains generally refer to impermeable barriers built to hold water and thus provide control of suspended sediment. Silt curtains are generally not used in tidal channels due to the elevated water velocities. An alternative solution is the use of turbidity curtains, which are deployed in a manner similar to silt curtains, but are constructed of a permeable material that allows water to flow through the membrane while trapping suspended sediment. Use of these permeable membrane curtains allows for the barrier to extend from the water surface to the bottom, which provides greater sediment containment over the use of silt curtains; and
    - Moving concrete sections to land for breaking down rather than breaking them down above the creek.
- **SC BIO-9:** A Noxious Weed Control Plan shall be prepared by a qualified biologist and submitted to CDFW for review and approval prior to the start of Project construction. The plan shall include measures to ensure that noxious weeds are not spread and to prevent the establishment of non-native, invasive vegetation. The plan shall be implemented during all Project-related activities,



and shall include, but not be limited to, the following: 1) control measures for invasive plant species on the site, 2) Project-specific procedures for handling noxious/invasive plants to prevent sprouting or regrowth, 3) Project-specific procedures for cleaning equipment, and 4) Project-specific transportation of vegetation debris off site. The Noxious Weed Control Plan shall be reviewed during the WEAP training.

- **SC BIO-10:** All Project noise-generating activities within portions of the Project in the County of Los Angeles shall be limited to the hours of 7:00 a.m. to 7:00 p.m. from Monday through Saturday and prohibited on Sundays or holidays as permitted under the Los Angeles County Code of Ordinances. All Project noise-generating activities occurring in portions of the Project in the City of Los Angeles shall be limited to the hours of 7:00 a.m. to 9:00 p.m. from Monday through Friday, 8:00 a.m. to 6 p.m. on any Saturday or national holiday, and prohibited on Sundays as permitted under the City of Los Angeles Municipal Code, unless otherwise authorized or exempted under each of the respective municipal codes.
- **SC BIO-11:** Prior to the completion of construction, the City shall prepare and coordinate with CDFW to obtain approval of a landscaping plan for the Project's temporary impact areas within the BWER. New landscaping shall consist of plant species selected in consultation with CDFW. The City shall implement the landscaping of temporary impact areas as soon as feasible after construction in each area of the Project site is completed. Thereafter, CDFW shall maintain and manage these areas as needed as part of the BWER
- **SC BIO-12:** All existing landscaped areas that would be temporarily disturbed by project construction would receive replacement landscaping. All new landscaping within temporary construction easement areas would consist of appropriate native, non-invasive plant palette that is developed by the City in consultation with each property owner. All proposed landscaping would conform to the latest Model Water Efficient Landscape Ordinance and applicable local ordinances. New landscaping in temporary impact areas within the Ballona Wetlands Ecological Reserve would be coordinated with CDFW.
- **SC BIO-13:** Construction night lighting would be limited to the maximum extent feasible. The contractor will ensure that all construction lighting is hooded and downcast, and that direct illumination be limited to the active portions of the project site.

- **SC BIO-14:** Prior to relocating or installing any new permanent roadway lighting as part of the Project, a lighting plan shall be developed that requires all permanent exterior lighting to be directed downward within the Project's permanent impact footprint and away from adjacent parcels. The City will ensure compliance with these requirements.
- **SC BIO-15:** An updated focused plant survey will be conducted no more than one year prior to the beginning of Project construction to identify any shifts in the locations of sensitive plants and vegetation communities. The locations of special status natural communities that are adjacent to the Project's temporary and permanent impact footprints will be delineated as ESAs on the Project's plans.
- **SC BIO-16:** An updated focused survey for the following bird species will also be performed no more than two years prior to starting Project construction: burrowing owl, coastal California gnatcatcher, and least Bell's vireo. Previous surveys determined these species to be absent from the Project impact area. If the survey results determine that the Project would directly impact area occupied nesting habitat of coastal California gnatcatcher or least Bell's vireo, Caltrans, on behalf of the FHWA, will undertake Section 7 consultation with the USFWS to address potential effects. If the survey results determine that the Project would directly impact area occupied nesting habitat of least Bell's vireo, the City will also obtain an Incidental Take Permit or a Consistency Determination from CDFW to address potential effects. Agency consultation(s) shall confirm that the avoidance and minimization measures listed in these Standard Conditions are sufficient to protect these species from adverse effects. Otherwise, additional mitigation required by USFWS or CDFW would be implemented as determined through the permitting process. If the survey results determine that the Project would directly impact area occupied burrowing owl habitat, the City will submit a plan for CDFW approval that sufficiently minimizes potential impacts to the species.

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

In addition to providing an inventory of special status plant and wildlife species, the CDFW also provides an inventory of vegetation types that are considered special status by the State and federal resource agencies, academic institutions, and various conservation groups. Special status vegetation types present in the BSA consist of Menzies's goldenbush scrub, alkali weed playa, California bulrush marsh, pickleweed mat, and arroyo willow thicket. These vegetation types are discussed below and are shown on Figure 7.

#### **4.1.1. Discussion of Natural Community Menzies's Golden Bush Scrub**

##### **Survey Results**

Approximately 2.158 acres of Menzies's golden bush scrub occur in the BSA. This vegetation Association is considered a sensitive natural community by the CDFW (CDFW 2018a). This area may also be considered an ESHA by the CCC; the determination of what areas would be regulated as an ESHA would be made by the CCC as part of the CDP process for the Project.

##### **Project Impacts**

The Project would impact 0.313 acre of Menzies's golden bush scrub (0.016 acre permanent, 0.297 acre temporary). This impact would be considered an adverse effect because it is a sensitive natural community and a potential ESHA.

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

No additional avoidance and minimization efforts are required for this species besides those which are outlined in the Standard Conditions described at the beginning of Chapter 4.

##### **Compensatory Mitigation**

- The City shall mitigate for temporary impacts to Menzie's golden bush scrub at a minimum 1:1 ratio through the planting of Menzie's golden bush scrub within the temporarily impacted areas of the BWER.
- The City shall mitigate for permanent impacts to Menzies's golden bush scrub at a minimum 1:1 ratio using one of the following approaches:
  - Preparing and implementing a Habitat Mitigation and Monitoring Plan (HMMP) to establish Menzie's golden bush scrub at a 1:1 ratio within City-controlled lands that are adjacent to the BWER;
  - Providing funding to CDFW to establish Menzie's golden bush scrub at a 1:1 ratio within the BWER; or
  - Purchase of credits for a habitat type containing Menzie's golden bush scrub from a mitigation bank at a 1:1 ratio.

##### **Cumulative Impacts**

In addition to the Project, the Ballona Wetlands Restoration Project is the other cumulative project in proximity to the Project site that would affect Menzie's golden bush scrub.

The Ballona Wetlands Restoration Project would result in permanent effects to Menzie's golden bush scrub at various locations throughout the BWER. Similar to the Project, the Ballona Wetlands Restoration Project will require issuance of a Coastal Development Permit, as well as other approvals. These regulatory approvals for both projects would ensure that each project is required to adequately mitigate for their temporary and permanent impacts to Menzie's golden bush scrub, which would minimize the potential for adverse cumulative effects.

**Conclusion**

The Project may affect, but not likely to adversely affect Menzie's golden bush scrub.

**4.1.2. Discussion of Natural Community Alkali Weed Playa**

**Survey Results**

Approximately 1.108 acres of alkali weed playa occur in the BSA. This vegetation Association is considered a sensitive natural community by the CDFW (CDFW 2018a). This area may also be considered an ESHA by the CCC; the determination of what areas would be regulated as an ESHA would be made by the CCC as part of the CDP process for the Project.

**Project Impacts**

The Project would not impact alkali weed playa in the BSA. Therefore, there would be no effect on this vegetation type.

**Avoidance and Minimization Efforts**

No additional avoidance and minimization efforts are required for this species besides those which are outlined in the Standard Conditions described at the beginning of Chapter 4.

**Compensatory Mitigation**

With incorporation of the avoidance and minimization measures, no mitigation would be required.

**Cumulative Impacts**

Since the Project would result in no permanent or temporary impacts to alkali weed playa, the Project would not contribute to a cumulative effect on this natural community.

**Conclusion**

The Project may affect, but not likely adversely affect alkali weed playa.

### **4.1.3. Discussion of Natural Community California Bulrush Marsh**

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

Approximately 0.689 acre of California bulrush marsh occurs in the BSA. This vegetation Association is considered a sensitive natural community by the CDFW (CDFW 2018a). This area may also be considered an ESHA by the CCC; the determination of what areas would be regulated as an ESHA would be made by the CCC as part of the CDP process for the Project.

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

The Project would temporarily impact 0.002 acre of California bulrush marsh. This would be an adverse effect because it is a sensitive natural community and a potential ESHA.

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

No additional avoidance and minimization efforts are required for this species besides those which are outlined in the Standard Conditions described at the beginning of Chapter 4.

#### ***Compensatory Mitigation***

- The City shall mitigate for temporary impacts to California bulrush marsh at a minimum 1:1 ratio through the planting of California bulrush marsh within the temporarily impacted areas of the BWER, or within temporarily impacted drainages such as Fiji Ditch, Feature 3 just north of the Culver Loop, etc.

#### ***Cumulative Impacts***

In addition to the Project, the Ballona Wetlands Restoration Project is the other cumulative project in proximity to the Project site that would affect California bulrush marsh.

The Ballona Wetlands Restoration Project would result in permanent effects to California bulrush marsh within Fiji Ditch. Similar to the Project, the Ballona Wetlands Restoration Project will require issuance of a Coastal Development Permit, as well as other approvals. These future regulatory approvals for both projects would ensure that each project is required to adequately mitigate for their temporary and permanent impacts to California bulrush marsh, which would minimize the potential for adverse cumulative effects.

#### ***Conclusion***

The Project may affect, but not likely to adversely affect California bulrush marsh.

#### **4.1.4. Discussion of Natural Community Pickleweed Mat**

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

Approximately 1.196 acres of pickleweed mat occur in the BSA. This vegetation Association is considered a sensitive natural community by the CDFW (CDFW 2018a). This area may also be considered an ESHA by the CCC; the determination of what areas would be regulated as an ESHA would be made by the CCC as part of the CDP process for the Project.

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

The Project would not result in any direct impacts to pickleweed mat. Therefore, there would be no effect on this vegetation type.

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

No additional avoidance and minimization efforts are required for this species besides those which are outlined in the Standard Conditions described at the beginning of Chapter 4.

##### ***Compensatory Mitigation***

With incorporation of the avoidance and minimization measures listed above, no impacts would occur to pickleweed mat and no mitigation would be required.

##### ***Cumulative Impacts***

Since the Project would result in no permanent or temporary impacts to pickleweed mat, the Project would not contribute to a cumulative effect on this natural community.

##### ***Conclusion***

The Project would not affect pickleweed mat.

#### **4.1.5. Discussion of Natural Community Arroyo Willow Thicket**

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

Approximately 2.039 acres of arroyo willow thicket occurs in the BSA. This vegetation association is considered a sensitive natural community by the CDFW (CDFW 2018a). This area may also be considered an ESHA by the CCC; the determination of what areas would be regulated as an ESHA would be made by the CCC as part of the CDP process for the Project.

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

The Project would permanently impact 0.286 acre of arroyo willow thicket. This impact would be adverse because it is a sensitive natural community and a potential ESHA.

### **Avoidance and Minimization Efforts**

In addition to the Standard Conditions described at the beginning of Chapter 4, the following measure shall be implemented during construction to avoid and minimize Project impacts on arroyo willow thicket. The City shall confirm that the Contractor has implemented the following:

- Arroyo willow thicket, which is located entirely within the Culver Loop, would be removed by hand tools unless authorized to remove by mechanical means by CDFW and USFWS.

### **Compensatory Mitigation**

- The City shall mitigate for permanent impacts to arroyo willow thicket at a minimum 1:1 ratio using one of the following approaches:
  - Preparing and implementing a Habitat Mitigation and Monitoring Plan (HMMP) to establish arroyo willow thicket at a 1:1 ratio within City-controlled lands that are adjacent to the BWER;
  - Providing funding to CDFW to establish arroyo willow thicket at a 1:1 ratio within the BWER; or
  - Purchase of credits for a habitat type containing arroyo willow thicket from a mitigation bank at a 1:1 ratio.

### **Cumulative Impacts**

In addition to the Project, the Ballona Wetlands Restoration Project is the other cumulative project in proximity to the Project site that would affect arroyo willow thicket.

The Ballona Wetlands Restoration Project would result in permanent effects to arroyo willow thicket within the BWER. Similar to the Project, the Ballona Wetlands Restoration Project will require issuance of a Coastal Development Permit, as well as other approvals. These regulatory approvals for both projects would ensure that each project is required to adequately mitigate for their temporary and permanent impacts to arroyo willow thicket, which would minimize the potential for adverse cumulative effects.

### **Conclusion**

The Project may affect but not adversely affect arroyo willow thicket.

**4.1.6. Discussion of Wetlands and Other Waters**

**Survey Results**

A total of nine jurisdictional features were mapped in the BSA (Tables 7 and 8; Figures 9a and 9b, and Table ES-1). This includes drainages with bed and banks (Ballona Creek and other blue-line streams), artificial basins, and areas of wetland/marsh or riparian vegetation dominated by hydrophytic plant species. These areas may also be considered ESHAs by the CCC; however, the determination of what areas would be regulated as an ESHA would be made by the CCC as part of the CDP process for the Project.

**Table 7 – Summary of Jurisdictional Resources in the BSA**

Jurisdictional Features	Existing Resources (acres)
<b>USACE Waters of the United States</b>	
Wetlands	11.805
Non-wetland Waters	9.948
Total USACE Waters of the United States	21.753
<b>RWCQB Waters of the State</b>	
Wetlands	11.805
Non-wetland Waters	9.948
Total RWQCB Waters of the State	21.753
Total CDFW Jurisdictional Resources*	24.434
Total CCC Jurisdictional Resources*	24.734
USACE: U.S. Army Corps of Engineers; RWQCB: Regional Water Quality Control Board; CDFW: California Department of Fish and Wildlife; CCC: California Coastal Commission	
* Jurisdictional Resources include wetland and non-wetland features.	



A total of 21.753 acres of waters of the United States under the regulatory authority of the USACE are present in the BSA (Table 7; Figure 9a). This includes 11.805 acres of wetlands that were identified based on the presence of hydrophytic vegetation and wetland hydrology and the assumed presence of hydric soil. The extent of waters of the United States was based on the OHWM, as evidenced by water staining on the concrete-lined banks of Ballona Creek or a change from upland to hydrophytic vegetation or hydrology indicators for the other features.

All features with USACE jurisdiction, as analyzed above, are also subject to the jurisdiction of the RWQCB. Approximately 21.753 acres of waters of the State under the regulatory authority of the RWQCB occurs in the BSA (Table 7; Figure 9a).

CDFW jurisdiction includes blueline streams with defined beds and banks, an artificial basin with bed and banks, and a human-altered freshwater marsh along a blueline stream. A total of 24.434 acres of waters under the regulatory authority of the CDFW occurs in the BSA (Table 7; Figure 9b).

Because the CCC uses a one parameter approach to identify the limits of jurisdictional wetlands, all features found within the BSA are subject to CCC jurisdiction based on all of them having either wetland hydrology and/or hydrophytic vegetation. Areas of upland vegetation between patches of hydrophytic vegetation were not considered CCC wetlands. Approximately 24.734 acres of CCC wetlands under the regulatory authority of the CCC occurs in the BSA. (Table 7; Figure 9b).

### ***Project Impacts***

Impacts on jurisdictional areas were determined by comparing engineering plans with maps of jurisdictional water resources (Table 7, Figures 9a and 9b). The Project would impact jurisdictional features 1 (Fiji Ditch), 3, and 4 (Ballona Creek) (Tables 8, 9, 10, and 11). Also, see Table ES-1, which summarizes all jurisdictional waters and impacts.

**Table 8 – USACE, RWQCB, CDFW, and CCC Jurisdictional Waters Impacted by the Project**

Jurisdictional Features	Existing Resources (acres)	Permanent Impact/Piers (acres)**	Permanent Impact/Shade (acres)***	Temporary Impact (acres)****	Total Impact (acres)
<b>USACE Waters of the United States</b>					
Wetlands	11.805	0.463	-	0.033	<b>0.496</b>
Non-wetland Waters	9.948	0.007	0.731	2.130	<b>2.868</b>
Total USACE Waters of the United States	21.753	0.470	0.731	2.163	<b>3.364</b>
<b>RWCQB Waters of the State</b>					
Wetlands	11.805	0.463	-	0.033	<b>0.496</b>
Non-wetland Waters	9.948	0.007	0.731	2.130	<b>2.868</b>
Total RWQCB Waters of the State	21.753	0.470	0.731	2.163	<b>3.364</b>
Total CDFW Jurisdictional Resources*	24.434	0.470	0.731	2.583	<b>3.784</b>
Total CCC Jurisdictional Resources*	24.734	0.470	0.731	2.583	<b>3.784</b>
USACE: U.S. Army Corps of Engineers; RWQCB: Regional Water Quality Control Board; CDFW: California Department of Fish and Wildlife; CCC: California Coastal Commission					
* CDFW and CCC Jurisdictional Resources include wetland and non-wetland features.					
** By building a three-span structure instead of a four-span structure and not constructing pier walls for the Lincoln Boulevard Bridge over Ballona Creek, the Project would reduce the amount of concrete and structural supports within the active Ballona Creek channel by approximately 701 square feet from 987 square feet in existing conditions to approximately 286 square feet with the Project, which represents a 71 percent reduction.					
*** The Project would result in 31,850 sf (0.7312 acres) of shading within Ballona Creek, which is an increase of 16,170 sf (0.3712 acres) from the 15,680 sf (0.3599 acres) of existing shading from the current bridge.					
****Temporary impact acreage for Ballona Creek includes the permanent impact areas for piers and shading.					
Note: This table is the same as ES-1.					

**Feature 1 (Fiji Ditch):** Feature 1 would be permanently and temporarily impacted to allow for the installation of sidewalks on both sides of Lincoln Boulevard at Fiji Ditch. This work would involve the extension of the existing culvert within this drainage on both sides of the roadway to accommodate the new sidewalks. Impacts to Feature 1 (Fiji Ditch) are detailed in Table 9.

**Feature 3:** Feature 3 would be permanently impacted to allow for the realignment of the Culver Boulevard ramp connecting to Lincoln Boulevard and the addition of sidewalks and a water quality basin. Impacts to Feature 3 are detailed in Table 10.

**Feature 4 (Ballona Creek):** The Project would remove the existing four-span Lincoln Boulevard Bridge over Ballona Creek as well as the three sets of piers/piles that support the existing bridge, which include 987 square feet of existing structural footprint within Ballona Creek. The Project would construct a new, wider Lincoln Boulevard Bridge that would only have three spans. The structural supports for the replacement Lincoln

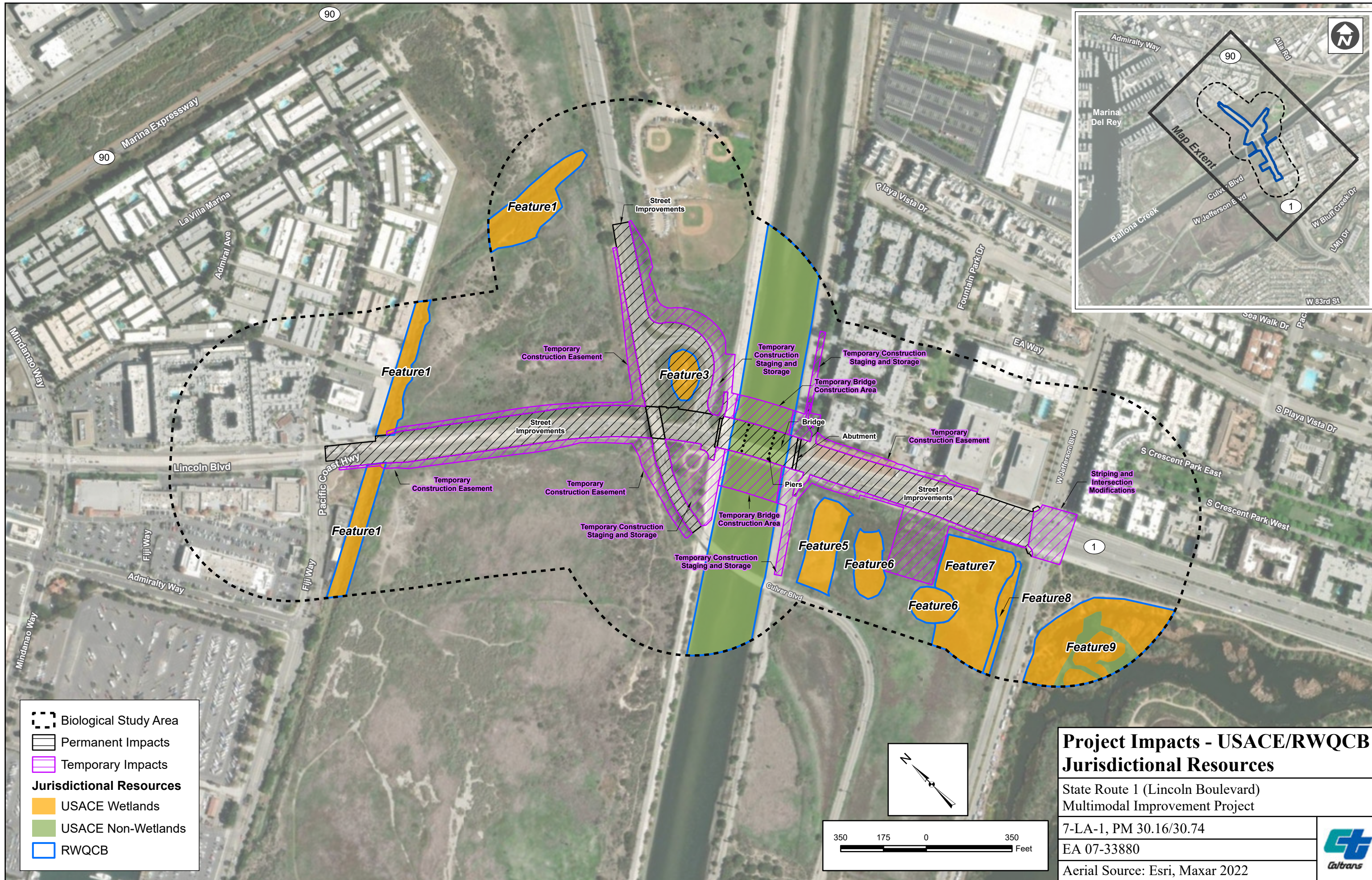
Boulevard Bridge in Ballona Creek would consist of two piers (each consisting of six, 66” diameter concrete piles) with no pier walls. By modifying the bridge from a four-span to a three-span structure and not constructing pier walls, the Project would reduce the amount of concrete and structural supports within Ballona Creek by approximately 701 square feet from 987 square feet in existing conditions to approximately 286 square feet with the Project, which represents a 71 percent reduction.

Permanent shading within Ballona Creek would increase with the Project, which includes the replacement of a 64-foot-wide existing bridge structures with a new 130-foot-wide bridge structure. With the widened structure, the Project would result in 31,850 sf (0.7312 acres) of shading, which is an increase of 16,170 sf (0.3712 acres) from the 15,680 sf (0.3599 acres) of existing shading.

Temporary impacts within Ballona Creek would also be required to demolish the existing Lincoln Boulevard Bridge over Ballona Creek, and for access and staging needed to construct a replacement bridge over Ballona Creek.

Impacts to Ballona Creek are detailed in Table 11.

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[Dashed Line] Biological Study Area  
 [Hatched] Permanent Impacts  
 [Purple Outline] Temporary Impacts  
**Jurisdictional Resources**  
 [Orange] USACE Wetlands  
 [Green] USACE Non-Wetlands  
 [Blue Outline] RWQCB

[North Arrow]  
 350 175 0 350 Feet

**Project Impacts - USACE/RWQCB  
 Jurisdictional Resources**  
 State Route 1 (Lincoln Boulevard)  
 Multimodal Improvement Project  
 7-LA-1, PM 30.16/30.74  
 EA 07-33880  
 Aerial Source: Esri, Maxar 2022


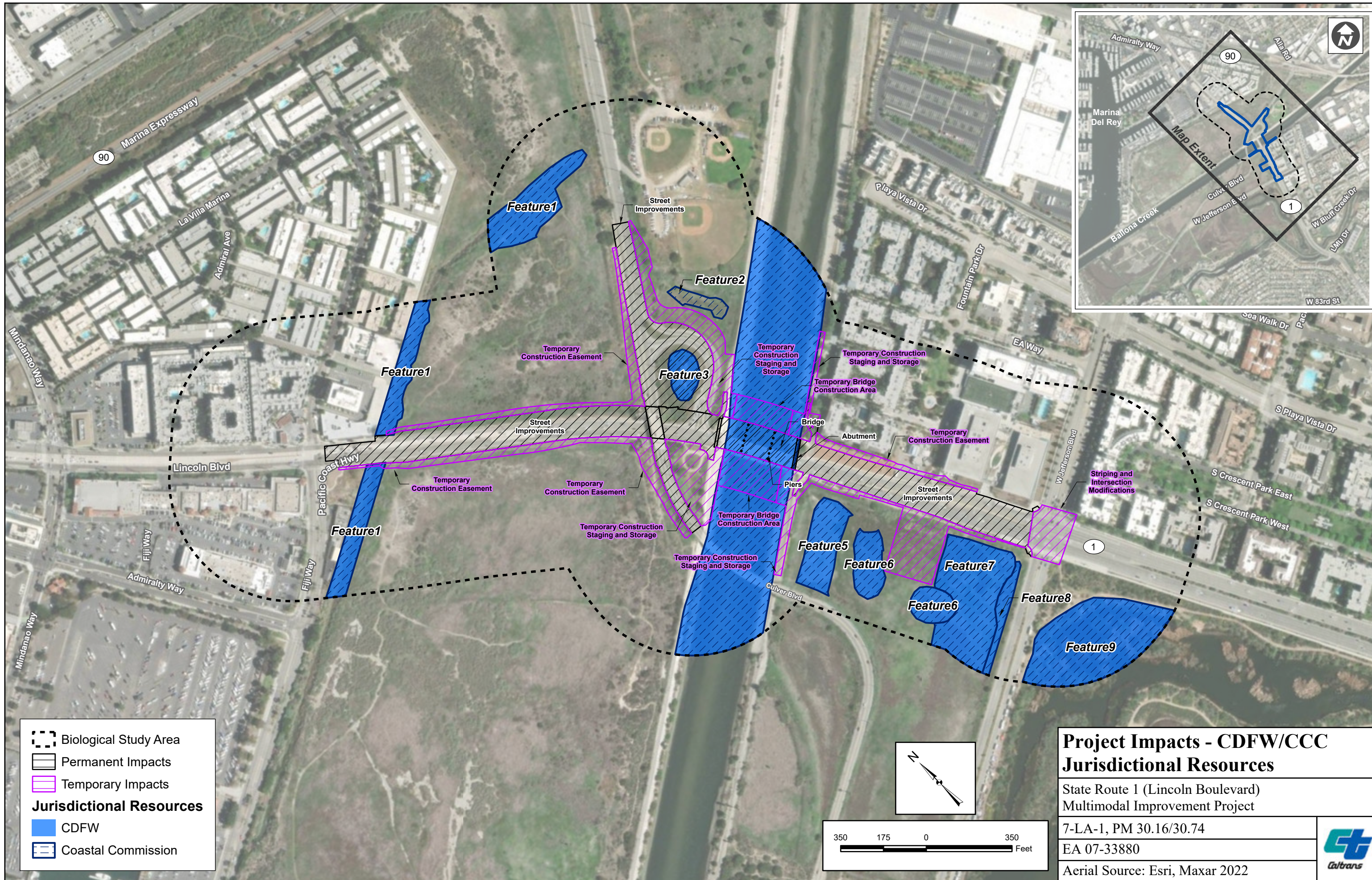


Figure 9a





[Dashed Line] Biological Study Area  
 [Hatched Box] Permanent Impacts  
 [Purple Outline Box] Temporary Impacts  
**Jurisdictional Resources**  
 [Blue Box] CDFW  
 [Hatched Box] Coastal Commission

[North Arrow]  
 350 175 0 350 Feet

**Project Impacts - CDFW/CCC  
 Jurisdictional Resources**  
 State Route 1 (Lincoln Boulevard)  
 Multimodal Improvement Project  
 7-LA-1, PM 30.16/30.74  
 EA 07-33880  
 Aerial Source: Esri, Maxar 2022




Figure 9b





**Table 9 – Impacts to Jurisdictional Resources in Feature 1  
(Fiji Ditch) in the BSA**

Jurisdiction	Existing Resources (acres)	Permanent Impact (acres)	Temporary Impact (acres)
<b>USACE Waters of the United States</b>			
Wetlands	3.257	0.004	0.033
Non-wetland Waters	–	–	–
<b>Total USACE Waters of the United States</b>	<b>3.257</b>	<b>0.004</b>	<b>0.033</b>
<b>RWCQB Waters of the State</b>			
Wetlands	3.257	0.004	0.033
Non-wetland Waters	–	–	–
<b>Total RWQCB Waters of the State</b>	<b>3.257</b>	<b>0.004</b>	<b>0.033</b>
<b>Total CDFW Jurisdictional Resources*</b>	<b>3.257</b>	<b>0.004</b>	<b>0.033</b>
<b>Total CCC Jurisdictional Resources*</b>	<b>3.257</b>	<b>0.004</b>	<b>0.033</b>

**Table 10 – Impacts to Jurisdictional Resources in Feature 3 in the BSA**

Jurisdiction	Existing Resources (acres)	Permanent Impact (acres)	Temporary Impact (acres)
<b>USACE Waters of the United States</b>			
Wetlands	0.459	0.459	0.000
Non-wetland Waters	–	–	–
<b>Total USACE Waters of the United States</b>	<b>0.459</b>	<b>0.459</b>	<b>0.000</b>
<b>RWCQB Waters of the State</b>			
Wetlands	0.459	0.459	0.000
Non-wetland Waters	–	–	–
<b>Total RWQCB Waters of the State</b>	<b>0.459</b>	<b>0.459</b>	<b>0.000</b>
<b>Total CDFW Jurisdictional Resources*</b>	<b>0.459</b>	<b>0.459</b>	<b>0.000</b>
<b>Total CCC Jurisdictional Resources*</b>	<b>0.459</b>	<b>0.459</b>	<b>0.000</b>

**Table 11 – Impacts to Jurisdictional Resources in Feature 4 (Ballona Creek) in the BSA**

Jurisdiction	Existing Resources (acres)	Permanent Impact/Piers (acres)	Permanent Impact/Shade (acres)	Temporary Impact (acres)
<b>USACE Waters of the United States</b>				
Wetlands	–	–	–	–
Non-wetland Waters	9.346	0.007*	0.731**	2.130***
<b>Total USACE Waters of the United States</b>	<b>9.346</b>	<b>0.007*</b>	<b>0.731**</b>	<b>2.130***</b>
<b>RWCQB Waters of the State</b>				
Wetlands	–	–	–	–
Non-wetland Waters	9.346	0.007*	0.731**	2.130***
<b>Total RWQCB Waters of the State</b>	<b>9.346</b>	<b>0.007*</b>	<b>0.731**</b>	<b>2.130***</b>
<b>Total CDFW Jurisdictional Resources</b>	<b>12.003</b>	<b>0.007*</b>	<b>0.731**</b>	<b>2.550***</b>
<b>Total CCC Jurisdictional Resources</b>	<b>12.003</b>	<b>0.007*</b>	<b>0.731**</b>	<b>2.550***</b>
<p>* By building a three-span structure instead of a four-span structure and not constructing pier walls for the Lincoln Boulevard Bridge over Ballona Creek, the Project would reduce the amount of concrete and structural supports within the active Ballona Creek channel by approximately 701 square feet from 987 square feet in existing conditions to approximately 286 square feet with the Project, which represents a 71 percent reduction.</p> <p>**The Project would result in 31,850 sf (0.7312 acres) of shading, which is an increase of 16,170 sf (0.3712 acres) from the 15,680 sf (0.3599 acres) of existing shading.</p> <p>***Temporary impact acreage for Ballona Creek includes the permanent impact areas for piers and shading.</p>				

**Avoidance and Minimization Efforts**

No additional avoidance and minimization efforts are required related to jurisdictional waters besides those which are outlined in the Standard Conditions described at the beginning of Chapter 4.

**Compensatory Mitigation**

The City shall confirm that:

- No ground-disturbing, deposition of fill, or vegetation clearing activities within jurisdictional drainages shall occur until all regulatory permits have been obtained. This includes a USACE Section 404 Permit; an RWQCB Section 401 Water Quality Certification; a CDFW Section 1602 Streambed Alteration Agreement; and a CCC Coastal Development Permit (CDP).
- The Contractor shall maintain a copy of agency permits at the construction site throughout the duration of construction.
- Compensatory mitigation shall be provided at a minimum 1:1 ratio for permanent impacts to waters under the regulatory authority of the USACE, the RWQCB, the

CDFW, and the CCC. Final details of the compensatory mitigation shall be determined within the regulatory permits. Mitigation for permanent impacts to waters would consist of one of the following approaches:

- a. Providing funding to CDFW to rehabilitate, enhance, or restore jurisdictional waters within the BWER;
  - b. Preparing and implementing a Habitat Mitigation and Monitoring Plan (HMMP) to rehabilitate, enhance, or restore jurisdictional waters within City-controlled lands that are adjacent to the BWER; or
  - c. Purchase of credits from a mitigation bank.
- All temporary impacts to vegetated portions of Feature 1 (Fiji Ditch) shall be replanted with native plant species in consultation with property owners and permitting agencies.

### **Cumulative Impacts**

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would affect jurisdictional waters.

The Ballona Wetlands Restoration Project would substantially alter Ballona Creek, Fiji Ditch, and other jurisdictional waters within the BWER. The Project would similarly involve work within jurisdictional waters including Ballona Creek and Fiji Ditch.

The BWER has approximately 151.7 acres of wetlands and 68.3 acres of other jurisdictional waters pursuant to Section 404 of the Clean Water Act. The Ballona Wetlands Restoration Project would result in a 49.6-acre net increase of wetlands within the BWER, and a 27.8-acre net increase of other Section 404 jurisdictional waters (CDFW 2017). Therefore, the Ballona Wetlands Restoration Project would result in temporary construction effects to jurisdictional waters and temporal loss of habitat but would result in an overall increase and improvement in quality of the wetlands and waters within the BWER once completed.

Also, both the Ballona Wetlands Restoration Project and the Project would be required to obtain regulatory permits. The regulatory permitting process would ensure that temporary and permanent impacts to jurisdictional waters are fully mitigated, which would avoid adverse cumulative effects related to jurisdictional waters.

### **Conclusion**

The Project may affect but not adversely affect jurisdictional waters.

## 4.2. Special Status Plant Species

Sixty-six special status plant species have been reported from the Project region and are listed in Table 4. Fourteen of these species are federally and/or state listed as Threatened, Endangered, or Rare. These species are not expected to occur within the BSA due to the lack of suitable habitat, because the species are presumed extirpated from the County, because all reported occurrences in the region are historic, because the BSA is outside the current known range of the species, and/or because they were not observed during focused plant surveys conducted for the BSA during the spring/summer 2017 or previous surveys of the BWER. There would be no impact on these listed species and no mitigation would be required; therefore, they are not discussed below.

One special status plant species, Lewis' evening-primrose (*Camissoniopsis lewisii*), was observed in the BSA (Figure 7). This species is discussed below. While not observed in the BSA during surveys conducted for the Project, suffrutescent wallflower (*Erysimum suffrutescens*), south coast branching phacelia (*Phacelia ramosissima* var. *austrolitoralis*), and woolly seablite (*Suaeda taxifolia*) have moderate potential to occur in the BSA since they have been reported recently from the BWER and the BSA contains suitable habitat (USACE and CDFW 2017).

### 4.2.1. Discussion of Lewis' Evening-primrose (*Camissoniopsis lewisii*)

#### **Survey Results**

Lewis' evening-primrose was observed in the BSA during the 2017 focused plant surveys. This species has a CRPR of 3. Populations of this species may be considered an ESHA by the CCC; however, they likely do not meet the definition of an ESHA due to the following reasons:

- The species' CRPR rank indicates that it is on a "review list", meaning there is not enough information to consider it rare or endangered in California and/or elsewhere. It also has a global and state rank of 4, indicating that it is uncommon but not rare.
- The populations in the BSA are also not associated with sensitive natural communities which may be considered ESHAs themselves. Therefore, Lewis' evening-primrose populations in the BSA are not being analyzed as ESHAs for the purposes of this study.
- The final determination of what areas would be regulated as an ESHA would be made by the CCC as part of the CDP process for the Project.

Approximately 500 individuals were observed in the BSA. Specifically in three populations north of Ballona Creek; one population occurs west of Lincoln Boulevard and two populations occur east of Lincoln Boulevard. The species occur on a flat, sandy plain in cudweed stand, upland mustard, and California sagebrush scrub habitats and co-occur with species such as small-flowered camissoniopsis (*Camissoniopsis micrantha*), pleasant-scented cudweed, coyote brush (*Baccharis pilularis* ssp. *consanguinea*), Geraldton carnation weed (*Euphorbia terracina*), and black mustard.

### **Project Impacts**

The Lewis' evening-primrose population of 300 individuals in the northern portion of the Project site would not be impacted by the Project and no mitigation would be required for this population.

The two Lewis' evening-primrose populations of approximately 100 individuals, each within the Project site that are located along Culver Boulevard on either side of Lincoln Boulevard, partially fall within the Project impact area. These populations will be partially impacted by the Project. It is anticipated that fewer than the 200 individuals that occur at these locations will be impacted by the Project; however, population size may vary from year to year so the exact number of individuals that may be impacted cannot be determined. Given the status of this species (e.g., CRPR 3) and limited number of individuals impacted relative to the population size in the BWER (e.g., approximately 12,300 individuals [WRA 2011]), this impact is not considered adverse. As discussed in the cumulative impacts section below, the Ballona Wetlands Restoration Project would result in the temporary loss of the approximately 12,300 individuals previously observed in the BWER. If the Project construction schedule were to overlap with the Ballona Wetlands Restoration Project, the temporary loss of natural-occurring seed propagation has potential to be adverse.

### **Avoidance and Minimization Efforts**

No additional avoidance and minimization efforts are required for this species besides those which are outlined in the Standard Conditions described at the beginning of Chapter 4.

### **Compensatory Mitigation**

- The City shall mitigate for permanent impacts to Lewis' evening-primrose at a minimum of 1:1 ratio (number of plants established: number of plants impacted) using one of the following means:
  - By incorporating Lewis' evening-primrose into the planting plan for the temporarily impacted areas of the BWER;

- By incorporating Lewis' evening-primrose into a Habitat Mitigation and Monitoring Plan (HMMP) for City-controlled lands that are adjacent to the BWER; or
- Providing funding to CDFW to establish Lewis' evening-primrose within the BWER.

### **Cumulative Impacts**

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would affect Lewis' evening-primrose.

The Ballona Wetlands Restoration Project would impact up to 11,763 of the 12,300 Lewis' evening-primrose individuals reported within the BWER according to CDFW's Ballona Wetlands Restoration Project EIR/EIS (USACE and CDFW 2017). This cumulative project's impact represents an adverse decrease of the regional population of Lewis' evening-primrose. However, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and mitigate their impacts to this plant species. CDFW's proposed mitigation for their impacts on Lewis' evening-primrose consists of re-establishment of the species in restored habitat on site at a minimum ratio of 1:1 (number of plants established: number of plants impacted) pursuant to a Habitat Mitigation and Monitoring Plan prepared for that project. As a result, CDFW's Ballona Wetlands Restoration Project would provide long-term conservation benefits for the species. These efforts are consistent with the Project's proposed compensatory mitigation efforts for this species. Further, construction of the Ballona Wetlands Restoration Project would be phased preventing removal of all individuals and associated habitat during the same growing season. By allowing onsite individuals to persist during construction, temporary impacts to regional populations would not be adverse, even if the construction schedule overlapped with Project construction.

When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project, would result in the temporary loss, but long-term establishment and conservation of this Lewis' evening-primrose.

### **Conclusion**

The Project may affect but not adversely affect Lewis' evening-primrose.

#### **4.2.2. Discussion of Suffrutescent Wallflower (*Erysimum suffrutescens*)**

##### **Survey Results**

Suffrutescent wallflower was reported at the western end of the BWER (USACE and CDFW 2017). Approximately 29 individuals were observed in coastal dune habitat of the BWER. While coastal dune habitat is not present in the BSA, the scrub communities in the BSA may represent suitable habitat. The potential for this species to be present in the BSA at this time is moderate given the lack of observations during the current or previous survey efforts; however, it may have since spread to the BSA.

##### **Project Impacts**

No suffrutescent wallflower were present in the BSA during the 2017 surveys and no adverse effect on this species would occur if determined to be absent. Given the presence of this species in the BWER; however, it is possible that the nearby population will expand and/or migrate to the BSA and potential direct impacts may occur.

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

No additional avoidance and minimization efforts are required for this species besides those which are outlined in the Standard Conditions described at the beginning of Chapter 4.

##### **Compensatory Mitigation**

If the species is determined to be present with the impact area per the survey results from SC BIO-15, the City shall mitigate for permanent impacts to the species at a minimum 1:1 ratio (number of plants established: number of plants impacted) using one of the following means:

- By incorporating the species into the planting plan for the temporarily impacted areas of the BWER;
- By incorporating the species into a Habitat Mitigation and Monitoring Plan (HMMP) for City-controlled lands that are adjacent to the BWER; or
- Providing funding to CDFW to establish the species within the BWER.

If the survey results associated with SC BIO-15 finds the species is absent, no further mitigation would be needed.

##### **Cumulative Impacts**

The 29 individual suffrutescent wallflowers in the BWER would not be directly impacted by restoration activities associated with the Ballona Wetlands Restoration Project

(USACE and CDFW 2017); therefore, the Project would result in no adverse cumulative effects related to suffrutescent wallflowers.

### **Conclusion**

The Project may affect but not likely adversely affect suffrutescent wallflowers.

#### **4.2.3. Discussion of South Coast Branching Phacelia (*Phacelia ramosissima* var. *austrolitoralis*)**

##### **Survey Results**

South coast branching phacelia was reported at the western end of the BWER (USACE and CDFW 2017). Approximately 600 individuals were observed in coastal dune habitat of the BWER. While coastal dune habitat is not present in the BSA, the scrub and marsh communities in the BSA may represent suitable habitat. The potential for this species to be present in the BSA at this time is moderate given the lack of observations during the current or previous survey efforts. However, it may spread to the BSA.

##### **Project Impacts**

No south coast branching phacelia were present in the BSA during the 2017 surveys and no adverse effect on this species would occur if determined to be absent. Given the presence of this species in the BWER; however, it is possible that the nearby population will expand and/or migrate to the BSA and potential direct impacts may occur.

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

No additional avoidance and minimization efforts are required for this species besides those which are outlined in the Standard Conditions described at the beginning of Chapter 4.

##### **Compensatory Mitigation**

If the species is determined to be present with the impact area per the survey results from SC BIO-15, the City shall mitigate for permanent impacts to the species at a minimum 1:1 ratio (number of plants established: number of plants impacted) using one of the following means:

- By incorporating the species into the planting plan for the temporarily impacted areas of the BWER;
- By incorporating the species into a Habitat Mitigation and Monitoring Plan (HMMP) for City-controlled lands that are adjacent to the BWER; or
- Providing funding to CDFW to establish the species within the BWER.



If the survey results associated with SC BIO-15 finds the species is absent, no further mitigation would be needed.

### **Cumulative Impacts**

The 600 individual south coast branching phacelia in the BWER would not be directly impacted by restoration activities associated with the Ballona Wetlands Restoration Project (USACE and CDFW 2017); therefore, cumulative impacts would not adversely effect on this species.

### **Conclusion**

The Project may affect but not likely adversely affect south coast branching phacelia.

## **4.2.4. Discussion of Woolly Seablite (*Suaeda taxifolia*)**

### **Survey Results**

Woolly seablite was reported in the western portion of the BWER (USACE and CDFW 2017). Approximately 85 individuals were observed on the edge of coastal brackish marsh of the BWER. The marsh communities in the BSA may represent suitable habitat for the species. The potential for this species to be present in the BSA at this time is moderate given the lack of observations during the current or previous survey efforts. However, it may spread to the BSA.

### **Project Impacts**

No woolly seablite were present in the BSA during the 2017 surveys and no adverse effect on this species would occur if determined absent. Given the presence of this species in the BWER; however, it is possible that the nearby population will expand and/or migrate to the BSA and potential direct impacts may occur.

### **Avoidance and Minimization Efforts**

No additional avoidance and minimization efforts are required for this species besides those which are outlined in the Standard Conditions described at the beginning of Chapter 4.

### **Compensatory Mitigation**

If the species is determined to be present with the impact area per the survey results from SC BIO-15, the City shall mitigate for permanent impacts to the species at a minimum 1:1 ratio (number of plants established: number of plants impacted) using one of the following means:

- By incorporating the species into the planting plan for the temporarily impacted areas of the BWER;

- By incorporating the species into a Habitat Mitigation and Monitoring Plan (HMMP) for City-controlled lands that are adjacent to the BWER; or
- Providing funding to CDFW to establish the species within the BWER.

If the survey results associated with SC BIO-15 finds the species is absent, no further mitigation would be needed.

### **Cumulative Impacts**

The Ballona Wetlands Restoration Project would directly impact 85 individual woolly seablite in the BWER (USACE and CDFW 2017). The Project's would have no adverse cumulative effects to this species.

### **Conclusion**

The Project may affect but not likely adversely affect this species.

## **4.3. Special Status Animal Species Occurrences**

One hundred and twenty-eight special status wildlife species have been reported from the Project region and are listed in Table 5. Thirty-one of these are federally and/or state listed as Threatened or Endangered or Candidate species and 18 were determined to potentially occur or have been observed within the BSA based on habitat requirements/BSA conditions and include: Crotch bumble bee (*Bombus crotchii*), steelhead-southern California DPS (*Oncorhynchus mykiss irideus* population 10), green sea turtle (*Chelonia mydas*), tricolored blackbird (*Agelaius tricolor*), marbled murrelet (*Brachyramphus marmoratus*), Swainson's hawk (*Buteo swainsoni*), western snowy plover (*Charadrius alexandrinus nivosus*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), southwestern willow flycatcher (*Empidonax traillii extimus*), greater sandhill crane (*Grus canadensis tabida*), bald eagle (*Haliaeetus leucocephalus*), California black rail (*Laterallus jamaicensis corturniculus*), Belding's savannah sparrow (*Passerculus sandwichensis beldingi*), coastal California gnatcatcher (*Polioptila californica californica*), light-footed Ridgway's rail (*Rallus obsoletus levipes*), bank swallow (*Riparia riparia*), California least tern (*Sternula antillarum browni*), and least Bell's vireo (*Vireo bellii pusillus*). The results of relevant surveys, Project impacts, avoidance and minimization efforts, and cumulative impacts for listed species with a potential to occur within the BSA are discussed in this section. Suitable habitat is not present within the BSA for the following species or they have not been reported in the vicinity and not observed during surveys for BWER (USACE and CDFW 2017): r San Diego fairy shrimp (*Branchinecta sandiegoensis*), El Segundo blue butterfly (*Euphilotes battoides allyni*), Quino checkerspot butterfly (*Euphydryas editha quino*), Palos Verdes

blue butterfly (*Glaucopsyche lygdamus paloverdesensis*), Riverside fairy shrimp (*Streptocephalus woottoni*), Santa Ana sucker (*Catostomus santaanae*), tidewater goby (*Eucyclogobius newberryi*), unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni*), Mohave tui chub (*Siphateles bicolor mohavensis*), arroyo toad (*Anaxyrus californicus*), California red-legged frog (*Rana draytonii*), rhinoceros auklet (*Cerorhinca monocerata*), and Scripp's murrelet (*Synthliboramphus scrippsi*). These species are not discussed further. Pacific pocket mouse (*Perognathus longimembris pacificus*) was captured within the alluvial sands of Ballona Wetlands in 1938, but multiple trapping efforts within the BWER and vicinity (trapping efforts occurred 1996, 2000, 2007, 2009, 2010, and 2011 (USACE and CDFW 2017)) have since determined it is extirpated from the BSA and vicinity and the species is not discussed further within this document.

Forty non-listed special status wildlife species are determined to potentially reside or breed in or immediately adjacent to the BSA and are discussed further below: Busck's gallmoth (*Carolella busckana*), western tidal-flat tiger beetle (*Cicindela gabbii*), sandy beach tiger beetle (*Cicindela hirticollis gravida*), senile tiger beetle (*Cicindela senilis frosti*), wandering skipper (*Panoquina errans*), Gertsch's socialchemmis spider (*Socalchemmis gertschi*), mimic tryonia (*Tryonia imitator*), western spadefoot (*Spea hammondii*), southern California legless lizard (*Anniella stebbinsi*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), San Bernardino ringneck snake (*Diadophis punctatus modestus*), western pond turtle (*Emys marmorata*), coast horned lizard (*Phrynosoma blainvillii*), two-striped garter snake (*Thamnophis hammondi*), south coast garter snake (*Thamnophis sirtalis* ssp.), Cooper's hawk (*Accipiter cooperii*), burrowing owl (*Athene cunicularia*), northern harrier (*Circus hudsonius*), Clark's marsh wren (*Cistothorus palustris clarkae*), white-tailed kite, California horned lark (*Eremophila alpestris actia*), yellow-breasted chat (*Icteria virens*), least bittern (*Ixobrychus exilis*), loggerhead shrike (*Lanius ludovicianus*), osprey (*Pandion haliaetus*), double-crested cormorant (*Phalacrocorax auratus*), white-faced ibis (*Plegadis chihi*), yellow warbler (*Setophaga petechia*), yellow-headed blackbird (*Xanthocephalus xanthocephalus*), pallid bat, (*Antrozous palliudus*), silver-haired bat (*Lasionycteris noctivagans*), western red bat (*Lasiurus blossevillii*), western yellow bat (*Lasiurus xanthinus*), hoary bat (*Lasiurus cinereus*), Yuma myotis (*Myotis yumanensis*), south coast marsh vole (*Microtus californicus stephensi*), pocket free-tailed bat (*Nyctinomops femorosaccus*), big free-tailed bat (*Nyctinomops macrotis*), southern California saltmarsh shrew (*Sorex ornatus salicornicus*), and American badger (*Taxidea taxus*).

The following sections discuss the special-status animal species that have the potential to breed on or immediately adjacent to the BSA and/or to regularly use it, that have the potential to be adversely affected by the Project (e.g., due to their rarity), and/or that are

of particular concern to resource agencies and therefore require additional discussion. Species not expected to occur would not be impacted and are not discussed below.

**4.3.1. Discussion of Crotch Bumble Bee (*Bombus crotchii*)**

**Survey Results**

Suitable habitat for the Crotch bumble bee occurs in the BSA and this species has been reported at the BWER, just southwest of the BSA (CDFW 2019a). This species was not observed during general surveys of the BSA, but has a moderate potential to occur in the BSA.

**Project Impacts**

Crotch bumblebee has a moderate potential to occur in the BSA. As identified in Table 12, the Project would impact a total of 7.849 acre of suitable habitat for this species (2.327 acre permanent; 5.522 acre temporary). Due to the species’ listing status, any impacts to this species have potential to be adverse. Approximately 52.164 acres of suitable habitat occurs within the BSA with additional suitable habitat occurring across substantial portions of the BWER. The loss of 7.849 acres of suitable habitat would not jeopardize the persistence of the species if they were found to be present.

**Table 12 – Habitat for the Crotch Bumblebee that would be Impacted by the Project**

Vegetation Types and Other Areas	Existing (acres)	Permanent Impact (acres)	Temporary Impact (acres)	Total Impact (acres)
California Sagebrush Scrub	3.533	0.835	0.381	<b>1.216</b>
Coyote Brush Scrub	4.485	0.042	0.248	<b>0.290</b>
Degraded Coyote Brush Scrub	2.637	0.000	0.000	<b>0.000</b>
Laurel Sumac Scrub	1.265	0.000	0.000	<b>0.000</b>
Menzies’s Golden Bush Scrub	2.158	0.016	0.297	<b>0.313</b>
Quailbush Scrub	4.145	0.004	0.031	<b>0.035</b>
Annual Brome Grassland	0.493	0.015	0.131	<b>0.146</b>
Cudweed Stand	0.874	0.000	0.000	<b>0.000</b>
Hyssop-Leaved Bassia Stand	3.056	0.000	0.952	<b>0.952</b>
Semi-Natural Herbaceous Stand	4.646	0.200	1.564	<b>1.764</b>
Upland Mustards	24.872	1.215	1.918	<b>3.133</b>
<b>Total</b>	<b>52.164</b>	<b>2.327</b>	<b>5.522</b>	<b>7.849</b>

**Avoidance and Minimization Efforts**

In addition to the Standard Conditions described at the beginning of Chapter 4, the following measure shall be implemented prior to or during construction to avoid and

minimize Project impacts to the Crotch bumble bee and/or its habitat. The City shall confirm that the Contractor has implemented the following:

1. Within one year prior to native vegetation removal associated with the Project, a qualified biologist will conduct a pre-construction survey in areas of suitable habitat to locate active bumble bee nests, if any. The survey shall be conducted during the peak flight season for a colony's males and workers increasing the likelihood of nest detection, which typically occurs from June through July. If no active bumble bee nest is observed during the survey, then the species will be determined to be absent from the Project site and no additional measures will be necessary. The survey results will remain valid until February 15 of the following year. If an active nest is determined to be within the Project site, then a 500-foot no-impact buffer shall be established in vegetated areas around the nest site. The no-impact buffer may be removed if permitted following coordination with CDFW.

### ***Compensatory Mitigation***

If no Crotch bumble bee are found during the preconstruction survey noted above, and with incorporation of the avoidance and minimization measures listed above in Section 4, the Project would not affect the Crotch bumble bee and no further mitigation would be required. If Crotch bumble are found during the preconstruction survey, active nest(s) will be avoided through implementation of a 500-foot avoidance buffer, and the City will obtain an Incidental Take Permit or a Consistency Determination from CDFW to address effects to the Crotch bumble bee. The consultation shall confirm that the avoidance and minimization measures listed above are sufficient to protect this species from potential effects, and whether additional compensatory mitigation may be required.

### ***Cumulative Impacts***

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would affect Crotch bumble bee.

The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas that could provide suitable habitat for Crotch bumble bee (USACE and CDFW 2017). This cumulative project's impact would represent a substantial decrease of the regional habitat for Crotch bumble bee. However, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to Crotch bumble bee. Like the Project, if CDFW's contractors were to encounter Crotch bumble bee during construction activities they would similarly be required to stop work, implement avoidance measures, and obtain an Incidental Take Permit or other approval to proceed with work that would directly affect this species. As

a result, CDFW's Ballona Wetlands Restoration Project would result in temporary effects but would provide long-term conservation benefits for the species.

When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for Crotch bumble bee.

### **Conclusion**

The Project may affect but not likely adversely affect Crotch bumble bee.

### **4.3.2. Discussion of Steelhead-Southern California Distinct Population Segment (DPS) (*Oncorhynchus mykiss irideus* population 10)**

#### **Survey Results**

Focused surveys for special status fish species were not performed as part of the Project. Steelhead were observed in 2008 within Ballona Creek upstream of the Project beneath the Overland Avenue pass in Culver City (Johnston et. al 2011) and the next closest known occurrences/populations are in the Santa Monica Mountains (CDFW 2019a). Limited suitable aquatic habitat for this species occurs in the BSA but no spawning habitat occurs in the BSA. This species was not observed during general surveys of the BSA and has a low potential to occur in Ballona Creek within the BSA.

#### **Project Impacts**

Steelhead has a low potential to occur in the BSA. As detailed in Table 13, the Project would remove the existing four-span Lincoln Boulevard Bridge over Ballona Creek as well as the three sets of piers/piles that support the existing bridge, which include 987 square feet of existing structural footprint within Ballona Creek. The Project would construct a new, wider Lincoln Boulevard Bridge that would only have three spans. The structural supports for the replacement Lincoln Boulevard Bridge in Ballona Creek would consist of two piers (each consisting of six, 66" diameter concrete piles) with no pier walls. By modifying the bridge from a four-span to a three-span structure and not constructing pier walls, the Project would reduce the amount of concrete and structural supports within Ballona Creek by approximately 701 square feet from 987 square feet in existing conditions to approximately 286 square feet with the Project, which represents a 71 percent reduction from existing conditions.

Permanent shading within Ballona Creek would increase with the Project, which includes the replacement of a 64-foot-wide existing bridge structures with a new 130-foot-wide bridge structure. With the widened structure, the Project would result in 31,850 sf

(0.7312 acres) of shading, which is an increase of 16,170 sf (0.3712 acres) from the 15,680 sf (0.3599 acres) of existing shading.

Temporary impacts within Ballona Creek would also be required to demolish the existing Lincoln Boulevard Bridge over Ballona Creek, and for access and staging needed to construct a replacement bridge over Ballona Creek. Project construction activities may require water flow diversion around impact areas within the creek. Although flow would be diverted, fish passage by the impact areas would still be available and potential species migration would not be prevented from occurring (upstream or downstream). Potential impacts to steelhead may occur but would not likely be adverse.

**Table 13 – Habitat for the Steelhead that would be Impacted by the Project**

Habitat Affected	Existing (acres)	Permanent Impact (acres)	Permanent Impact/Shade (acres)	Temporary Impact (acres)	Total Impact (acres)
Ballona Creek	9.948	0.007	0.731	2.130	<b>2.868</b>

**Avoidance and Minimization Efforts**

Although the steelhead has low potential to occur within the BSA and the Project is not expected to directly affect this species, there is potential for indirect effects from Project construction. In addition to the Standard Conditions described at the beginning of Chapter 4, the following measures shall be implemented prior to or during construction to avoid and minimize Project impacts to steelhead and/or its habitat.

1. To avoid direct impacts to steelhead, marine mammals, and sea turtles that may occur in Ballona Creek during in-water construction, a 320-foot (100 meter) safety zone shall be maintained around in-water work areas. At the discretion of the NOAA/NMFS and USFWS, based on the findings of initial biological monitoring, the size or configuration of the in-water marine mammal safety zone may change. The purpose of the marine mammal safety zone is to prevent animal entrapment or to cause hearing loss resulting from pile-driving activities.

A qualified biologist will conduct daily surveys during in-water activities in Ballona Creek to inspect the work zone and adjacent waters for marine mammals and sea turtles. Unless otherwise modified by the resource agencies, biological monitoring of in-water work will continue until all earth-moving and noise generating work has been completed within the Ballona Creek channel.

In-water work activities and/or other activities that could adversely affect steelhead, marine mammals, and/or sea turtles shall be halted if a steelhead,

marine mammal, or sea turtle enters the 320-foot marine mammal safety zone and resume only after the animal has been gone from the area for a minimum of 15 minutes.

2. A “soft start” will be used to initiate pile driving activities within Ballona Creek whereby pile driving will be limited to one or two strikes at less than full strength to allow any steelhead or other fish species present to leave the Project area and to allow the biological monitor an opportunity to document the behavior of animals in the Project area.
3. Biological monitoring shall include underwater noise monitoring, which will be conducted full-time during in-water work. Underwater noise monitoring will be initiated 500 meters from the bridge site. The location of underwater noise monitoring activities will be adjusted as necessary based on measured underwater sound levels so that monitoring is occurring at the location where noise levels are at the 160-dBA threshold based on the behavioral disruption for impulsive noise threshold identified in the NOAA Fisheries In-water Acoustic Thresholds Technical Guidance table (NOAA 2022c). If noise monitoring determines that noise levels are greater than 160 dBA outside of the initial 500-meter area, the qualified biologist will consult with NOAA/NMFS regarding the appropriate avoidance and minimization measures. Construction activities will be stopped when a marine mammal is within the greater than 160 dBA area identified by noise monitoring and will only be resumed when the animal has left the area. In addition, the qualified biologist will confirm that bubble curtains (specified below) are being used effectively and to document and evaluate any fish impacts (including mortality). The biological monitor shall provide monitoring reports following site visits to the City and Caltrans.
4. Bubble curtains shall be used for in-water work within Ballona Creek to minimize underwater noise disturbance from construction. The bubble curtains shall entirely encircle the active in-water work area (e.g., the pile being removed/installed, placement of riprap; etc.), allowing sufficient space for construction crews to operate. The bubble curtains shall also act as a barrier to prevent green turtle (and other aquatic species) from entering the work area. The bubble curtains shall be moved as the active work area progresses across the channel; at no time shall the bubble curtains entirely eliminate movement up and down the channel (e.g., the bubble curtains shall not span the channel). Bubble curtains will be used in combination with turbidity curtains to manage sediment and silt transport resulting from construction activities.



5. Sound pressure levels resulting from pile-driving activities shall comply with the *Interim Criteria for Injury to Fish from Pile Driving Activities* (e.g., 206 decibels [dB] peak for all size of fish; 187 dB accumulated sound exposure level [SEL] for fish 2 grams or greater; and 183 dB accumulated SEL for fish less than 2 grams) (FHWG 2008). An acoustical technician shall conduct noise monitoring in collaboration with the biological monitor to ensure that sound pressure levels do not exceed these criteria. A noise monitoring report shall be submitted to the City and Caltrans documenting implementation of noise monitoring requirements.
6. Turbidity curtains shall be deployed around pile removal zones to minimize the spread of turbid plumes outside the construction area within Ballona Creek. During construction, the Contractor shall implement a water quality monitoring program that evaluates and tests for water quality degradation in areas adjacent to and outside the turbidity curtain in Ballona Creek.

### ***Compensatory Mitigation***

The Project is not expected to adversely affect steelhead with incorporation of the avoidance and minimization measures listed above; therefore, no mitigation would be required.

If steelhead are found within the BSA during construction, Caltrans, on behalf of the Federal Highway Administration (FHWA), will undertake Section 7 consultation with the NOAA/NMFS to address potential effects to steelhead. The consultation shall confirm that the avoidance and minimization measures listed above are sufficient to protect this species from potential effects. Otherwise, additional mitigation may be required by NOAA/NMFS through the permitting process.

### ***Cumulative Impacts***

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that could affect steelhead if they were to occur in Ballona Creek.

The Ballona Wetlands Restoration Project would temporarily impact, realign, and enhance Ballona Creek for use by steelhead (USACE and CDFW 2017). Like the Project, CDFW's contractors would be required to implement avoidance measures similar to those prescribed for the Project for all in-water work potentially affecting steelhead. As a result, the Ballona Wetlands Restoration Project would result in potential temporary effects to steelhead but would provide long-term conservation benefits for this species.

When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of improved habitat for steelhead in the Project vicinity.

### **Conclusion**

The Project may affect the species but would not adversely affect the species with implementation of the above measures.

### **4.3.3. Discussion of Green Sea Turtle (*Chelonia mydas*)**

#### **Survey Results**

Limited habitat for green sea turtle occurs in Ballona Creek and rare sightings have been reported in Ballona Creek (CDFW 2017). Focused surveys for the green sea turtle were not performed as part of the Project and this species was not observed during general surveys of the BSA. Due to lack of required water temperatures, food sources, and nesting habitat within Ballona Creek, the Project site does not offer suitable foraging or nesting habitat for green sea turtles. Ballona Creek does not provide lagoons and shoals with an abundance of marine grass and algae that would represent potential foraging habitat, nor does it contain any open beaches that would represent potential nesting habitat. Therefore, green sea turtle has a low potential to occur in the BSA.

#### **Project Impacts**

Green sea turtle has a low potential to occur in the BSA. As identified in Table 14, the Project would remove the existing four-span Lincoln Boulevard Bridge over Ballona Creek as well as the three sets of piers/piles that support the existing bridge, which include 987 square feet of existing structural footprint within Ballona Creek. The Project would construct a new, wider Lincoln Boulevard Bridge that would only have three spans. The structural supports for the replacement Lincoln Boulevard Bridge in Ballona Creek would consist of two piers (each consisting of six, 66" diameter concrete piles) with no pier walls. By modifying the bridge from a four-span to a three-span structure and not constructing pier walls, the Project would reduce the amount of concrete and structural supports within Ballona Creek by approximately 701 square feet from 987 square feet in existing conditions to approximately 286 square feet with the Project, which represents a 71 percent reduction from existing conditions.

Permanent shading within Ballona Creek would increase with the Project, which includes the replacement of a 64-foot-wide existing bridge structures with a new 130-foot-wide bridge structure. With the widened structure, the Project would result in 31,850 sf

(0.7312 acres) of shading, which is an increase of 16,170 sf (0.3712 acres) from the 15,680 sf (0.3599 acres) of existing shading.

Temporary impacts within Ballona Creek would also be required to demolish the existing Lincoln Boulevard Bridge over Ballona Creek, and for access and staging needed to construct a replacement bridge over Ballona Creek. Project construction activities may temporarily block species from migrating (upstream or downstream).

Green sea turtle feeds on aquatic vegetation and algae, and an increase in shade or loss of available open water habitat has potential to reduce available foraging resources for the species. Similar habitat is abundant throughout the wetted portion of Ballona Creek and along the coast of Southern California. The reduction of available foraging resources that has potential to occur as a result of the Project would not jeopardize the persistence of the species and any potential impacts would not be adverse. Underwater noise associated with construction activities (specifically pile driving) has potential to effect individual green sea turtles if they occur onsite during construction and such impacts may be adverse.

**Table 14 – Habitat for the Green Sea Turtle that would be Impacted by the Project**

Habitat Affected	Existing (acres)	Permanent Impact (acres)	Permanent Impact/ Shade (acres)	Temporary Impact (acres)	Total Impact (acres)
Ballona Creek	9.948	0.007	0.731	<b>2.130</b>	<b>2.868</b>

***Avoidance and Minimization Efforts***

Although the green sea turtle is not anticipated within the BSA and the Project is not expected to directly affect this species, there is potential for indirect effects from Project construction. In addition to the Standard Conditions described at the beginning of Chapter 4, the measures listed above in Section 4.3.2 would also apply to the green sea turtle.

***Compensatory Mitigation***

The Project is not expected to adversely affect the green sea turtle with incorporation of Avoidance and Minimization Measures; therefore, no mitigation would be required.

If green sea turtle are encountered during Project construction, Caltrans, on behalf of the FHWA, will undertake Section 7 consultation with the NOAA/NMFS to address potential effects to green sea turtle. The consultation shall confirm that the avoidance and

minimization measures listed above are sufficient to protect this species from potential effects. Otherwise, additional mitigation may be required by NOAA/NMFS through the permitting process.

### **Cumulative Impacts**

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that could affect green sea turtle if they were to occur in Ballona Creek.

The Ballona Wetlands Restoration Project would temporarily impact, realign, and enhance Ballona Creek for use by green sea turtle (USACE and CDFW 2017). Like the Project, CDFW's contractors would be required to implement avoidance measures similar to those prescribed for the Project for all in-water work potentially affecting green sea turtle. As a result, the Ballona Wetlands Restoration Project would result in potential temporary effects to green sea turtle but would provide long-term conservation benefits for this species.

When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of improved habitat for green sea turtle in the Project vicinity.

### **Conclusion**

The Project may affect the species but would not adversely affect the species with implementation of the above measures.

#### **4.3.4. Discussion of Tricolored Blackbird (*Agelaius tricolor*)**

##### **Survey Results**

Suitable foraging habitat, but no nesting habitat, is present for tricolored blackbird in the BSA. This species was not observed during general surveys of the BSA. Tricolored blackbird has a low potential to occur in the BSA for foraging (mainly expected to occur as a vagrant), though it is not expected to occur for nesting. This species has been documented in the Freshwater Marsh southwest of the Project site, but only in a foraging role (CDFW 2017). Aside from a regular wintering flock of several dozen birds in the vicinity of Westchester Park near Manchester Boulevard and Lincoln Boulevard, this species is only a casual visitor to the Ballona Valley (CDFW 2017).

**Project Impacts**

Tricolored blackbird has a low potential to forage in the BSA. As identified in Table 15, the Project would impact a total of 6.452 acre of suitable foraging habitat for this species (2.732 acre permanent; 3.720 acre temporary). Approximately 34.943 acres of foraging habitat occurs within the BSA with additional foraging habitat occurring across substantial portions of the BWER. The loss of 6.452 acres of foraging habitat would not jeopardize the persistence of the species if they were found to be present.

**Table 15 – Habitat for the Tricolored Blackbird that would be Impacted by the Project**

<b>Vegetation Types and Other Areas</b>	<b>Existing (acres)</b>	<b>Permanent Impact (acres)</b>	<b>Temporary Impact (acres)</b>	<b>Total Impact (acres)</b>
Annual Brome Grassland	0.493	0.015	0.131	<b>0.146</b>
Cudweed Stand	0.874	0.000	0.000	<b>0.000</b>
Hyssop-Leaved Bassia Stand	3.056	0.000	0.860	<b>0.860</b>
Semi-Natural Herbaceous Stand	4.646	0.200	1.564	<b>3.133</b>
Upland Mustards	24.872	1.215	1.918	<b>3.133</b>
California Bulrush Marsh	0.689	0.000	0.002	<b>0.002</b>
Cattail Marsh	0.313	0.000	0.000	<b>0.000</b>
<b>Total</b>	<b>34.943</b>	<b>1.43</b>	<b>4.475</b>	<b>7.274</b>

**Avoidance and Minimization Efforts**

Although no tricolored blackbirds were observed during any surveys, and no nesting habitat is expected to occur within the BSA, the Project may affect potential foraging habitat. With implementation of the Standard Conditions described at the beginning of Chapter 4, no further avoidance or minimization measures would be required for tricolored blackbirds.

**Compensatory Mitigation**

The Project is not expected to adversely affect the tricolored blackbird with incorporation of the avoidance and minimization measures listed above; therefore, no mitigation would be required.

If this species is observed nesting within the impact area and take is anticipated, the City will obtain an Incidental Take Permit or a Consistency Determination from CDFW to address effects to the tricolored blackbird. The consultation shall confirm that the avoidance and minimization measures listed above are sufficient to protect this species from potential effects. Otherwise, additional mitigation may be required by CDFW through the permitting process.

### **Cumulative Impacts**

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect tricolored blackbird.

The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable foraging and breeding habitat for tricolored blackbird (USACE and CDFW 2017). This cumulative project's impact would represent a temporary decrease of the regional habitat for tricolored blackbird. However, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat for tricolored blackbird. Like the Project, CDFW would be required to implement avoidance and minimization measures for this species and would be required to obtain an Incidental Take Permit or other approval to proceed with work affecting this species. As a result, CDFW's Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species. Further, construction of the Ballona Wetlands Restoration Project would be phased preventing removal of all foraging habitat at the same time. By allowing large portions of suitable foraging habitat to persist during construction, temporary impacts to regional populations would not likely be adverse, even if the construction schedule overlapped with Project construction.

When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for tricolored blackbird.

### **Conclusion**

The Project may affect but not likely adversely affect tricolored blackbird.

#### **4.3.5. Discussion of Marbled Murrelet (*Brachyramphus marmoratus*)**

##### **Survey Results**

Suitable foraging habitat, but no nesting habitat, is present for marbled murrelet in the BSA. This species has a low potential to occur in the BSA for foraging but is not expected to occur for nesting.

##### **Project Impacts**

Marbled murrelet has a low potential to forage in the BSA. As identified in Table 16, the Project would impact a total of 1.795 acre of suitable foraging habitat for this species

(0.414 acre permanent; 1.391 acre temporary). Approximately 9.268 acres of foraging habitat occurs within the BSA with additional foraging habitat occurring across substantial portions of the BWER. The loss of 1.765 acres of foraging habitat would not jeopardize the persistence of the species if they were found to be present.

**Table 16 – Habitat for the Marbled Murrelet that would be Impacted by the Project**

Habitat Affected	Existing (acres)	Permanent Impact (acres)	Permanent Impact/ Shade (acres)	Temporary Impact (acres)	Total Impact (acres)
Ballona Creek	9.948	0.007	0.731	2.130	<b>2.868</b>

***Avoidance and Minimization Efforts***

With implementation of the Standard Conditions described at the beginning of Chapter 4, no further avoidance or minimization measures would be required for the marbled murrelet.

***Compensatory Mitigation***

The Project is not expected to adversely affect the marbled murrelet with incorporation of the avoidance and minimization measures listed above; therefore, no mitigation would be required.

***Cumulative Impacts***

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect marbled murrelet.

The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable foraging habitat for marbled murrelet (USACE and CDFW 2017). This cumulative project’s impact would represent a temporary decrease of the regional habitat for marbled murrelet. However, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat for marbled murrelet. Like the Project, CDFW would be required to implement avoidance and minimization measures for this species. As a result, CDFW’s Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species.

When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of foraging habitat for marbled murrelet.

**Conclusion**

The Project may affect but not likely adversely affect marbled murrelet.

**4.3.6. Discussion of Swainson’s Hawk (*Buteo swainsoni*)**

**Survey Results**

Limited suitable foraging habitat, but no nesting habitat is present for Swainson’s hawk in the BSA. Therefore, this species has low potential to occur in the BSA for foraging (mainly expected to occur as a vagrant) but it is not expected to nest in the BSA.

**Project Impacts**

Swainson’s hawk has a low potential to forage in the BSA. As identified in Table 17, the Project would impact a total of 5.995 acre of suitable foraging habitat for this species (1.430 acre permanent; 4.565 acre temporary). Approximately 33.941 acres of foraging habitat occurs within the BSA with additional foraging habitat occurring across substantial portions of the larger BWER. The loss of 4.565 acres of foraging habitat would not jeopardize the persistence of the species if they were found to be present.

**Table 17 – Habitat for the Swainson’s Hawk that would be Impacted by the Project**

Vegetation Types and Other Areas	Existing (acres)	Permanent Impact (acres)	Temporary Impact (acres)	Total Impact (acres)
Annual Brome Grassland	0.493	0.015	0.131	<b>0.146</b>
Cudweed Stand	0.874	0.000	0.000	<b>0.000</b>
Hyssop-Leaved Bassia Stand	3.056	0.000	0.952	<b>0.952</b>
Semi-Natural Herbaceous Stand	4.646	0.200	1.564	<b>1.764</b>
Upland Mustards	24.872	1.215	1.918	<b>3.133</b>
<b>Total</b>	<b>33.941</b>	<b>1.430</b>	<b>4.565</b>	<b>5.995</b>

**Avoidance and Minimization Efforts**

Although no Swainson’s hawks were observed during any surveys, and no nesting habitat is expected to occur within the BSA, the Project may affect potential foraging habitat. With implementation of the Standard Conditions described at the beginning of Chapter 4, no further avoidance or minimization measures would be required for Swainson’s hawk.



### **Compensatory Mitigation**

The Project is not expected to adversely affect the Swainson's hawk with incorporation of the avoidance and minimization measures listed above; therefore, no mitigation would be required.

### **Cumulative Impacts**

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect Swainson's hawk.

The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for Swainson's hawk (USACE and CDFW 2017). This cumulative project's impact would represent a temporary decrease of the regional habitat for Swainson's hawk. However, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat for Swainson's hawk. Like the Project, CDFW would be required to implement avoidance and minimization measures for this species and would be required to initiate consultation with USFWS and to obtain an Incidental Take Permit or other approval to proceed with work affecting this species. As a result, CDFW's Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species.

When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for Swainson's hawk.

### **Conclusion**

The Project may affect but not likely adversely affect Swainson's hawk.

#### **4.3.7. Discussion of Western Snowy Plover (*Charadrius alexandrinus nivosus*)**

##### **Survey Results**

Limited suitable foraging habitat, but no nesting habitat is present for western snowy plover in the BSA. Western snowy plover has been documented as a regular migrant and rare winter visitor to the adjacent BWER (CDFW 2017). Therefore, this species has low potential to occur in the BSA for foraging mostly along Ballona Creek but is not expected to occur for nesting.

**Project Impacts**

Western snowy plover has a low potential to forage in the BSA. Although there is foraging habitat within the BSA, there is not any foraging habitat within areas to be impacted (see Table 18). Because the Project would not affect foraging or nesting habitat for the western snowy plover, no direct or indirect impacts are anticipated. The Project would have no effect on western snowy plover.

**Table 18 – Habitat for the Western Snowy Plover that would be Impacted by the Project**

Vegetation Types and Other Areas	Existing (acres)	Permanent Impact (acres)	Temporary Impact (acres)	Total Impact (acres)
Alkali Weed Playa	1.108	0.000	0.000	<b>0.000</b>
Pickleweed Mat	1.196	0.000	0.000	<b>0.000</b>
<b>Total</b>	<b>1.108</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>

**Avoidance and Minimization Efforts**

Because there would be no impact on foraging or nesting habitat for the western snowy plover, no avoidance or minimization efforts are required.

**Compensatory Mitigation**

Western snowy plover was not observed and foraging and nesting habitat will not be affected; therefore, no compensatory mitigation is proposed.

**Cumulative Impacts**

Given that the Project would not affect foraging habitat and not have an adverse effect on western snowy plover, the Project does not have potential to contribute to cumulative impacts related to this species.

**Conclusion**

The Project may affect but not likely adversely affect western snowy plover.

**4.3.8. Discussion of Western Yellow-Billed Cuckoo (*Coccyzus americanus occidentalis*)**

**Survey Results**

Suitable foraging habitat, but no nesting habitat, is present for western yellow-billed cuckoo in the BSA. This species was not observed during general surveys of the BSA. Western yellow-billed cuckoo has a low potential to occur in the BSA for foraging (mainly expected to occur as a vagrant), though it is not expected to occur for nesting.

**Project Impacts**

Western yellow-billed cuckoo has a low potential to forage in the BSA. As identified in Table 19, the Project would permanently impact a total of 0.286 acre of marginally suitable foraging habitat for this species. Approximately 2.724 acres of marginal foraging habitat occurs within the BSA with additional foraging habitat occurring across portions of the BWER. The permanent loss of 0.286 acres of foraging habitat would not jeopardize the persistence of the species if they were found to be present as vagrants.

**Table 19 – Habitat for the Western Yellow-Billed Cuckoo that would be Impacted by the Project**

Vegetation Types and Other Areas	Existing (acres)	Permanent Impact (acres)	Temporary Impact (acres)	Total Impact (acres)
Arroyo Willow Thicket	2.039	0.286	0.000	<b>0.286</b>
Mulefat Thicket	0.685	0.000	0.000	<b>0.000</b>
Total	2.724	0.286	0.000	<b>0.286</b>

**Avoidance and Minimization Efforts**

Although no western yellow-billed cuckoo were observed during any surveys, and no nesting habitat is expected to occur within the BSA, the Project may affect potential foraging habitat. With implementation of the Standard Conditions described at the beginning of Chapter 4, no further avoidance or minimization measures would be required for western yellow-billed cuckoo.

**Compensatory Mitigation**

The Project is not expected to adversely affect the western yellow-billed cuckoo with incorporation of the avoidance and minimization measures listed above; therefore, no mitigation would be required.

**Cumulative Impacts**

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect western yellow-billed cuckoo.

The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for western yellow-billed cuckoo (USACE and CDFW 2017). This cumulative project’s impact would represent a temporary decrease of the regional habitat for western yellow-billed cuckoo. However, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat for

western yellow-billed cuckoo. Like the Project, CDFW would be required to implement avoidance and minimization measures for this species and would be required to initiate consultation with USFWS and to obtain an Incidental Take Permit or other approval to proceed with work affecting this species. As a result, CDFW's Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species.

When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for western yellow-billed cuckoo.

### **Conclusion**

The Project may affect but not likely adversely affect western yellow-billed cuckoo.

#### **4.3.9. Discussion of Southwestern Willow Flycatcher (*Empidonax traillii extimus*)**

##### **Survey Results**

Suitable foraging habitat, but no nesting habitat, is present for southwestern willow flycatcher in the BSA. This species was not observed during general surveys of the BSA and is not known to nest in the area. Southwestern willow flycatcher has a low potential to occur in the BSA for foraging and only with potential to occur as a migrant. Suitable nesting habitat requires riparian forests that are both taller and wider than the arroyo willow thicket present onsite, subsequently, no suitable nesting habitat is present and southwestern willow flycatcher is not expected to occur for nesting.

##### **Project Impacts**

Southwestern willow flycatcher has a low potential to forage in the BSA. As identified in Table 20, the Project would permanently impact a total of 0.286 acre of suitable foraging habitat for this species. Approximately 2.724 acres of foraging habitat occurs within the BSA with additional foraging habitat occurring across substantial portions of the BWER. The loss of 0.286 acres of foraging habitat (approximately seven percent of similar habitat in the BSA) would not jeopardize the persistence of the species onsite if they were found to be present and any potential impacts would not be adverse.

**Table 20 – Habitat for the Southwestern Willow Flycatcher that would be Impacted by the Project**

Vegetation Types and Other Areas	Existing (acres)	Permanent Impact (acres)	Temporary Impact (acres)	Total Impact (acres)
Arroyo Willow Thicket	2.039	0.286	0.000	<b>0.286</b>
Mulefat Thicket	0.685	0.000	0.000	<b>0.000</b>
<b>Total</b>	<b>2.724</b>	<b>0.286</b>	<b>0.000</b>	<b>0.286</b>

***Avoidance and Minimization Efforts***

Although no southwestern willow flycatcher were observed during any surveys, and no nesting habitat is expected to occur within the BSA, the Project may affect potential foraging habitat. With implementation of the Standard Conditions described at the beginning of Chapter 4, no further avoidance or minimization measures would be required for southwestern willow flycatcher.

***Compensatory Mitigation***

The Project is not expected to adversely affect the southwestern willow flycatcher with incorporation of the avoidance and minimization measures listed above; therefore, no mitigation would be required.

***Cumulative Impacts***

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect southwestern willow flycatcher.

The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for southwestern willow flycatcher (USACE and CDFW 2017). This cumulative project’s impact would represent a temporary decrease of the regional habitat for southwestern willow flycatcher. However, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat for southwestern willow flycatcher. Like the Project, CDFW would be required to implement avoidance and minimization measures for this species and would be required to initiate consultation with USFWS and to obtain an Incidental Take Permit or other approval to proceed with work affecting this species. As a result, CDFW’s Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species.

When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for southwestern willow flycatcher.

**Conclusion**

The Project may affect but not likely adversely affect southwestern willow flycatcher.

**4.3.10. Discussion of Greater Sandhill Crane (*Grus canadensis tabida*)**

**Survey Results**

Suitable foraging, but no suitable nesting habitat is present for greater sandhill crane in the BSA. Therefore, this species may occur in the BSA for foraging, but it is not expected to occur for nesting. It is not currently known to breed in the vicinity and believed to nest in northeastern California.

**Project Impacts**

Greater sandhill crane has a low potential to forage in the BSA. As identified in Table 21, the Project would temporary impact a total of 0.002 acre of suitable foraging habitat for this species. Approximately 5.988 acres of foraging habitat occurs within the BSA with additional foraging habitat occurring across substantial portions of the BWER. The loss of 0.002 acres of foraging habitat would not jeopardize the persistence of the species onsite if they were found to be present and any potential impacts would not be adverse.

**Table 21 – Habitat for the Greater Sandhill Crane that would be Impacted by the Project**

Vegetation Types and Other Areas	Existing (acres)	Permanent Impact (acres)	Temporary Impact (acres)	Total Impact (acres)
Alkali Weed Playa	1.108	0.000	0.000	<b>0.000</b>
Annual Beard Grass-Bristly Ox-tongue Grassland	2.682	0.000	0.000	<b>0.000</b>
California Bulrush Marsh	0.689	0.000	0.002	<b>0.002</b>
Cattail Marsh	0.313	0.000	0.000	<b>0.000</b>
Pickleweed Mat	1.196	0.000	0.000	<b>0.000</b>
<b>Total</b>	<b>5.988</b>	<b>0.000</b>	<b>0.002</b>	<b>0.002</b>

**Avoidance and Minimization Efforts**

Although no greater sandhill crane were observed during any surveys, and no nesting habitat is expected to occur within the BSA, the Project may affect potential foraging habitat. With implementation of the Standard Conditions described at the beginning of

Chapter 4, no further avoidance or minimization measures would be required for greater sandhill.

### **Compensatory Mitigation**

The Project is not expected to adversely affect the greater sandhill crane with incorporation of the avoidance and minimization measures listed above; therefore, no mitigation would be required.

If this species is observed nesting within the impact area and take is anticipated, the City will obtain an Incidental Take Permit or a Consistency Determination from CDFW to address effects to the greater sandhill crane. The consultation shall confirm that the avoidance and minimization measures listed above are sufficient to protect this species from potential effects. Otherwise, additional mitigation may be required by CDFW through the permitting process.

### **Cumulative Impacts**

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect greater sandhill crane.

The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for greater sandhill crane (USACE and CDFW 2017). This cumulative project's impact would represent a temporary decrease of the regional habitat for greater sandhill crane. However, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat for greater sandhill crane. Like the Project, CDFW would be required to implement avoidance and minimization measures for this species, and species and would be required to initiate consultation with USFWS and to obtain an Incidental Take Permit or other approval to proceed with work affecting this species. As a result, CDFW's Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species.

When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for greater sandhill crane.

### **Conclusion**

The Project may affect but not likely adversely affect greater sandhill crane.

#### **4.3.11. Discussion of Bald Eagle (*Haliaeetus leucocephalus*)**

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

Limited suitable foraging, but no suitable nesting habitat is present for bald eagle in the BSA. Therefore, this species has a low potential to occur in the BSA for foraging as a vagrant and wintering, but it is not expected to occur for nesting.

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

Bald eagle has a low potential to forage and winter in the BSA. As identified in Table 22, the Project would impact a total of 11.014 acre of suitable foraging and overwintering habitat for this species (3.017 acre permanent; 0.731 acre permanent shade; and 7.663 acre temporary). Approximately 76 acres of foraging habitat occurs within the BSA with additional foraging habitat occurring across substantial portions of the BWER. The loss of 11.014 acres of foraging habitat would not jeopardize the persistence of the species onsite if they were found to be present and any potential impacts would not be adverse.



**Table 22 – Habitat for the Bald Eagle that would be Impacted by the Project**

<b>Vegetation Types and Other Areas</b>	<b>Existing (acres)</b>	<b>Permanent Impact (acres)</b>	<b>Shade Impact (acres)</b>	<b>Temporary Impact (acres)</b>	<b>Total Impact (acres)</b>
California Sagebrush Scrub	3.533	0.835	0.000	0.381	<b>1.216</b>
Coyote Brush Scrub	4.485	0.042	0.000	0.248	<b>0.290</b>
Degraded Coyote Brush Scrub	2.637	0.000	0.000	0.000	<b>0.000</b>
Laurel Sumac Scrub	1.265	0.000	0.000	0.000	<b>0.000</b>
Menzies’s Golden Bush Scrub	2.158	0.016	0.000	0.297	<b>0.313</b>
Quailbush Scrub	4.145	0.004	0.000	0.031	<b>0.035</b>
Annual Brome Grassland	0.493	0.015	0.000	0.131	<b>0.146</b>
Cudweed Stand	0.874	0.000	0.000	0.000	<b>0.000</b>
Hyssop-Leaved Bassia Stand	3.056	0.000	0.000	0.952	<b>0.952</b>
Semi-Natural Herbaceous Stand	4.646	0.200	0.000	1.564	<b>1.764</b>
Upland Mustards	24.872	1.215	0.000	1.918	<b>3.133</b>
Alkali Weed Playa	1.108	0.000	0.000	0.000	<b>0.000</b>
Annual Beard Grass-Bristly Ox-tongue Grassland	2.682	0.000	0.000	0.000	<b>0.000</b>
California Bulrush Marsh	0.689	0.000	0.000	0.002	<b>0.002</b>
Cattail Marsh	0.313	0.000	0.000	0.000	<b>0.000</b>
Pickleweed Mat	1.196	0.000	0.000	0.000	<b>0.000</b>
Arroyo Willow Thicket	2.039	0.286	0.000	0.000	<b>0.286</b>
Mulefat Thicket	0.685	0.000	0.000	0.000	<b>0.000</b>
Open Water	9.268	0.007	0.731*	2.130	<b>2.868</b>
Parks and Landscaping	5.650	0.000	0.000	0.009	<b>0.009</b>
<b>Total</b>	<b>75.794</b>	<b>3.017</b>	<b>0.731*</b>	<b>7.663</b>	<b>11.014</b>

\* This impact represents the footprint of the new bridge over open water. The area will also be temporarily impacted for construction access. There will be no permanent loss of open water in this area.

**Avoidance and Minimization Efforts**

Although no bald eagles were observed during any surveys, and no nesting habitat is expected to occur within the BSA, the Project may affect potential foraging habitat. With implementation of the Standard Conditions described at the beginning of Chapter 4, no further avoidance or minimization measures would be required for the bald eagle.

**Compensatory Mitigation**

The Project is not expected to adversely affect the bald eagle with incorporation of the avoidance and minimization measures listed above; therefore, no mitigation would be required.

If this species is observed nesting within the impact area and take is anticipated, the City will obtain an Incidental Take Permit or a Consistency Determination from CDFW to address effects to the bald eagle. The consultation shall confirm that the avoidance and

minimization measures listed above are sufficient to protect this species from potential effects. Otherwise, additional mitigation may be required by CDFW through the permitting process.

### **Cumulative Impacts**

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect bald eagle.

The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for bald eagle (USACE and CDFW 2017). This cumulative project's impact would represent a temporary decrease of the regional habitat for bald eagle. However, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat for bald eagle. Like the Project, CDFW would be required to implement avoidance and minimization measures for this species and would be required to initiate consultation with USFWS and to obtain an Incidental Take Permit or other approval to proceed with work affecting this species. As a result, CDFW's Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species.

When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for bald eagle.

### **Conclusion**

The Project may affect but not likely adversely affect bald eagle.

#### **4.3.12. Discussion of California Black Rail (*Laterallus jamaicensis corturniculus*)**

##### **Survey Results**

Limited suitable foraging, but no suitable nesting habitat is present for California black rail in the BSA. Therefore, this species has a low potential to occur in the BSA for foraging as a vagrant and wintering, but it is not expected to occur for nesting.

##### **Project Impacts**

California black rail has a low potential to forage in the BSA, mainly expected to occur as a vagrant. As identified in Table 23, the Project would temporarily impact a total of 0.002 acre of suitable foraging habitat for this species. Approximately 6 acres of foraging

habitat occurs within the BSA with additional foraging habitat occurring across substantial portions of the BWER. The loss of 0.002 acres of foraging habitat would not jeopardize the persistence of the species onsite if they were found to be present and any potential impacts would not be adverse.

**Table 23 – Habitat for the California Black Rail that would be Impacted by the Project**

<b>Vegetation Types and Other Areas</b>	<b>Existing (acres)</b>	<b>Permanent Impact (acres)</b>	<b>Temporary Impact (acres)</b>	<b>Total Impact (acres)</b>
Alkali Weed Playa	1.108	0.000	0.000	<b>0.000</b>
Annual Beard Grass-Bristly Ox-tongue Grassland	2.682	0.000	0.000	<b>0.000</b>
California Bulrush Marsh	0.689	0.000	0.002	<b>0.002</b>
Cattail Marsh	0.313	0.000	0.000	<b>0.000</b>
Pickleweed Mat	1.196	0.000	0.000	<b>0.000</b>
<b>Total</b>	<b>5.988</b>	<b>0.000</b>	<b>0.002</b>	<b>0.002</b>

***Avoidance and Minimization Efforts***

Although no California black rail were observed during any surveys, and no nesting habitat is expected to occur within the BSA, the Project may affect potential foraging habitat. With implementation of the Standard Conditions described at the beginning of Chapter 4, no further avoidance or minimization measures would be required for the California black rail.

***Compensatory Mitigation***

The Project is not expected to adversely affect the California black rail with incorporation of the avoidance and minimization measures listed above; therefore, no mitigation would be required.

***Cumulative Impacts***

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the California black rail.

The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for the California black rail (USACE and CDFW 2017). This cumulative project’s impact would represent a temporary decrease of the regional habitat for the California black rail. However, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat for the California

black rail. Like the Project, CDFW would be required to implement avoidance and minimization measures for this species and would be required to initiate consultation with CDFW to proceed with work affecting this species. As a result, CDFW's Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species.

When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the California black rail.

### **Conclusion**

The Project may affect but not likely adversely affect California black rail.

#### **4.3.13. Discussion of Belding's Savannah Sparrow (*Passerculus sandwichensis beldingi*)**

##### **Survey Results**

Suitable foraging and nesting habitat for Belding's savannah sparrow is located in the BSA. Therefore, this species has a high potential to occur in the BSA for foraging and nesting. This species was observed breeding nearby during surveys of the BWER (USACE and CDFW 2017).

##### **Project Impacts**

Belding's savannah sparrow has a high potential to forage and nest in the BSA. As identified in Table 24, the Project would not directly impact nesting habitat for this species. Because the Project would not directly affect nesting or foraging habitat for the Belding's savannah sparrow, no direct impacts are anticipated. Construction related impacts, such as noise, may indirectly impact the species and activities affecting the species' nesting activities would likely be adverse.

**Table 24 – Habitat for the Belding’s Savannah Sparrow that would be Impacted by the Project**

Vegetation Types and Other Areas	Existing (acres)	Permanent Impact (acres)	Temporary Impact (acres)	Total Impact (acres)
Alkali Weed Playa	1.108	0.000	0.000	<b>0.000</b>
Pickleweed Mat	1.196	0.000	0.000	<b>0.000</b>
<b>Total</b>	<b>2.304</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>

***Avoidance and Minimization Efforts***

With implementation of the Standard Conditions described at the beginning of Chapter 4, no further avoidance or minimization measures would be required for the Belding’s savannah sparrow.

***Compensatory Mitigation***

The Project is not expected to adversely affect the Belding’s savannah sparrow with incorporation of the avoidance and minimization measures listed above; therefore, no additional mitigation would be required.

If this species is observed nesting adjacent to the impact area and take is anticipated, the City will obtain an Incidental Take Permit or a Consistency Determination from CDFW to address effects to the Belding’s savannah sparrow. The consultation shall confirm that the avoidance and minimization measures listed above are sufficient to protect this species from potential effects. Otherwise, additional mitigation may be required by CDFW through the permitting process.

***Cumulative Impacts***

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the Belding’s savannah sparrow.

Cumulative impacts to this species may occur through the loss and degradation of potential foraging habitat along the Project; however, this small amount of habitat to be impacted and the abundance of higher quality suitable habitat located in the vicinity of the BSA is not expected to impact habitat more than incrementally. The Ballona Wetland Restoration Project would permanently impact approximately one acre of occupied habitat (outside of nesting season) for this species but would ultimately add approximately 70 acres of nesting habitat to the BWER.

When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the Belding’s savannah sparrow.

**Conclusion**

The Project may affect but not likely adversely affect Belding’s savannah sparrow.

**4.3.14. Discussion of Coastal California Gnatcatcher (*Polioptila californica californica*)**

**Survey Results**

Protocol surveys for coastal California gnatcatcher were conducted in potentially suitable coastal sage scrub habitats in the BSA between April 6 and May 30, 2017 (Appendix F; Table 1). The results of the surveys indicate that coastal California gnatcatcher did not occupy any of the coastal sage scrub habitats within the BSA. Coastal California gnatcatcher has a moderate potential to forage and a low potential to nest in the BSA based on the results of the previous focused surveys.

**Project Impacts**

Coastal California gnatcatcher has a moderate potential to forage and a low potential to nest in the BSA. As identified in Table 25, the Project would impact a total of 1.854 acre of suitable foraging and nesting habitat for this species (0.897 acre permanent; 0.957 acre temporary). Approximately 18.250 acres of foraging habitat occurs within the BSA with additional foraging habitat occurring across substantial portions of the BWER. The loss of 1.854 acres of foraging habitat would not jeopardize the persistence of the species onsite if they were found to be present and any potential impacts would not be adverse. Construction related impacts, such as noise, may indirectly impact the species and activities affecting the species’ nesting activities would likely be adverse.

**Table 25 – Habitat for the Coastal California Gnatcatcher that would be Impacted by the Project**

<b>Vegetation Types and Other Areas</b>	<b>Existing (acres)</b>	<b>Permanent Impact (acres)</b>	<b>Temporary Impact (acres)</b>	<b>Total Impact (acres)</b>
California Sagebrush Scrub	3.533	0.835	0.381	<b>1.216</b>
Coyote Brush Scrub	4.485	0.042	0.248	<b>0.290</b>
Degraded Coyote Brush Scrub	2.637	0.000	0.000	<b>0.000</b>
Laurel Sumac Scrub	1.265	0.000	0.000	<b>0.000</b>
Menzies’s Golden Bush Scrub	2.185	0.016	0.297	<b>0.313</b>
Quailbush Scrub	4.145	0.004	0.031	<b>0.035</b>
<b>Total</b>	<b>18.250</b>	<b>0.897</b>	<b>0.957</b>	<b>1.854</b>

### **Avoidance and Minimization Efforts**

With implementation of the Standard Conditions described at the beginning of Chapter 4, no further avoidance or minimization measures would be required for the coastal California gnatcatcher.

### **Compensatory Mitigation**

The Project is not expected to adversely affect the coastal California gnatcatcher with incorporation of the avoidance and minimization measures listed above; therefore, no mitigation would be required.

If this species is observed nesting within the impact area and take is anticipated, Caltrans, on behalf of the FHWA, will undertake Section 7 consultation with the USFWS and the City will obtain an Incidental Take Permit or a Consistency Determination from CDFW to address effects to the coastal California gnatcatcher. The consultation shall confirm that the avoidance and minimization measures listed above are sufficient to protect this species from potential effects. Otherwise, additional mitigation may be required by USFWS and CDFW through the permitting process.

### **Cumulative Impacts**

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the coastal California gnatcatcher.

The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for the coastal California gnatcatcher (USACE and CDFW 2017). This cumulative project's impact would represent a temporary decrease of the regional habitat for the coastal California gnatcatcher. However, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat for the coastal California gnatcatcher. Like the Project, CDFW would be required to implement avoidance and minimization measures for this species and would be required to initiate consultation with USFWS and to obtain an Incidental Take Permit or other approval to proceed with work affecting this species. As a result, CDFW's Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species.

When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the coastal California gnatcatcher.

**Conclusion**

The Project may affect but not likely adversely affect coastal California gnatcatcher.

**4.3.15. Discussion of Light-Footed Ridgway’s Rail (*Rallus obsoletus levipes*)**

**Survey Results**

Limited suitable foraging, but no suitable nesting habitat is present for light-footed Ridgway’s rail in the BSA. Therefore, this species has a low potential to occur in the BSA for foraging, but it is not expected to occur for nesting. It is presumed extirpated as a breeder from the county (Garret and Dunn 1981; Allen, Garret, and Wimer 2016).

**Project Impacts**

Light-footed Ridgway’s rail has a low potential to forage in the BSA. As identified in Table 26, the Project would temporarily impact a total of 0.002 acre of suitable foraging habitat for this species. Approximately 5.988 acres of foraging habitat occurs within the BSA with additional foraging habitat occurring across substantial portions of the BWER. The loss of 0.002 acres of foraging habitat would not jeopardize the persistence of the species onsite if they were found to be present.

**Table 26 – Habitat for the Light-Footed Ridgway’s Rail that would be Impacted by the Project**

Vegetation Types and Other Areas	Existing (acres)	Permanent Impact (acres)	Temporary Impact (acres)	Total Impact (acres)
Alkali Weed Playa	1.108	0.000	0.000	<b>0.000</b>
Annual Beard Grass-Bristly Ox-tongue Grassland	2.682	0.000	0.000	<b>0.000</b>
California Bulrush Marsh	0.689	0.000	0.002	<b>0.002</b>
Cattail Marsh	0.313	0.000	0.000	<b>0.000</b>
Pickleweed Mat	1.196	0.000	0.000	<b>0.000</b>
<b>Total</b>	<b>5.988</b>	<b>0.000</b>	<b>0.002</b>	<b>0.002</b>

**Avoidance and Minimization Efforts**

Although no light-footed Ridgway’s rail were observed during any surveys, and no nesting habitat is expected to occur within the BSA, the Project may affect potential foraging habitat. With implementation of the Standard Conditions described at the beginning of Chapter 4, no further avoidance or minimization measures would be required for the light-footed clapper rail.



### **Compensatory Mitigation**

The Project is not expected to adversely affect the light-footed Ridgway's rail with incorporation of the avoidance and minimization measures listed above; therefore, no mitigation would be required.

If this species is observed nesting within the impact area and take is anticipated, the City will undertake Section 7 consultation with USFWS and obtain an Incidental Take Permit or a Consistency Determination from CDFW to address effects to the light-footed Ridgway's rail. The consultation shall confirm that the avoidance and minimization measures listed above are sufficient to protect this species from potential effects. Otherwise, additional mitigation may be required by USFWS and CDFW through the permitting process.

### **Cumulative Impacts**

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the light-footed Ridgway's rail .

The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for the light-footed Ridgway's rail (USACE and CDFW 2017). This cumulative project's impact would represent a temporary decrease of the regional habitat for the light-footed Ridgway's rail. However, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat for the light-footed Ridgway's rail. Like the Project, CDFW would be required to implement avoidance and minimization measures for this species and would be required to initiate consultation with USFWS and to obtain an Incidental Take Permit or other approval to proceed with work affecting this species. As a result, CDFW's Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species.

When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the light-footed Ridgway's rail.

### **Conclusion**

The Project may affect but not likely adversely affect light-footed Ridgway's rail.

**4.3.16. Discussion of Bank Swallow (*Riparia riparia*)**

**Survey Results**

Suitable foraging, but no suitable nesting habitat is present for bank swallow in the BSA. Therefore, this species has a low potential to occur in the BSA for foraging as a migrant, but it is not expected to occur for nesting.

**Project Impacts**

Bank swallow has a low potential to forage in the BSA. As identified in Table 27, the Project would impact a total of 3.156 acres of suitable foraging habitat for this species (0.293 acre permanent; 0.731 acres of permanent shade; and 2.132 acre temporary). Approximately 17.980 acres of foraging habitat occurs within the BSA with additional foraging habitat occurring across substantial portions of the BWER. The loss of 3.156 acres of foraging habitat would not jeopardize the persistence of the species onsite if they were found to be present.

**Table 27 – Habitat for the Bank Swallow that would be Impacted by the Project**

Vegetation Types and Other Areas	Existing (acres)	Permanent Impact (acres)	Shade Impact (acres)	Temporary Impact (acres)	Total Impact (acres)
Alkali Weed Playa	1.108	0.000	0.000	0.000	<b>0.000</b>
Annual Beard Grass-Bristly Ox-tongue Grassland	2.682	0.000	0.000	0.000	<b>0.000</b>
California Bulrush Marsh	0.689	0.000	0.000	0.002	<b>0.002</b>
Cattail Marsh	0.313	0.000	0.000	0.000	<b>0.000</b>
Pickleweed Mat	1.196	0.000	0.000	0.000	<b>0.000</b>
Arroyo Willow Thicket	2.039	0.286	0.000	0.000	<b>0.286</b>
Mulefat Thicket	0.685	0.000	0.000	0.000	<b>0.000</b>
Open Water	9.268	0.007	0.731*	2.130	<b>2.868</b>
<b>Total</b>	<b>17.980</b>	<b>0.293</b>	<b>0.731*</b>	<b>2.132</b>	<b>3.156</b>

\* This impact represents the footprint of the new bridge over open water. The area will also be temporarily impacted for construction access. There will be no permanent loss of open water in this area.

**Avoidance and Minimization Efforts**

With implementation of the Standard Conditions described at the beginning of Chapter 4, no further avoidance or minimization measures would be required for the bank swallow.

**Compensatory Mitigation**

The Project is not expected to adversely affect the bank swallow with incorporation of the avoidance and minimization measures listed above; therefore, no mitigation would be required.

### **Cumulative Impacts**

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the bank swallow.

The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for the bank swallow (USACE and CDFW 2017). This cumulative project's impact would represent a temporary decrease of the regional habitat for the bank swallow. However, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat for the bank swallow. Like the Project, CDFW would be required to implement avoidance and minimization measures for this species and would be required to initiate consultation with USFWS and to obtain an Incidental Take Permit or other approval to proceed with work affecting this species. As a result, CDFW's Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species.

When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the bank swallow.

### **Conclusion**

The Project may affect but not likely adversely affect bank swallow.

#### **4.3.17. Discussion of California Least Tern (*Sternula antillarum browni*)**

##### **Survey Results**

Suitable foraging, but no suitable nesting habitat is present for California least tern in the BSA. This species was not observed during general surveys of the BSA; however, this species has a high potential to occur in the BSA for foraging but is not expected to occur for nesting.

##### **Project Impacts**

California least tern has a high potential to forage in the BSA. As identified in Table 28, the Project would impact a total of 2.868 acre of suitable foraging habitat for this species (0.007 acre permanent; 0.731 acre temporary). The Project effects to the species' foraging habitat is not adverse because the Project would result in a minimal loss of

suitable habitat relative to the amount available along Ballona Creek and within the BWER.

**Table 28 – Habitat for the California Least Tern that would be Impacted by the Project**

Habitat Affected	Existing (acres)	Permanent Impact (acres)	Permanent Impact/ Shade (acres)	Temporary Impact (acres)	Total Impact (acres)
Ballona Creek	9.948	0.007	0.731	2.130	<b>2.868</b>

***Avoidance and Minimization Efforts***

Although no California least tern were observed during any surveys, and no nesting habitat is expected to occur within the BSA, the Project may affect potential foraging habitat. With implementation of the Standard Conditions described at the beginning of Chapter 4, no further avoidance or minimization measures would be required for the California least tern.

***Compensatory Mitigation***

The Project is not expected to adversely affect the California least tern with incorporation of the avoidance and minimization measures listed above; therefore, no mitigation would be required.

***Cumulative Impacts***

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the California least tern.

The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for the California least tern (USACE and CDFW 2017). This cumulative project’s impact would represent a temporary decrease of the regional habitat for the California least tern. However, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat for the California least tern. Like the Project, CDFW would be required to implement avoidance and minimization measures for this species and would be required to initiate consultation with USFWS and to obtain an Incidental Take Permit or other approval to proceed with work affecting this species. As a result, CDFW’s Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species.

When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the California least tern.

### **Conclusion**

The Project may affect but not likely adversely affect California least tern.

### **4.3.18. Discussion of Least Bell's Vireo (*Vireo bellii pusillus*)**

#### **Survey Results**

Protocol surveys for least Bell's vireo were conducted in potentially suitable riparian habitats in the BSA between April 13 and July 14, 2017 (Appendix F; Table 2). One male least Bell's vireo was detected in the BSA during focused surveys in the arroyo willow thicket vegetation located in the southern portion of the survey area during the first four focused surveys (Figure 7). However, no least Bell's vireos were observed or detected during the last four focused surveys. The results of the surveys indicate that no least Bell's vireo nesting occurred during the previous survey and that the individual observed was not a permanent resident within the BSA. Subsequently, least Bell's vireo has a high potential to forage but a moderate potential to nest in the BSA. Additional focused surveys for least Bell's vireo are being conducted within the project site in the 2024 survey season. Information on the results of these surveys will be provided along with the Final EIR/EA.

#### **Project Impacts**

Least Bell's vireo was observed during focused surveys in the BSA. As identified in Table 29, the Project would permanently impact a total of 0.286 acre of suitable foraging and nesting habitat for this species. Approximately 2.724 acres of foraging habitat occurs within the BSA with additional foraging habitat occurring across substantial portions of the BWER. The loss of 0.286 acres of foraging habitat would not jeopardize the persistence of the species onsite if it were determined to have established an onsite territory; however, direct impacts have potential to occur.

**Table 29 – Habitat for the Least Bell’s Vireo that would be Impacted by the Project**

<b>Vegetation Types and Other Areas</b>	<b>Existing (acres)</b>	<b>Permanent Impact (acres)</b>	<b>Temporary Impact (acres)</b>	<b>Total Impact (acres)</b>
Arroyo Willow Thicket	2.039	0.286	0.000	<b>0.286</b>
Mulefat Thicket	0.685	0.000	0.000	<b>0.000</b>
<b>Total</b>	<b>2.724</b>	<b>0.286</b>	<b>0.000</b>	<b>0.286</b>

***Avoidance and Minimization Efforts***

With implementation of the Standard Conditions described at the beginning of Chapter 4, no further avoidance or minimization measures would be required for the least Bell’s vireo.

***Compensatory Mitigation***

The Project is not expected to adversely affect the least Bell’s vireo with incorporation of the avoidance and minimization efforts listed above; therefore, no mitigation would be required.

If this species is observed nesting within the impact area or take is anticipated, Caltrans, on behalf of FHWA, will notify the USFWS during the Section 7 consultation. Further, the City will obtain an Incidental Take Permit or a Consistency Determination from CDFW to address effects to the least Bell’s vireo. The consultation shall confirm that the avoidance and minimization measures listed above are sufficient to protect this species from potential effects. Otherwise, additional mitigation may be required by USFWS and CDFW through the permitting process.

***Cumulative Impacts***

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the least Bell’s vireo.

The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for the least Bell’s vireo (USACE and CDFW 2017). This cumulative project’s impact would represent a temporary decrease of the regional habitat for the least Bell’s vireo. However, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat for the least Bell’s vireo. Like the Project, CDFW would be required to implement avoidance and minimization measures for this species and would be required to initiate consultation with

USFWS and to obtain an Incidental Take Permit or other approval to proceed with work affecting this species. As a result, CDFW’s Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species.

When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the least Bell’s vireo.

**Conclusion**

The Project may affect but not likely adversely affect least Bell’s vireo.

**4.4. Discussion of Non-Listed Species**

**4.4.1. Discussion of Busck’s Gallmoth (*Carolella busckana*)**

**Survey Results**

Suitable habitat for the Busck’s gallmoth occurs in the BSA. This species was not observed during general surveys of the BSA and during invertebrate surveys of the BWER (USACE and CDFW 2017); therefore, this species has a low potential to occur in the BSA.

**Project Impacts**

Busck’s gallmoth has a low potential in the BSA. As identified in Table 31, the Project would impact a total of 1.854 acre of suitable habitat for this species (0.897 acre permanent; 0.957 acre temporary). Project effects would not adversely affect the regional populations because if the species had since become present onsite, the Project would not likely reduce populations below self-sustaining levels on a regional scale.

**Table 30 – Habitat for the Busck’s Gallmoth that would be Impacted by the Project**

Vegetation Types and Other Areas	Existing (acres)	Permanent Impact (acres)	Temporary Impact (acres)	Total Impact (acres)
California Sagebrush Scrub	3.533	0.835	0.381	<b>1.216</b>
Coyote Brush Scrub	4.485	0.042	0.248	<b>0.290</b>
Degraded Coyote Brush Scrub	2.637	0.000	0.000	<b>0.000</b>
Laurel Sumac Scrub	1.265	0.000	0.000	<b>0.000</b>
Menzies’s Golden Bush Scrub	2.158	0.016	0.297	<b>0.313</b>
Quailbush Scrub	4.145	0.004	0.031	<b>0.035</b>
<b>Total</b>	<b>18.223</b>	<b>0.897</b>	<b>0.957</b>	<b>1.854</b>

### **Avoidance and Minimization Efforts**

No avoidance and minimization efforts would be necessary.

### **Compensatory Mitigation**

Impacts may occur but not be adverse in the BSA; therefore, no mitigation would be required.

### **Cumulative Impacts**

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the species. The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for the species (USACE and CDFW 2017). This cumulative project's impact would represent a temporary decrease of the regional habitat; however, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat. As a result, CDFW's Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species. When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the species.

### **Conclusion**

The Project may affect but not likely adversely affect Busck's gallmoth.

#### **4.4.2. Discussion of Western Tidal-Flat Tiger Beetle (*Cicindela gabbii*), Sandy Beach Tiger Beetle (*Cicindela hirticollis gravida*) and Senile Tiger Beetle (*Cicindela senilis frosti*)**

### **Survey Results**

Suitable habitat for the western tidal-flat tiger beetle, sandy beach tiger beetle, and senile tiger beetle occurs in the BSA. These species were not observed during general surveys of the BSA and all reported CNDDDB occurrences are believed to be extirpated (CDFW 2022a). Therefore, these species have a low potential to occur in the BSA.

### **Project Impacts**

Western tidal-flat tiger beetle, sandy beach tiger beetle, and senile tiger beetle have low potential to occur in the BSA. As identified in Table 31, the Project would temporarily impact a total of 0.002 acres of suitable habitat for these species. The Project would not



adversely affect the regional populations because the Project would result in a minimal loss of suitable habitat relative to the amount available within the BSA.

**Table 31 – Habitat for the Tidal-Flat Tiger Beetle, Sandy Beach Tiger Beetle and Senile Tiger Beetle that would be Impacted by the Project**

Vegetation Types and Other Areas	Existing (acres)	Permanent Impact (acres)	Temporary Impact (acres)	Total Impact (acres)
Alkali Weed Playa	1.108	0.000	0.000	<b>0.000</b>
Annual Beard Grass-Bristly Ox-Tongue Grassland	2.682	0.000	0.000	<b>0.000</b>
California Bulrush Marsh	0.689	0.000	0.002	<b>0.002</b>
Cattail Marsh	0.313	0.000	0.000	<b>0.000</b>
Pickleweed Mat	1.196	0.000	0.000	<b>0.000</b>
<b>Total</b>	<b>5.988</b>	<b>0.000</b>	<b>0.002</b>	<b>0.002</b>

***Avoidance and Minimization Efforts***

No avoidance and minimization efforts would be necessary.

***Compensatory Mitigation***

Impacts may occur but would not be adverse in the BSA; therefore, no mitigation would be required.

***Cumulative Impacts***

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the species. The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for the species (USACE and CDFW 2017). This cumulative project’s impact would represent a temporary decrease of the regional habitat; however, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat. As a result, CDFW’s Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species. When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the species.

**Conclusion**

The Project may affect but not likely adversely affect western tidal-flat tiger beetle, sandy beach tiger beetle, and senile tiger beetle.

**4.4.3. Discussion of Wandering (Saltmarsh) Skipper (*Panoquina errans*)**

**Survey Results**

Suitable habitat for the wandering (saltmarsh) skipper occurs in the BSA and this species has been reported at Ballona Wetlands, just west of the BSA (CDFW 2019a). Therefore, this species has a high potential to occur in the BSA.

**Project Impacts**

Wandering (saltmarsh) skipper has high potential to occur in the BSA. As identified in Table 32, the Project would temporarily impact a total of 0.002 acre of suitable habitat for this species.

**Table 32 – Habitat for the Wandering (Saltmarsh) Skipper that would be Impacted by the Project**

Vegetation Types and Other Areas	Existing (acres)	Permanent Impact (acres)	Temporary Impact (acres)	Total Impact (acres)
Alkali Weed Playa	1.108	0.000	0.000	<b>0.000</b>
Annual Beard Grass-Bristly Ox-Tongue Grassland	2.682	0.000	0.000	<b>0.000</b>
California Bulrush Marsh	0.689	0.000	0.002	<b>0.002</b>
Cattail Marsh	0.313	0.000	0.000	<b>0.000</b>
Pickleweed Mat	1.196	0.000	0.000	<b>0.000</b>
<b>Total</b>	<b>5.988</b>	<b>0.000</b>	<b>0.002</b>	<b>0.002</b>

**Avoidance and Minimization Efforts**

In addition to the Standard Conditions described at the beginning of Chapter 4, the following measure will be implemented prior to and during construction to avoid and minimize Project impacts to the wandering skipper and/or its habitat. The City shall confirm that the Contractor has implemented the following:

1. A qualified biologist shall conduct a pre-construction survey for the wandering (saltmarsh) skipper within the proposed impact area before construction. If this species is observed and is in imminent danger from construction activities, a qualified biologist shall attempt to relocate the wandering skipper to appropriate habitat outside the impact area or they shall be allowed to leave the impact area on their own.

### **Compensatory Mitigation**

With incorporation of the avoidance and minimization measures listed above, no mitigation would be required.

### **Cumulative Impacts**

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the species. The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for the species (USACE and CDFW 2017). This cumulative project's impact would represent a temporary decrease of the regional habitat; however, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat. As a result, CDFW's Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species. When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the species.

### **Conclusion**

The Project may affect but not likely adversely affect wandering (saltmarsh) skipper.

#### **4.4.4. Discussion of Gertsch's Socalchemmis Spider (*Socalchemmis gertshi*)**

##### **Survey Results**

Suitable habitat for the Gertsch's socalchemmis spider occurs in the BSA. This species was not observed during general surveys of the BSA and during invertebrate surveys of the BWER (USACE and CDFW 2017); therefore, this species has a low potential to occur in the BSA.

##### **Project Impacts**

Gertsch's socalchemmis spider has a low potential to occur in the BSA. As identified in Table 33, the Project would impact a total of 1.854 acre of suitable habitat for this species (0.897 acre permanent; 0.957 acre temporary). Project effects would not adversely affect the regional populations because if the species had since become present onsite, the Project would not likely reduce populations below self-sustaining levels on a regional scale.

**Table 33 – Habitat for the Gertsch’s Socialchemmis Spider that would be Impacted by the Project**

<b>Vegetation Types and Other Areas</b>	<b>Existing (acres)</b>	<b>Permanent Impact (acres)</b>	<b>Temporary Impact (acres)</b>	<b>Total Impact (acres)</b>
California Sagebrush Scrub	3.533	0.835	0.381	<b>1.216</b>
Coyote Brush Scrub	4.485	0.042	0.248	<b>0.29</b>
Degraded Coyote Brush Scrub	2.637	0	0	<b>0</b>
Laurel Sumac Scrub	1.265	0	0	<b>0</b>
Menzies’s Golden Bush Scrub	2.158	0.016	0.297	<b>0.313</b>
Quailbush Scrub	4.145	0.004	0.031	<b>0.035</b>
<b>Total</b>	<b>18.223</b>	<b>0.897</b>	<b>0.957</b>	<b>1.854</b>

***Avoidance and Minimization Efforts***

No avoidance and minimization efforts would be necessary.

***Compensatory Mitigation***

The Project may affect the species but its effects would not be adverse; therefore, no mitigation would be required.

***Cumulative Impacts***

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the species. The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for the species (USACE and CDFW 2017). This cumulative project’s impact would represent a temporary decrease of the regional habitat; however, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat. As a result, CDFW’s Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species. When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the species.

***Conclusion***

The Project may affect but not likely adversely affect Gertsch’s socialchemmis spider.

**4.4.5. Discussion of Mimic Tryonia (California Brackish Snail) (*Tryonia imitator*)**

**Survey Results**

Suitable habitat for the mimic tryonia (California brackish snail) occurs in the BSA. This species was not observed during general surveys of the BSA but has been reported along Ballona Creek, just southwest of the BSA (CDFW 2019a). This species has a moderate potential to occur in the BSA.

**Project Impacts**

Mimic tryonia (California brackish snail) has a moderate potential to occur in the BSA. As identified in Table 34, the Project would temporarily impact a total of 0.002 acre of suitable habitat for this species. The Project would not adversely affect the regional populations because the Project would result in a minimal loss of suitable habitat relative to the amount available along Ballona Creek and Ballona Wetlands.

**Table 34 – Habitat for the Mimic Tryonia (California Brackish Snail) that would be Impacted by the Project**

Vegetation Types and Other Areas	Existing (acres)	Permanent Impact (acres)	Temporary Impact (acres)	Total Impact (acres)
Alkali Weed Playa	1.108	0.000	0.000	<b>0.000</b>
Annual Beard Grass-Bristly Ox-Tongue Grassland	2.682	0.000	0.000	<b>0.000</b>
California Bulrush Marsh	0.689	0.000	0.002	<b>0.002</b>
Cattail Marsh	0.313	0.000	0.000	<b>0.000</b>
Pickleweed Mat	1.196	0.000	0.000	<b>0.000</b>
<b>Total</b>	<b>5.988</b>	<b>0.000</b>	<b>0.002</b>	<b>0.002</b>

**Avoidance and Minimization Efforts**

Avoidance and minimization measures efforts are the same as those described in Section 4.4.3.

**Compensatory Mitigation**

The Project is not expected to adversely affect the mimic tryonia with incorporation of the avoidance and minimization measures listed above; therefore, no mitigation would be required.

### **Cumulative Impacts**

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the species. The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for the species (USACE and CDFW 2017). This cumulative project's impact would represent a temporary decrease of the regional habitat; however, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat. As a result, CDFW's Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species. When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the species.

### **Conclusion**

The Project may affect but not likely adversely affect mimic tryonia.

#### **4.4.6. Discussion of Western Spadefoot (*Spea hammondi*)**

##### **Survey Results**

Limited suitable breeding habitat with suitable upland habitat is present in the BSA for the western spadefoot. Western spadefoot have not been reported in the vicinity and were not observed during surveys for the BWER (USACE and CDFW 2017). Focused surveys for this species were not done for the Project. This species has a low potential to occur in the BSA.

##### **Project Impacts**

Western spadefoot has low potential to occur in the BSA. As identified in Table 35, the Project would impact a total of 7.849 acre of potential habitat for this species (2.327 acre permanent; 5.522 acre temporary). Although the Project would result in a minimal loss of foraging habitat relative to the amount available in the Project region (7.849 acres impacted of the 55.954 acres identified within the BSA, not including the substantial additional habitat within the BWER); breeding pools for this species are limited in number. Therefore, an impact on a breeding pool, if both the species and a suitable pool are present, would be considered potentially adverse. Additionally, construction activities may result in the direct take of individuals of this species, if the species is present. This

species meets the definition of Section 15380<sup>7</sup> of the California Environmental Quality Act Guidelines; therefore, direct impacts to this species have potential to be adverse.

**Table 35 – Habitat for the Western Spadefoot Potential that would be Impacted by the Project**

<b>Vegetation Types and Other Areas</b>	<b>Existing (acres)</b>	<b>Permanent Impact (acres)</b>	<b>Temporary Impact (acres)</b>	<b>Total Impact (acres)</b>
California Sagebrush Scrub	3.533	0.835	0.381	<b>1.216</b>
Coyote Brush Scrub	4.485	0.042	0.248	<b>0.290</b>
Degraded Coyote Brush Scrub	2.637	0.000	0.000	<b>0.000</b>
Laurel Sumac Scrub	1.265	0.000	0.000	<b>0.000</b>
Menzies’s Golden Bush Scrub	2.158	0.016	0.297	<b>0.313</b>
Quailbush Scrub	4.145	0.004	0.031	<b>0.035</b>
Annual Brome Grassland	0.493	0.015	0.131	<b>0.146</b>
Cudweed Stand	0.874	0.000	0.000	<b>0.000</b>
Hyssop-Leaved Bassia Stand	3.056	0.000	0.952	<b>0.952</b>
Semi-Natural Herbaceous Stand	4.646	0.200	1.564	<b>1.764</b>
Upland Mustards	24.872	1.215	1.918	<b>3.133</b>
Alkali Weed Playa	1.108	0.000	0.000	<b>0.000</b>
Annual Beard Grass-Bristly Ox-tongue Grassland	2.682	0.000	0.000	<b>0.000</b>
<b>Total</b>	<b>55.954</b>	<b>2.327</b>	<b>5.522</b>	<b>7.849</b>

**Avoidance and Minimization Efforts**

In addition to the Standard Conditions described at the beginning of Chapter 4, the following measure will be implemented prior to and during construction to avoid and minimize Project impacts to the western spadefoot and/or its habitat. The City shall confirm that the Contractor has implemented the following:

1. A pre-construction survey for the western spadefoot shall be conducted by a qualified biologist within the proposed impact area before construction. If the species is determined to be onsite or within 300 feet of the impact area, Project activities within suitable habitat shall be postponed until an amphibian impact avoidance and minimization plan is prepared and submitted to CDFW for approval. The plan shall identify measures to prevent construction-related impacts from occurring, such as installing silt fencing around the area to be impacted following confirmation that no individuals are present within the area to be fenced. If the species’ breeding, eggs, or tadpoles are observed within the Project impact area, no construction activities will occur within occupied habitat until all reproductive

<sup>7</sup> CEQA provides protection not only for federal and state-listed species, but also for any species that can be shown to meet the criteria for listing (CEQA Guidelines, Section 15380).

activities have completed for the season and the amphibian impact avoidance and minimization plan has been approved by CDFW.

### **Compensatory Mitigation**

With incorporation of the avoidance and minimization measures listed above, no mitigation would be required.

### **Cumulative Impacts**

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the species. The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for the species (USACE and CDFW 2017). This cumulative project's impact would represent a temporary decrease of the regional habitat; however, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat. As a result, CDFW's Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species. When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the species.

### **Conclusion**

The Project may affect but not likely adversely affect western spadefoot.

#### **4.4.7. Discussion of Southern California Legless Lizard (*Anniella stebbinsi*)**

##### **Survey Results**

Suitable habitat is present in the BSA for the southern California legless lizard and there is a high potential for this species to occur in the BSA. This species has been observed during surveys for the BWER (USACE and CDFW 2017).

##### **Project Impacts**

Southern California legless lizard has high potential to occur in the BSA. As identified in Table 36, the Project would impact a total of 8.135 acre of potential habitat for this species (2.613 acre permanent; 5.522 acre temporary). Although the Project would result in a minimal loss of suitable habitat relative to the amount available along the Project region (8.135 acres impacted of the 58.678 acres identified within the BSA, not including the substantial additional habitat within the BWER); construction activities may result in



the direct take of individuals of this species. Additionally, this species meets the definition of Section 15380<sup>8</sup> of the California Environmental Quality Act Guidelines; therefore, direct impact on this species have potential to be adverse.

**Table 36 – Habitat for the Southern California Legless Lizard that would be Impacted by the Project**

Vegetation Types and Other Areas	Existing (acres)	Permanent Impact (acres)	Temporary Impact (acres)	Total Impact (acres)
California Sagebrush Scrub	3.533	0.835	0.381	<b>1.216</b>
Coyote Brush Scrub	4.485	0.042	0.248	<b>0.290</b>
Degraded Coyote Brush Scrub	2.637	0.000	0.000	<b>0.000</b>
Laurel Sumac Scrub	1.265	0.000	0.000	<b>0.000</b>
Menzies's Golden Bush Scrub	2.158	0.016	0.297	<b>0.313</b>
Quailbush Scrub	4.145	0.004	0.031	<b>0.035</b>
Annual Brome Grassland	0.493	0.015	0.131	<b>0.146</b>
Cudweed Stand	0.874	0.000	0.000	<b>0.000</b>
Hyssop-Leaved Bassia Stand	3.056	0.000	0.952	<b>0.952</b>
Semi-Natural Herbaceous Stand	4.646	0.200	1.564	<b>1.764</b>
Upland Mustards	24.872	1.215	1.918	<b>3.133</b>
Alkali Weed Playa	1.108	0.000	0.000	<b>0.000</b>
Annual Beard Grass-Bristly Ox-tongue Grassland	2.682	0.000	0.000	<b>0.000</b>
Arroyo Willow Thicket	2.039	0.286	0.000	<b>0.286</b>
Mulefat Thicket	0.685	0.000	0.000	<b>0.000</b>
<b>Total</b>	<b>58.678</b>	<b>2.613</b>	<b>5.522</b>	<b>8.135</b>

**Avoidance and Minimization Efforts**

In addition to the Standard Conditions described at the beginning of Chapter 4, the following measures will be implemented prior to and during construction to avoid and minimize Project impacts to the southern California legless lizard and/or its habitat. The City shall confirm that the Contractor has implemented the following:

1. A pre-construction survey for special status reptile species, including the southern California legless lizard, shall be conducted by a qualified biologist in suitable habitat within the proposed impact area. If any special status reptile species is observed within the Project impact area or within a 300-foot buffer of the impact area, a reptile relocation plan shall be prepared and submitted to the City, Caltrans, and CDFW for review and approval. The reptile relocation plan shall identify the parameters of any potential relocation effort including:

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<sup>8</sup> CEQA provides protection not only for federal and state-listed species, but also for any species that can be shown to meet the criteria for listing (CEQA Guidelines, Section 15380).

- a. Qualifications of the biologist to monitor construction activities in suitable habitat, and to capture and relocate any special status individuals observed within the impact area;
- b. Methods to safely and appropriately capture and relocate the relevant special status species; and
- c. Precise locations of the suitable habitat within the BWER to relocate the captured species to.

### **Compensatory Mitigation**

With incorporation of the avoidance and minimization measures listed above, no mitigation would be required.

### **Cumulative Impacts**

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the species. The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for the species (USACE and CDFW 2017). This cumulative project's impact would represent a temporary decrease of the regional habitat; however, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat. As a result, CDFW's Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species. When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the species.

### **Conclusion**

The Project may affect but not likely adversely affect southern California legless lizard.

#### **4.4.8. Discussion of Coastal Whiptail (*Aspidoscelis tigris stejnegeri*) and Coast Horned Lizard (*Phrynosoma blainvillii*)**

### **Survey Results**

Suitable habitat is present in the BSA for the coastal whiptail and coast horned lizard; however, these species have not been reported in the vicinity and the BSA is outside the current range (Thomson, Wright and Shaffer 2016). Therefore, these species have a low potential to occur in the BSA.

**Project Impacts**

Coastal whiptail and coast horned lizard have low potential to occur in the BSA. As identified in Table 37, the Project would impact a total of 7.849 acre of potential habitat for these species (2.327 acre permanent; 5.522 acre temporary). Although the Project would result in a minimal loss of suitable habitat relative to the amount available along the Project region (7.849 acres impacted of the 52.164 acres identified within the BSA, not including the substantial additional habitat within the BWER); construction activities may result in the direct take of individuals of this species, if either species is present. Additionally, coast horned lizard meets the definition of Section 15380<sup>9</sup> of the California Environmental Quality Act Guidelines; therefore, any direct impact on this species would be considered potentially adverse.

**Table 37 – Habitat for the Coastal Whiptail and Coast Horned Lizard that would be Impacted by the Project**

Vegetation Types and Other Areas	Existing (acres)	Permanent Impact (acres)	Temporary Impact (acres)	Total Impact (acres)
California Sagebrush Scrub	3.533	0.835	0.381	<b>1.216</b>
Coyote Brush Scrub	4.485	0.042	0.248	<b>0.290</b>
Degraded Coyote Brush Scrub	2.637	0.000	0.000	<b>0.000</b>
Laurel Sumac Scrub	1.265	0.000	0.000	<b>0.000</b>
Menzies’s Golden Bush Scrub	2.158	0.016	0.297	<b>0.313</b>
Quailbush Scrub	4.145	0.004	0.031	<b>0.035</b>
Annual Brome Grassland	0.493	0.015	0.131	<b>0.146</b>
Cudweed Stand	0.874	0.000	0.000	<b>0.000</b>
Hyssop-Leaved Bassia Stand	3.056	0.000	0.952	<b>0.952</b>
Semi-Natural Herbaceous Stand	4.646	0.200	1.564	<b>1.764</b>
Upland Mustards	24.872	1.215	1.918	<b>3.133</b>
<b>Total</b>	<b>52.164</b>	<b>2.327</b>	<b>5.522</b>	<b>7.849</b>

**Avoidance and Minimization Efforts**

In addition to the Standard Conditions described at the beginning of Chapter 4, the following measures will be implemented prior to and during construction to avoid and minimize Project impacts to the species and/or its habitat. The City shall confirm that the Contractor has implemented the following:

1. A pre-construction survey for special status reptile species shall be conducted by a qualified biologist in suitable habitat within the proposed impact area. If any special status reptile species is observed within the Project impact area, a reptile relocation

<sup>9</sup> CEQA provides protection not only for federal and state-listed species, but also for any species that can be shown to meet the criteria for listing (CEQA Guidelines, Section 15380).

plan shall be prepared and submitted to the City, Caltrans, and CDFW for review and approval. The reptile relocation plan shall identify the parameters of any potential relocation effort including:

- a. Qualifications of the biologist to monitor construction activities in suitable habitat, and to capture and relocate any special status individuals observed within the impact area;
- b. Methods to safely and appropriately capture and relocate the relevant special status species; and
- c. Precise locations of the suitable habitat within the BWER to relocate the captured species to.

### ***Compensatory Mitigation***

With incorporation of the avoidance and minimization measures listed above, no mitigation would be required.

### ***Cumulative Impacts***

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the species. The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for the species (USACE and CDFW 2017). This cumulative project's impact would represent a temporary decrease of the regional habitat; however, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat. As a result, CDFW's Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species. When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the species.

### ***Conclusion***

The Project may affect, but not adversely affect coastal whiptail and coast horned lizard.

**4.4.9. Discussion of San Bernardino Ringneck Snake (*Diadophis punctatus modestus*)**

**Survey Results**

Suitable habitat is present in the BSA for the San Bernardino ringneck snake and this species has been observed during surveys for the BWER (USACE and CDFW 2017). Therefore, this species has a high potential to occur in the BSA.

**Project Impacts**

San Bernardino ringneck snake has high potential to occur in the BSA. As identified in Table 38, the Project would impact a total of 7.849 acre of potential habitat for these species (2.327 acre permanent; 5.522 acre temporary). Although the Project would result in a minimal loss of suitable habitat relative to the amount available along the Project region (7.849 acres impacted of the 52.164 acres identified within the BSA, not including the substantial additional habitat within the BWER); construction activities may result in the direct take of individuals of this species and the number of individuals that could be lost may be potentially substantial. Therefore, direct impacts on this species have potential to be adverse.

**Table 38 – Habitat for the San Bernardino Ringneck Snake that would be Impacted by the Project**

<b>Vegetation Types and Other Areas</b>	<b>Existing (acres)</b>	<b>Permanent Impact (acres)</b>	<b>Temporary Impact (acres)</b>	<b>Total Impact (acres)</b>
California Sagebrush Scrub	3.533	0.835	0.381	<b>1.216</b>
Coyote Brush Scrub	4.485	0.042	0.248	<b>0.290</b>
Degraded Coyote Brush Scrub	2.637	0.000	0.000	<b>0.000</b>
Laurel Sumac Scrub	1.265	0.000	0.000	<b>0.000</b>
Menzies’s Golden Bush Scrub	2.158	0.016	0.297	<b>0.313</b>
Quailbush Scrub	4.145	0.004	0.031	<b>0.035</b>
Annual Brome Grassland	0.493	0.015	0.131	<b>0.146</b>
Cudweed Stand	0.874	0.000	0.000	<b>0.000</b>
Hyssop-Leaved Bassia Stand	3.056	0.000	0.952	<b>0.952</b>
Semi-Natural Herbaceous Stand	4.646	0.200	1.564	<b>1.764</b>
Upland Mustards	24.872	1.215	1.918	<b>3.133</b>
<b>Total</b>	<b>52.164</b>	<b>2.327</b>	<b>5.522</b>	<b>7.849</b>

**Avoidance and Minimization Efforts**

In addition to the Standard Conditions described at the beginning of Chapter 4, the following measures will be implemented prior to and during construction to avoid and minimize Project impacts to the species and/or its habitat. The City shall confirm that the Contractor has implemented the following:

1. A pre-construction survey for special status reptile species shall be conducted by a qualified biologist in suitable habitat within the proposed impact area. If any special status reptile species is observed within the Project impact area, a reptile relocation plan shall be prepared and submitted to the City, Caltrans, and CDFW for review and approval. The reptile relocation plan shall identify the parameters of any potential relocation effort including:
  - a. Qualifications of the biologist to monitor construction activities in suitable habitat, and to capture and relocate any special status individuals observed within the impact area;
  - b. Methods to safely and appropriately capture and relocate the relevant special status species; and
  - c. Precise locations of the suitable habitat within the BWER to relocate the captured species to.

### ***Compensatory Mitigation***

With incorporation of the avoidance and minimization measures listed above, no mitigation would be required.

### ***Cumulative Impacts***

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the species. The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for the species (USACE and CDFW 2017). This cumulative project's impact would represent a temporary decrease of the regional habitat; however, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat. As a result, CDFW's Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species. When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the species.

### ***Conclusion***

The Project may affect, but not adversely affect San Bernardino ringneck snake.

**4.4.10. Discussion of Western Pond Turtle (*Emys marmorata*)**

**Survey Results**

Suitable habitat for western pond turtle is located in the BSA but this species was not observed during general surveys of the BSA or during surveys of the BWER (USACE and CDFW 2017). Focused surveys for this species were not done as part of the Project. This species has a low potential to occur in the BSA.

**Project Impacts**

Western pond turtle has low potential to occur in the BSA. As identified in Table 39, the Project would impact a total of 3.156 acre of potential habitat for this species (0.293 acre permanent; 1.393 acre temporary). Although the Project would result in a minimal loss of suitable habitat relative to the amount available along the Project region (3.156 acres impacted of the 12.309 acres identified within the BSA, not including the additional habitat within the BWER); construction activities may result in the direct take of individuals of this species and the number of individuals that could be lost may be potentially substantial. Additionally, this species meets the definition of Section 15380<sup>10</sup> of the California Environmental Quality Act Guidelines; therefore, any direct impact on this species has potential to be adverse.

**Table 39 – Habitat for the Western Pond Turtle Potential that would be Impacted by the Project**

<b>Vegetation Types and Other Areas</b>	<b>Existing (acres)</b>	<b>Permanent Impact (acres)</b>	<b>Shade Impact (acres)</b>	<b>Temporary Impact (acres)</b>	<b>Total Impact (acres)</b>
California Bulrush Marsh	0.689	0.000	0.000	0.002	<b>0.002</b>
Cattail Marsh	0.313	0.000	0.000	0.000	<b>0.000</b>
Arroyo Willow Thicket	2.039	0.286	0.000	0.000	<b>0.286</b>
Open Water	9.268	0.007	0.731	2.130	<b>2.868</b>
<b>Total</b>	<b>12.309</b>	<b>0.293</b>	<b>0.731</b>	<b>2.132</b>	<b>3.156</b>

**Avoidance and Minimization Efforts**

In addition to the Standard Conditions described at the beginning of Chapter 4, the following measures will be implemented prior to and during construction to avoid and minimize Project impacts to the western pond turtle and/or its habitat. The City shall confirm that the Contractor has implemented the following:

<sup>10</sup> CEQA provides protection not only for federal and state-listed species, but also for any species that can be shown to meet the criteria for listing (CEQA Guidelines, Section 15380).

1. A pre-construction survey for special status reptile species shall be conducted by a qualified biologist in suitable habitat within the proposed impact area. If any special status reptile species is observed within the Project impact area, a reptile relocation plan shall be prepared and submitted to the City, Caltrans, and CDFW for review and approval. The reptile relocation plan shall identify the parameters of any potential relocation effort including:
  - a. Qualifications of the biologist to monitor construction activities in suitable habitat, and to capture and relocate any special status individuals observed within the impact area;
  - b. Methods to safely and appropriately capture and relocate the relevant special status species; and
2. Precise locations of the suitable habitat within the BWER to relocate the captured species to. Prior to and during construction activities in the water of Ballona Creek, bubble curtains in combination with turbidity curtains shall be installed/used to minimize underwater noise disturbance from construction. The bubble curtains shall entirely encircle the active work area (e.g., the pile being removed/installed, placement of riprap), allowing sufficient space for construction crews to operate. The bubble curtains shall also act as a barrier to prevent western pond turtle (and other aquatic species) from entering the work area. The bubble curtains shall be moved as the active work area progresses across the channel; at no time shall the bubble curtains entirely eliminate movement up and down the channel (e.g., the bubble curtains shall not span the channel).
3. A qualified biologist shall be present during the initiation of work within the water and shall conduct site visits on an as-needed basis to confirm that bubble curtains are being used effectively. The qualified biologist shall provide monitoring reports to the City and Caltrans following site visits.

### ***Compensatory Mitigation***

With incorporation of the avoidance and minimization measures listed above, no mitigation would be required.

### ***Cumulative Impacts***

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the species. The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for the species (USACE and CDFW 2017). This cumulative project's impact would represent a temporary decrease of the regional habitat; however, the Ballona Wetlands Restoration



Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat. As a result, CDFW's Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species. When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the species.

### **Conclusion**

The Project may affect, but not adversely affect western pond turtle.

#### **4.4.11. Discussion of Two-Striped Garter Snake (*Thamnophis hammondi*)**

##### **Survey Results**

Suitable habitat for two-striped garter snake is located in the BSA but this species was not observed during general surveys of the BSA or during surveys of the BWER (USACE and CDFW 2017). Therefore, this species a low potential to occur in the BSA.

##### **Project Impacts**

Two-striped garter snake has low potential to occur in the BSA. As identified in Table 40, the Project would impact a total of 3.083 acre of suitable habitat for this species (0.700 acre permanent; 1.393 acre temporary). Although the Project would result in a minimal loss of suitable habitat relative to the amount available along the Project region (3.156 acres impacted of the 12.309 acres identified within the BSA, not including the substantial additional habitat within the BWER); construction activities may result in the direct take of individuals of this species and the number of individuals that could be lost may be potentially substantial, if the species is present. Additionally, this species meets the definition of Section 15380<sup>11</sup> of the CEQA Guidelines; therefore, any direct impact on this species has potential to be adverse.

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<sup>11</sup> CEQA provides protection not only for federal and state-listed species, but also for any species that can be shown to meet the criteria for listing (CEQA Guidelines, Section 15380).

**Table 40 – Habitat for the Two-striped Garter Snake Potential that would be Impacted by the Project**

<b>Vegetation Types and Other Areas</b>	<b>Existing (acres)</b>	<b>Permanent Impact (acres)</b>	<b>Shade Impact (acres)</b>	<b>Temporary Impact (acres)</b>	<b>Total Impact (acres)</b>
California Bulrush Marsh	0.689	0.000	0.000	0.002	<b>0.002</b>
Cattail Marsh	0.313	0.000	0.000	0.000	<b>0.000</b>
Arroyo Willow Thicket	2.039	0.286	0.000	0.000	<b>0.286</b>
Open Water	9.268	0.007	0.731	2.130	<b>2.868</b>
<b>Total</b>	<b>12.309</b>	<b>0.293</b>	<b>0.731</b>	<b>2.132</b>	<b>3.156</b>

***Avoidance and Minimization Efforts***

In addition to the Standard Conditions described at the beginning of Chapter 4, the following measures will be implemented prior to and during construction to avoid and minimize Project impacts to the western pond turtle and/or its habitat. The City shall confirm that the Contractor has implemented the following:

1. A pre-construction survey for special status reptile species shall be conducted by a qualified biologist in suitable habitat within the proposed impact area. If any special status reptile species is observed within the Project impact area, a reptile relocation plan shall be prepared and submitted to the City, Caltrans, and CDFW for review and approval. The reptile relocation plan shall identify the parameters of any potential relocation effort including:
  - a. Qualifications of the biologist to monitor construction activities in suitable habitat, and to capture and relocate any special status individuals observed within the impact area;
  - b. Methods to safely and appropriately capture and relocate the relevant special status species; and
  - c. Precise locations of the suitable habitat within the BWER to relocate the captured species to.

***Compensatory Mitigation***

With incorporation of the avoidance and minimization measures listed above, no mitigation would be required.

***Cumulative Impacts***

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the species. The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for the species

(USACE and CDFW 2017). This cumulative project's impact would represent a temporary decrease of the regional habitat; however, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat. As a result, CDFW's Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species. When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the species.

### **Conclusion**

The Project may affect, but not adversely affect two-striped garter snake.

#### **4.4.12. Discussion of South Coast Garter Snake (*Thamnophis sirtalis* ssp.)**

##### **Survey Results**

Suitable habitat for south coast garter snake is located in the BSA and this species has been reported in the vicinity of the BSA (Thomson, Wright and Shaffer 2016). However, this species was not observed during general surveys of the BSA or during surveys of the BWER (USACE and CDFW 2017). This species a moderate potential to occur in the BSA.

##### **Project Impacts**

South coast garter snake has moderate potential to occur in the BSA. As identified in Table 41, the Project would impact a total of 3.083 acre of suitable habitat for this species (0.700 acre permanent; 1.393 acre temporary). Although the Project would result in a minimal loss of suitable habitat relative to the amount available along the Project region (3.156 acres impacted of the 12.309 acres identified within the BSA, not including the substantial additional habitat within the BWER); construction activities may result in the direct take of individuals of this species and the number of individuals that could be lost may be potentially substantial. Additionally, this species meets the definition of Section 15380<sup>12</sup> of the California Environmental Quality Act Guidelines; therefore, any direct impact on this species have potential to be adverse.

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<sup>12</sup> CEQA provides protection not only for federal and state-listed species, but also for any species that can be shown to meet the criteria for listing (CEQA Guidelines, Section 15380).

**Table 41 – Habitat for the South Coast Garter Snake Potential that would be Impacted by the Project**

Vegetation Types and Other Areas	Existing (acres)	Permanent Impact (acres)	Shade Impact (acres)	Temporary Impact (acres)	Total Impact (acres)
California Bulrush Marsh	0.689	0.000	0.000	0.002	0.002
Cattail Marsh	0.313	0.000	0.000	0.000	0.000
Arroyo Willow Thicket	2.039	0.286	0.000	0.000	0.286
Open Water	9.268	0.007	0.731	2.130	2.868
<b>Total</b>	<b>12.309</b>	<b>0.293</b>	<b>0.731</b>	<b>2.132</b>	<b>3.156</b>

***Avoidance and Minimization Efforts***

In addition to the Standard Conditions described at the beginning of Chapter 4, the following measures will be implemented prior to and during construction to avoid and minimize Project impacts to the species and/or its habitat. The City shall confirm that the Contractor has implemented the following:

1. A pre-construction survey for special status reptile species shall be conducted by a qualified biologist in suitable habitat within the proposed impact area. If any special status reptile species is observed within the Project impact area, a reptile relocation plan shall be prepared and submitted to the City, Caltrans, and CDFW for review and approval. The reptile relocation plan shall identify the parameters of any potential relocation effort including:
  - a. Qualifications of the biologist to monitor construction activities in suitable habitat, and to capture and relocate any special status individuals observed within the impact area;
  - b. Methods to safely and appropriately capture and relocate the relevant special status species; and
  - c. Precise locations of the suitable habitat within the BWER to relocate the captured species to.

***Compensatory Mitigation***

With incorporation of the avoidance and minimization measures listed above, no mitigation would be required.

***Cumulative Impacts***

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the species. The Ballona Wetlands Restoration Project would impact up to 473 acres of

impacts to vegetated areas, some of which could provide suitable habitat for the species (USACE and CDFW 2017). This cumulative project's impact would represent a temporary decrease of the regional habitat; however, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat. As a result, CDFW's Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species. When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the species.

### **Conclusion**

The Project may affect, but not adversely affect south coast garter snake.

#### **4.4.13. Discussion of Cooper's Hawk (*Accipiter cooperii*)**

##### **Survey Results**

Suitable foraging and nesting habitat for Cooper's hawk is located in the BSA. This species was observed during surveys of the BSA. Therefore, this species a high potential to occur in the BSA for foraging and nesting.

##### **Project Impacts**

Cooper's hawk was observed in the BSA. As identified in Table 42, the Project would impact a total of 0.295 acre of suitable nesting habitat for this species (0.286 acre permanent; 0.009 acre temporary). The loss of foraging habitat for this species would be limited relative to the availability of similar habitat in the region (11.024 total non-developed acres impacted of the 75.794 non-developed acres identified within the BSA, not including the substantial additional habitat within the BWER). Further, the BSA does not have the capacity to support large numbers of the species and the limited loss of foraging habitat would not likely have an effect on regional populations. Cooper's hawk could nest in trees within the BSA. Tree removal and/or nearby construction could adversely affect nesting efforts for this species. Construction during the breeding season could disturb nesting activities, possibly resulting in nest abandonment, loss of young, and reduced health and vigor of eggs and/or nestlings. Direct effects on an active Cooper's hawk nest would be considered a violation of the *California Fish and Game Code* (Sections 3503, 3503.5, and 3513), and the MBTA. Any impact on an active nest would be considered an adverse affect.

**Table 42 – Nesting Habitat for the Cooper’s Hawk that would be Impacted by the Project**

Vegetation Type and Other Areas	Existing (acres)	Permanent Impact (acres)	Temporary Impact (acres)	Total Impact (acres)
Arroyo Willow Thicket	2.039	0.286	0.000	<b>0.286</b>
Parks and Landscaping	5.650	0.000	0.009	<b>0.009</b>
<b>Total</b>	<b>7.689</b>	<b>0.286</b>	<b>0.009</b>	<b>0.295</b>

***Avoidance and Minimization Efforts***

In addition to the Standard Conditions described at the beginning of Chapter 4, the following measures shall be implemented prior to or during construction to avoid and minimize Project impacts to the Cooper’s hawk and/or its habitat. The City shall confirm that the Contractor has implemented the following:

1. A pre-construction survey for nesting raptors shall be done by a qualified biologist within the limits of Project disturbance. Any active nest found during survey efforts shall be mapped on the construction plans. If nesting activity is present, the active site shall be protected until nesting activity ends to ensure compliance with Section 3503.5 of the *California Fish and Game Code*.

Nesting activity for raptors in the region normally occurs from January 1 to September 1. If no active nests are found, no further mitigation would be required. Results of the surveys shall be provided to the CDFW and Caltrans.

2. To protect any nest site, the following restrictions on construction would be required between January 1 and September 1 (or until nests are no longer active, as determined by a qualified biologist): (1) clearing limits shall be established a minimum of 500 feet in any direction from any occupied nest and (2) access and surveying shall be restricted within 300 feet of any occupied nest. Any encroachment into the buffer area around the known nest shall only be allowed if it is determined by a qualified biologist that the proposed activity shall not disturb the nest occupants. Construction during the nesting season can occur only at the site if a qualified biologist determines that fledglings have left the nest.

***Compensatory Mitigation***

With incorporation of the avoidance and minimization measures listed above, no mitigation would be required.

### **Cumulative Impacts**

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the species. The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for the species (USACE and CDFW 2017). This cumulative project's impact would represent a temporary decrease of the regional habitat; however, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat. As a result, CDFW's Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species. When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the species.

### **Conclusion**

The Project may affect, but not adversely affect Cooper's hawk.

#### **4.4.14. Discussion of Northern Harrier (*Circus hudsonius*)**

##### **Survey Results**

Suitable foraging habitat for northern harrier is located in the BSA and this species was observed; however, most likely to occur as a migrant. This species has been nearly eradicated from the coastal slope of the County over the course of the 20<sup>th</sup> century, but small numbers seem to be breeding in the Antelope Valley (Garrett and Dunn 1981; Allen, Garrett, and Wimer 2016). This species is not expected to nest within the BSA because it is outside of the species current nesting range but has a high potential to occur as a foraging migrant.

##### **Project Impacts**

Northern harrier was observed foraging in the BSA. As identified in Table 44, the Project would impact a total of 7.851 acre of suitable nesting habitat for this species (2.327 acre permanent; 5.524 acre temporary). The Project would contribute to the regional ongoing loss of raptor foraging habitat in the Project region. The loss of foraging habitat for this species would be limited relative to the availability of similar habitat in the region (11.024 total non-developed acres impacted of the 75.794 non-developed acres identified within the BSA, not including the substantial additional habitat within the BWER). Further, the BSA does not have the capacity to support large numbers of the species and the limited loss of foraging habitat would not likely adversely affect regional populations. Northern harrier is not expected to nest in the BSA.

**Table 43 – Foraging Habitat for the Northern Harrier that would be Impacted by the Project**

<b>Vegetation Types and Other Areas</b>	<b>Existing (acres)</b>	<b>Permanent Impact (acres)</b>	<b>Temporary Impact (acres)</b>	<b>Total Impact (acres)</b>
California Sagebrush Scrub	3.533	0.835	0.381	<b>1.216</b>
Coyote Brush Scrub	4.485	0.042	0.248	<b>0.290</b>
Degraded Coyote Brush Scrub	2.637	0.000	0.000	<b>0.000</b>
Laurel Sumac Scrub	1.265	0.000	0.000	<b>0.000</b>
Menzies’s Golden Bush Scrub	2.158	0.016	0.297	<b>0.313</b>
Quailbush Scrub	4.145	0.004	0.031	<b>0.035</b>
Annual Brome Grassland	0.493	0.015	0.131	<b>0.146</b>
Cudweed Stand	0.874	0.000	0.000	<b>0.000</b>
Hyssop-Leaved Bassia Stand	3.056	0.000	0.952	<b>0.952</b>
Semi-Natural Herbaceous Stand	4.646	0.200	1.564	<b>1.764</b>
Upland Mustards	24.872	1.215	1.918	<b>3.133</b>
Alkali Weed Playa	1.108	0.000	0.000	<b>0.000</b>
Annual Beard Grass-Bristly Ox-tongue Grassland	2.682	0.000	0.000	<b>0.000</b>
California Bulrush Marsh	0.689	0.000	0.002	<b>0.002</b>
Cattail Marsh	0.313	0.000	0.000	<b>0.000</b>
<b>Total</b>	<b>56.956</b>	<b>2.327</b>	<b>5.524</b>	<b>7.851</b>

***Avoidance and Minimization Efforts***

Avoidance and minimization measures efforts are the same as those described in Section 4.4.13.

***Compensatory Mitigation***

With incorporation of the avoidance and minimization measures listed above, no mitigation would be required.

***Cumulative Impacts***

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the species. The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for the species (USACE and CDFW 2017). This cumulative project’s impact would represent a temporary decrease of the regional habitat; however, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat. As a result, CDFW’s Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species. When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands



Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the species.

**Conclusion**

The Project may affect, but not adversely affect northern harrier.

**4.4.15. Discussion of Clark’s Marsh Wren (*Cistothorus palustris clarkae*)**

**Survey Results**

Suitable foraging and nesting habitat for Clark’s marsh wren is located in the BSA; however, this species is mainly expected to occur for wintering. This species was not observed during general surveys of the BSA. Therefore, this species has a moderate potential to occur in the BSA for foraging and nesting.

**Project Impacts**

Clark’s marsh wren has a moderate potential to nest in the BSA. As identified in Table 44, the Project would impact a total of 0.002 acre of suitable nesting habitat for this species (0.002 acre temporary). The loss of foraging habitat for this species would be limited relative to the availability of similar habitat in the region (0.002 acres impacted of the 1.002 acres identified within the BSA, not including the substantial additional habitat within the BWER). Further, the BSA does not have the capacity to support large numbers of the species and the limited loss of foraging habitat would not adversely effect regional populations. Clark’s marsh wren could nest in the BSA. Construction during the breeding season could disturb nesting activities, possibly resulting in nest abandonment, loss of young, and reduced health and vigor of eggs and/or nestlings. Direct effects on an active Clark’s marsh wren nest would be considered a violation of the *California Fish and Game Code* (Sections 3503, 3503.5, and 3513) and the MBTA. Any impact on an active nest would be considered adverse.

**Table 44 – Nesting Habitat for the Clark’s Marsh Wren that would be Impacted by the Project**

Vegetation Type and Other Areas	Existing (acres)	Permanent Impact (acres)	Temporary Impact (acres)	Total Impact (acres)
California Bulrush Marsh	0.689	0.000	0.002	<b>0.002</b>
Cattail Marsh	0.313	0.000	0.000	<b>0.000</b>
<b>Total</b>	<b>1.002</b>	<b>0.000</b>	<b>0.002</b>	<b>0.002</b>

**Avoidance and Minimization Efforts**

Avoidance and minimization measures efforts are the same as those described in SC BIO-5.

### **Compensatory Mitigation**

With incorporation of the avoidance and minimization measures listed above, no mitigation would be required.

### **Cumulative Impacts**

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the species. The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for the species (USACE and CDFW 2017). This cumulative project's impact would represent a temporary decrease of the regional habitat; however, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat. As a result, CDFW's Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species. When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the species.

### **Conclusion**

The Project may affect, but not adversely affect Clark's marsh wren.

#### **4.4.16. Discussion of White-Tailed Kite (*Elanus leucurus*)**

##### **Survey Results**

Suitable foraging and limited nesting habitat for white-tailed kite is located in the BSA. This species is mainly expected to occur as a post-breeding visitor. This species was not observed during general surveys of the BSA but was observed during surveys of the BWER (USACE and CDFW 2017). Therefore, this species has a high potential to occur for foraging but low potential to occur for nesting in the BSA.

##### **Project Impacts**

White-tailed kite has a low potential to nest in the BSA. As identified in Table 45, the Project would impact a total of 0.286 acre of suitable nesting habitat for this species (0.286 acre permanent; 0.000 acre temporary). The Project would contribute to the regional ongoing loss of raptor foraging habitat in the Project region. The loss of foraging habitat for this species would be limited relative to the availability of similar habitat in the region (11.024 total non-developed acres impacted of the 75.794 non-developed acres identified within the BSA, not including the substantial additional habitat within the BWER). Further the BSA does not have the capacity to support large numbers of the

species and the limited loss of foraging habitat would not likely have an effect on regional populations. White-tailed kite could nest in the BSA. Tree removal and/or nearby construction could adversely affect nesting efforts for this species. Construction during the breeding season could disturb nesting activities, possibly resulting in nest abandonment, loss of young, and reduced health and vigor of eggs and/or nestlings. Direct effects on an active white-tailed kite nest would be considered a violation of the *California Fish and Game Code* (Sections 3503, 3503.5, and 3513), and the MBTA. Any impact on an active nest would be considered adverse.

**Table 45 – Nesting Habitat for the White-tailed Kite that would be Impacted by the Project**

Vegetation Type and Other Areas	Existing (acres)	Permanent Impact (acres)	Temporary Impact (acres)	Total Impact (acres)
Arroyo Willow Thicket	2.039	0.286	0.000	<b>0.286</b>
<b>Total</b>	<b>2.039</b>	<b>0.286</b>	<b>0.000</b>	<b>0.286</b>

**Avoidance and Minimization Efforts**

In addition to the Standard Conditions described at the beginning of Chapter 4, the following measures shall be implemented prior to or during construction to avoid and minimize Project impacts to the white-tailed kite and/or its habitat. The City shall confirm that the Contractor has implemented the following:

1. A pre-construction survey for nesting raptors shall be done by a qualified biologist within the limits of Project disturbance. Any active nest found during survey efforts shall be mapped on the construction plans. If nesting activity is present, the active site shall be protected until nesting activity ends to ensure compliance with Section 3503.5 of the *California Fish and Game Code*.  
  
Nesting activity for raptors in the region normally occurs from January 1 to September 1. If no active nests are found, no further mitigation would be required. Results of the surveys shall be provided to the CDFW and Caltrans.
2. To protect any nest site, the following restrictions on construction would be required between January 1 and September 1 (or until nests are no longer active, as determined by a qualified biologist): (1) clearing limits shall be established a minimum of 500 feet in any direction from any occupied nest and (2) access and surveying shall be restricted within 150 feet of any occupied nest. Any encroachment into the buffer area around the known nest shall only be allowed if it is determined by a qualified biologist that the proposed activity shall not disturb

the nest occupants. Construction during the nesting season can occur only at the sites if a qualified biologist determines that fledglings have left the nest.

### **Compensatory Mitigation**

With incorporation of the avoidance and minimization measures listed above, no mitigation would be required.

### **Cumulative Impacts**

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the species. The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for the species (USACE and CDFW 2017). This cumulative project's impact would represent a temporary decrease of the regional habitat; however, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat. As a result, CDFW's Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species. When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the species.

### **Conclusion**

The Project may affect, but not adversely affect white-tailed kite.

#### **4.4.17. Discussion of California Horned Lark (*Eremophila alpestris actia*)**

##### **Survey Results**

Suitable foraging and limited nesting habitat for California horned lark is located in the BSA. This species was not observed during general surveys of the BSA and has not been reported breeding in the vicinity. Therefore, this species has a moderate potential to occur for foraging but low potential to occur for nesting in the BSA.

##### **Project Impacts**

California horned lark has a low potential to nest in the BSA. As identified in Table 46, the Project would impact a total of 5.995 acre of suitable nesting habitat for this species (1.43 acre permanent; 4.565 acre temporary). The loss of foraging habitat for this species would be limited relative to the availability of similar habitat in the region. Further, the number of individuals with potential to occur onsite are low and the limited loss of foraging habitat would not likely have an effect on regional populations (5.995 acres

impacted of the 33.941 acres identified within the BSA, not including the substantial additional habitat within the BWER). California horned lark could nest in the BSA. Construction during the breeding season could disturb nesting activities, possibly resulting in nest abandonment, loss of young, and reduced health and vigor of eggs and/or nestlings. Direct effects on an active Clark’s marsh wren nest would be considered a violation of the *California Fish and Game Code* (Sections 3503, 3503.5, and 3513) and the MBTA. Any impact on an active nest would be considered adverse.

**Table 46 – Nesting Habitat for the California Horned Lark that would be Impacted by the Project**

Vegetation Types and Other Areas	Existing (acres)	Permanent Impact (acres)	Temporary Impact (acres)	Total Impact (acres)
Annual Brome Grassland	0.493	0.015	0.131	<b>0.146</b>
Cudweed Stand	0.874	0.000	0.000	<b>0.000</b>
Hyssop-Leaved Bassia Stand	3.056	0.000	0.952	<b>0.952</b>
Semi-Natural Herbaceous Stand	4.646	0.200	1.564	<b>1.764</b>
Upland Mustards	24.872	1.215	1.918	<b>3.133</b>
<b>Total</b>	<b>33.941</b>	<b>1.43</b>	<b>4.565</b>	<b>5.995</b>

***Avoidance and Minimization Efforts***

Avoidance and minimization measures efforts are the same as those described in SC BIO-1.

***Compensatory Mitigation***

With incorporation of the avoidance and minimization measures listed above, no mitigation would be required.

***Cumulative Impacts***

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the species. The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for the species (USACE and CDFW 2017). This cumulative project’s impact would represent a temporary decrease of the regional habitat; however, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat. As a result, CDFW’s Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species. When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands

Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the species.

### **Conclusion**

The Project may affect, but not adversely affect California horned lark.

#### **4.4.18. Discussion of Yellow-Breasted Chat (*Icteria virens*)**

##### **Survey Results**

Suitable foraging and nesting habitat for yellow-breasted chat is located in the BSA. Therefore, this species has a high potential to occur in the BSA for foraging and nesting. This species was observed during focused surveys of the BSA and surveys of the BWER (USACE and CDFW 2017).

##### **Project Impacts**

Yellow-breasted chat was observed in the BSA. As identified in Table 47, the Project would permanently impact a total of 0.286 acre of suitable nesting habitat for this species. The loss of foraging habitat for this species would be limited relative to the availability of similar habitat in the region. Further, the number of individuals with potential to occur onsite are low and the limited loss of foraging habitat would not likely have an effect on regional populations (0.286 acres impacted of the 2.724 acres identified within the BSA, not including the substantial additional habitat within the BWER). Yellow-breasted chat could nest in the BSA. Construction during the breeding season could disturb nesting activities, possibly resulting in nest abandonment, loss of young, and reduced health and vigor of eggs and/or nestlings. Direct effects on an active yellow-breasted chat nest would be considered a violation of the *California Fish and Game Code* (Sections 3503, 3503.5, and 3513) and the MBTA. Any impact on an active nest would be considered adverse.

**Table 47 – Nesting Habitat for the Yellow-breasted Chat that would be Impacted by the Project**

Vegetation Types and Other Areas	Existing (acres)	Permanent Impact (acres)	Temporary Impact (acres)	Total Impact (acres)
Arroyo Willow Thicket	2.039	0.286	0.000	<b>0.286</b>
Mulefat Thicket	0.685	0.000	0.000	<b>0.000</b>
Total	2.724	0.286	0.000	<b>0.286</b>

***Avoidance and Minimization Efforts***

Avoidance and minimization measures efforts are the same as those described in SC BIO-5.

***Compensatory Mitigation***

With incorporation of the avoidance and minimization measures listed above, no mitigation would be required.

***Cumulative Impacts***

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the species. The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for the species (USACE and CDFW 2017). This cumulative project’s impact would represent a temporary decrease of the regional habitat; however, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat. As a result, CDFW’s Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species. When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the species.

***Conclusion***

The Project may affect, but not adversely affect yellow-breasted chat.

**4.4.19. Discussion of Least Bittern (*Ixobrychus exilis*)**

***Survey Results***

Suitable foraging and limited nesting habitat for least bittern is located in the BSA. Therefore, this species a moderate potential to occur in the BSA for foraging and a low

potential to occur for nesting. This species was not observed during general surveys of the BSA and surveys of the BWER (USACE and CDFW 2017).

**Project Impacts**

Least bittern has a low potential to nest in the BSA. As identified in Table 48, the Project would impact a total of 0.002 acre of suitable nesting habitat for this species (0.000 acre permanent; 0.002 acre temporary). The loss of foraging habitat for this species would be limited relative to the availability of similar habitat in the region (0.002 acres impacted of the 1.687 acres identified within the BSA, not including the substantial additional habitat within the BWER). Further, the impact area does not have the capacity to support large numbers of the species and the limited loss of foraging habitat would not likely have an effect on regional populations. Least bittern could nest in the BSA. Construction during the breeding season could disturb nesting activities, possibly resulting in nest abandonment, loss of young, and reduced health and vigor of eggs and/or nestlings. Direct effects on a least bittern nest would be considered a violation of the *California Fish and Game Code* (Sections 3503, 3503.5, and 3513) and the MBTA. Any impact on an active nest would be considered adverse.

**Table 48 – Nesting Habitat for the Least Bittern that would be Impacted by the Project**

Vegetation Types and Other Areas	Existing (acres)	Permanent Impact (acres)	Temporary Impact (acres)	Total Impact (acres)
California Bulrush Marsh	0.689	0.000	0.002	<b>0.002</b>
Cattail Marsh	0.313	0.000	0.000	<b>0.000</b>
Mulefat Thicket	0.685	0.000	0.000	<b>0.000</b>
<b>Total</b>	<b>1.687</b>	<b>0.000</b>	<b>0.002</b>	<b>0.002</b>

**Avoidance and Minimization Efforts**

Avoidance and minimization measures efforts are the same as those described in SC BIO-5.

**Compensatory Mitigation**

With incorporation of the avoidance and minimization measures listed above, no mitigation would be required.

**Cumulative Impacts**

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the species. The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for the species



(USACE and CDFW 2017). This cumulative project's impact would represent a temporary decrease of the regional habitat; however, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat. As a result, CDFW's Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species. When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the species.

### **Conclusion**

The Project may affect, but not adversely affect least bittern.

#### **4.4.20. Discussion of Loggerhead Shrike (*Lanius ludovicianus*)**

##### **Survey Results**

Suitable foraging and nesting habitat for loggerhead shrike is located in the BSA. Therefore, this species a high potential to occur in the BSA for foraging and a moderate potential to occur for nesting. This species was not observed during general surveys of the BSA and surveys of the BWER (USACE and CDFW 2017).

##### **Project Impacts**

Loggerhead shrike has a moderate potential to nest in the BSA. As identified in Table 49, the Project would impact a total of 1.854 acre of suitable habitat for this species (0.897-acre permanent; 0.957-acre temporary). The loss of foraging habitat for this species would be limited relative to the availability of similar habitat in the region (1.854 acres impacted of the 18.223 acres identified within the BSA, not including the substantial additional habitat within the BWER). Loggerhead shrike could nest in the BSA.

Construction during the breeding season could disturb nesting activities, possibly resulting in nest abandonment, loss of young, and reduced health and vigor of eggs and/or nestlings. Direct effects on a loggerhead shrike nest would be considered a violation of the *California Fish and Game Code* (Sections 3503, 3503.5, and 3513) and the MBTA. Any impact on an active nest would be considered adverse.

**Table 49 – Nesting Habitat for the Loggerhead Shrike that would be Impacted by the Project**

<b>Vegetation Types and Other Areas</b>	<b>Existing (acres)</b>	<b>Permanent Impact (acres)</b>	<b>Temporary Impact (acres)</b>	<b>Total Impact (acres)</b>
California Sagebrush Scrub	3.533	3.533	0.835	0.381
Coyote Bush Scrub	4.485	4.485	0.042	0.248
Degraded Coyote Bush Scrub	2.637	2.637	0.000	0.000
Laurel Sumac Scrub	1.265	1.265	0.000	0.000
Menzies's Golden Bush Scrub	2.158	2.158	0.016	0.297
Quailbush Scrub	4.145	4.145	0.004	0.031
<b>Total</b>	<b>18.223</b>	<b>0.897</b>	<b>0.957</b>	<b>1.854</b>

***Avoidance and Minimization Efforts***

Avoidance and minimization measures efforts are the same as those described in SC BIO-5.

***Compensatory Mitigation***

With incorporation of the avoidance and minimization measures listed above, no mitigation would be required.

***Cumulative Impacts***

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the species. The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for the species (USACE and CDFW 2017). This cumulative project’s impact would represent a temporary decrease of the regional habitat; however, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat. As a result, CDFW’s Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species. When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the species.

***Conclusion***

The Project may affect, but not adversely affect loggerhead shrike.

**4.4.21. Discussion of Osprey (*Pandion haliaetus*)**

**Survey Results**

Suitable foraging and limited nesting habitat for osprey is located in the BSA; however, this species has not been reported breeding in the vicinity (Allen, Garrett, and Wimer 2016). This species was not observed during general surveys of the BSA or during surveys of the BWER (USACE and CDFW 2017). Therefore, this species has a high potential to occur for foraging but low potential to occur for nesting in the BSA.

**Project Impacts**

Osprey has a low potential to nest in the BSA. As identified in Table 51, the Project would impact a total of 0.286 acre of suitable nesting habitat for this species (0.286 acre permanent; 0.000 acre temporary). The loss of foraging habitat for this species would be limited relative to the availability of similar habitat in the region (2.868 acres of open water impacted of the 9.268 acres of open water identified within the BSA, not including the substantial additional habitat within the BWER). Tree removal and/or nearby construction could adversely affect nesting efforts for this species. Construction during the breeding season could disturb nesting activities, possibly resulting in nest abandonment, loss of young, and reduced health and vigor of eggs and/or nestlings. Direct effects on an active nest would be considered a violation of the *California Fish and Game Code* (Sections 3503, 3503.5, and 3513), and the MBTA. Any impact on an active nest would be considered adverse.

**Table 50 – Nesting Habitat for the Osprey that would be Impacted by the Project**

Vegetation Type and Other Areas	Existing (acres)	Permanent Impact (acres)	Temporary Impact (acres)	Total Impact (acres)
Arroyo Willow Thicket	2.039	0.286	0.000	<b>0.286</b>
<b>Total</b>	<b>2.039</b>	<b>0.286</b>	<b>0.000</b>	<b>0.286</b>

**Avoidance and Minimization Efforts**

Avoidance and minimization measures efforts are the same as those described in Section 4.4.13.

**Compensatory Mitigation**

With incorporation of the avoidance and minimization measures listed above, no mitigation would be required.

### **Cumulative Impacts**

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the species. The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for the species (USACE and CDFW 2017). This cumulative project's impact would represent a temporary decrease of the regional habitat; however, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat. As a result, CDFW's Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species. When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the species.

### **Conclusion**

The Project may affect, but not adversely affect osprey.

#### **4.4.22. Discussion of Double-Crested Cormorant (*Phalacrocorax auratus*)**

##### **Survey Results**

Suitable foraging and nesting habitat for double-crested cormorant is located in the BSA. Therefore, this species has a high potential to occur in the BSA for foraging and nesting. This species was observed during general surveys of the BSA.

##### **Project Impacts**

Double-crested cormorant was observed in the BSA. As identified in Table 52, the Project would impact a total of 0.286 acre of suitable nesting habitat for this species (0.286 acre permanent; 0.000 acre temporary). The loss of foraging habitat for this species would be limited relative to the availability of similar habitat in the region (2.868 acres of open water impacted of the 9.268 acres identified within the BSA, not including the substantial additional habitat within the BWER). Double-crested cormorant could nest in the BSA. Construction during the breeding season could disturb nesting activities, possibly resulting in nest abandonment, loss of young, and reduced health and vigor of eggs and/or nestlings. Direct effects on an active double-crested cormorant nest would be considered a violation of the *California Fish and Game Code* (Sections 3503, 3503.5, and 3513) and the MBTA. Any impact on an active nest would be considered adverse.

**Table 51 – Nesting Habitat for the Double-crested Cormorant that would be Impacted by the Project**

Vegetation Type and Other Areas	Existing (acres)	Permanent Impact (acres)	Temporary Impact (acres)	Total Impact (acres)
Arroyo Willow Thicket	2.039	0.286	0.000	<b>0.286</b>
<b>Total</b>	<b>2.039</b>	<b>0.286</b>	<b>0.000</b>	<b>0.286</b>

**Avoidance and Minimization Efforts**

Avoidance and minimization measures efforts are the same as those described in SC BIO-5

**Compensatory Mitigation**

With incorporation of the avoidance and minimization measures listed above, no mitigation would be required.

**Cumulative Impacts**

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the species. The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for the species (USACE and CDFW 2017). This cumulative project’s impact would represent a temporary decrease of the regional habitat; however, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat. As a result, CDFW’s Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species. When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the species.

**Conclusion**

The Project may affect, but not adversely affect double-crested cormorant.

**4.4.23. Discussion of White-Faced Ibis (*Plegadis chihi*)**

**Survey Results**

Suitable foraging and limited nesting habitat for white-faced ibis is located in the BSA; however, this species has historically been known to breed in the Ballona marshes but now only known to breed at Piute Ponds for the entirety of the county’s breeding season

population (Allen, Garrett, and Wimer 2016). This species was not observed during general surveys of the BSA or during surveys of the BWER (USACE and CDFW 2017). Therefore, this species has a high potential to occur for foraging but low potential to occur for nesting in the BSA.

**Project Impacts**

White-faced ibis has a low potential to nest in the BSA. As identified in Table 53, the Project would impact a total of 0.002 acre of suitable nesting habitat for this species (0.000 acre permanent; 0.002 acre temporary). The loss of foraging habitat for this species would be limited relative to the availability of similar habitat in the region. Further, the BSA does not have the capacity to support large numbers of the species and the limited loss of foraging habitat would not likely have an effect on regional populations (0.002 acres impacted of the 1.687 acres identified within the BSA, not including the substantial additional habitat within the BWER). White-faced ibis could nest in the BSA. Construction during the breeding season could disturb nesting activities, possibly resulting in nest abandonment, loss of young, and reduced health and vigor of eggs and/or nestlings. Direct effects on an active white-faced ibis’ nest would be considered a violation of the *California Fish and Game Code* (Sections 3503, 3503.5, and 3513) and the MBTA. Any impact on an active nest would be considered adverse.

**Table 52 – Nesting Habitat for the White-faced Ibis that would be Impacted by the Project**

Vegetation Types and Other Areas	Existing (acres)	Permanent Impact (acres)	Temporary Impact (acres)	Total Impact (acres)
California Bulrush Marsh	0.689	0.000	0.002	<b>0.002</b>
Cattail Marsh	0.313	0.000	0.000	<b>0.000</b>
Mulefat Scrub	0.685	0.000	0.000	<b>0.000</b>
<b>Total</b>	<b>1.687</b>	<b>0.000</b>	<b>0.002</b>	<b>0.002</b>

**Avoidance and Minimization Efforts**

Avoidance and minimization measures efforts are the same as those described in Section 4.4.15.

**Compensatory Mitigation**

With incorporation of the avoidance and minimization measures listed above, no mitigation would be required.

### **Cumulative Impacts**

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the species. The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for the species (USACE and CDFW 2017). This cumulative project's impact would represent a temporary decrease of the regional habitat; however, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat. As a result, CDFW's Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species. When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the species.

### **Conclusion**

The Project may affect, but not adversely affect white-faced ibis.

#### **4.4.24. Discussion of Yellow Warbler (*Setophaga petechia*)**

##### **Survey Results**

Suitable foraging and nesting habitat for yellow warbler is located in the BSA. Therefore, this species a high potential to occur in the BSA for foraging and moderate for nesting. This species was observed during general surveys of the BSA.

##### **Project Impacts**

Yellow warbler was observed in the BSA. As identified in Table 54, the Project would impact a total of 0.286 acre of suitable nesting habitat for this species (0.286 acre permanent; 0.000 acre temporary). The loss of foraging habitat for this species would be limited relative to the availability of similar habitat in the region (0.286 acres impacted of the 2.724 acres identified within the BSA, not including the substantial additional habitat within the BWER). Yellow warbler could nest in the BSA. Construction during the breeding season could disturb nesting activities, possibly resulting in nest abandonment, loss of young, and reduced health and vigor of eggs and/or nestlings. Direct effects on an active yellow warbler nest would be considered a violation of the *California Fish and Game Code* (Sections 3503, 3503.5, and 3513) and the MBTA. Any impact on an active nest would be considered adverse.

**Table 53 – Nesting Habitat for the Yellow Warbler that would be Impacted by the Project**

Vegetation Types and Other Areas	Existing (acres)	Permanent Impact (acres)	Temporary Impact (acres)	Total Impact (acres)
Arroyo Willow Thicket	2.039	0.286	0.000	<b>0.286</b>
Mulefat Thicket	0.685	0.000	0.000	<b>0.000</b>
<b>Total</b>	<b>2.724</b>	<b>0.286</b>	<b>0.000</b>	<b>0.286</b>

***Avoidance and Minimization Efforts***

Avoidance and minimization measures efforts are the same as those described in SC BIO-5.

***Compensatory Mitigation***

With incorporation of the avoidance and minimization measures listed above, no mitigation would be required.

***Cumulative Impacts***

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the species. The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for the species (USACE and CDFW 2017). This cumulative project’s impact would represent a temporary decrease of the regional habitat; however, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat. As a result, CDFW’s Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species. When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the species.

***Conclusion***

The Project may affect, but not adversely affect yellow warbler.



**4.4.25. Discussion of Yellow-Headed Blackbird (*Xanthocephalus xanthocephalus*)**

**Survey Results**

Suitable foraging and limited nesting habitat for yellow-headed blackbird is located in the BSA; however, this species is mainly expected to occur as a migrant. This species was not observed during general surveys of the BSA or during surveys of the BWER (USACE and CDFW 2017). Therefore, this species has a moderate potential to occur for foraging but low potential to occur for nesting in the BSA.

**Project Impacts**

Yellow-headed blackbird has a low potential for nesting in the BSA. As identified in Table 55, the Project would impact a total of 0.002 acre of suitable nesting habitat for this species (0.000 acre permanent; 0.002 acre temporary). The loss of foraging habitat for this species would be limited relative to the availability of similar habitat in the region. Further, the number of individuals with potential to occur onsite are low and the limited loss of foraging habitat would not likely have an effect on regional populations (0.002 acres impacted of the 1.002 acres identified within the BSA, not including the substantial additional habitat within the BWER). Yellow-headed blackbird could nest in the BSA. Construction during the breeding season could disturb nesting activities, possibly resulting in nest abandonment, loss of young, and reduced health and vigor of eggs and/or nestlings. Direct effects on an active yellow-headed blackbird nest would be considered a violation of the *California Fish and Game Code* (Sections 3503, 3503.5, and 3513) and the MBTA. Any impact on an active nest would be considered adverse.

**Table 54 – Nesting Habitat for the Yellow-headed Blackbird that would be Impacted by the Project**

Vegetation Types and Other Areas	Existing (acres)	Permanent Impact (acres)	Temporary Impact (acres)	Total Impact (acres)
California Bulrush Marsh	0.689	0.000	0.002	<b>0.002</b>
Cattail Marsh	0.313	0.000	0.000	<b>0.000</b>
<b>Total</b>	<b>1.002</b>	<b>0.000</b>	<b>0.002</b>	<b>0.002</b>

**Avoidance and Minimization Efforts**

Avoidance and minimization measures efforts are the same as those described in Section 4.4.15.

### **Compensatory Mitigation**

With incorporation of the avoidance and minimization measures listed above, no mitigation would be required.

### **Cumulative Impacts**

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the species. The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for the species (USACE and CDFW 2017). This cumulative project's impact would represent a temporary decrease of the regional habitat; however, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat. As a result, CDFW's Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species. When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the species.

### **Conclusion**

The Project may affect, but not adversely affect yellow-headed blackbird.

#### **4.4.26. Discussion of Burrowing Owl (*Athene cunicularia*)**

##### **Survey Results**

Suitable foraging habitat for burrowing owl is located in the BSA; however, this species is mainly expected to occur as a migrant or for wintering. The BSA is outside of the species current range for nesting and the species is not expected to nest within the BSA. This species was not observed during the habitat assessment and burrow surveys, no suitable burrows were observed during the surveys; however, observations of the species are documented from within Ballona wetlands (Appendix E; USACE and CDFW2017). Therefore, this species has a moderate potential to occur for foraging and wintering in the BSA.

##### **Project Impacts**

Burrowing owl has a moderate potential to occur for foraging but is not expected to nest in the BSA. As identified in Table 56, the Project would impact a total of 7.851 acre of suitable foraging habitat for this species (2.327 acre permanent; 5.524 acre temporary). The loss of foraging habitat for this species would be limited relative to the availability of

similar habitat in the region (7.849 acres impacted of the 55.954 acres identified within the BSA, not including the substantial additional habitat within the BWER).

**Table 55 – Habitat for the Burrowing Owl that would be Impacted by the Project**

Vegetation Types and Other Areas	Existing (acres)	Permanent Impact (acres)	Temporary Impact (acres)	Total Impact (acres)
California Sagebrush Scrub	3.533	0.835	0.381	<b>1.216</b>
Coyote Brush Scrub	4.485	0.042	0.248	<b>0.290</b>
Degraded Coyote Brush Scrub	2.637	0.000	0.000	<b>0.000</b>
Laurel Sumac Scrub	1.265	0.000	0.000	<b>0.000</b>
Menzies's Golden Bush Scrub	2.158	0.016	0.297	<b>0.313</b>
Quailbush Scrub	4.145	0.004	0.031	<b>0.035</b>
Annual Brome Grassland	0.493	0.015	0.131	<b>0.146</b>
Cudweed Stand	0.874	0.000	0.000	<b>0.000</b>
Hyssop-Leaved Bassia Stand	3.056	0.000	0.952	<b>0.952</b>
Semi-Natural Herbaceous Stand	4.646	0.200	1.564	<b>1.764</b>
Upland Mustards	24.872	1.215	1.918	<b>3.133</b>
Alkali Weed Playa	1.108	0.000	0.000	<b>0.000</b>
Annual Beard Grass-Bristly Ox-tongue Grassland	2.682	0.000	0.000	<b>0.000</b>
<b>Total</b>	<b>55.954</b>	<b>2.327</b>	<b>5.522</b>	<b>7.849</b>

**Avoidance and Minimization Efforts**

In addition to the Standard Conditions described at the beginning of Chapter 4, the following measures shall be implemented prior to or during construction to avoid and minimize Project impacts to the burrowing owl and/or its habitat. The City shall confirm that the Contractor has implemented the following:

1. A qualified biologist shall conduct wintering/breeding protocol burrowing owl surveys in accordance with CDFW’s 2012 Staff Report on Burrowing Owl Mitigation to determine whether or not owls are present within the Project site. If burrowing owls are detected, a Burrowing Owl Management Plan will be prepared and then submitted to CDFW and Caltrans for approval prior to commencement of construction. The Burrowing Owl Management Plan will be based on CDFW’s 2012 Staff Report on Burrowing Owl Mitigation and address owl specific minimization and avoidance measures, and measures to protect occupied habitat. The Burrowing Owl Management Plan will include mitigation for impacted occupied burrows at no less than a 3:1 ratio by installation of artificial burrows.

2. Prior to construction, pre-construction surveys shall be conducted no more than 14 days prior to the commencement of work activities. A final survey prior to disturbance of a potential owl burrow shall be conducted within 24 hours of disturbance. Surveys shall be conducted throughout suitable habitat to detect wintering and breeding owls, if present. Destruction of unoccupied wintering burrows is considered a temporary impact, and suitable wintering habitat shall be restored to pre-Project or better conditions in upland areas. If an occupied burrow is impacted by Project activities, mitigation for that impact shall be implemented in accordance with the Burrowing Owl Management Plan as mentioned in the prior paragraph.
3. Within 24 hours prior to construction activities involving ground or vegetation disturbance within suitable burrowing owl habitat, a qualified biologist shall conduct a survey to check for signs of burrowing owl. If breeding or wintering owls are detected, burrowing owls and active burrows shall be avoided and the protective buffers established in the Burrowing Owl Management Plan shall be implemented.
4. To avoid effects on burrowing owls, preconstruction surveys of potential breeding sites would be conducted onsite within 152 m (500 ft) of construction activities. Construction activities may only occur within 152 m (500 ft) of unoccupied nest sites at the discretion of a qualified biologist. If breeding birds are present and are within an area with potential to be affected, then the measures outlined in the Burrowing Owl Management Plan shall be implemented and no construction activity shall be allowed to affect an active nest. .
5. Burrowing owl individuals present within the construction area would be flushed from active burrows during the non-nesting season (August to January) and burrows excluded. These activities would be conducted in a manner consistent with the *Burrowing Owl Survey Protocol and Mitigation Guidelines*, prepared by The California Burrowing Owl Consortium in 1997. Exclusions would require maintenance and monitoring to assure that individuals do not return.

### ***Compensatory Mitigation***

The requisite mitigation identified in the Burrowing Owl Management Plan, should it be needed, would sufficiently mitigate potential adverse effects to the species.

### ***Cumulative Impacts***

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the species. The Ballona Wetlands Restoration Project would impact up to 473 acres of

impacts to vegetated areas, some of which could provide suitable habitat for the species (USACE and CDFW 2017). This cumulative project's impact would represent a temporary decrease of the regional habitat; however, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat. As a result, CDFW's Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species. When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the species.

### **Conclusion**

The Project may affect, but not adversely affect burrowing owl.

#### **4.4.27. Discussion of Special-Status Birds With Limited Occurrence Within the BSA**

Several special-status bird species could occasionally occur within the BSA as non-breeding foragers based on previous surveys of the BSA and the results of the literature review. These species are grouped together because they are not expected to nest within the BSA and because affects will be minimal, if at all, by the Project.

### **Survey Results**

Several other special-status wildlife species may occur in the BSA only as occasional foragers, migrants, or transients; these include the sharp-shinned hawk (*Accipiter striatus*), southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), grasshopper sparrow (*Ammodramus savannarum*), Bell's sage sparrow (*Artemisiospiza belli bellii*), short-eared owl (*Asio flammeus*), long-eared owl (*Asio otus*), redhead (*Aythya americana*), brant (*Branta bernicla*), American bittern (*Botaurus lentiginosus*), ferruginous hawk (*Buteo regalis*), rhinoceros auklet (*Cerorhinca monocerata*), Vaux's swift (*Chaetura vauxi*), mountain plover (*Charadrius montanus*), black tern (*Chlidonias niger*), olive-sided flycatcher (*Contopus cooperi*), yellow rail (*Coturnicops noveboracensis*), black swift (*Cypseloides niger*), fulvous whistling-duck (*Dendrocygna bicolor*), merlin (*Falco columbarius*), American peregrine falcon (*Falco peregrinus anatum*), prairie falcon (*Falco mexicanus*), tufted puffin (*Fratercula cirrhata*), common loon (*Gavia immer*), harlequin duck (*Histrionicus histrionicus*), Caspian tern (*Hydroprogne caspia*), California gull (*Larus californicus*), laughing gull (*Leucophaeus atricilla*), wood stork (*Mycteria americana*), long-billed curlew (*Numenius americanus*), fork-tailed storm-petrel (*Oceanodroma furcata*), ashy storm-petrel (*Oceanodroma homochroa*), black storm-petrel (*Oceanodroma melania*), Lucy's warbler (*Oreothlypis*

*luciae*), Virginia's warbler (*Oreothlypis virginiae*), large-billed savannah sparrow (*Passerculus sandwichensis rostratus*), American white pelican (*Pelecanus erythrorhynchos*), California brown pelican (*Pelecanus occidentalis californicus*), summer tanager (*Piranga rubra*), Oregon vesper sparrow (*Pooecetes gramineus affinis*), purple martin (*Progne subis*), Cassin's auklet (*Ptychoramphus aleuticus*), vermilion flycatcher (*Pyrocephalus rubinus*), black skimmer (*Rynchops niger*), Brewer's sparrow (*Spizella breweri*), and elegant tern (*Thalasseus elegans*). None of these species are expected to breed on, or regularly use the BSA, as the BSA is not within their breeding range and/or does not contain breeding habitat; therefore, these species are not expected to be adversely affected by Project activities. In addition, these species are only considered special status during the nesting season. Suitable foraging habitat for these species is abundant in the region, and the BSA represents a minor fraction of foraging habitat available to these species regionally.

### **Project Impacts**

A small amount of potential foraging habitat will be permanently or temporarily impacted by the Project, and small numbers of individual species may be temporarily disturbed during construction. In addition, the number of individuals of these species that forage in the Project is low and the Project's effect on non-breeding habitat for these species are not expected to result in impacts on regional populations. Therefore, no long-term effects on populations of these species is expected.

### **Avoidance and Minimization Efforts**

These species are not expected to nest in the BSA, and occasional foraging individuals are not expected to be impacted directly by the Project, as they can easily flee construction activities before injury or mortality occurs. Therefore, no avoidance and minimization measures are proposed.

### **Compensatory Mitigation**

No nesting habitat will be impacted due to Project activities so no mitigation for impacts to these species is necessary. Because of the limited nature of Project impacts on these species and their habitats, no additional compensatory mitigation is necessary.

### **Cumulative Impacts**

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the species. The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for the species (USACE and CDFW 2017). This cumulative project's impact would represent a temporary decrease of the regional habitat; however, the Ballona Wetlands Restoration

Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat. As a result, CDFW's Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species. When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the species.

### **Conclusion**

The Project may affect, but not adversely affect these other special status bird species.

#### **4.4.28. Discussion of Roosting Bats**

Bats are known to roost under or in association with bridges, and several species may roost in trees in the BSA as well, so the potential for the BSA to support roosting bats was assessed. Special-status bats with potential to roost in the BSA include pallid bat (*Antrozous pallidus*), silver-haired bat (*Lasionycteris noctivagans*), western red bat (*Lasiurus frantzii*), western yellow bat (*Dasypterus xanthinus*), hoary bat (*Aeorestes cinereus*), Yuma myotis (*Myotis yumanensis*), pocketed free-tailed bat (*Nyctinomops femorosaccus*), and big free-tailed bat (*Nyctinomops macrotis*). Further, common species of bat, such as Mexican free-tail (*Tadarida brasiliensis*) and California myotis (*Myotis californicus*), have potential to have large maternity colonies in structures, such as bridges and culverts, located within the BSA.

### **Survey Results**

Focused surveys for bats were not done as part of the Project; however, suitable foraging and roosting habitat for Mexican free-tail bat, hoary bat, Yuma myotis, and silver-haired bat is located in the BSA. These species were observed during 2014 bat surveys for the BWER (ESA 2015). Therefore, these species have a moderate and high potential to occur in the BSA. Suitable foraging and roosting habitat for western yellow bat, pallid bat, western red bat, pocketed free-tailed bat, and big free-tailed bat is located in the BSA; however, these species were not observed during bat surveys for the BWER (ESA 2015). These species have a moderate potential to occur in the BSA. Additional focused bat surveys are being conducted within the project site in the 2024 survey season. Information on the results of these surveys will be provided along with the Final EIR/EA.

### **Project Impacts**

Special-status bats have potential to forage and roost in the BSA. As identified in Table 57, the Project would impact a total of 22.404 acres of suitable habitat for these species (12.087 acres permanent; 10.317 acres temporary). The loss of habitat for this species

would be limited relative to the availability of similar habitat in the region (22.404 acres impacted of the 131.809 acres identified within the BSA, not including the substantial additional habitat within the BWER).

If the structures or vegetation within the Project impact area support an active bat maternity roost during bridge demolition or vegetation removal activities associated with the Project, impacts have potential to be adverse.

**Table 56 – Habitat for Special-Status Bats that would be Impacted by the Project**

<b>Vegetation Types and Other Areas</b>	<b>Existing (acres)</b>	<b>Permanent Impact (acres)</b>	<b>Temporary Impact (acres)</b>	<b>Total Impact (acres)</b>
California Sagebrush Scrub	3.533	0.835	0.381	<b>1.216</b>
Coyote Brush Scrub	4.485	0.042	0.248	<b>0.290</b>
Degraded Coyote Brush Scrub	2.637	0.000	0.000	<b>0.000</b>
Laurel Sumac Scrub	1.265	0.000	0.000	<b>0.000</b>
Menzies's Golden Bush Scrub	2.158	0.016	0.297	<b>0.313</b>
Quailbush Scrub	4.145	0.004	0.031	<b>0.035</b>
Annual Brome Grassland	0.493	0.015	0.131	<b>0.146</b>
Cudweed Stand	0.874	0.000	0.000	<b>0.000</b>
Hyssop-Leaved Bassia Stand	3.056	0.000	0.952	<b>0.952</b>
Semi-Natural Herbaceous Stand	4.646	0.200	1.564	<b>1.764</b>
Upland Mustards	24.872	1.215	1.918	<b>3.133</b>
Alkali Weed Playa	1.108	0.000	0.000	<b>0.000</b>
Annual Beard Grass-Bristly Ox-tongue Grassland	2.682	0.000	0.000	<b>0.000</b>
California Bulrush Marsh	0.689	0.000	0.002	<b>0.002</b>
Cattail Marsh	0.313	0.000	0.000	<b>0.000</b>
Pickleweed Mat	1.196	0.000	0.000	<b>0.000</b>
Arroyo Willow Thicket	2.039	0.286	0.000	<b>0.286</b>
Mulefat Thicket	0.685	0.000	0.000	<b>0.000</b>
Developed	56.015	9.467	2.654	<b>12.111</b>
Open Water	9.268	0.007	2.130	<b>2.137</b>
Parks and Landscaping	5.650	0.000	0.009	<b>0.009</b>
<b>Total</b>	<b>131.809</b>	<b>12.087</b>	<b>10.317</b>	<b>22.404</b>



### **Avoidance and Minimization Efforts**

In addition to the Standard Conditions described at the beginning of Chapter 4, the following measures shall be implemented prior to or during construction to avoid and minimize Project impacts to special-status bat species and/or their habitat. The City shall confirm that the Contractor has implemented the following:

1. Project bridge demolition or vegetation removal activities within potential bat roosting habitat shall avoid the maternity roosting season (March 1 to October 1) to the extent feasible. If work must be conducted within the maternity roosting season, prior to the start of work within or near trees, bridges or other structures within the work area, a qualified bat biologist shall conduct a preconstruction survey to determine if bats are roosting within the Project work area. If bats are not roosting, no further mitigation is required.
2. If bats are roosting, all maternity roosts shall be avoided and an appropriate no-disturbance buffer shall be established at the discretion of a qualified bat biologist. No work shall be allowed within the buffer during maternity roosting without prior approval by CDFW.
3. Prior to felling any tree with potential to support tree-roosting bat species, the following procedures shall be applied: 1) Trees shall only be trimmed and/or felled outside of the maternity roosting season (prior to March 1 or after October 1); 2) All tree felling and removal shall be conducted under the direction of a qualified bat biologist; 3) All trees shall be removed in two stages, where in the first stage, the tree will be felled by slowly lowering it to the ground (either the entire tree or large, intact portions of the tree) and left on the ground, untrimmed and uncovered for a minimum of 24 hours allowing bats to leave during the night, followed by the second stage of removal where the tree can then be dismantled or cut into smaller parts and removed.
4. If bats are determined by a qualified biologist to be roosting within bridges and other structures within the work area and unavoidable Project-related impacts to the roosting bats are anticipated, bats shall be humanely evicted and excluded from those structures. The humane eviction/exclusion shall be conducted in the fall (October or November) preceding work activities that could affect roosting bats. Exclusion in the fall is recommended to avoid impacts to hibernating bats (typically December through February in southern California) or a maternity roost (typically March 1 through October 1) when roost occupants are not able to evacuate.

5. To protect roosting bats, a combination of acoustic surveys of habitat around structures, structure inspection, and exit counts shall be used to survey the area that may be directly or indirectly impacted by the Project. As bats may utilize dense tree canopies, snags, or bridges over creeks/water, these habitat types should be specifically surveyed. Foraging areas should also be identified and specific flight routes to those foraging areas as well. Bats shall be identified to the most specific taxonomic level possible, and roosts shall be evaluated to determine their size and significance.
6. Bat surveys shall include: 1) the location of all roosting sites (location shall be adequately described and drawn on a map); 2) the number of bats present at the time of visit (count or estimate); 3) all species of bat observed shall be identified to the best extent feasible (include how the species was identified); 4) the location, approximate amount and distribution of all bat droppings shall be described and shown on a map; 5) the type of roost; night roost (rest at night while out feeding) versus a day roost (maternity colony) shall also be clearly stated; and 6) all survey results shall be provided to CDFW and Caltrans.
7. During installation of humane eviction/exclusion materials, each crevice shall be inspected using flashlights or fiber optic scopes for the presence of day-roosting bats. At crevices where the absence of day-roosting bats is confirmed, the crevices immediately shall be sealed using materials such as foam backer rod or pipe insulation secured with adhesive to prevent bats from entering and using the crevices. At crevices where bats are visibly present or where absence cannot be confirmed, humane eviction devices shall be installed that would allow the bats to exit the crevice but prevent them from returning. The qualified biologist performing the humane eviction shall determine the exact type of eviction device to be installed and exclusionary device used. The eviction device shall remain in place for at least 14 days following installation to allow sufficient time for all the bats to vacate the crevice. After the eviction period, the eviction device shall be removed, and exclusion material installed. The exclusion material shall remain in place for the duration of work activities and shall be inspected weekly by a qualified biologist. All aspects of the humane eviction/exclusion of bats shall be supervised directly and monitored by a qualified biologist approved by CDFW. Following completion of activities that could impact roosting bats, the exclusion devices shall be removed by the contractor (under supervision of the qualified biologist) to allow bats to return to the roost crevices.

### **Compensatory Mitigation**

With incorporation of the avoidance and minimization measures listed above, no mitigation would be required.

### **Cumulative Impacts**

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the species. The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for the species (USACE and CDFW 2017). This cumulative project's impact would represent a temporary decrease of the regional habitat; however, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat. As a result, CDFW's Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species. When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the species.

### **Conclusion**

The Project may affect, but not adversely affect roosting bats.

#### **4.4.29. Discussion of South Coast Marsh Vole (*Microtus californicus stephensi*) and Southern California Saltmarsh Shrew (*Sorex ornatus salicornicus*)**

##### **Survey Results**

The south coast marsh vole and southern California saltmarsh shrew are similarly associated with marsh habitats in the BSA. These species are assessed together because potential impacts of the Project on these species will be similar. Focused trapping surveys for mammals were not done as part of the Project; however, suitable habitat for south coast marsh vole and southern California saltmarsh shrew is located in the BSA and these species were observed during surveys of the BWER (USACE and CDFW 2017). Mammal trapping surveys are being conducted within the project site in the 2024 survey season. Information on the results of these surveys will be provided along with the Final EIR/EA.

##### **Project Impacts**

South coast marsh vole and southern California saltmarsh shrew have a high potential to occur in the BSA. As identified in Table 58, the Project would impact a total of 0.002

acre of suitable habitat for these species (0.000 acre permanent; 0.002 acre temporary). The Project would not adversely affect the regional populations because the Project would result in a minimal loss of suitable habitat relative to the amount available along Ballona Creek and the adjacent BWER.

**Table 57 – Habitat for South Coast Marsh Vole and Southern California Saltmarsh Shrew that would be Impacted by the Project**

Vegetation Types and Other Areas	Existing (acres)	Permanent Impact (acres)	Temporary Impact (acres)	Total Impact (acres)
California Bulrush Marsh	0.689	0.000	0.002	<b>0.002</b>
Cattail Marsh	0.313	0.000	0.000	<b>0.000</b>
<b>Total</b>	<b>1.002</b>	<b>0.000</b>	<b>0.002</b>	<b>0.002</b>

***Avoidance and Minimization Efforts***

In addition to the Standard Conditions described at the beginning of Chapter 4, the following measures shall be implemented prior to or during construction to avoid and minimize Project impacts to the south coast marsh vole and southern California saltmarsh shrew and/or their habitat. The City shall confirm that the Contractor has implemented the following:

1. Prior to the start of the construction day and at the end of the construction day, all open trenches, holes, or other excavations shall be inspected by the qualified biologist for the presence of small mammals and other wildlife prior to backfilling. Excavations that remain open overnight shall be covered to prevent wildlife from becoming trapped. If any small mammals are observed in the trenches or excavated areas, a ramp will be placed in the trench/excavated area to allow the animal to escape, or a qualified biologist shall relocate any animals found within excavated areas.

***Compensatory Mitigation***

No compensatory mitigation would be required beyond implementation of the Standard Conditions described at the beginning of Chapter 4 and listed above.

***Cumulative Impacts***

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the species. The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for the species (USACE and CDFW 2017). This cumulative project’s impact would represent a temporary decrease of the regional habitat; however, the Ballona Wetlands Restoration

Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat. As a result, CDFW's Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species. When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the species.

### **Conclusion**

The Project may affect, but not adversely affect south coast marsh vole and southern California saltmarsh shrew.

#### **4.4.30. Discussion of American Badger (*Taxidea taxus*)**

##### **Survey Results**

Focused surveys for mammals were not done as part of the Project; however, limited suitable habitat for American badger is located in the BSA. This species was not observed during surveys of the BWER (USACE and CDFW 2017). There are no known occurrences in the vicinity of the BSA (CDFW 2019a). Therefore, these species have low potential to occur in the BSA. Additional focused surveys are being conducted within the project site in the 2024 survey season. Information on the results of these surveys will be provided along with the Final EIR/EA.

##### **Project Impacts**

American badger has a low potential to occur in the BSA. As identified in Table 59, the Project would impact a total of 7.849 acre of suitable habitat for these species (2.327 acre permanent; 5.522 acre temporary). The Project would not adversely affect the regional populations because the Project would result in a minimal loss of suitable habitat relative to the amount available along Ballona Creek and the adjacent BWER (7.849 acres impacted of the 55.954 acres identified within the BSA, not including the substantial additional habitat within the BWER).

**Table 58 – Habitat for American Badger that would be Impacted by the Project**

<b>Vegetation Types and Other Areas</b>	<b>Existing (acres)</b>	<b>Permanent Impact (acres)</b>	<b>Temporary Impact (acres)</b>	<b>Total Impact (acres)</b>
California Sagebrush Scrub	3.533	0.835	0.381	<b>1.216</b>
Coyote Brush Scrub	4.485	0.042	0.248	<b>0.290</b>
Degraded Coyote Brush Scrub	2.637	0.000	0.000	<b>0.000</b>
Laurel Sumac Scrub	1.265	0.000	0.000	<b>0.000</b>
Menzies's Golden Bush Scrub	2.158	0.016	0.297	<b>0.313</b>
Quailbush Scrub	4.145	0.004	0.031	<b>0.035</b>
Annual Brome Grassland	0.493	0.015	0.131	<b>0.146</b>
Cudweed Stand	0.874	0.000	0.000	<b>0.000</b>
Hyssop-Leaved Bassia Stand	3.056	0.000	0.952	<b>0.952</b>
Semi-Natural Herbaceous Stand	4.646	0.200	1.564	<b>1.764</b>
Upland Mustards	24.872	1.215	1.918	<b>3.133</b>
Alkali Weed Playa	1.108	0.000	0.000	<b>0.000</b>
Annual Beard Grass-Bristly Ox-tongue Grassland	2.682	0.000	0.000	<b>0.000</b>
<b>Total</b>	<b>55.954</b>	<b>2.327</b>	<b>5.522</b>	<b>7.849</b>

***Avoidance and Minimization Efforts***

No avoidance or minimization measures would be necessary.

***Compensatory Mitigation***

No mitigation would be required for this species.

***Cumulative Impacts***

In addition to the Project, the Ballona Wetlands Restoration Project is the other primary cumulative project in proximity to the Project site that would potentially affect the species. The Ballona Wetlands Restoration Project would impact up to 473 acres of impacts to vegetated areas, some of which could provide suitable habitat for the species (USACE and CDFW 2017). This cumulative project’s impact would represent a temporary decrease of the regional habitat; however, the Ballona Wetlands Restoration Project would preserve and restore or enhance biologically significant areas and would mitigate their impacts to suitable habitat. As a result, CDFW’s Ballona Wetlands Restoration Project would result in potential temporary effects but would provide long-term conservation benefits for the species. When viewed cumulatively, the Project and other cumulative projects in the Project vicinity, including the Ballona Wetlands Restoration Project would result in the temporary loss, but long-term establishment and conservation of habitat for the species.

***Conclusion***

The Project may affect, but not adversely affect American badger.

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## Chapter 5. Conclusions and Regulatory Determinations

Prior to construction, the permits and special provisions summarized in Table 60 may be required.

**Table 59 – Project Permits and Special Provisions**

Potential Impact To:	Law/Permit Provisions Anticipated	Issuing Agency
“Waters of the U.S.”	<b>Clean Water Act:</b> 404 Permit/401 Water Quality Certification; NPDES Permit.	USACE/RWQCB
“Waters of the State”	<b>California Fish and Game Code:</b> 1602 Streambed Alteration Agreement.	CDFW
CCC Jurisdictional Waters	<b>Coastal Act:</b> CDP	CCC
Crotch bumblebee	<b>CESA, Incidental Take Permit/Consistency Determination:</b> Pre-construction survey; protection if found.	CDFW
Wandering skipper, mimic tryonia	<b>CEQA;</b> Pre-construction survey; relocation or protection if found.	City
Steelhead, green turtle	<b>FESA, Section 7 Consultation:</b> Daily surveys; protection if found; noise restrictions; use of bubble curtains; monitoring requirements.	USFWS, NOAA/NMFS
Western spadefoot, southern California legless lizard, coastal whiptail, coast horned lizard, San Bernardino ringneck snake, two-striped garter snake, south coast garter snake	<b>CEQA; California Fish and Game Code:</b> Pre-construction survey; relocation or protection if found; monitoring requirements.	CDFW/City
Western pond turtle	<b>CEQA; California Fish and Game Code:</b> Pre-construction survey; relocation or protection if found; noise restrictions, use of bubble curtains, monitoring requirements.	CDFW/City
Tricolored blackbird, Swainson’s hawk, greater sandhill crane, bald eagle, California black rail, bank swallow,	<b>CESA, Incidental Take Permit/Consistency Determination, California Fish and Game Code:</b> pre-construction surveys, protection if found; noise restrictions; monitoring requirements.	CDFW
Marbled murrelet, western yellow-billed cuckoo, southwestern willow flycatcher, light-footed Ridgway’s rail, California least tern, least Bell’s vireo,	<b>FESA, Section 7 Consultation, CESA, Incidental Take Permit/Consistency Determination:</b> pre-construction surveys, protection if found; noise restrictions; monitoring requirements.	USFWS/CDFW
Belding’s savannah sparrow	<b>CESA, Incidental Take Permit/Consistency Determination:</b> pre-construction focused surveys, protection if found; noise restrictions; monitoring requirements.	CDFW
Coastal California gnatcatcher	<b>FESA, Section 7 Consultation, CESA, Incidental Take Permit/Consistency Determination:</b> pre-construction focused surveys, protection if found; noise restrictions; monitoring requirements.	<u>USFWS/CDFW</u>

**Table 60 – Project Permits and Special Provisions**

Potential Impact To:	Law/Permit Provisions Anticipated	Issuing Agency
Cooper’s hawk, northern harrier, white-tailed kite, osprey	<b>CEQA; California Fish and Game Code; MBTA:</b> pre-construction surveys, protection if found; construction timing; noise restrictions; monitoring requirements.	CDFW/City
Yellow-breasted chat, least bittern, loggerhead shrike, California black rail, double-crested cormorant, white-faced ibis, yellow warbler, yellow-headed blackbird, Clark’s marsh wren, California horned lark	<b>CEQA; California Fish and Game Code; MBTA:</b> pre-construction nesting bird survey (if vegetation removed during the breeding season), protection if found; noise restrictions; monitoring requirements.	CDFW/City
Burrowing owl	<b>CEQA; California Fish and Game Code; MBTA:</b> focused surveys; relocation or protection if found (depending on season).	CDFW/City
South coast marsh vole, southern California saltmarsh shrew,	<b>CEQA:</b> inspection of open trenches, holes or other excavations; monitoring requirements.	City
Pallid bat, silver-haired bat, western red bat, western yellow bat, hoary bat, Yuma myotis, pocketed free-tailed bat, big free-tailed bat	<b>CEQA:</b> avoidance of maternity roosting season; pre-construction roosting surveys; protection during hibernation and breeding season, if found; exclusion outside of maternity roosting season.	City
Bat species	<b>CEQA:</b> Restrictions on night lighting during construction and placement of permanent night lighting.	City
Nesting birds/Raptors	<b>California Fish and Game Code; MBTA:</b> vegetation removal to occur during the non-breeding season (September 1–January 31) or pre-construction nesting bird/raptor surveys; protection, if found.	CDFW/City
Invasive Exotic Plant Species	<b>CEQA;</b> Contract Special Provisions; review of Landscaping Plan.	Caltrans/City
Protected Trees	<b>CEQA; City Code:</b> tree removal permit.	City
USACE: U.S. Army Corps of Engineers; RWQCB: Regional Water Quality Control Board; CDFW: California Department of Fish and Wildlife; CDP: Coastal Development Permit; CCC: California Coastal Commission; FESA: Federal Endangered Species Act; NOAA/NMFS: National Oceanic and Atmospheric Administration/National Marine Fisheries Service; USFWS: U.S. Fish and Wildlife Service; CEQA: California Environmental Quality Act; MBTA: Migratory Bird Treaty Act; CESA: California Endangered Species Act		

### 5.1. Federal Endangered Species Act Consultation Summary

This NES provides information that is consistent with the content and analysis of a Biological Assessment (BA). Caltrans initiated consultation with the USFWS in 2023 for this Project. The Project is not likely to cause take of any federally listed species. With implementation of the Avoidance and Minimization Measures described above, the any potential Project-related effects would not adversely affect species listed under the Federal Endangered Species Act.

A USFWS special-status species list was obtained from the Sacramento office of the USFWS on March 20, 2017, and updated lists were obtained on June 24, 2019,

December 12, 2019, December 7, 2022, and October 1, 2023 (see the USFWS Species List, which is provided in Appendix A).

## **5.2. Essential Fish Habitat Consultation Summary**

EFH is defined as “those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity” (16 USC Section 1802[10]). This habitat is under the jurisdiction of, and regulated by, the NOAA Fisheries (also known as the NMFS). Any adverse impacts from Projects on EFH must be disclosed in an Essential Fish Habitat Assessment, which is submitted to the NMFS for approval as a stand-alone assessment, or such impacts can be evaluated in the NEPA document. The impact analysis section discusses why the Project alternatives would result in short-term adverse impacts to EFH during construction with long-term beneficial effects.

The web mapper provided on the NMFS website identifies groundfish EFH as occurring within the Project site (NMFS 2022a) within Ballona Creek. Groundfish are fish such as rockfish, sablefish, flatfish, and Pacific whiting that are often (but not exclusively) found on or near the ocean floor or other structures (PFMC 2013). NMFS interprets EFH in its regulations as follows: “waters” include aquatic areas and their associated physical, chemical, and biological properties that are used by fish, and may include areas historically used by fish where appropriate; “substrate” includes sediment, hard bottom, structures underlying the waters, and associated biological communities; “necessary” means “the habitat required to support a sustainable fishery and the managed species’ contribution to a healthy ecosystem”; and “spawning, breeding, feeding, or growth to maturity” covers the full life cycle of a species (PFMC 2005).

The extent of groundfish EFH is identified as all waters and substrate with depths less than or equal to 3,500 meters (1,914 fathoms) to mean higher high-water level (MHHW) or the upriver extent of saltwater intrusion, defined as upstream and landward to where ocean-derived salts measure less than 0.5 ppt during the period of average annual low flow (PFMC 2005). Groundfish EFH is mapped along the entire California coastline, including waters and substrate adjacent to the Project site such as Marina Del Rey and Santa Monica Bay (NMFS 2022a).

In addition to EFH, the Project site is also within a Habitat Area of Particular Concern (HAPC). HAPCs are areas within EFH that are considered “high priority areas for conservation, management, or research due to their rare, sensitive, stressed by development, or important to ecosystem function” (NMFS 2022b). The HAPC in the Project site is defined as an estuary (NMFS 2022b).

Federal agencies that fund, permit, or implement activities that may adversely affect EFH are required to consult with NMFS regarding potential adverse effects of the Project on EFH and respond in writing to the NMFS recommendations. There has been no consultation with NMFS to date on this Project. Implementation of the Avoidance and Minimization Measures described above will reduce potential effects and while effects may occur to EFH they would not be adverse. However, EFH Consultations between the Caltrans and NOAA/NMFS may be necessary to request concurrence on special-status species impact determinations and avoidance, minimization, and mitigation proposed to offset any impacts. The NOAA/NMFS will make the final decision for consultation.

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

The CDFW authorizes take of Endangered, Threatened, or candidate species through Section 2081 and 2081.1 of the *California Fish and Game Code*. No take of state-listed species is anticipated as a result of the Project with implementation of the Avoidance and Minimization Measures listed above. Therefore, it will not be necessary for the City to obtain an Incidental Take Permit or a Consistency Determination. However, consultations between the City and CDFW may be necessary to request concurrence on special-status species impact determinations and avoidance, minimization, and mitigation proposed to offset any impacts. CDFW will make the final decision as to whether a Take Permit or a Consistency Determination is needed.

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

Figures 9a and 9b illustrate the jurisdictional resources present within the BSA. No coordination with the USACE, the CDFW, the RWQCB, and the CCC has occurred to date related to permitting for jurisdictional resources; however, agency coordination will occur during the permitting phase. The City will contact the USACE, the CDFW, the RWQCB, Caltrans, and the CCC to request a field verification meeting. Impacts on jurisdictional waters require preparation and processing of a USACE Section 404 Permit, an RWQCB Section 401 Water Quality Certification, a CDFW Section 1602 Streambed Alteration Agreement, a CCC CDP, and the appropriate jurisdictional determination form approved by the USACE.

## 5.5. Invasive Species

During the field surveys conducted for the Project, plant species were observed, and a list of these species were compiled and is presented in the plant compendium, which is provided as Appendix B. Several invasive species were observed within or adjacent to the BSA. Executive Order 13112 directs federal agencies to “prevent the introduction of invasive species and provide for their control and to minimize the economic, ecological, and human health impacts that invasive species [may] cause” (Clinton 1999). The Project would include re-planting of some temporarily impacted areas. Federal requirements prohibit planting of exotic species identified as invasive because seeds from invasive species could escape into natural areas and degrade the native vegetation. Implementation of the following measures would ensure that the Project would not indirectly impact the BSA or adjacent areas by introducing invasive plant species.

The City shall confirm that:

1. All landscape plans shall be reviewed and approved by a qualified botanist/restoration biologist during the Project design phase. The review shall verify that no noxious weeds/invasive exotic plant species (i.e., those on the California Invasive Plant Council’s (Cal-IPC) invasive plant inventory) are included on landscaping plans for the Project. The reviewing botanist/restoration biologist shall recommend suitable substitutes. Once a final landscaping plan is prepared, landscaping installed as part of the Project shall only include species on the approved list.
2. During site preparation and mobilization, the Contractor shall remove all invasive weeds designated by the Cal-IPC within Project’s designated construction staging and storage areas.
3. All equipment shall be power washed with hot water prior to utilization to avoid transferring invasive species from a prior work site.

Also, as noted above in the Standard Conditions provided in Section 4, a Noxious Weed Control Plan would be prepared by a qualified biologist and submitted to CDFW for review and approval prior to the start of Project construction. The plan shall include measures to ensure that noxious weeds are not spread and to prevent the establishment of non-native, invasive vegetation. The plan shall be implemented during all Project-related activities, and shall include, but not be limited to, the following: 1) control measures for invasive plant species on the site, 2) Project-specific procedures for handling noxious/invasive plants to prevent sprouting or regrowth, 3) Project-specific procedures

for cleaning equipment, and 4) Project-specific transportation of vegetation debris off site. The Noxious Weed Control Plan shall be reviewed during the WEAP training.

## **5.6. Other**

### ***Nesting Birds/Raptors***

The MBTA protects migratory birds and their nests and eggs, both common and special status. Bird species protected under the provisions of the MBTA are identified by the List of Migratory Birds (50 *Code of Federal Regulations* [CFR] §10.13, as amended). Since the 1970s, the MBTA has been interpreted to prohibit the accidental or “incidental” take of migratory birds.

Multiple sections of *California Fish and Game Code* provide protection for nesting birds and raptors unless the *California Fish and Game Code* or its implementing regulations provide otherwise. Section 3503 makes it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 specifically addresses raptors (i.e., birds of prey in the orders *Falconiformes* and *Strigiformes*) and makes it unlawful to take, possess, or destroy these birds or their nest or eggs. Section 3513 prohibits the take or possession of migratory non-game birds as designated by the MBTA or any part of such bird.

Migratory birds and raptors have the potential to nest on structures, in shrubs and trees, and on bare ground throughout the BSA. To prevent affects from being adverse, measures to avoid and minimize impacts to nesting birds are provided above in Section 4.0. With implementation of these measures, no additional mitigation is required.

### ***Wildlife Movement***

The BSA is located in an isolated fragment of coastal open space (i.e., the BWER) within a highly urbanized landscape. As such, regional movement is currently very limited. The Project would not result in additional habitat fragmentation or barriers to regional wildlife movement above current conditions. Therefore, there would be no impact on regional wildlife movement and no mitigation would be required.

The presence of the existing roads in the BSA (i.e., Lincoln Boulevard, Culver Boulevard, and West Jefferson Boulevard) currently act as a barrier to local wildlife movement. Under current conditions, Lincoln Boulevard has two travel lanes in the southbound direction and three travel lanes in the northbound direction; the southbound direction widens to four travel lanes at Jefferson Boulevard. Jefferson Boulevard has two to three travel lanes in each direction. Culver Boulevard has one travel lane in the southwest direction and two lanes in the northeast direction; the Culver Loop provides

northbound access to Lincoln Boulevard with two lanes from Culver Boulevard to Lincoln Boulevard and one lane from Lincoln Boulevard onto northeast-bound Culver Boulevard. The Culver overpass provides one travel lane in each direction. Average daily traffic (ADT) forecasts were developed for the segment of Lincoln Boulevard between Jefferson Boulevard and Fiji Way for four future year scenarios (Fehr and Peers 2017). The 2011 ADT was measured at 64,931. Under a no-build scenario, future traffic volumes are estimated at 70,600 and 83,000 for 2025 and 2045, respectively. Under a build scenario, future traffic volumes are estimated at 72,900 and 85,700 for 2025 and 2045, respectively.

Roads with a traffic intensity of over 10,000 vehicles per day were considered a near complete barrier for wildlife movement for most species by multiple authors (Charry and Jones 2009, Seiler 2003, Gibbs and Shriver 2005). Under both existing and estimated future conditions, traffic volumes of well over 10,000 vehicles per day are considered a near complete barrier to local wildlife movement. This is anticipated to occur whether or not the Project is built. Given the substantial impact on wildlife movement that currently exists, development of the Project doesn't represent a substantial change from current conditions. Therefore, the Project is not expected to result in increased mortality due to vehicle strikes above existing levels.

### ***Protected Trees and Shrubs***

Trees and shrubs protected by the City of Los Angeles Municipal Code (Article 6 Preservation of Protected Trees Sections 46.00 to 46.06) are present in the BSA, including California Live Oak (*Quercus agrifolia*) and Western Sycamore (*Platanus racemose*).

Prior to any Project-related vegetation removal a certified arborist shall assess all trees and vegetation identified for removal to determine if they would be considered protected based on the City's Municipal Code. If these trees or shrubs would be removed as part of the Project, then a permit would be required from the City's Board of Public Works.

### ***Noise Impacts***

Portions of the BWER that are adjacent to Lincoln Boulevard have existing sound levels between 67 and 68 dB, while sound levels drop down to 58 to 62 dB range as you get approximately 200 feet from the existing roadway (Caltrans 2021a). Therefore, there is already traffic noise which effects birds and other wildlife within the BWER. The effects of traffic and construction noise on birds and other wildlife is complex and varied depending on the species; however, it is clear that noise has effects on the behavior and communication of many species. For example, masking of communication signals and other biologically relevant sounds for birds are believed to be affected by continuous

noise levels of 60 dBA or greater but can be lower or higher depending on the bird species (Caltrans 2016a).

The closer birds and other wildlife are to the roadway in existing conditions, the greater the chance they would experience noise effects. For example, for birds there are four general overlapping categories of construction and traffic noise effects on birds, which include: (1) permanent threshold shift (PTS—permanent hearing loss), (2) temporary threshold shift (TTS—temporary hearing loss which recovers over a period of minutes to days from the end of noise exposure), (3) masking, and (4) other physiological and behavioral responses. For birds and other wildlife that are closest to the roadway, there is potential they could experience all four of the effects noted above. For birds and other wildlife furthest away, they may just experience other physiological and behavioral responses, such as constant arousal from the roadway noise levels, but not the other effects such as hearing loss or masking. In summary, increased noise levels can lead to hearing loss and other physical changes as well as behavioral changes in birds and other wildlife. For songbirds, for example, higher sound levels can result in changes to the tonality/amplitude of their calls, their higher cortisol levels, the likelihood that they will abandon their nests. For many wildlife, noise effects can result in reduced ability to hear prey, predators, and/or mates, as well as in reduced or altered usage of noisy areas in preference for more quiet areas (Shannon et al 2015).

During construction, Alternative 2 would result in temporary construction noise ranging from 70 to 86 dB at a distance of 50 feet, depending on the work activity. This would represent up to a 19 dB increase from existing ambient conditions at times temporarily during construction. Mitigation measures would be implemented to minimize potential temporary effects to wildlife hearing and behavior during construction, including conducting preconstruction nesting bird surveys, biological monitoring, and noise monitoring.

Once built, Alternative 2 would result in projected noise levels within areas of the BWER nearest Lincoln Boulevard of between 1 and 3 dBA higher than existing conditions. In addition to an overall increase in traffic noise from additional vehicles, the widening and realignment of the roadway to the east of its existing location would result in a shift of noise effects by approximately 50 feet to the east into the portions of the BWER that are east of Lincoln Boulevard.

Noise effects of the Project would be reduced through: implementation of the Avoidance and Minimization Measures at the beginning of Chapter 4; implementation of additional measures requiring noise monitoring for work adjacent to the BWER and within Ballona Creek.



### **Increased Dust and Urban Pollutants**

Grading activities would disturb soils and result in the accumulation of dust on the surface of the leaves of plant species in adjacent areas. The respiratory function of the plants in the area could be impaired if dust accumulation is excessive. This indirect effect of Project construction on the native vegetation in the immediate vicinity of the construction area is not considered adverse since it is not expected to be detrimental enough to result in plant mortality.

Improper disposal of petroleum and chemical products from construction equipment could impact water quality of any runoff from construction areas. Urban runoff from Project infrastructure could also impact runoff water quality adjacent to the roadway during operation of the Project. In addition, runoff could remain in standing puddles or small ponds temporarily, especially during the construction phase if heavy equipment compacts the soil within the temporary impact area. Adverse effects on water quality could impact populations of terrestrial wildlife species that drink this water or plant species that occur in the immediate vicinity of the runoff.

Additional impacts on biological resources in the area could occur as a result of changes in water quality. Runoff of silt from the BSA or improper disposal of petroleum and chemical products from construction equipment could temporarily impact water quality during construction. Adverse effects on water quality could affect populations of aquatic species (including special status species) by reducing the amount of available habitat and by smothering eggs of aquatic species; this may result in direct mortality. Adverse effects on water quality could also impact populations of terrestrial wildlife species that use the Ballona Creek for foraging by (1) ingesting toxic chemicals; (2) ingesting aquatic species that have ingested toxic chemicals leading to bioaccumulation of toxics; or (3) decreasing the available prey within aquatic habitats. The indirect impact on water quality is considered a potentially adverse effect. The Project shall incorporate the Avoidance and Minimization Measures at the beginning of Chapter 4, including applicable measures required through NPDES requirements, to ensure that the quantity and quality of runoff discharged into the BSA is not adversely affected. In particular, measures will be put in place to avoid discharge of untreated surface runoff from developed and paved areas into adjacent open space areas. Storm water systems will be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials, or other elements that might degrade or harm biological resources or ecosystem processes within the adjacent open space areas. This can be accomplished using a variety of methods including detention basins, swales, or mechanical trapping devices to contain or treat runoff before it enters adjacent areas. Regular maintenance will occur during operation of the Project to ensure effective operation of runoff control systems.

Turbidity curtains shall be deployed around pile removal placement zones to minimize the spread of turbid plumes outside the construction area. During construction, the Contractor shall implement a water quality monitoring program, in consultation with the Los Angeles Regional Water Quality Control Board, that would evaluate and test for water quality degradation in areas adjacent to and outside the turbidity curtain.

***Night Lighting***

Night lighting during construction or operation of the Project could inadvertently result in an indirect effect on the behavioral patterns of aquatic species and nocturnal and crepuscular (i.e., active at dawn and dusk) wildlife in adjacent open space of the BWER and Ballona Creek. Wildlife present in these areas may already be somewhat acclimated to current lighting associated with the existing roadways and development. Night work will be minimized or avoided. Consistent with the City's Noise Ordinance, Project construction activities would occur between 6 a.m. and 9 p.m., and would therefore generally not require night lighting. Limited nighttime lighting may be needed within construction staging areas, but lighting for this purpose would be shielded to avoid spillover lighting to areas outside of the Project construction limits and would be limited to the extent feasible. Therefore, there would be no adverse effect on wildlife in surrounding open space areas and no mitigation would be required.

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# **Appendix A** CNDDDB, CNPS, and USFWS Species List

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



**Query Criteria:** Quad IS (Topanga (3411815) OR Beverly Hills (3411814) OR Hollywood (3411813) OR Inglewood (3311883) OR Venice (3311884) OR Torrance (3311873) OR Redondo Beach (3311874))  
 AND County IS (Los Angeles)

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<b>American badger</b> <i>Taxidea taxus</i>	AMAJF04010	None	None	G5	S3	SSC
<b>aphanisma</b> <i>Aphanisma blitoides</i>	PDCHE02010	None	None	G3G4	S2	1B.2
<b>Ballona cinquefoil</b> <i>Potentilla multijuga</i>	PDROS1B120	None	None	GX	SX	1A
<b>bank swallow</b> <i>Riparia riparia</i>	ABPAU08010	None	Threatened	G5	S2	
<b>beach spectaclepod</b> <i>Dithyrea maritima</i>	PDBRA10020	None	Threatened	G1	S1	1B.1
<b>Belding's savannah sparrow</b> <i>Passerculus sandwichensis beldingi</i>	ABPBX99015	None	Endangered	G5T3	S3	
<b>Belkin's dune tabanid fly</b> <i>Brennania belkini</i>	IIDIP17010	None	None	G1G2	S1S2	
<b>big free-tailed bat</b> <i>Nyctinomops macrotis</i>	AMACD04020	None	None	G5	S3	SSC
<b>Brand's star phacelia</b> <i>Phacelia stellaris</i>	PDHYD0C510	None	None	G1	S1	1B.1
<b>Braunton's milk-vetch</b> <i>Astragalus brauntonii</i>	PDFAB0F1G0	Endangered	None	G2	S2	1B.1
<b>burrowing owl</b> <i>Athene cunicularia</i>	ABNSB10010	None	None	G4	S3	SSC
<b>Busck's gallmoth</b> <i>Eugnosta busckana</i>	IILEM2X090	None	None	G1G3	SH	
<b>California black rail</b> <i>Laterallus jamaicensis coturniculus</i>	ABNME03041	None	Threatened	G3T1	S1	FP
<b>California brown pelican</b> <i>Pelecanus occidentalis californicus</i>	ABNFC01021	Delisted	Delisted	G4T3T4	S3	FP
<b>California least tern</b> <i>Sternula antillarum browni</i>	ABNNM08103	Endangered	Endangered	G4T2T3Q	S2	FP
<b>California Orcutt grass</b> <i>Orcuttia californica</i>	PMPOA4G010	Endangered	Endangered	G1	S1	1B.1
<b>California Walnut Woodland</b> <i>California Walnut Woodland</i>	CTT71210CA	None	None	G2	S2.1	
<b>coast horned lizard</b> <i>Phrynosoma blainvillii</i>	ARACF12100	None	None	G3G4	S4	SSC
<b>coastal California gnatcatcher</b> <i>Polioptila californica californica</i>	ABPBJ08081	Threatened	None	G4G5T3Q	S2	SSC



Selected Elements by Common Name  
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Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<b>coastal dunes milk-vetch</b> <i>Astragalus tener</i> var. <i>titi</i>	PDFAB0F8R2	Endangered	Endangered	G2T1	S1	1B.1
<b>coastal goosefoot</b> <i>Chenopodium littoreum</i>	PDCHE091Z0	None	None	G1	S1	1B.2
<b>coastal whiptail</b> <i>Aspidoscelis tigris stejnegeri</i>	ARACJ02143	None	None	G5T5	S3	SSC
<b>Coulter's goldfields</b> <i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	PDAST5L0A1	None	None	G4T2	S2	1B.1
<b>Coulter's saltbush</b> <i>Atriplex coulteri</i>	PDCHE040E0	None	None	G3	S1S2	1B.2
<b>Crotch bumble bee</b> <i>Bombus crotchii</i>	IIHYM24480	None	Candidate Endangered	G2	S1S2	
<b>Davidson's saltscale</b> <i>Atriplex serenana</i> var. <i> davidsonii</i>	PDCHE041T1	None	None	G5T1	S1	1B.2
<b>decumbent goldenbush</b> <i>Isocoma menziesii</i> var. <i>decumbens</i>	PDAST57091	None	None	G3G5T2T3	S2	1B.2
<b>Dorothy's El Segundo Dune weevil</b> <i>Trigonoscuta dorothea dorothea</i>	IICOL51021	None	None	G1T1	S1	
<b>El Segundo blue butterfly</b> <i>Euphilotes battoides allyni</i>	IILEPG201B	Endangered	None	G5T1	S1	
<b>El Segundo flower-loving fly</b> <i>Rhaphiomidas terminatus terminatus</i>	IIDIP05022	None	None	G1T1	S1	
<b>estuary seablite</b> <i>Suaeda esteroa</i>	PDCHE0P0D0	None	None	G3	S2	1B.2
<b>Gambel's water cress</b> <i>Nasturtium gambelii</i>	PDBRA270V0	Endangered	Threatened	G1	S1	1B.1
<b>Gertsch's socalchemmis spider</b> <i>Socalchemmis gertschi</i>	ILARAU7010	None	None	G1	S1	
<b>globose dune beetle</b> <i>Coelus globosus</i>	IICOL4A010	None	None	G1G2	S1S2	
<b>Greata's aster</b> <i>Symphotrichum greatae</i>	PDASTE80U0	None	None	G2	S2	1B.3
<b>Henne's eucosman moth</b> <i>Eucosma hennei</i>	IILEM0R390	None	None	G1	S1	
<b>hoary bat</b> <i>Lasiurus cinereus</i>	AMACC05032	None	None	G3G4	S4	
<b>island green dudleya</b> <i>Dudleya virens</i> ssp. <i>insularis</i>	PDCRA040S2	None	None	G3?T3	S3	1B.2
<b>Lange's El Segundo Dune weevil</b> <i>Onychobaris langei</i>	IICOL4W010	None	None	G1	S1	
<b>least Bell's vireo</b> <i>Vireo bellii pusillus</i>	ABPBW01114	Endangered	Endangered	G5T2	S2	



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<b>Los Angeles sunflower</b> <i>Helianthus nuttallii</i> ssp. <i>parishii</i>	PDAST4N102	None	None	G5TX	SX	1A
<b>lucky morning-glory</b> <i>Calystegia felix</i>	PDCON040P0	None	None	G1Q	S1	1B.1
<b>Lyon's pentachaeta</b> <i>Pentachaeta lyonii</i>	PDAST6X060	Endangered	Endangered	G1	S1	1B.1
<b>many-stemmed dudleya</b> <i>Dudleya multicaulis</i>	PDCRA040H0	None	None	G2	S2	1B.2
<b>marsh sandwort</b> <i>Arenaria paludicola</i>	PDCAR040L0	Endangered	Endangered	G1	S1	1B.1
<b>mesa horkelia</b> <i>Horkelia cuneata</i> var. <i>puberula</i>	PDROS0W045	None	None	G4T1	S1	1B.1
<b>mimic tryonia (=California brackishwater snail)</b> <i>Tryonia imitator</i>	IMGASJ7040	None	None	G2	S2	
<b>Mohave tui chub</b> <i>Siphateles bicolor mohavensis</i>	AFCJB1303H	Endangered	Endangered	G4T1	S1	FP
<b>monarch - California overwintering population</b> <i>Danaus plexippus plexippus</i> pop. 1	IILEPP2012	Candidate	None	G4T1T2	S2	
<b>mud nama</b> <i>Nama stenocarpa</i>	PDHYD0A0H0	None	None	G4G5	S1S2	2B.2
<b>Nevin's barberry</b> <i>Berberis nevinii</i>	PDBER060A0	Endangered	Endangered	G1	S1	1B.1
<b>Nuttall's scrub oak</b> <i>Quercus dumosa</i>	PDFAG050D0	None	None	G3	S3	1B.1
<b>Orcutt's pincushion</b> <i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>	PDAST20095	None	None	G5T1T2	S1	1B.1
<b>Pacific pocket mouse</b> <i>Perognathus longimembris pacificus</i>	AMAFD01042	Endangered	None	G5T1	S2	SSC
<b>pallid bat</b> <i>Antrozous pallidus</i>	AMACC10010	None	None	G4	S3	SSC
<b>Palos Verdes blue butterfly</b> <i>Glaucoopsyche lygdamus palosverdesensis</i>	IILEPG402A	Endangered	None	G5T1	S1	
<b>Parish's brittle-scale</b> <i>Atriplex parishii</i>	PDCHE041D0	None	None	G1G2	S1	1B.1
<b>Plummer's mariposa-lily</b> <i>Calochortus plummerae</i>	PMLIL0D150	None	None	G4	S4	4.2
<b>pocketed free-tailed bat</b> <i>Nyctinomops femorosaccus</i>	AMACD04010	None	None	G5	S3	SSC
<b>prostrate vernal pool navarretia</b> <i>Navarretia prostrata</i>	PDPLM0C0Q0	None	None	G2	S2	1B.2
<b>Riverside fairy shrimp</b> <i>Streptocephalus woottoni</i>	ICBRA07010	Endangered	None	G1G2	S2	



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<b>salt marsh bird's-beak</b> <i>Chloropyron maritimum ssp. maritimum</i>	PDSCR0J0C2	Endangered	Endangered	G4?T1	S1	1B.2
<b>salt spring checkerbloom</b> <i>Sidalcea neomexicana</i>	PDMAL110J0	None	None	G4	S2	2B.2
<b>San Bernardino aster</b> <i>Symphotrichum defoliatum</i>	PDASTE80C0	None	None	G2	S2	1B.2
<b>San Bernardino ringneck snake</b> <i>Diadophis punctatus modestus</i>	ARADB10015	None	None	G5T2T3	S2?	
<b>San Diego button-celery</b> <i>Eryngium aristulatum var. parishii</i>	PDAP10Z042	Endangered	Endangered	G5T1	S1	1B.1
<b>San Fernando Valley spineflower</b> <i>Chorizanthe parryi var. fernandina</i>	PDPGN040J1	None	Endangered	G2T1	S1	1B.1
<b>San Gabriel chestnut</b> <i>Glyptostoma gabrielense</i>	IMGASB1010	None	None	G2	S2	
<b>sandy beach tiger beetle</b> <i>Cicindela hirticollis gravida</i>	IICOL02101	None	None	G5T2	S2	
<b>Santa Catalina Island desert-thorn</b> <i>Lycium brevipes var. hassei</i>	PDSOL0G0N0	None	None	G5T1Q	S1	3.1
<b>Santa Monica dudleya</b> <i>Dudleya cymosa ssp. ovatifolia</i>	PDCRA040A5	Threatened	None	G5T1	S1	1B.1
<b>Santa Monica shieldback katydid</b> <i>Aglaothorax longipennis</i>	IORT32020	None	None	G1G2	S1S2	
<b>Santa Susana tarplant</b> <i>Deinandra minthornii</i>	PDAST4R0J0	None	Rare	G2	S2	1B.2
<b>senile tiger beetle</b> <i>Cicindela senilis frosti</i>	IICOL02121	None	None	G2G3T1T3	S1	
<b>silver-haired bat</b> <i>Lasionycteris noctivagans</i>	AMACC02010	None	None	G3G4	S3S4	
<b>slender mariposa-lily</b> <i>Calochortus clavatus var. gracilis</i>	PMLIL0D096	None	None	G4T2T3	S2S3	1B.2
<b>smooth tarplant</b> <i>Centromadia pungens ssp. laevis</i>	PDAST4R0R4	None	None	G3G4T2	S2	1B.1
<b>Sonoran maiden fern</b> <i>Thelypteris puberula var. sonorensis</i>	PPTHE05192	None	None	G5T3	S2	2B.2
<b>south coast marsh vole</b> <i>Microtus californicus stephensi</i>	AMAFF11035	None	None	G5T2T3	S2	SSC
<b>south coast saltscale</b> <i>Atriplex pacifica</i>	PDCHE041C0	None	None	G4	S2	1B.2
<b>Southern California legless lizard</b> <i>Anniella stebbinsi</i>	ARACC01060	None	None	G3	S3	SSC
<b>southern California rufous-crowned sparrow</b> <i>Aimophila ruficeps canescens</i>	ABPBX91091	None	None	G5T3	S3	WL





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<b>southern California saltmarsh shrew</b> <i>Sorex ornatus salicornicus</i>	AMABA01104	None	None	G5T1?	S1	SSC
<b>Southern Coast Live Oak Riparian Forest</b> <i>Southern Coast Live Oak Riparian Forest</i>	CTT61310CA	None	None	G4	S4	
<b>Southern Coastal Bluff Scrub</b> <i>Southern Coastal Bluff Scrub</i>	CTT31200CA	None	None	G1	S1.1	
<b>Southern Coastal Salt Marsh</b> <i>Southern Coastal Salt Marsh</i>	CTT52120CA	None	None	G2	S2.1	
<b>Southern Dune Scrub</b> <i>Southern Dune Scrub</i>	CTT21330CA	None	None	G1	S1.1	
<b>Southern Sycamore Alder Riparian Woodland</b> <i>Southern Sycamore Alder Riparian Woodland</i>	CTT62400CA	None	None	G4	S4	
<b>southern tarplant</b> <i>Centromadia parryi ssp. australis</i>	PDAST4R0P4	None	None	G3T2	S2	1B.1
<b>southwestern willow flycatcher</b> <i>Empidonax traillii extimus</i>	ABPAE33043	Endangered	Endangered	G5T2	S1	
<b>spreading navarretia</b> <i>Navarretia fossalis</i>	PDPLM0C080	Threatened	None	G2	S2	1B.1
<b>steelhead - southern California DPS</b> <i>Oncorhynchus mykiss irideus pop. 10</i>	AFCHA0209J	Endangered	Candidate Endangered	G5T1Q	S1	
<b>Swainson's hawk</b> <i>Buteo swainsoni</i>	ABNKC19070	None	Threatened	G5	S3	
<b>tricolored blackbird</b> <i>Agelaius tricolor</i>	ABPBXB0020	None	Threatened	G1G2	S1S2	SSC
<b>two-striped gartersnake</b> <i>Thamnophis hammondi</i>	ARADB36160	None	None	G4	S3S4	SSC
<b>Ventura Marsh milk-vetch</b> <i>Astragalus pycnostachyus var. lanosissimus</i>	PDFAB0F7B1	Endangered	Endangered	G2T1	S1	1B.1
<b>wandering (=saltmarsh) skipper</b> <i>Panoquina errans</i>	IILEP84030	None	None	G4G5	S2	
<b>western beach tiger beetle</b> <i>Cicindela latesignata</i>	IICOL02110	None	None	G2G3	S1	
<b>western mastiff bat</b> <i>Eumops perotis californicus</i>	AMACD02011	None	None	G4G5T4	S3S4	SSC
<b>western pond turtle</b> <i>Emys marmorata</i>	ARAAD02030	None	None	G3G4	S3	SSC
<b>western ridged mussel</b> <i>Gonidea angulata</i>	IMBIV19010	None	None	G3	S1S2	
<b>western snowy plover</b> <i>Charadrius nivosus nivosus</i>	ABNNB03031	Threatened	None	G3T3	S3	SSC
<b>western spadefoot</b> <i>Spea hammondi</i>	AAABF02020	None	None	G2G3	S3S4	SSC



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<b>western tidal-flat tiger beetle</b> <i>Habroscelimorpha gabbii</i>	IICOL02080	None	None	G2G4	S1	
<b>western yellow-billed cuckoo</b> <i>Coccyzus americanus occidentalis</i>	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
<b>white rabbit-tobacco</b> <i>Pseudognaphalium leucocephalum</i>	PDAST440C0	None	None	G4	S2	2B.2
<b>white-veined monardella</b> <i>Monardella hypoleuca ssp. hypoleuca</i>	PDLAM180A5	None	None	G4T3	S3	1B.3
<b>yellow rail</b> <i>Coturnicops noveboracensis</i>	ABNME01010	None	None	G4	S1S2	SSC

**Record Count: 108**

## CNPS Rare Plant Inventory



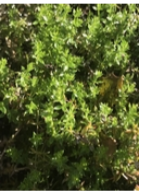

## Search Results

67 matches found. Click on scientific name for details

Search Criteria: County is one of [LAX], 9-Quad include [3311883:3311873:3411813:3311874:3411815:3411814:3311884]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	PHOTO
<a href="#"><i>Abronia maritima</i></a>	red sand-verbena	Nyctaginaceae	perennial herb	Feb-Nov	None	None	G4	S3?	4.2	 ©2003 Christopher L. Christie
<a href="#"><i>Aphanisma blitoides</i></a>	aphanisma	Chenopodiaceae	annual herb	Feb-Jun	None	None	G3G4	S2	1B.2	 © 2010 Larry Sward
<a href="#"><i>Arenaria paludicola</i></a>	marsh sandwort	Caryophyllaceae	perennial stoloniferous herb	May-Aug	FE	CE	G1	S1	1B.1	No Photo Available
<a href="#"><i>Astragalus brauntonii</i></a>	Braunton's milk-vetch	Fabaceae	perennial herb	Jan-Aug	FE	None	G2	S2	1B.1	 © 2009 Thomas Stoughton
<a href="#"><i>Astragalus pycnostachyus</i> var. <i>lanosissimus</i></a>	Ventura Marsh milk-vetch	Fabaceae	perennial herb	(Jun)Aug-Oct	FE	CE	G2T1	S1	1B.1	No Photo Available
<a href="#"><i>Astragalus tener</i> var. <i>titi</i></a>	coastal dunes milk-vetch	Fabaceae	annual herb	Mar-May	FE	CE	G2T1	S1	1B.1	No Photo Available
<a href="#"><i>Atriplex coulteri</i></a>	Coulter's saltbush	Chenopodiaceae	perennial herb	Mar-Oct	None	None	G3	S1S2	1B.2	No Photo Available
<a href="#"><i>Atriplex pacifica</i></a>	south coast saltscale	Chenopodiaceae	annual herb	Mar-Oct	None	None	G4	S2	1B.2	No Photo Available
<a href="#"><i>Atriplex parishii</i></a>	Parish's brittlescale	Chenopodiaceae	annual herb	Jun-Oct	None	None	G1G2	S1	1B.1	No Photo Available
<a href="#"><i>Atriplex serenana</i> var. <i>davidsonii</i></a>	Davidson's saltscale	Chenopodiaceae	annual herb	Apr-Oct	None	None	G5T1	S1	1B.2	No Photo Available

<a href="#"><i>Berberis nevinii</i></a>	Nevin's barberry	Berberidaceae	perennial evergreen shrub	(Feb)Mar- Jun	FE	CE	G1	S1	1B.1	No Photo Available
<a href="#"><i>Calandrinia breweri</i></a>	Brewer's calandrinia	Montiaceae	annual herb	(Jan)Mar- Jun	None	None	G4	S4	4.2	No Photo Available
<a href="#"><i>Calochortus catalinae</i></a>	Catalina mariposa lily	Liliaceae	perennial bulbiferous herb	(Feb)Mar- Jun	None	None	G3G4	S3S4	4.2	No Photo Available
<a href="#"><i>Calochortus clavatus</i></a> <a href="#"><i>var. gracilis</i></a>	slender mariposa-lily	Liliaceae	perennial bulbiferous herb	Mar- Jun(Nov)	None	None	G4T2T3	S2S3	1B.2	No Photo Available
<a href="#"><i>Calochortus plummerae</i></a>	Plummer's mariposa-lily	Liliaceae	perennial bulbiferous herb	May-Jul	None	None	G4	S4	4.2	No Photo Available
<a href="#"><i>Calystegia felix</i></a>	lucky morning- glory	Convolvulaceae	annual rhizomatous herb	Mar-Sep	None	None	G1Q	S1	1B.1	No Photo Available
<a href="#"><i>Calystegia peirsonii</i></a>	Peirson's morning-glory	Convolvulaceae	perennial rhizomatous herb	Apr-Jun	None	None	G4	S4	4.2	No Photo Available
<a href="#"><i>Camissoniopsis lewisii</i></a>	Lewis' evening- primrose	Onagraceae	annual herb	Mar- May(Jun)	None	None	G4	S4	3	No Photo Available
<a href="#"><i>Centromadia parryi</i></a> <a href="#"><i>ssp. australis</i></a>	southern tarplant	Asteraceae	annual herb	May-Nov	None	None	G3T2	S2	1B.1	No Photo Available
<a href="#"><i>Centromadia pungens</i></a> <a href="#"><i>ssp. laevis</i></a>	smooth tarplant	Asteraceae	annual herb	Apr-Sep	None	None	G3G4T2	S2	1B.1	No Photo Available
<a href="#"><i>Cercocarpus betuloides</i></a> <a href="#"><i>var. blancheae</i></a>	island mountain- mahogany	Rosaceae	perennial evergreen shrub	Feb-May	None	None	G5T4	S4	4.3	No Photo Available
<a href="#"><i>Chaenactis glabriuscula</i></a> <a href="#"><i>var. orcuttiana</i></a>	Orcutt's pincushion	Asteraceae	annual herb	Jan-Aug	None	None	G5T1T2	S1	1B.1	No Photo Available
<a href="#"><i>Chenopodium littoreum</i></a>	coastal goosefoot	Chenopodiaceae	annual herb	Apr-Aug	None	None	G1	S1	1B.2	No Photo Available
<a href="#"><i>Chloropyron maritimum</i></a> <a href="#"><i>ssp. maritimum</i></a>	salt marsh bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	May- Oct(Nov)	FE	CE	G4?T1	S1	1B.2	No Photo Available
<a href="#"><i>Chorizanthe parryi</i></a> <a href="#"><i>var. fernandina</i></a>	San Fernando Valley spineflower	Polygonaceae	annual herb	Apr-Jul	None	CE	G2T1	S1	1B.1	No Photo Available
<a href="#"><i>Cistanthe maritima</i></a>	seaside cistanthe	Montiaceae	annual herb	(Feb)Mar- Jun(Aug)	None	None	G3G4	S3	4.2	No Photo Available

<a href="#"><i>Convolvulus simulans</i></a>	small-flowered morning-glory	Convolvulaceae	annual herb	Mar-Jul	None	None	G4	S4	4.2	No Photo Available
<a href="#"><i>Deinandra minthornii</i></a>	Santa Susana tarplant	Asteraceae	perennial deciduous shrub	Jul-Nov	None	CR	G2	S2	1B.2	No Photo Available
<a href="#"><i>Deinandra paniculata</i></a>	paniculate tarplant	Asteraceae	annual herb	(Mar)Apr-Nov	None	None	G4	S4	4.2	No Photo Available
<a href="#"><i>Dichondra occidentalis</i></a>	western dichondra	Convolvulaceae	perennial rhizomatous herb	(Jan)Mar-Jul	None	None	G3G4	S3S4	4.2	No Photo Available
<a href="#"><i>Dithyrea maritima</i></a>	beach spectaclepod	Brassicaceae	perennial rhizomatous herb	Mar-May	None	CT	G1	S1	1B.1	No Photo Available
<a href="#"><i>Dudleya cymosa ssp. ovatifolia</i></a>	Santa Monica dudleya	Crassulaceae	perennial herb	Mar-Jun	FT	None	G5T1	S1	1B.1	No Photo Available
<a href="#"><i>Dudleya multicaulis</i></a>	many-stemmed dudleya	Crassulaceae	perennial herb	Apr-Jul	None	None	G2	S2	1B.2	No Photo Available
<a href="#"><i>Dudleya virens ssp. insularis</i></a>	island green dudleya	Crassulaceae	perennial herb	Apr-Jun	None	None	G3?T3	S3	1B.2	No Photo Available
<a href="#"><i>Eryngium aristulatum var. parishii</i></a>	San Diego button-celery	Apiaceae	annual/perennial herb	Apr-Jun	FE	CE	G5T1	S1	1B.1	No Photo Available
<a href="#"><i>Erysimum insulare</i></a>	island wallflower	Brassicaceae	perennial herb	Mar-Jul	None	None	G3	S3	1B.3	No Photo Available
<a href="#"><i>Erysimum suffrutescens</i></a>	suffrutescent wallflower	Brassicaceae	perennial herb	Jan-Jul(Aug)	None	None	G3	S3	4.2	No Photo Available
<a href="#"><i>Galium cliftonsmithii</i></a>	Santa Barbara bedstraw	Rubiaceae	perennial herb	May-Jul	None	None	G4	S4	4.3	 © 2020 Brian Bielfelt
<a href="#"><i>Helianthus nuttallii ssp. parishii</i></a>	Los Angeles sunflower	Asteraceae	perennial rhizomatous herb	Aug-Oct	None	None	G5TX	SX	1A	No Photo Available
<a href="#"><i>Hordeum intercedens</i></a>	vernal barley	Poaceae	annual herb	Mar-Jun	None	None	G3G4	S3S4	3.2	No Photo Available
<a href="#"><i>Horkelia cuneata var. puberula</i></a>	mesa horkelia	Rosaceae	perennial herb	Feb-Jul(Sep)	None	None	G4T1	S1	1B.1	 © 2008 Tony Morosco

<a href="#"><u><i>Isocoma menziesii</i></u></a> <a href="#"><u>var. <i>decumbens</i></u></a>	decumbent goldenbush	Asteraceae	perennial shrub	Apr-Nov	None	None	G3G5T2T3	S2	1B.2	No Photo Available
<a href="#"><u><i>Juglans californica</i></u></a>	Southern California black walnut	Juglandaceae	perennial deciduous tree	Mar-Aug	None	None	G4	S4	4.2	 © 2020 Zoya Akulova
<a href="#"><u><i>Juncus acutus</i> ssp.</u></a> <a href="#"><u><i>leopoldii</i></u></a>	southwestern spiny rush	Juncaceae	perennial rhizomatous herb	(Mar)May- Jun	None	None	G5T5	S4	4.2	 © 2019 Belinda Lo
<a href="#"><u><i>Lasthenia glabrata</i></u></a> <a href="#"><u>ssp. <i>coulteri</i></u></a>	Coulter's goldfields	Asteraceae	annual herb	Feb-Jun	None	None	G4T2	S2	1B.1	 © 2013 Keir Morse
<a href="#"><u><i>Lepechinia fragrans</i></u></a>	fragrant pitcher sage	Lamiaceae	perennial shrub	Mar-Oct	None	None	G3	S3	4.2	 © 2014 Debra L. Cook
<a href="#"><u><i>Lycium brevipes</i> var.</u></a> <a href="#"><u><i>hassei</i></u></a>	Santa Catalina Island desert- thorn	Solanaceae	perennial deciduous shrub	Jun(Aug)	None	None	G5T1Q	S1	3.1	No Photo Available
<a href="#"><u><i>Lycium californicum</i></u></a>	California box- thorn	Solanaceae	perennial shrub	Mar- Aug(Dec)	None	None	G4	S4	4.2	No Photo Available
<a href="#"><u><i>Monardella</i></u></a> <a href="#"><u><i>hypoleuca</i> ssp.</u></a> <a href="#"><u><i>hypoleuca</i></u></a>	white-veined monardella	Lamiaceae	perennial herb	(Apr)May- Aug(Sep- Dec)	None	None	G4T3	S3	1B.3	No Photo Available
<a href="#"><u><i>Nama stenocarpa</i></u></a>	mud nama	Namaceae	annual/perennial herb	Jan-Jul	None	None	G4G5	S1S2	2B.2	No Photo Available
<a href="#"><u><i>Nasturtium gambelii</i></u></a>	Gambel's water cress	Brassicaceae	perennial rhizomatous herb	Apr-Oct	FE	CT	G1	S1	1B.1	No Photo Available
<a href="#"><u><i>Navarretia fossalis</i></u></a>	spreading navarretia	Polemoniaceae	annual herb	Apr-Jun	FT	None	G2	S2	1B.1	No Photo Available
<a href="#"><u><i>Navarretia prostrata</i></u></a>	prostrate vernal pool navarretia	Polemoniaceae	annual herb	Apr-Jul	None	None	G2	S2	1B.2	No Photo Available
<a href="#"><u><i>Orcuttia californica</i></u></a>	California Orcutt grass	Poaceae	annual herb	Apr-Aug	FE	CE	G1	S1	1B.1	No Photo Available
<a href="#"><u><i>Pelazoneuron</i></u></a> <a href="#"><u><i>puberulum</i> var.</u></a> <a href="#"><u><i>sonorensis</i></u></a>	Sonoran maiden fern	Thelypteridaceae	perennial rhizomatous herb	Jan-Sep	None	None	G5T3	S2	2B.2	No Photo Available

<a href="#"><i>Pentachaeta lyonii</i></a>	Lyon's pentachaeta	Asteraceae	annual herb	(Feb)Mar-Aug	FE	CE	G1	S1	1B.1	No Photo Available
<a href="#"><i>Phacelia hubbyi</i></a>	Hubby's phacelia	Hydrophyllaceae	annual herb	Apr-Jul	None	None	G4	S4	4.2	No Photo Available
<a href="#"><i>Phacelia ramosissima</i></a> var. <a href="#"><i>austrolitoralis</i></a>	south coast branching phacelia	Hydrophyllaceae	perennial herb	Mar-Aug	None	None	G5?T3Q	S3	3.2	No Photo Available
<a href="#"><i>Phacelia stellaris</i></a>	Brand's star phacelia	Hydrophyllaceae	annual herb	Mar-Jun	None	None	G1	S1	1B.1	No Photo Available
<a href="#"><i>Potentilla multijuga</i></a>	Ballona cinquefoil	Rosaceae	perennial herb	Jun-Aug	None	None	GX	SX	1A	No Photo Available
<a href="#"><i>Pseudognaphalium leucocephalum</i></a>	white rabbit-tobacco	Asteraceae	perennial herb	(Jul)Aug-Nov(Dec)	None	None	G4	S2	2B.2	No Photo Available
<a href="#"><i>Quercus dumosa</i></a>	Nuttall's scrub oak	Fagaceae	perennial evergreen shrub	Feb-Apr(May-Aug)	None	None	G3	S3	1B.1	No Photo Available
<a href="#"><i>Sidalcea neomexicana</i></a>	salt spring checkerbloom	Malvaceae	perennial herb	Mar-Jun	None	None	G4	S2	2B.2	No Photo Available
<a href="#"><i>Suaeda esteroa</i></a>	estuary seablite	Chenopodiaceae	perennial herb	(Jan-May)Jul-Oct	None	None	G3	S2	1B.2	No Photo Available
<a href="#"><i>Suaeda taxifolia</i></a>	woolly seablite	Chenopodiaceae	perennial evergreen shrub	Jan-Dec	None	None	G4	S4	4.2	No Photo Available
<a href="#"><i>Symphotrichum defoliatum</i></a>	San Bernardino aster	Asteraceae	perennial rhizomatous herb	Jul-Nov	None	None	G2	S2	1B.2	No Photo Available
<a href="#"><i>Symphotrichum greatae</i></a>	Greata's aster	Asteraceae	perennial rhizomatous herb	Jun-Oct	None	None	G2	S2	1B.3	No Photo Available

Showing 1 to 67 of 67 entries

#### Suggested Citation:

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## 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:

February 07, 2024

Project Code: 2024-0046562

Project Name: SR-1/Lincoln Boulevard Multimodal Improvements Project

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

To Whom It May Concern:

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

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

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

A biological assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological



evaluation similar to a biological assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a biological assessment are described at 50 CFR 402.12.

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

<https://www.fws.gov/service/esa-section-7-consultation>

**Migratory Birds:** In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, 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: 2024-0046562  
Project Name: SR-1/Lincoln Boulevard Multimodal Improvements Project  
Project Type: Road/Hwy - Maintenance/Modification  
Project Description: The project consists of a multimodal improvements project along 0.6 acres of SR-1/Lincoln Boulevard.

### Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@33.975132450000004,-118.43235086896999,14z>



Counties: Los Angeles County, California

## ENDANGERED SPECIES ACT SPECIES

There is a total of 8 threatened, endangered, or candidate species on this species list.

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

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

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

### BIRDS

NAME	STATUS
California Least Tern <i>Sternula antillarum browni</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/8104">https://ecos.fws.gov/ecp/species/8104</a>	Endangered
Coastal California Gnatcatcher <i>Polioptila californica californica</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/8178">https://ecos.fws.gov/ecp/species/8178</a>	Threatened
Least Bell's Vireo <i>Vireo bellii pusillus</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5945">https://ecos.fws.gov/ecp/species/5945</a>	Endangered
Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/6749">https://ecos.fws.gov/ecp/species/6749</a>	Endangered
Western Snowy Plover <i>Charadrius nivosus nivosus</i> Population: Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/8035">https://ecos.fws.gov/ecp/species/8035</a>	Threatened

**REPTILES**

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

**INSECTS**

NAME	STATUS
El Segundo Blue Butterfly <i>Euphilotes battoides allyni</i> There is <b>proposed</b> critical habitat for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/3135">https://ecos.fws.gov/ecp/species/3135</a>	Endangered
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate

**CRITICAL HABITATS**

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

## **IPAC USER CONTACT INFORMATION**

Agency: Private Entity  
Name: Sean Noonan  
Address: 5 Hutton Centre Drive, Suite 200  
City: Santa Ana  
State: CA  
Zip: 92707  
Email: sean.noonan@psomas.com  
Phone: 7144818035

## **LEAD AGENCY CONTACT INFORMATION**

Lead Agency: Federal Highway Administration

# Appendix B Plant Compendium

Species	
Scientific Name	Common Name
<b>MAGNOLIIDS</b>	
SAURURACEAE – LIZARD’S-TAIL FAMILY	
<i>Anemopsis californica</i>	yerba mansa
<b>EUDICOTS</b>	
AIZOACEAE – FIG-MARIGOLD FAMILY	
<i>Carpobrotus chilensis*</i>	sea fig
<i>Carpobrotus edulis*</i>	freeway ice plant
<i>Mesembryanthemum nodiflorum*</i>	slender-leaved ice plant
ANACARDIACEAE – SUMAC FAMILY	
<i>Malosma laurina</i>	laurel sumac
<i>Rhus integrifolia</i>	lemonade berry
<i>Schinus molle*</i>	pepper tree
<i>Schinus terebinthifolius*</i>	Brazilian pepper tree
APIACEAE – CARROT FAMILY	
<i>Foeniculum vulgare*</i>	fennel
ASTERACEAE - SUNFLOWER FAMILY	
<i>Lactuca serriola*</i>	prickly lettuce
<i>Laennecia coulteri</i>	Coulter's horseweed
<i>Lasthenia glabrata</i> ssp. <i>glabrata</i>	yellow-ray goldfields
ASTERACEAE – SUNFLOWER FAMILY	
<i>Ambrosia acanthicarpa</i>	annual bur-sage
<i>Artemisia californica</i>	California sagebrush
<i>Artemisia douglasiana</i>	mugwort
<i>Baccharis pilularis</i> ssp. <i>consanguinea</i>	coyote brush
<i>Baccharis salicifolia</i> ssp. <i>salicifolia</i>	mule fat
<i>Brickellia californica</i>	California brickellbush
<i>Carduus pycnocephalus</i> ssp. <i>pycnocephalus*</i>	Italian thistle
<i>Centaurea melitensis*</i>	tocalote
<i>Cirsium vulgare*</i>	bull thistle
<i>Encelia californica</i>	California encelia
<i>Erigeron canadensis</i>	horseweed
<i>Glebionis coronaria*</i>	crown daisy
<i>Helminthotheca echioides*</i>	bristly ox-tongue
<i>Heterotheca grandiflora</i>	telegraph weed
<i>Isocoma menziesii</i> var. <i>menziesii</i>	Menzies' coastal goldenbush
<i>Matricaria discoidea*</i>	pineapple weed
<i>Pluchea sericea</i>	arrow-weed
<i>Pseudognaphalium beneolens</i>	pleasant-scented cudweed
<i>Pseudognaphalium californicum</i>	California cudweed
<i>Pseudognaphalium luteoalbum*</i>	white lamb cudweed
<i>Sonchus asper</i> ssp. <i>asper*</i>	prickly sow thistle
<i>Sonchus oleraceus*</i>	common sow thistle

Appendix B • Plant Compendium

Species	
Scientific Name	Common Name
BRASSICACEAE – MUSTARD FAMILY	
<i>Brassica nigra</i> *	black mustard
<i>Brassica rapa</i> *	field mustard
<i>Hirschfeldia incana</i> *	grayish shortpod mustard
<i>Lobularia maritima</i> *	sweet alyssum
<i>Raphanus sativus</i> *	radish
CARYOPHYLLACEAE – PINK FAMILY	
<i>Spergularia marina</i>	saltmarsh sand-spurrey
<i>Stellaria media</i> *	common chickweed
CHENOPODIACEAE – GOOSEFOOT FAMILY	
<i>Atriplex lentiformis</i>	big saltbush
<i>Atriplex prostrata</i> *	fat-hen
<i>Bassia hyssopifolia</i> *	hyssop-leaved bassia
<i>Salicornia cf. depressa</i>	flat pickleweed
<i>Salicornia pacifica</i>	Pacific pickleweed
<i>Salsola tragus</i> *	Russian thistle
CONVOLVULACEAE – MORNING-GLORY FAMILY	
<i>Cressa truxillensis</i>	alkali weed
CRASSULACEAE – STONECROP FAMILY	
<i>Crassula connata</i>	pygmy-weed
EUPHORBIACEAE – SPURGE FAMILY	
<i>Croton californicus</i>	California croton
<i>Croton setiger</i>	turkey-mullein
<i>Euphorbia peplus</i> *	petty spurge
<i>Euphorbia terracina</i> *	Geraldton carnation weed
<i>Ricinus communis</i> *	common castor bean
FABACEAE – LEGUME FAMILY	
<i>Acmispon glaber</i> var. <i>glaber</i>	glabrous deerweed
<i>Medicago polymorpha</i> *	variable burclover
<i>Melilotus albus</i> *	white sweetclover
<i>Melilotus indicus</i> *	sourclover
FAGACEAE – OAK FAMILY	
<i>Quercus agrifolia</i>	coast live oak
FRANKENIACEAE – FRANKENIA FAMILY	
<i>Frankenia salina</i>	alkali heath
GERANIACEAE – GERANIUM FAMILY	
<i>Erodium botrys</i> *	long-beaked filaree
<i>Erodium cicutarium</i> *	redstem filaree
<i>Erodium moschatum</i> *	greenstem filaree
LAMIACEAE – MINT FAMILY	
<i>Marrubium vulgare</i> *	common horehound
LYTHRACEAE - LOOSESTRIFE FAMILY	
<i>Lythrum hyssopifolia</i> *	hyssop-leaf loosestrife
MALVACEAE – MALLOW FAMILY	
<i>Malva parviflora</i> *	cheeseweed
<i>Malvella leprosa</i>	alkali-mallow



Appendix B • Plant Compendium

Species	
Scientific Name	Common Name
OLEACEAE – OLIVE FAMILY	
<i>Olea europaea</i> *	European olive
ONAGRACEAE – EVENING PRIMROSE FAMILY	
<i>Camissoniopsis cheiranthifolia</i> ssp. <i>suffruticosa</i>	shrubby beach evening-primrose
<i>Camissoniopsis lewisii</i> *	Lewis' evening-primrose
<i>Camissoniopsis micrantha</i>	small-flowered camissoniopsis
PLANTAGINACEAE – PLANTAIN FAMILY	
<i>Plantago lanceolata</i> *	English plantain
PLATANACEAE – SYCAMORE FAMILY	
<i>Platanus racemosa</i>	western sycamore
POLYGONACEAE – BUCKWHEAT FAMILY	
<i>Eriogonum fasciculatum</i> var. <i>foliolosum</i>	leafy California buckwheat
<i>Rumex crispus</i> *	curly dock
ROSACEAE – ROSE FAMILY	
<i>Rosa californica</i>	California rose
SALICACEAE – WILLOW FAMILY	
<i>Populus fremontii</i> ssp. <i>fremontii</i>	Fremont cottonwood
<i>Salix exigua</i> var. <i>hindsiana</i>	Hinds' willow
<i>Salix gooddingii</i>	Goodding's black willow
<i>Salix lasiolepis</i>	arroyo willow
SOLANACEAE – NIGHTSHADE FAMILY	
<i>Datura wrightii</i>	Wright's jimsonweed
<i>Nicotiana glauca</i> *	tree tobacco
<i>Solanum douglasii</i>	Douglas' nightshade
TAMARICACEAE – TAMARISK FAMILY	
<i>Tamarix ramosissima</i> *	saltcedar
ULMACEAE – ELM FAMILY	
<i>Ulmus parvifolia</i> *	Chinese elm
<b>MONOCOTS</b>	
AGAVACEAE – AGAVE FAMILY	
<i>Yucca gloriosa</i> *	glorious yucca
ARECACEAE – PALM FAMILY	
<i>Phoenix canariensis</i> *	Canary Island palm
<i>Washingtonia robusta</i> *	Mexican fan palm
CYPERACEAE – SEDGE FAMILY	
<i>Schoenoplectus californicus</i>	southern bulrush
JUNCACEAE – RUSH FAMILY	
<i>Juncus bufonius</i>	toad rush
<i>Juncus bufonius</i> var. <i>bufonius</i>	toad rush
POACEAE – GRASS FAMILY	
<i>Arundo donax</i> *	giant reed
<i>Avena barbata</i> *	slender wild oat
<i>Avena fatua</i> *	wild oat
<i>Bromus diandrus</i> *	ripgut grass
<i>Bromus madritensis</i> ssp. <i>rubens</i> *	red brome
<i>Cortaderia selloana</i> *	pampas grass

Species	
Scientific Name	Common Name
<i>Cynodon dactylon</i> *	Bermuda grass
<i>Festuca myuros</i> *	rattail sixweeks grass
<i>Festuca perennis</i> *	rye grass
<i>Hordeum murinum</i> ssp. <i>leporinum</i> *	hare barley
<i>Pennisetum setaceum</i> *	crimson fountain grass
<i>Polypogon monspeliensis</i> *	annual beard grass
<i>Stipa miliacea</i> var. <i>miliacea</i> *	smilo grass
TYPHACEAE – CATTAIL FAMILY	
<i>Typha</i> cf. <i>domingensis</i>	southern cattail
<p>* Non-native or invasive species</p> <p>* <i>Camissoniopsis lewisii</i> is a California Rare Plant Rank (CRPR) of 3 and was the only CRPR plant species observed onsite during the surveys.</p> <p>cf. "conforms to"; species cannot be confirmed due to phenological condition</p>	

# Appendix C Wildlife Compendium

Species		Special Status
Scientific Name	Common Name	
RANIDAE - TRUE FROG FAMILY		
<i>Lithobates catesbeianus*</i>	American bullfrog	
HYLIDAE - TREEFROG FAMILY		
<i>Pseudacris hypochondriaca</i>	Baja California treefrog	
PHRYNOSOMATIDAE - SPINY LIZARD FAMILY		
<i>Sceloporus occidentalis</i>	western fence lizard	
<i>Uta stansburiana</i>	common side-blotched lizard	
ANATIDAE - SWAN, GOOSE, AND DUCK FAMILY		
<i>Branta canadensis</i>	Canada goose	
<i>Anas strepera</i>	gadwall	
<i>Anas platyrhynchos</i>	mallard	
<i>Anas discors</i>	blue-winged teal	
<i>Anas cyanoptera</i>	cinnamon teal	
<i>Oxyura jamaicensis</i>	ruddy duck	
COLUMBIDAE - PIGEON AND DOVE FAMILY		
<i>Zenaida macroura</i>	mourning dove	
TROCHILIDAE - HUMMINGBIRD FAMILY		
<i>Calypte anna</i>	Anna's hummingbird	
<i>Selasphorus sasin</i>	Allen's hummingbird	
RALLIDAE - RAIL AND COOT FAMILY		
<i>Porzana carolina</i>	sora	
<i>Fulica americana</i>	American coot	
PHALACROCORACIDAE - CORMORANT FAMILY		
<i>Phalacrocorax auritus</i>	double-crested cormorant	WL
ARDEIDAE - HERON FAMILY		
<i>Ardea herodias</i>	great blue heron	
<i>Ardea alba</i>	great egret	
<i>Egretta thula</i>	snowy egret	
<i>Butorides virescens</i>	green heron	
<i>Nycticorax nycticorax</i>	black-crowned night-heron	
ACCIPITRIDAE - HAWK FAMILY		
<i>Circus cyaneus</i>	northern harrier	SSC
<i>Accipiter cooperii</i>	Cooper's hawk	
ALCEDINIDAE - KINGFISHER FAMILY		
<i>Megaceryle alcyon</i>	belted kingfisher	
FALCONIDAE - FALCON FAMILY		
<i>Falco sparverius</i>	American kestrel	
TYRANNIDAE - TYRANT FLYCATCHER FAMILY		
<i>Sayornis nigricans</i>	black phoebe	
<i>Sayornis saya</i>	Say's phoebe	
<i>Tyrannus verticalis</i>	western kingbird	
VIREONIDAE - VIREO FAMILY		
<i>Vireo bellii</i>	Bell's vireo	FE, SE

Appendix C • Wildlife Compendium

Species		Special Status
Scientific Name	Common Name	
CORVIDAE - JAY AND CROW FAMILY		
<i>Corvus brachyrhynchos</i>	American crow	
HIRUNDINIDAE - SWALLOW FAMILY		
<i>Stelgidopteryx serripennis</i>	northern rough-winged swallow	
<i>Hirundo rustica</i>	barn swallow	
AEGITHALIDAE - BUSHTIT FAMILY		
<i>Psaltriparus minimus</i>	bushtit	
TROGLODYTIDAE - WREN FAMILY		
<i>Thryomanes bewickii</i>	Bewick's wren	
STURNIDAE - STARLING FAMILY		
<i>Sturnus vulgaris</i> *	European starling*	
PASSERIDAE - OLD WORLD SPARROW FAMILY		
<i>Passer domesticus</i> *	house sparrow*	
ICTERIIDAE - BLACKBIRDS AND ORIOLES		
<i>Icteria virens</i>	yellow-breasted chat	SSC
FRINGILLIDAE - FINCH FAMILY		
<i>Haemorhous mexicanus</i>	house finch	
<i>Spinus psaltria</i>	lesser goldfinch	
PARULIDAE - WOOD-WARBLER FAMILY		
<i>Geothlypis trichas</i>	common yellowthroat	
<i>Setophaga petechia</i>	yellow warbler	SSC
EMBERIZIDAE - SPARROW FAMILY		
<i>Pipilo maculatus</i>	spotted towhee	
<i>Melospiza crissalis</i>	California towhee	
<i>Zonotrichia leucophrys</i>	white-crowned sparrow	
ICTERIDAE - BLACKBIRDS AND ORIOLES		
<i>Agelaius phoeniceus</i>	red-winged blackbird	
<i>Quiscalus mexicanus</i>	great-tailed grackle	
SCIURIDAE - SQUIRREL FAMILY		
<i>Otospermophilus beecheyi</i>	California ground squirrel	
LEPORIDAE - HARE AND RABBIT FAMILY		
<i>Sylvilagus audubonii</i>	desert cottontail	
<p><b>LEGEND:</b>                      * = Non-native or invasive species</p> <p><b>Special Status:</b></p> <p><b>Federal (USFWS):</b>                      FE = Endangered</p> <p><b>State (CDFW):</b>                      SE = Endangered                      SSC = Species of Concern                      WL = Watch List</p>		

# **Appendix D** Results of Special Status Plant Surveys

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February 15, 2018

Sean Haeri, P.E.  
Department of Transportation  
7166 West Manchester Avenue  
Los Angeles, California 90045

**VIA EMAIL**  
**sean.haeri@lacity.org**

**Subject:** Results of Special Status Plant Surveys for the State Route-1/Lincoln Boulevard Bridge Multi-Modal Improvement Project, City of Los Angeles, California

Dear Mr. Haeri:

This Letter Report presents the findings of special status plant surveys conducted for the Proposed State Route-1/Lincoln Boulevard Bridge Multi-Modal Improvement Project (hereinafter referred to as “Proposed Project”) located in the City of Los Angeles, California. The purpose of the survey was to determine the presence or absence of special status plant species in the Biological Study Area (BSA).

### **PROJECT LOCATION AND DESCRIPTION**

The BSA is located along Lincoln Boulevard between West Jefferson Boulevard and Fiji Way. It is approximately 2 miles west of Interstate (I-) 405, 3 miles south of I-10, and 3 miles north of I-105 (Figure 1). The Project site is surrounded by urban development and open space, including the Ballona Wetlands Ecological Reserve (Figure 2). The Project occurs on the U.S. Geological Survey’s (USGS’) Venice 7.5-minute topographic quadrangle of the San Bernardino Meridian in Township 02S, Range 15W, Sections 22, 23, 26, and 27 (Figure 3). The BSA includes all areas of potential direct and indirect effects where improvements would be made plus a buffer of 500 feet, for a total area of approximately 132 acres, as depicted on Figure 3.

Twenty-one vegetation types and other areas are present within the BSA: California sagebrush scrub, coyote brush scrub, degraded coyote brush scrub, laurel sumac scrub, Menzies’s golden bush scrub, quailbush scrub, annual brome grassland, cudweed stand, hyssop-leaved bassia stand, semi-natural herbaceous stand, upland mustards, alkali weed playa, annual beard grass – bristly ox-tongue grassland, California bulrush marsh, cattail marsh, pickleweed mat, arroyo willow thicket, mulefat thicket, developed landcover, open water, and parks and landscaping. The BSA crosses Ballona Creek and two unnamed drainages that occur at the northern and southern ends of the BSA. Topography in the BSA is generally flat, with elevations ranging from approximately 0 to 31 feet above mean sea level (msl). The soils in the BSA consist of fill soils including urban land (0 to 2 percent slopes), urban land-Typic Xerorthents (0 to 2 percent slopes), and Typic Fluvaquents-Typic Xerorthents (0 to 1 percent slopes) (Figure 4).

The Proposed Project is designed to create a new multi-modal corridor to serve high capacity transit, bicyclists, and pedestrians and will be partially funded with Active Transportation Program (ATPL) funds.

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The Proposed Project scope includes widening of Lincoln Boulevard between West Jefferson Boulevard and Culver Boulevard, replacing the existing Lincoln Boulevard Bridge over Ballona Creek, replacing the existing Culver Boulevard Bridge over Lincoln Boulevard, and reconstructing the existing Culver Boulevard/Lincoln Boulevard interchange. Both the Lincoln Boulevard Bridge over Ballona Creek and Lincoln Boulevard within the Proposed Project limits will be widened to accommodate a “complete street” cross section comprising vehicle lanes, bike lanes, and sidewalks, with sufficient width to accommodate future light rail or Bus Rapid Transit. The pedestrian crossings will also be restriped.

Within the Proposed Project limits, Lincoln Boulevard narrows to two lanes in the southbound direction and three lanes in the northbound direction. In contrast, south of the Proposed Project, Lincoln Boulevard opens to four lanes in the northbound direction and three lanes in the southbound direction; north of the Proposed Project, Lincoln Boulevard opens to four lanes in each direction. The Proposed Project is designed to close this gap and widen Lincoln Boulevard to better match the existing roadway configuration north and south of the Proposed Project. As a result, the proposed Lincoln Boulevard roadway centerline across Ballona Creek will be shifted to the east to allow new improvements to occur on the east side of the existing roadway.

The Proposed Project would restripe lanes between West Jefferson Boulevard and Fiji Way to accommodate the widened approach of Lincoln Boulevard and align proposed lanes with existing lanes beyond the Proposed Project limits.

The Proposed Project includes the following bridge improvements:

- Lincoln Bridge # 53-0118 will be replaced and widened to three lanes in each direction and will be built according to the current seismic standards.
- Culver Boulevard Bridge # 53-0089 over Lincoln Boulevard will be replaced with a widened bridge to accommodate one travel lane in each direction, bike lanes on both sides of the roadway, and a sidewalk along the north side of the roadway. All proposed widening is anticipated to fit within the existing right-of-way.

## **SURVEY METHODS**

Prior to the field surveys, a literature search was conducted to identify special status plant species reported from the vicinity of the BSA. Sources reviewed include the database searches in the California Native Plant Society’s (CNPS’) Inventory of Rare and Endangered Plants (CNPS 2017) and the California Department of Fish and Wildlife’s (CDFW’s) California Natural Diversity Database (CDFW 2017). Search criteria consisted of the USGS’ Beverly Hills, Hollywood, Inglewood, Topanga, and Venice 7.5-minute quadrangles. In addition, the *Draft Ballona Wetlands Restoration Project EIS/EIR State Clearinghouse No. 2012071090* (USACE and CDFW 2017) was reviewed.

Rainfall received in the winter and spring determines the germination of many annual and perennial herb species. The Santa Monica region received approximately 17.8 inches of precipitation between June 2016 and May 2017 (data taken from Santa Monica Station No. 99). The average annual precipitation for this period (between 1937 and 2016) is 12.6 inches (WRCC 2017).

Reference populations were monitored for select herbaceous species that have potential to occur in the BSA to ensure that the surveys were appropriately timed (Table 1). If conditions at a nearby reference population are suitable for germination and growth, then it can be inferred that conditions would also be suitable in the BSA. The species selected for having reference populations monitored for this survey effort were chosen based on the following factors:



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- Similarity of required habitat of the species and habitat present in the BSA
- Presence of populations within 1 mile of the BSA
- A California Rare Plant Rank (CRPR) of 1B or 2B

Of the species identified from the literature search, two species were determined to warrant monitoring of reference populations. Orcutt’s pincushion (*Chaenactis glabriuscula* var. *orcuttii*) was observed at the west end of the Ballona reserve on May 3, 2017, and southern tarplant (*Centromadia parryi* ssp. *australis*) was observed on June 21, 2017, at Madrona Marsh. Additional information about species blooming times was gathered from other rare plant focused surveys occurring in the Southern California region. Although surveys within the BSA were not specifically timed for these additional species, the life history of these additional species is such that they would have been detectable at the time of the surveys.

**TABLE 1**  
**REFERENCE POPULATIONS MONITORED IN THE PROJECT REGION**

Species	Date Observed	Location	Phenology
<i>Calochortus clavatus</i> var. <i>gracilis</i>	May 5	Santa Clarita	in bloom
<i>Centromadia parryi</i> ssp. <i>australis</i>	June 21	Madrona Marsh	in bloom
<i>Chaenactis glabriuscula</i> var. <i>orcuttii</i>	May 3	West end of Ballona Wetland Ecological Reserve	in bloom
<i>Eryngium aristulatum</i> var. <i>parishii</i>	May 19	Otay Mesa	in bloom
<i>Nama stenocarpa</i>	June 3	San Clemente	in bloom

Special status plant surveys were conducted following the CDFW’s *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFG 2009). Psomas Biologists performed surveys on March 15, April 18, May 16, and June 26, 2017. Table 2 details the survey days and personnel who conducted focused surveys within the BSA. The total number of person-hours spent surveying was approximately 40 hours. Surveys were conducted in areas of potential habitat for special status plant species in the BSA, which consisted of all open space habitat in the BSA outside areas that were severely overgrown with black mustard (*Brassica nigra*). Meandering transects were used to achieve 100 percent visual coverage of suitable habitat. The Biologist modified the intensity of the survey effort in any given area based on microtopography, soil conditions, potential for rare plants, and density of the shrub layer. Inaccessible areas were surveyed with binoculars. Plant species were identified in the field or collected for later identification with the Jepson Manual (Baldwin et al. 2012). Nomenclature of plant taxa conform to the *Special Vascular Plants, Bryophytes, and Lichens List* (CDFW 2018) for special status species and the Jepson eFlora (Jepson Flora Project 2016) for all other taxa. A list of all plant species observed in the BSA during special status plant surveys is included in Attachment A.

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**TABLE 2**  
**SURVEY DAYS AND PERSONNEL**

Date	Personnel
March 15*	Ian Cain, Irena Mendez
April 18	Agnieszka Napiatek, Ian Cain
May 16	Agnieszka Napiatek, Ian Cain
June 26	Allison Rudalevige, Irena Mendez
* A vegetation map and jurisdictional delineation were conducted on this date. Although not a focused survey, the majority of the BSA was walked and surveyed for these efforts; and all observed plant species were recorded.	

Any special status plant species observed in the BSA were mapped with a Global Positioning System (GPS) unit, and data were collected on the number and phenology of individuals (estimated for large populations) and microsite characteristics such as slope, aspect, soil texture, surrounding habitat, and associated species. Representative photographs are included as Attachment B.

**SURVEY RESULTS**

Sixty-five special status plant species were reported from the vicinity of the BSA based on the literature review. Attachment C identifies these species with their status, their potential to occur in the BSA, and the survey results. One special status plant species, Lewis’ evening-primrose (*Camissoniopsis lewisii*) was observed in the BSA during the survey period. While not observed in the BSA during current surveys, suffrutescent wallflower (*Erysimum suffrutescens*), south coast branching phacelia (*Phacelia ramosissima* var. *austrolitoralis*), and woolly seablite (*Suaeda taxifolia*) have low potential to occur in the BSA since they have been reported recently from the Ballona Wetlands Ecological Reserve and the BSA contains suitable habitat (USACE and CDFW 2017). A description of these species and population information in the BSA are given below. The remaining species reported from the literature review are not expected to occur in the BSA because suitable habitat is not present in the BSA, the BSA is outside the known range or elevation range of the species, the species is extirpated, and/or the species has not been observed in the BSA or vicinity, except historically.

**Lewis’ Evening-primrose**

Lewis’ evening-primrose is a yellow-flowered annual herb species in the evening-primrose family (Onagraceae) with a CRPR of 3. It is generally associated with coastal dunes, although some populations have been found more than 5 miles from the ocean. It is currently known to occur in Los Angeles and San Diego Counties in Southern California.

Approximately 500 individuals of Lewis’ evening-primrose are estimated to occur in three populations. These populations all occur north of Ballona Creek, with one population west of Lincoln Boulevard and two populations east of Lincoln Boulevard, as depicted on Figure 5. The specific habitat of Lewis’ evening-primrose in the BSA is on a flat, sandy plain in cudweed special stand, upland mustard, and California sagebrush scrub habitat co-occurring with species such as small-flowered camissoniopsis (*Camissoniopsis micrantha*), pleasant-scented cudweed (*Psuedognaphalium beneolens*), coyote brush (*Baccharis pilularis* ssp. *consanguinea*), Geraldton carnation weed (*Euphorbia terracina*), and black mustard.

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**Suffrutescent Wallflower**

Suffrutescent wallflower is a perennial herb in the mustard family (Brassicaceae) with a CRPR of 4.2. It occurs in maritime chaparral, coastal bluff scrub, coastal scrub, and coastal dunes. It is currently known from Los Angeles and Ventura Counties in Southern California.

Approximately 29 individuals were observed in coastal dune habitat at the western end of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017). While coastal dune habitat is not present in the BSA, the scrub communities in the BSA may represent suitable habitat. The potential for this species to be present in the BSA at this time is low given the lack of observations during the current or previous survey efforts. However, it may spread to the BSA in the future.

**South Coast Branching Phacelia**

South coast branching phacelia is a perennial herb in the borage family (Boraginaceae) with a CRPR of 3.2. It occurs in sandy, sometimes rocky soils in chaparral, coastal dunes, coastal scrub, and coastal salt marshes and swamps. It is currently known from Orange, Los Angeles, San Diego, and Ventura Counties in Southern California.

Approximately 600 individuals were observed in coastal dune habitat at the western end of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017). While coastal dune habitat is not present in the BSA, the scrub and marsh communities in the BSA may represent suitable habitat. The potential for this species to be present in the BSA at this time is low given the lack of observations during the current or previous survey efforts. However, it may spread to the BSA in the future.

**Woolly Seablite**

Woolly seablite is an evergreen shrub in the goosefoot family (Chenopodiaceae) with a CRPR of 4.2. It occurs in coastal bluff scrub, coastal dunes, and the margins of coastal salt marshes and swamps. It is currently known from Los Angeles, Orange, San Diego, and Ventura Counties in Southern California.

Approximately 85 individuals were observed on the edge of coastal brackish marsh in the western portion of the Ballona Wetlands Ecological Reserve. The marsh communities in the BSA may represent suitable habitat. The potential for this species to be present in the BSA at this time is low given the lack of observations during the current or previous survey efforts. However, it may spread to the BSA in the future.

**CONCLUSIONS**

Protocol surveys found one special status plant species, Lewis' evening-primrose, in the BSA. Impacts to species with a CRPR of 3 generally are not considered significant under the California Environmental Quality Act (CEQA). The distribution of this species in the BSA is such that impacts to the population would be minimal (i.e., less than 10 percent of the total population within the BSA would be impacted). However, to ensure that impacts on Lewis' evening-primrose are avoided, it is recommended that protective fencing (e.g., orange snow fencing, lath and rope, or other fencing deemed suitable by the Project Biologist) be placed around the primrose locations. The placement of fencing should be conducted by a qualified Biologist (i.e., one familiar with this species).

Three species were not observed in the BSA but have potential to occur in the BSA in the future. As species with CRPRs of 3.2 and 4.2, impacts on these species, if present, would not generally be considered significant under CEQA.

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Although reference populations and regional rainfall amounts were monitored to ensure the scientific adequacy of these focused surveys, there is always a minimal potential for false negative survey results, as species could possibly be present on a site but may not be detectable at the time of the surveys.

If you have any comments or questions, please call Agnieszka Napiatek at (714) 751-7373.

Sincerely,

**P S O M A S**

  
Agnieszka Napiatek  
Project Manager

  
Stacie A. Tennant  
Senior Biologist

Enclosures: Figure 1 – Project Location  
Figure 2 – Project Aerial  
Figure 3 – Study Area  
Figure 4 – Soils  
Figure 5 – Biological Resources  
Attachment A – Botanical Compendium  
Attachment B – Site Photos  
Attachment C – Special Status Plant Species Reported From the Biological Study Area Vicinity

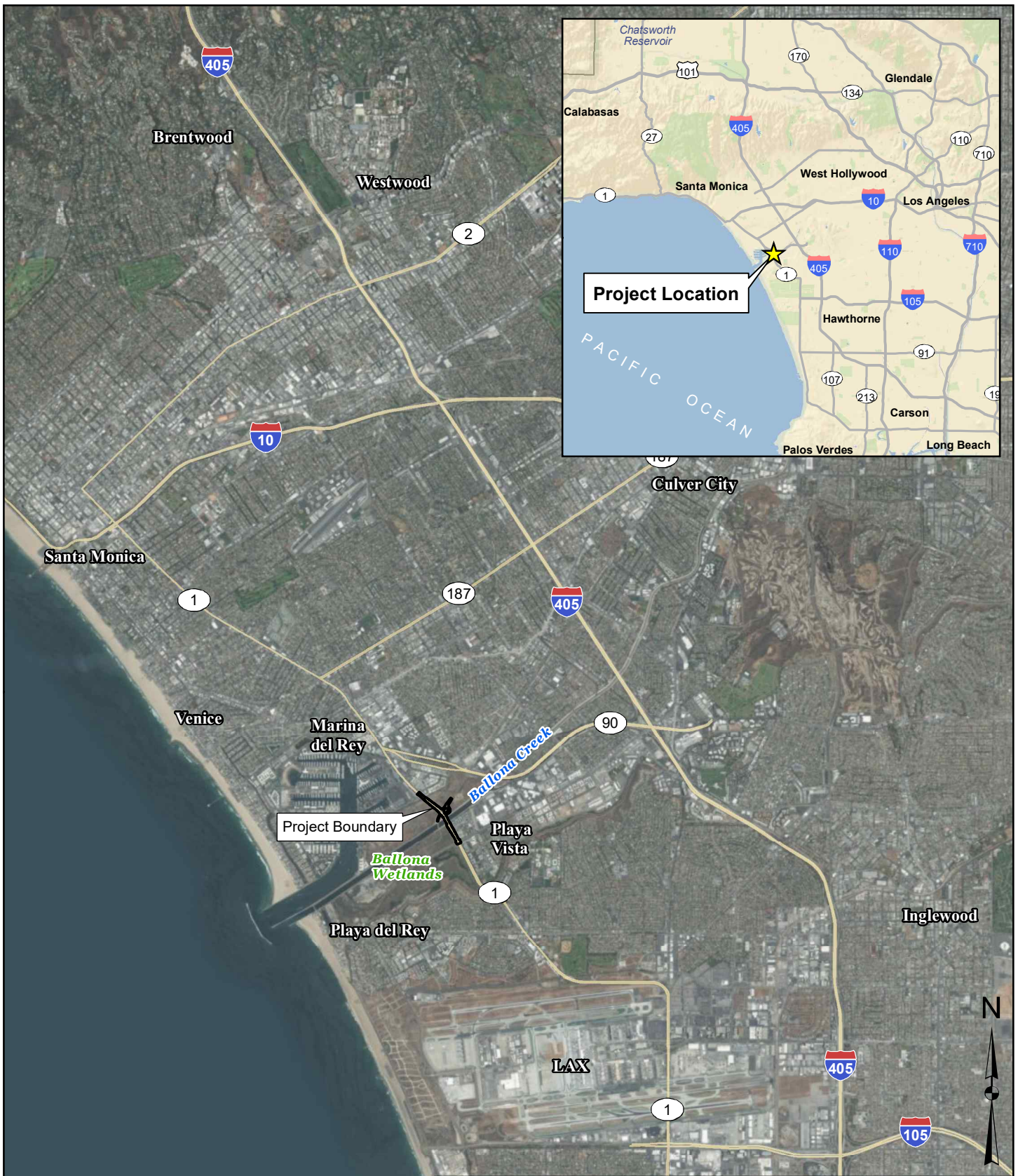
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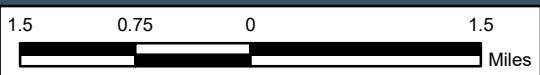
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<b>Project Location</b>	
State Route-1/Lincoln Boulevard Bridge Multi-Modal Improvement Project	
07-LA-1, PM30.16/30.74	
EA 33880	
Aerial Source: ESRI, NAIP 2016	
	

 Project Boundary



**Figure 1**



 Project Boundary

500 250 0 500  
Feet

### Project Aerial

State Route-1/Lincoln Boulevard Bridge  
Multi-Modal Improvement Project

07-LA-1, PM30.16/30.74

EA 33880

Aerial Source: LAR-IAC 2014



Figure 2

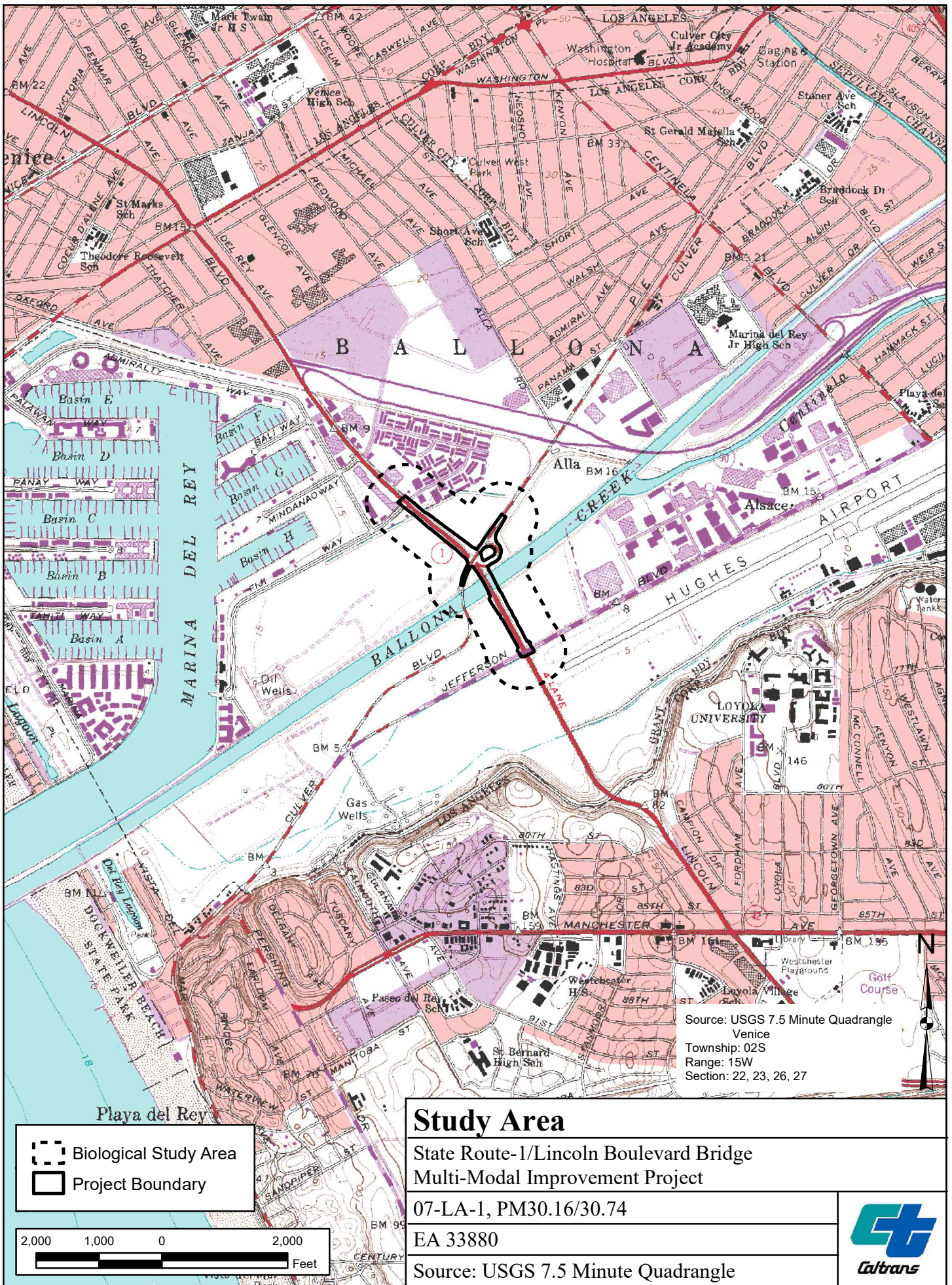


Figure 3



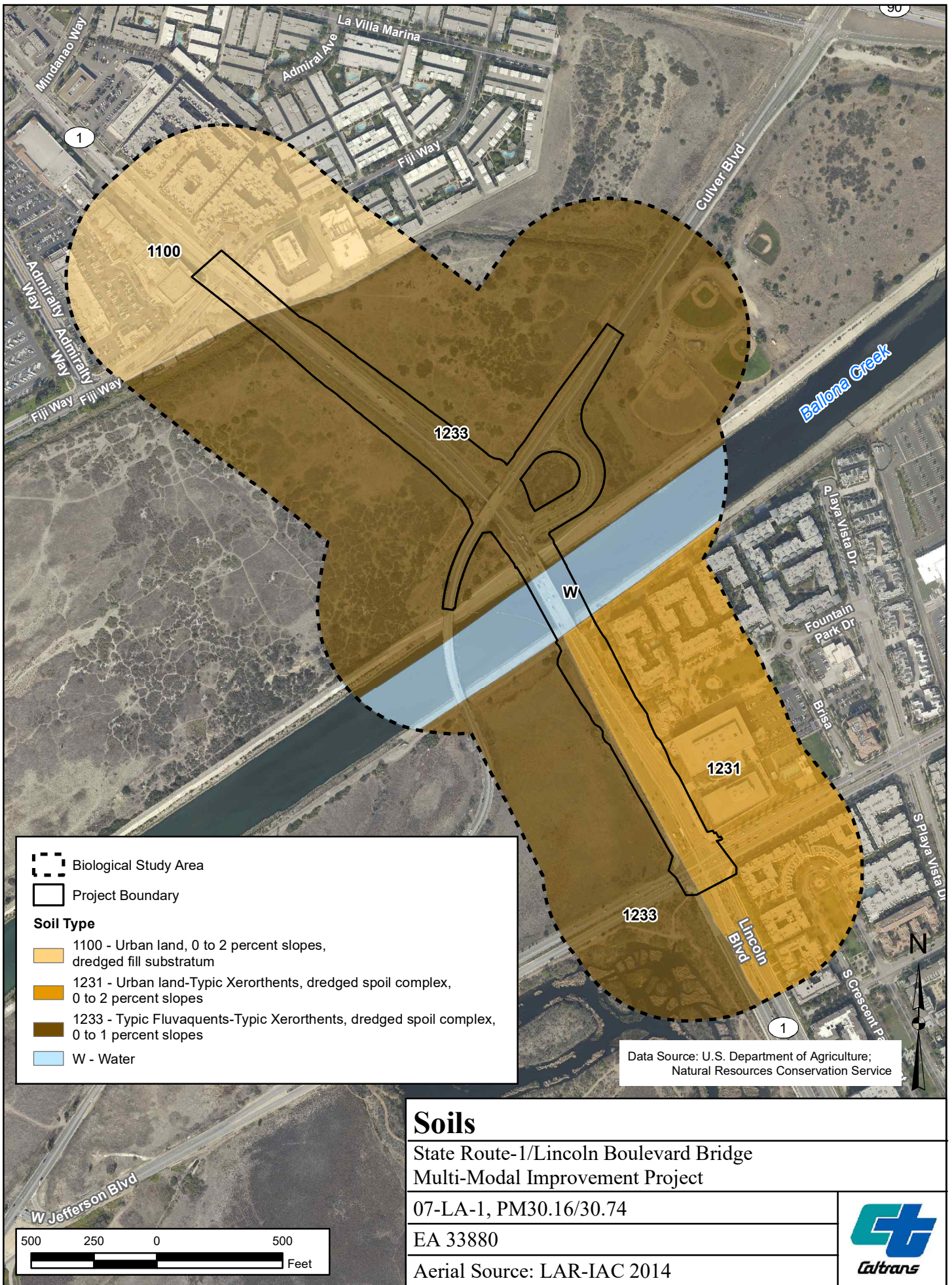


Figure 4

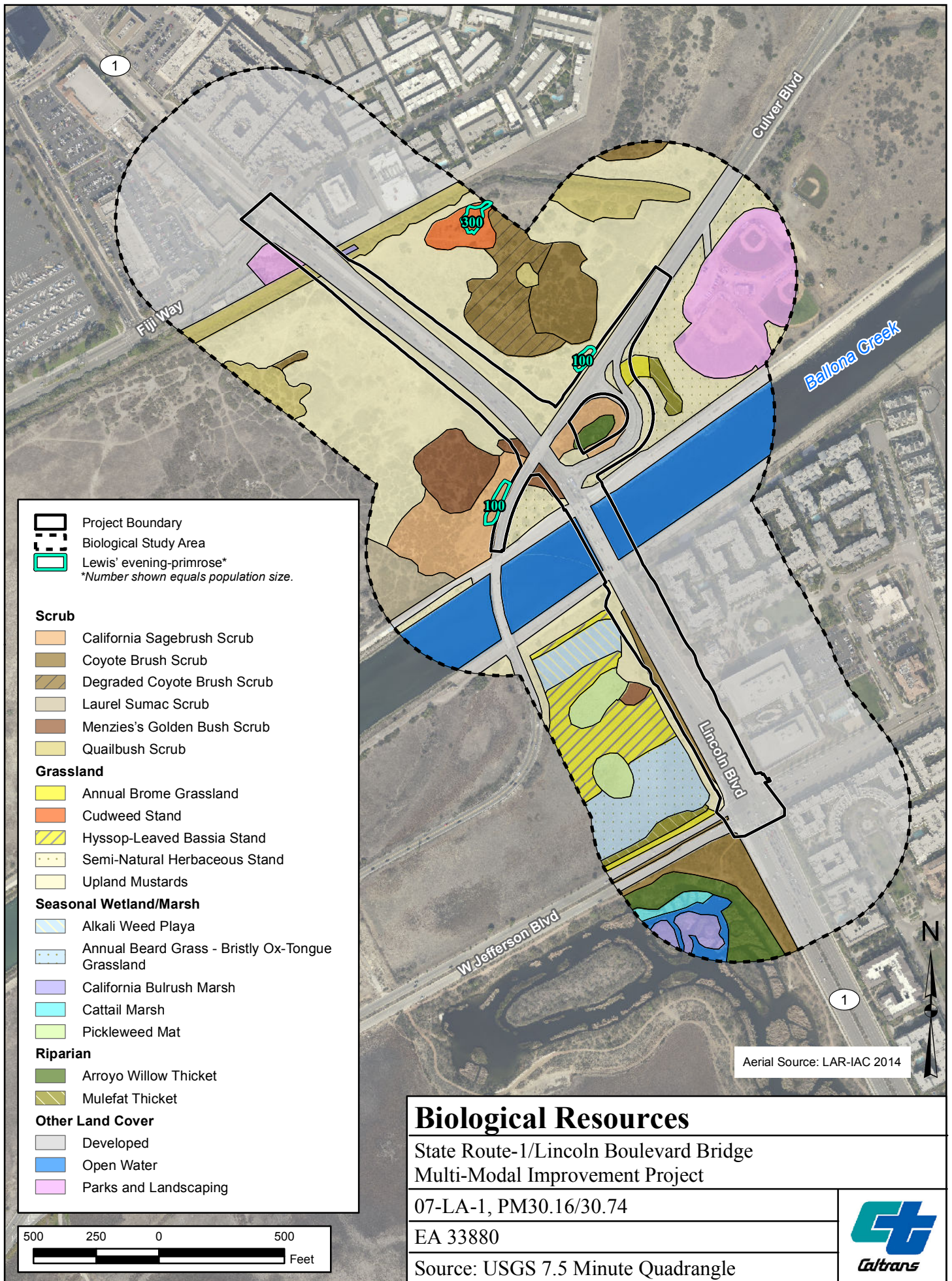


Figure 5

**ATTACHMENT A**  
**BOTANICAL COMPENDIUM**

**PLANT SPECIES OBSERVED IN THE BIOLOGICAL STUDY AREA  
DURING SPECIAL STATUS PLANT SURVEYS**

Species	
Scientific Name	Common Name
<b>MAGNOLIIDS</b>	
SAURURACEAE – LIZARD'S-TAIL FAMILY	
<i>Anemopsis californica</i>	yerba mansa
<b>EUDICOTS</b>	
AIZOACEAE – FIG-MARIGOLD FAMILY	
<i>Carpobrotus chilensis</i> *	sea fig
<i>Carpobrotus edulis</i> *	freeway iceplant
<i>Mesembryanthemum nodiflorum</i> *	slender-leaved iceplant
ANACARDIACEAE – SUMAC FAMILY	
<i>Malosma laurina</i>	laurel sumac
<i>Rhus integrifolia</i>	lemonade berry
<i>Schinus molle</i> *	pepper tree
<i>Schinus terebinthifolius</i> *	Brazilian pepper tree
APIACEAE – CARROT FAMILY	
<i>Foeniculum vulgare</i> *	fennel
ASTERACEAE - SUNFLOWER FAMILY	
<i>Lactuca serriola</i> *	prickly lettuce
<i>Laennecia coulteri</i>	Coulter's horseweed
<i>Lasthenia glabrata</i> ssp. <i>glabrata</i>	yellow-ray goldfields
ASTERACEAE – SUNFLOWER FAMILY	
<i>Ambrosia acanthicarpa</i>	annual bur-sage
<i>Artemisia californica</i>	California sagebrush
<i>Artemisia douglasiana</i>	mugwort
<i>Baccharis pilularis</i> ssp. <i>consanguinea</i>	coyote brush
<i>Baccharis salicifolia</i> ssp. <i>salicifolia</i>	mule fat
<i>Brickellia californica</i>	California brickellbush
<i>Carduus pycnocephalus</i> ssp. <i>pycnocephalus</i> *	Italian thistle
<i>Centaurea melitensis</i> *	toocalote
<i>Cirsium vulgare</i> *	bull thistle
<i>Encelia californica</i>	California encelia
<i>Erigeron canadensis</i>	horseweed
<i>Glebionis coronaria</i> *	crown daisy
<i>Helminthotheca echioides</i> *	bristly ox-tongue
<i>Heterotheca grandiflora</i>	telegraph weed
<i>Isocoma menziesii</i> var. <i>menziesii</i>	Menzies' coastal goldenbush
<i>Matricaria discoidea</i> *	pineapple weed
<i>Pluchea sericea</i>	arrow-weed
<i>Pseudognaphalium beneolens</i>	pleasant-scented cudweed
<i>Pseudognaphalium californicum</i>	California cudweed
<i>Pseudognaphalium luteoalbum</i> *	white lamb cudweed
<i>Sonchus asper</i> ssp. <i>asper</i> *	prickly sow thistle
<i>Sonchus oleraceus</i> *	common sow thistle

**PLANT SPECIES OBSERVED IN THE BIOLOGICAL STUDY AREA  
DURING SPECIAL STATUS PLANT SURVEYS**

<b>Species</b>	
<b>Scientific Name</b>	<b>Common Name</b>
BRASSICACEAE – MUSTARD FAMILY	
<i>Brassica nigra</i> *	black mustard
<i>Brassica rapa</i> *	field mustard
<i>Hirschfeldia incana</i> *	grayish shortpod mustard
<i>Lobularia maritima</i> *	sweet alyssum
<i>Raphanus sativus</i> *	radish
CARYOPHYLLACEAE – PINK FAMILY	
<i>Spergularia marina</i>	saltmarsh sand-spurrey
<i>Stellaria media</i> *	common chickweed
CHENOPODIACEAE – GOOSEFOOT FAMILY	
<i>Atriplex lentiformis</i>	big saltbush
<i>Atriplex prostrata</i> *	fat-hen
<i>Bassia hyssopifolia</i> *	hyssop-leaved bassia
<i>Salicornia</i> cf. <i>depressa</i>	flat pickleweed
<i>Salicornia pacifica</i>	Pacific pickleweed
<i>Salsola tragus</i> *	Russian thistle
CONVOLVULACEAE – MORNING-GLORY FAMILY	
<i>Cressa truxillensis</i>	alkali weed
CRASSULACEAE – STONECROP FAMILY	
<i>Crassula connata</i>	pygmy-weed
EUPHORBIACEAE – SPURGE FAMILY	
<i>Croton californicus</i>	California croton
<i>Croton setiger</i>	turkey-mullein
<i>Euphorbia peplus</i> *	petty spurge
<i>Euphorbia terracina</i> *	Geraldton carnation weed
<i>Ricinus communis</i> *	common castor bean
FABACEAE – LEGUME FAMILY	
<i>Acmispon glaber</i> var. <i>glaber</i>	glabrous deerweed
<i>Medicago polymorpha</i> *	variable burclover
<i>Melilotus albus</i> *	white sweetclover
<i>Melilotus indicus</i> *	sourclover
FRANKENIACEAE – FRANKENIA FAMILY	
<i>Frankenia salina</i>	alkali heath
GERANIACEAE – GERANIUM FAMILY	
<i>Erodium botrys</i> *	long-beaked filaree
<i>Erodium cicutarium</i> *	redstem filaree
<i>Erodium moschatum</i> *	greenstem filaree
LAMIACEAE – MINT FAMILY	
<i>Marrubium vulgare</i> *	common horehound
LYTHRACEAE - LOOSESTRIFE FAMILY	
<i>Lythrum hyssopifolia</i> *	hyssop-leaf loosestrife

**PLANT SPECIES OBSERVED IN THE BIOLOGICAL STUDY AREA  
DURING SPECIAL STATUS PLANT SURVEYS**

<b>Species</b>	
<b>Scientific Name</b>	<b>Common Name</b>
MALVACEAE – MALLOW FAMILY	
<i>Malva parviflora</i> *	cheeseweed
<i>Malvella leprosa</i>	alkali-mallow
OLEACEAE – OLIVE FAMILY	
<i>Olea europaea</i> *	European olive
ONAGRACEAE – EVENING PRIMROSE FAMILY	
<i>Camissoniopsis cheiranthifolia</i> ssp. <i>suffruticosa</i>	shrubby beach evening-primrose
<i>Camissoniopsis lewisii</i>	Lewis' evening-primrose
<i>Camissoniopsis micrantha</i>	small-flowered camissoniopsis
PLANTAGINACEAE – PLANTAIN FAMILY	
<i>Plantago lanceolata</i> *	English plantain
PLATANACEAE – SYCAMORE FAMILY	
<i>Platanus racemosa</i>	western sycamore
POLYGONACEAE – BUCKWHEAT FAMILY	
<i>Eriogonum fasciculatum</i> var. <i>foliolosum</i>	leafy California buckwheat
<i>Rumex crispus</i> *	curly dock
ROSACEAE – ROSE FAMILY	
<i>Rosa californica</i>	California rose
SALICACEAE – WILLOW FAMILY	
<i>Populus fremontii</i> ssp. <i>fremontii</i>	Fremont cottonwood
<i>Salix exigua</i> var. <i>hindsiana</i>	Hinds' willow
<i>Salix gooddingii</i>	Goodding's black willow
<i>Salix lasiolepis</i>	arroyo willow
SOLANACEAE – NIGHTSHADE FAMILY	
<i>Datura wrightii</i>	Wright's jimsonweed
<i>Nicotiana glauca</i> *	tree tobacco
<i>Solanum douglasii</i>	Douglas' nightshade
TAMARICACEAE – TAMARISK FAMILY	
<i>Tamarix ramosissima</i> *	saltcedar
ULMACEAE – ELM FAMILY	
<i>Ulmus parvifolia</i> *	Chinese elm
<b>MONOCOTS</b>	
AGAVACEAE – AGAVE FAMILY	
<i>Yucca gloriosa</i> *	glorious yucca
ARECACEAE – PALM FAMILY	
<i>Phoenix canariensis</i> *	Canary Island palm
<i>Washingtonia robusta</i> *	Mexican fan palm
CYPERACEAE – SEDGE FAMILY	
<i>Schoenoplectus californicus</i>	southern bulrush
JUNCACEAE – RUSH FAMILY	
<i>Juncus bufonius</i>	toad rush
<i>Juncus bufonius</i> var. <i>bufonius</i>	toad rush

**PLANT SPECIES OBSERVED IN THE BIOLOGICAL STUDY AREA  
DURING SPECIAL STATUS PLANT SURVEYS**

Species	
Scientific Name	Common Name
POACEAE – GRASS FAMILY	
<i>Arundo donax</i> *	giant reed
<i>Avena barbata</i> *	slender wild oat
<i>Avena fatua</i> *	wild oat
<i>Bromus diandrus</i> *	ripgut grass
<i>Bromus madritensis</i> ssp. <i>rubens</i> *	red brome
<i>Cortaderia selloana</i> *	pampas grass
<i>Cynodon dactylon</i> *	Bermuda grass
<i>Festuca myuros</i> *	rattail sixweeks grass
<i>Festuca perennis</i> *	rye grass
<i>Hordeum murinum</i> ssp. <i>leporinum</i> *	hare barley
<i>Pennisetum setaceum</i> *	crimson fountain grass
<i>Polypogon monspeliensis</i> *	annual beard grass
<i>Stipa miliacea</i> var. <i>miliacea</i> *	smilo grass
TYPHACEAE – CATTAIL FAMILY	
<i>Typha</i> cf. <i>domingensis</i>	southern cattail
* Non-native or invasive species cf. "conforms to"; species can not be confirmed due to phenological condition	

**ATTACHMENT B**  
**SITE PHOTOGRAPHS**





Lewis' evening-primrose (*Camissoniopsis lewisii*) observed in the BSA.



Lewis' evening-primrose habitat in the BSA.

## Site Photographs

State Route-1/Lincoln Boulevard Bridge Multi-Modal Improvement Project

07-LA-14, PM30.16/30.74

EA 33880



**ATTACHMENT C**

**SPECIAL STATUS PLANT SPECIES REPORTED  
FROM THE BIOLOGICAL STUDY AREA VICINITY**

**SPECIAL STATUS PLANT SPECIES REPORTED  
FROM THE BIOLOGICAL STUDY AREA VICINITY**

Common Name	Scientific Name	Status			General Habitat Description	Habitat Present/Absent	Rationale
		USFWS	CDFW	CRPR			
red sand-verbena	<i>Abronia maritima</i>	-	-	4.2	Perennial herb. Coastal dunes; 0–328 ft. Southern California County Distribution: Los Angeles, Orange, San Diego, Ventura. Blooming period: February–November.	A	Not expected to occur. No suitable dune habitat in the BSA; historically reported from the Ballona Wetlands Ecological Reserve (CCH 2017; 1901 record), but not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
aphanisma	<i>Aphanisma blitoides</i>	-	-	1B.2	Annual herb. Sandy soils in coastal bluff scrub, coastal dunes, and coastal scrub; 3–1,000 ft. Southern California County Distribution: Los Angeles, Orange, San Diego, Ventura. Blooming period: March–June.	HP	Not expected to occur. Suitable habitat in the BSA, but not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.

**SPECIAL STATUS PLANT SPECIES REPORTED  
FROM THE BIOLOGICAL STUDY AREA VICINITY**

Common Name	Scientific Name	Status			General Habitat Description	Habitat Present/Absent	Rationale
		USFWS	CDFW	CRPR			
marsh sandwort	<i>Arenaria paludicola</i>	FE	SE	1B.1	Perennial stoloniferous herb. Sandy soils in marshes and swamps with brackish freshwater; 10–558 ft. Southern California County Distribution: Los Angeles, San Bernardino (Presumed extirpated). Blooming period: May–August.	HP	Not expected to occur. Suitable habitat in the BSA, but County records are historic (CCH 2017; 1900 record) and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
Braunton's milk-vetch	<i>Astragalus brauntonii</i>	FE	–	1B.1	Perennial herb. Recently burned and disturbed areas, usually in sandstone and carbonite soils, in chaparral, coastal scrub, and grasslands; 13–2,099 ft. Southern California County Distribution: Los Angeles, Orange, Riverside, Ventura. Blooming period: January–August.	A	Not expected to occur. No suitable sandstone or carbonate soils in the BSA and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.

**SPECIAL STATUS PLANT SPECIES REPORTED  
FROM THE BIOLOGICAL STUDY AREA VICINITY**

Common Name	Scientific Name	Status			General Habitat Description	Habitat Present/Absent	Rationale
		USFWS	CDFW	CRPR			
Ventura Marsh milk-vetch	<i>Astragalus pycnostachyus</i> var. <i>lanosissimus</i>	FE	SE	1B.1	Perennial herb. Coastal dunes and scrub, marshes and swamps at ocean edges; 3–115 ft. Southern California County Distribution: Los Angeles (Presumed extirpated), Orange (Presumed extirpated), Ventura. Blooming period: June–October.	HP	Not expected to occur. Suitable habitat in the BSA, but presumed extirpated from the County; historically reported from the Ballona Wetlands Ecological Reserve (Read 2015; 1882 record), but not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
coastal dunes milk-vetch	<i>Astragalus tener</i> var. <i>titi</i>	FE	SE	1B.1	Annual herb. Often in vernal mesic areas in sandy coastal bluff scrub, coastal dunes, and mesic coastal prairie; 3–164 ft. Southern California County Distribution: Los Angeles (Presumed extirpated), San Diego (Presumed extirpated; Occurrence confirmed, but possibly extirpated). Blooming period: March–May.	HP	Not expected to occur. Suitable habitat in the BSA, but presumed extirpated from the County; historically reported from the Ballona Wetlands Ecological Reserve (Read 2015; 1891 record), but not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.

**SPECIAL STATUS PLANT SPECIES REPORTED  
FROM THE BIOLOGICAL STUDY AREA VICINITY**

Common Name	Scientific Name	Status			General Habitat Description	Habitat Present/Absent	Rationale
		USFWS	CDFW	CRPR			
Coulter's saltbush	<i>Atriplex coulteri</i>	–	–	1B.2	Perennial herb. Alkaline or clay soils in coastal bluff scrub, coastal dunes, coastal scrub, and grassland; 9–1,509 ft. Southern California County Distribution: Los Angeles, Orange, San Bernardino, San Diego, Ventura. Blooming period: March–October.	HP	Not expected to occur. Suitable habitat in the BSA, but nearby record is historic (CCH 2017; 1881 record) and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
south coast saltscale	<i>Atriplex pacifica</i>	–	–	1B.2	Annual herb. Coastal bluff scrub, coastal dunes, coastal scrub, playas; 0–459 ft. Southern California County Distribution: Los Angeles, Orange, Riverside, San Diego, Ventura (Presumed extirpated). Blooming period: March–October.	HP	Not expected to occur. Suitable habitat in the BSA, but nearby record is historic (CCH 2017; 1881 record) and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
Parish's brittlescale	<i>Atriplex parishii</i>	–	–	1B.1	Annual herb. Alkaline soils in chenopod scrub, playas, and vernal pools; 82–6,232 ft. Southern California County	A	Not expected to occur. Suitable habitat in the BSA, but presumed extirpated from the County and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between

**SPECIAL STATUS PLANT SPECIES REPORTED  
FROM THE BIOLOGICAL STUDY AREA VICINITY**

Common Name	Scientific Name	Status			General Habitat Description	Habitat Present/Absent	Rationale
		USFWS	CDFW	CRPR			
					Distribution: Los Angeles (Presumed extirpated), Orange (Presumed extirpated), Riverside, San Bernardino (Presumed extirpated), San Diego. Blooming period: June–October.		1979 and 2011) or current surveys of the BSA.
Davidson's saltscale	<i>Atriplex serenana</i> var. <i> davidsonii</i>	–	–	1B.2	Annual herb. Alkaline conditions in coastal bluff scrub and coastal scrub; 32–656 ft. Southern California County Distribution: Los Angeles (Presumed extirpated; Occurrence confirmed, but possibly extirpated), Orange, Riverside, San Diego, Ventura. Blooming period: April–October.	HP	Not expected to occur. Suitable habitat in the BSA, but presumed extirpated from the County and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.

**SPECIAL STATUS PLANT SPECIES REPORTED  
FROM THE BIOLOGICAL STUDY AREA VICINITY**

Common Name	Scientific Name	Status			General Habitat Description	Habitat Present/Absent	Rationale
		USFWS	CDFW	CRPR			
Brewer's calandrinia	<i>Calandrinia breweri</i>	–	–	4.2	Annual herb. Sandy or loamy soils, disturbed and/or burned sites in chaparral and coastal scrub; 32–4,001 ft. Southern California County Distribution: Los Angeles, Orange, Riverside, San Bernardino, San Diego, Ventura. Blooming period: March–June.	HP	Not expected to occur. Suitable habitat in the BSA, but nearby record is historic (CCH 2017; 1928 record) and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
Catalina mariposa-lily	<i>Calochortus catalinae</i>	–	–	4.2	Perennial bulbiferous herb. Chaparral, cismontane woodland, coastal scrub, and grassland; 49–2,296 ft. Southern California County Distribution: Los Angeles, Orange, San Bernardino, San Diego, Ventura. Blooming period: February–June.	HP	Not expected to occur. Suitable habitat in the BSA, but not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.



**SPECIAL STATUS PLANT SPECIES REPORTED  
FROM THE BIOLOGICAL STUDY AREA VICINITY**

Common Name	Scientific Name	Status			General Habitat Description	Habitat Present/Absent	Rationale
		USFWS	CDFW	CRPR			
slender mariposa-lily	<i>Calochortus clavatus</i> var. <i>gracilis</i>	–	–	1B.2	Perennial bulbiferous herb. Chaparral, coastal scrub, grassland; 1,050–3,280 ft. Southern California County Distribution: Los Angeles, Ventura. Blooming period: March–June.	HP	Not expected to occur. Suitable habitat in the BSA, but BSA is outside the known elevation range and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
Plummer's mariposa-lily	<i>Calochortus plummerae</i>	–	–	4.2	Perennial bulbiferous herb. Granitic and rocky areas in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and grassland; 328–5,576 ft. Southern California County Distribution: Los Angeles, Orange, Riverside, San Bernardino, Ventura. Blooming period: May–July.	HP	Not expected to occur. Suitable habitat in the BSA, but BSA is outside the known elevation range and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.

**SPECIAL STATUS PLANT SPECIES REPORTED  
FROM THE BIOLOGICAL STUDY AREA VICINITY**

Common Name	Scientific Name	Status			General Habitat Description	Habitat Present/Absent	Rationale
		USFWS	CDFW	CRPR			
lucky morning-glory	<i>Calystegia felix</i>	-	-	1B.1	Annual rhizomatous herb. Currently known from irrigated landscapes, but historically from meadows and seeps that are sometimes alkaline and alluvial riparian scrub; 98–705 ft. Southern California County Distribution: Los Angeles (Presumed extirpated), Riverside (Presumed extirpated), San Bernardino. Blooming period: March–September.	HP	Not expected to occur. Suitable habitat in the BSA, but nearby record is historic (CCH 2017), presumed extirpated from the County, and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
Peirson's morning-glory	<i>Calystegia peirsonii</i>	-	-	4.2	Perennial rhizomatous herb. Chaparral, chenopod scrub, cismontane woodland, coastal scrub, lower montane coniferous forest, grassland; 98–4,920 ft. Southern California County Distribution: Los Angeles. Blooming period: April–June.		Not expected to occur. Suitable habitat in the BSA, but BSA is outside the known elevation range and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.

**SPECIAL STATUS PLANT SPECIES REPORTED  
FROM THE BIOLOGICAL STUDY AREA VICINITY**

Common Name	Scientific Name	Status			General Habitat Description	Habitat Present/Absent	Rationale
		USFWS	CDFW	CRPR			
Santa Barbara morning-glory	<i>Calystegia sepium</i> ssp. <i>binghamiae</i>	-	-	1A	Perennial rhizomatous herb. Coastal marshes and swamps, riverbanks; 0–65 ft. Southern California County Distribution: Los Angeles, San Bernardino (Presumed extirpated; rediscovery in 2011 classified as <i>Calystegia felix</i> ). Blooming period: April–June, August.	HP	Not expected to occur. Suitable habitat in the BSA, but nearby records are historic (CCH 2017; 1899 and 1904 records), presumed extirpated, and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
Lewis' evening-primrose	<i>Camissoniopsis lewisii</i>	-	-	3	<b>Annual herb. Sandy or clay soils in coastal bluff scrub, Cismontane woodland, coastal dunes, coastal scrub, and grassland; 0–984 ft. Southern California County Distribution: Los Angeles, Orange (Presumed extirpated), San Diego. Blooming period: March–June.</b>	P	<b>Observed in the BSA during focused surveys.</b>

**SPECIAL STATUS PLANT SPECIES REPORTED  
FROM THE BIOLOGICAL STUDY AREA VICINITY**

Common Name	Scientific Name	Status			General Habitat Description	Habitat Present/Absent	Rationale
		USFWS	CDFW	CRPR			
southern tarplant	<i>Centromadia parryi</i> <i>ssp. australis</i>	–	–	1B.1	Annual herb. Found within the margin of marshes and swamps, vernal mesic soils in grassland, and vernal pools; 0–1,574 ft. Southern California County Distribution: Los Angeles, Orange, San Diego, Ventura. Blooming period: May–November.	HP	Not expected to occur. Suitable habitat in the BSA; historically reported from the Ballona Wetlands Ecological Reserve (Read 2015; 1890 record) but not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
island mountain-mahogany	<i>Cercocarpus betuloides</i> var. <i>blancheae</i>	–	–	4.3	Evergreen shrub. Closed-cone coniferous forests and chaparral; 98–1,968 ft. Southern California County Distribution: Los Angeles, Ventura. Blooming period: February–May.	A	Not expected to occur. No suitable forest or chaparral habitat in the BSA and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA; the species is a large tree that would be observed if present in the BSA.

**SPECIAL STATUS PLANT SPECIES REPORTED  
FROM THE BIOLOGICAL STUDY AREA VICINITY**

Common Name	Scientific Name	Status			General Habitat Description	Habitat Present/Absent	Rationale
		USFWS	CDFW	CRPR			
Orcutt's pincushion	<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>	-	-	1B.1	Annual herb. Sandy soils in coastal bluff scrub and coastal dunes; 0–328 ft. Southern California County Distribution: Los Angeles, Orange (Presumed extirpated), San Diego, Ventura. Blooming period: January–August.	A	Not expected to occur. No suitable bluff or dune habitat in the BSA; reported from restored coastal dune habitat in the western end of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017), but not observed during current surveys of the BSA.
coastal goosefoot	<i>Chenopodium littoreum</i>	-	-	1B.2	Annual herb. Coastal dunes; 33–98 ft. Southern California County Distribution: Los Angeles. Blooming period: April–August.	A	Not expected to occur. No suitable dune habitat in the BSA and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
salt marsh bird's-beak	<i>Chloropyron maritimum</i> ssp. <i>maritimum</i>	FE	SE	1B.2	Hemiparasitic annual herb. Coastal dunes and coastal salt marshes and swamps; 0–98 ft. Southern California County Distribution: Los Angeles, Orange, San Bernardino, San Diego, Ventura. Blooming period: May–October.	HP	Not expected to occur. Suitable habitat in the BSA; historically reported from the Ballona Wetlands Ecological Reserve (Read 2015; 1901 record), but not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.

**SPECIAL STATUS PLANT SPECIES REPORTED  
FROM THE BIOLOGICAL STUDY AREA VICINITY**

Common Name	Scientific Name	Status			General Habitat Description	Habitat Present/Absent	Rationale
		USFWS	CDFW	CRPR			
San Fernando Valley spineflower	<i>Chorizanthe parryi</i> var. <i>fernandina</i>	PT	SE	1B.1	Annual herb. Sandy soil in coastal scrub and grassland; 492–4,002 ft. Southern California County Distribution: Los Angeles, Orange (Presumed extirpated), Ventura. Blooming period: April–July.	HP	Not expected to occur. Suitable habitat in the BSA; historically reported from the Ballona Wetlands Ecological Reserve (Read 2015; 1901 record), but not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
seaside cistanthe	<i>Cistanthe maritima</i>	–	–	4.2	Annual herb. Sandy soils in coastal bluff scrub, coastal scrub, and grassland; 16–984 ft. Southern California County Distribution: Los Angeles, Orange, San Diego, Ventura. Blooming period: February–August.	HP	Not expected to occur. Suitable habitat in the BSA, but nearby record is historic (CCH 2017; 1881 record) and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.

**SPECIAL STATUS PLANT SPECIES REPORTED  
FROM THE BIOLOGICAL STUDY AREA VICINITY**

Common Name	Scientific Name	Status			General Habitat Description	Habitat Present/Absent	Rationale
		USFWS	CDFW	CRPR			
small-flowered morning-glory	<i>Convolvulus simulans</i>	–	–	4.2	Annual herb. Friable clay soils or serpentine seeps in chaparral openings, coastal scrub, and grassland; 98–2,297 ft. Southern California County Distribution: Kern, Los Angeles, Orange, Riverside, San Diego. Blooming period: March–July.	A	Not expected to occur. No suitable clay or serpentine soils in the BSA and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
Santa Susana tarplant	<i>Deinandra minthornii</i>	–	SR	1B.2	Deciduous shrub. Rocky soils in chaparral and coastal scrub; 918–2,493 ft. Southern California County Distribution: Los Angeles, Ventura. Blooming period: July–November.	A	Not expected to occur. No suitable rocky soils in the BSA, the BSA is outside the known elevation range, and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.

**SPECIAL STATUS PLANT SPECIES REPORTED  
FROM THE BIOLOGICAL STUDY AREA VICINITY**

Common Name	Scientific Name	Status			General Habitat Description	Habitat Present/Absent	Rationale
		USFWS	CDFW	CRPR			
paniculate tarplant	<i>Deinandra paniculata</i>	–	–	4.2	Annual herb. Usually found in vernal mesic soils in coastal scrub, grassland, and vernal pools; 82–3,084 ft. Southern California County Distribution: Orange, Riverside, San Bernardino, San Diego. Blooming period: April–November.	HP	Not expected to occur. Suitable habitat in the BSA, but not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys in 1991 and 2002 reporting presence are likely misidentifications of fascicled tarplant) or current surveys of the BSA.
western dichondra	<i>Dichondra occidentalis</i>	–	–	4.2	Perennial rhizomatous herb. Chaparral, cismontane woodland, coastal scrub, grassland; 164–1,640 ft. Southern California County Distribution: Los Angeles (Uncertain about distribution or identity), Orange, San Diego, Ventura. Blooming period: January–July.	HP	Not expected to occur. Suitable habitat in the BSA, reported from the Ballona Wetlands Ecological Reserve in 1991 and 2002, but not observed during recent surveys (USACE and CDFW 2017; surveys between 2010 and 2011) or current surveys of the BSA.



**SPECIAL STATUS PLANT SPECIES REPORTED  
FROM THE BIOLOGICAL STUDY AREA VICINITY**

Common Name	Scientific Name	Status			General Habitat Description	Habitat Present/Absent	Rationale
		USFWS	CDFW	CRPR			
beach spectaclepod	<i>Dithyrea maritima</i>	–	ST	1B.1	Perennial rhizomatous herb. Coastal dunes and sandy coastal scrub; 10–164 ft. Southern California County Distribution: Los Angeles (Presumed extirpated), Ventura. Blooming period: March–May.	HP	Not expected to occur. Suitable habitat in the BSA, but nearby record is historic (CCH 2017; 1903 record) and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
Santa Monica dudleya	<i>Dudleya cymosa</i> ssp. <i>ovatifolia</i>	FT	–	1B.1	Perennial herb. Volcanic or sedimentary rocky soils in chaparral and coastal scrub; 492–5,494 ft. Southern California County Distribution: Los Angeles, Orange. Blooming period: March–June.	A	Not expected to occur. No suitable rocky soils in the BSA, the BSA is outside the known elevation range, and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.

**SPECIAL STATUS PLANT SPECIES REPORTED  
FROM THE BIOLOGICAL STUDY AREA VICINITY**

Common Name	Scientific Name	Status			General Habitat Description	Habitat Present/Absent	Rationale
		USFWS	CDFW	CRPR			
many-stemmed dudleya	<i>Dudleya multicaulis</i>	–	–	1B.2	Perennial herb. Often in heavy clay soils or sandstone outcrops in chaparral, coastal scrub, and grassland; 49–2,591 ft. Southern California County Distribution: Los Angeles, Orange, Riverside, San Bernardino, San Diego. Blooming period: April–July.	A	Not expected to occur. No suitable clay soils or sandstone outcrops in the BSA and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
island green dudleya	<i>Dudleya virens</i> ssp. <i>insularis</i>	–	–	1B.2	Perennial herb. Rocky soil in coastal bluff scrub and coastal scrub; 16–984 ft. Southern California County Distribution: Los Angeles, Ventura. Blooming period: April–June.	A	Not expected to occur. No suitable rocky soils or bluffs in the BSA and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.

**SPECIAL STATUS PLANT SPECIES REPORTED  
FROM THE BIOLOGICAL STUDY AREA VICINITY**

Common Name	Scientific Name	Status			General Habitat Description	Habitat Present/Absent	Rationale
		USFWS	CDFW	CRPR			
San Diego button-celery	<i>Eryngium aristulatum</i> var. <i>parishii</i>	FE	SE	1B.1	Annual/perennial herb. Mesic soils in coastal scrub, grassland, and vernal pools; 65–2,034 ft. Southern California County Distribution: Los Angeles, Orange, Riverside, San Diego. Blooming period: April–June.	HP	Not expected to occur. Suitable habitat in the BSA, but nearby record is historic (CCH 2017; 1901 record) and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
island wallflower	<i>Erysimum insulare</i>	–	–	1B.3	Perennial herb. Coastal bluff scrub and coastal dunes; 0–950 ft. Southern California County Distribution: Los Angeles. Blooming period: March–July.	A	Not expected to occur. No suitable bluff or dune habitat in the BSA, the BSA is outside the current known range, and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
suffrutescent wallflower	<i>Erysimum suffrutescens</i>	–	–	4.2	Perennial herb. Maritime chaparral, coastal bluff scrub, coastal scrub, and coastal dunes; 0–492 ft. Southern California County Distribution: Los Angeles, Ventura. Blooming period: January–July.	HP	Low potential to occur. Suitable habitat in the BSA and reported from restored coastal dune habitat in the western end of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017), but not observed during current surveys of the BSA.

**SPECIAL STATUS PLANT SPECIES REPORTED  
FROM THE BIOLOGICAL STUDY AREA VICINITY**

Common Name	Scientific Name	Status			General Habitat Description	Habitat Present/Absent	Rationale
		USFWS	CDFW	CRPR			
Los Angeles sunflower	<i>Helianthus nuttallii</i> ssp. <i>parishii</i>	–	–	1A	Perennial rhizomatous herb. Coastal salt and freshwater marshes and swamps; 33–5,494 ft. Southern California County Distribution: Los Angeles (Presumed extirpated), Orange (Presumed extirpated), San Bernardino (Presumed extirpated). Blooming period: August–October.	HP	Not expected to occur. Suitable habitat in the BSA, but presumed extirpated and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
vernal barley	<i>Hordeum intercedens</i>	–	–	3.2	Annual herb. Coastal dunes, coastal scrub, saline flats and depressions in grassland, and vernal pools; 16–3,280 ft. Southern California County Distribution: Kern, Los Angeles, Orange, Riverside, San Diego, Ventura. Blooming period: March–June.	HP	Not expected to occur. Suitable habitat in the BSA and historically reported from the Ballona Wetlands Ecological Reserve (Read 2015; 1901 record), but not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.

**SPECIAL STATUS PLANT SPECIES REPORTED  
FROM THE BIOLOGICAL STUDY AREA VICINITY**

Common Name	Scientific Name	Status			General Habitat Description	Habitat Present/Absent	Rationale
		USFWS	CDFW	CRPR			
mesa horkelia	<i>Horkelia cuneata</i> var. <i>puberula</i>	–	–	1B.1	Perennial herb. Sandy and gravelly soils within maritime chaparral, cismontane woodland, and coastal scrub; 229–2,657 ft. Southern California County Distribution: Los Angeles, Orange, Riverside (Presumed extirpated), San Bernardino, San Diego (Presumed extirpated), Ventura. Blooming period: February–September.	HP	Not expected to occur. Suitable habitat in the BSA, but nearby record is historic (CCH 2017; 1932 record) and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
southern California black walnut	<i>Juglans californica</i>	–	–	4.2	Deciduous tree. Alluvial areas in chaparral, cismontane woodland, and coastal scrub; 164–2,952 ft. Southern California County Distribution: Los Angeles, Orange, Riverside, San Bernardino, San Diego, Ventura. Blooming period: March–August.	HP	Not expected to occur. Marginally suitable habitat in the BSA, not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA; the species is a large tree that would be observed if present in the BSA.

**SPECIAL STATUS PLANT SPECIES REPORTED  
FROM THE BIOLOGICAL STUDY AREA VICINITY**

Common Name	Scientific Name	Status			General Habitat Description	Habitat Present/Absent	Rationale
		USFWS	CDFW	CRPR			
southwestern spiny rush	<i>Juncus acutus</i> ssp. <i>leopoldii</i>	-	-	4.2	Perennial rhizomatous herb. Mesic soils in coastal dunes, alkaline seeps in meadows and seeps, and coastal salt marshes and swamps; 9–2,953 ft. Southern California County Distribution: Imperial, Los Angeles, Orange, San Diego, Ventura. Blooming period: (March) May–June.	HP	Not expected to occur. Suitable habitat in the BSA, but not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
Coulter's goldfields	<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	-	-	1B.1	Annual herb. Coastal salt marsh, coastal salt swamps, playas, vernal pools; 3–4,001 ft. Southern California County Distribution: Kern (Presumed extirpated), Los Angeles (Presumed extirpated), Orange, Riverside, San Bernardino (Presumed extirpated), San Diego, Ventura. Blooming period: February–June.	HP	Not expected to occur. Suitable habitat in the BSA, but nearby record is historic (CCH 2017; 1881 record) and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.

**SPECIAL STATUS PLANT SPECIES REPORTED  
FROM THE BIOLOGICAL STUDY AREA VICINITY**

Common Name	Scientific Name	Status			General Habitat Description	Habitat Present/Absent	Rationale
		USFWS	CDFW	CRPR			
sea dahlia	<i>Leptosyne maritima</i>	–	–	2B.2	Perennial herb. Coastal bluff scrub and coastal scrub; 16-492 ft. Southern California County Distribution: San Diego. Blooming period: March–May.	HP	Not expected to occur. Suitable habitat in the BSA, but most occurrences are in San Diego County and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
white-veined monardella	<i>Monardella hypoleuca</i> ssp. <i>hypoleuca</i>	–	–	1B.3	Perennial herb. Chaparral and cismontane woodland; 164–5,002 ft. Southern California County Distribution: Los Angeles, Ventura. Blooming period: April–December.	A	Not expected to occur. No suitable chaparral or woodland habitat in the BSA, the BSA is outside the known elevation range, and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
California spineflower	<i>Mucronea californica</i>	–	–	4.2	Annual herb. Sandy soils in chaparral, cismontane woodland, coastal dunes, coastal scrub, and grassland; 0–4,592 ft. Southern California County Distribution: Kern, Los Angeles, Riverside, San Bernardino, San Diego, Ventura. Blooming period: March–August.	HP	Not expected to occur. Suitable habitat in the BSA; historically reported from the Ballona Wetlands Ecological Reserve (Read 2015; 1899 record), but not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.

**SPECIAL STATUS PLANT SPECIES REPORTED  
FROM THE BIOLOGICAL STUDY AREA VICINITY**

Common Name	Scientific Name	Status			General Habitat Description	Habitat Present/Absent	Rationale
		USFWS	CDFW	CRPR			
mud nama	<i>Nama stenocarpa</i>			2B.2	Annual/perennial herb. Marshes and swamps, also riverbanks and lake margins; 16–1,640 ft. Southern California County Distribution: Imperial (Presumed extirpated), Los Angeles (Presumed extirpated), Orange, Riverside, San Diego. Blooming period: January–July.	HP	Not expected to occur. Suitable habitat in the BSA, but presumed extirpated from the County and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
Gambel's water cress	<i>Nasturtium gambelii</i>	FE	ST	1B.1	Perennial rhizomatous herb. Freshwater or brackish marshes and swamps; 16–1,000 ft. Southern California County Distribution: Los Angeles, Orange, San Bernardino (Presumed extirpated), San Diego. Blooming period: April–October.	HP	Not expected to occur. Suitable habitat in the BSA, but nearby records are historic (CCH 2017; 1885 and 1904 records) and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.



**SPECIAL STATUS PLANT SPECIES REPORTED  
FROM THE BIOLOGICAL STUDY AREA VICINITY**

Common Name	Scientific Name	Status			General Habitat Description	Habitat Present/Absent	Rationale
		USFWS	CDFW	CRPR			
spreading navarretia	<i>Navarretia fossalis</i>	FT	–	1B.1	Annual herb. Chenopod scrub, assorted freshwater marshes and swamps, playas, and vernal pools; 98–2,149 ft. Southern California County Distribution: Los Angeles, Riverside, San Diego. Blooming period: April–June.	HP	Not expected to occur. Suitable habitat in the BSA, but nearby record is historic (CCH 2017; 1906 record) and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
prostrate vernal pool navarretia	<i>Navarretia prostrata</i>	–	–	1B.1	Annual herb. Mesic coastal scrub, meadows and seeps, alkaline grassland, and vernal pools; 49–3,968 ft. Southern California County Distribution: Los Angeles, Orange, Riverside, San Bernardino (Presumed extirpated; Occurrence confirmed, but possibly extirpated), San Diego. Blooming period: April–July.	HP	Not expected to occur. Suitable habitat in the BSA, but nearby records are historic (CCH 2017; 1899, 1906, and 1944 records) and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.

**SPECIAL STATUS PLANT SPECIES REPORTED  
FROM THE BIOLOGICAL STUDY AREA VICINITY**

Common Name	Scientific Name	Status			General Habitat Description	Habitat Present/Absent	Rationale
		USFWS	CDFW	CRPR			
coast woolly-heads	<i>Nemacaulis denudata</i> var. <i>denudata</i>	-	-	1B.2	Annual herb. Coastal dunes; 0–328 ft. Southern California County Distribution: Los Angeles, Orange, San Diego. Blooming period: April–September.	A	Not expected to occur. No suitable dune habitat in the BSA and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
California Orcutt grass	<i>Orcuttia californica</i>	FE	SE	1B.1	Annual herb. Vernal pools; 49–2,165 ft. Southern California County Distribution: Los Angeles, Orange, Riverside, San Diego, Ventura. Blooming period: April–August.	A	Not expected to occur. No suitable dune habitat in the BSA and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
Lyon's pentachaeta	<i>Pentachaeta lyonii</i>	FE	SE	1B.1	Annual herb. Rocky or clay soils in coastal scrub, grassland, and openings in chaparral; 98–2,066 ft. Southern California County Distribution: Los Angeles, Ventura. Blooming period: March–August.	A	Not expected to occur. No suitable rocky or clay soils in the BSA and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.

**SPECIAL STATUS PLANT SPECIES REPORTED  
FROM THE BIOLOGICAL STUDY AREA VICINITY**

Common Name	Scientific Name	Status			General Habitat Description	Habitat Present/Absent	Rationale
		USFWS	CDFW	CRPR			
Hubby's phacelia	<i>Phacelia hubbyi</i>	-	-	4.2	Annual herb. Gravelly to rocky soil or talus in chaparral, coastal scrub, grassland; 0–3,280 ft. Southern California County Distribution: Kern, Los Angeles, Ventura. Blooming period: April–July.	A	Not expected to occur. No suitable rocky soils or talus in the BSA and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
south coast branching phacelia	<i>Phacelia ramosissima</i> var. <i>austrolitoralis</i>	-	-	3.2	Perennial herb. Sandy, sometimes rocky soils in chaparral, coastal dunes, coastal scrub, coastal salt marshes and swamps; 16–984 ft. Southern California County Distribution: Orange, Los Angeles, San Diego, Ventura. Blooming period: March–August.	HP	Low potential to occur. Suitable habitat in the BSA and reported from restored coastal dune habitat in the western end of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017), but not observed during current surveys of the BSA.

**SPECIAL STATUS PLANT SPECIES REPORTED  
FROM THE BIOLOGICAL STUDY AREA VICINITY**

Common Name	Scientific Name	Status			General Habitat Description	Habitat Present/Absent	Rationale
		USFWS	CDFW	CRPR			
Brand's star phacelia	<i>Phacelia stellaris</i>	-	-	1B.1	Annual herb. Coastal dunes, coastal scrub; 3–1,312 ft. Southern California County Distribution: Los Angeles (Presumed extirpated; Occurrence confirmed, but possibly extirpated), Orange, Riverside, San Bernardino, San Diego. Blooming period: March–June.	HP	Not expected to occur. Suitable habitat in the BSA, but nearby record is historic (CCH 2017; 1943 record) and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
Ballona cinquefoil	<i>Potentilla multijuga</i>	-	-	1A	Perennial herb. Meadows and seeps in brackish water; 0–7 ft. Southern California County Distribution: Los Angeles (Presumed extirpated). Blooming period: June–August.	HP	Not expected to occur. Suitable habitat in the BSA and historically reported from the Ballona Wetlands Ecological Reserve (Read 2015; 1890 record), but presumed extirpated and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.

**SPECIAL STATUS PLANT SPECIES REPORTED  
FROM THE BIOLOGICAL STUDY AREA VICINITY**

Common Name	Scientific Name	Status			General Habitat Description	Habitat Present/Absent	Rationale
		USFWS	CDFW	CRPR			
white rabbit-tobacco	<i>Pseudognaphalium leucocephalum</i>	–	–	2B.2	Perennial herb. Sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian woodland; 0–6,888 ft. Southern California County Distribution: Los Angeles, Orange, Riverside, San Diego. Blooming period: July–December.	HP	Not expected to occur. Suitable habitat in the BSA, but not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
Nuttall's scrub oak	<i>Quercus dumosa</i>	–	–	1B.1	Perennial evergreen shrub. Sandy or clay loam in closed-cone coniferous forest, chaparral, and coastal scrub; 49–1,312 ft. Southern California County Distribution: Los Angeles, Orange, San Diego, Ventura. Blooming period: February–August.	HP	Not expected to occur. Suitable habitat in the BSA, but not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA; the species is a large shrub that would be observed if present in the BSA.

**SPECIAL STATUS PLANT SPECIES REPORTED  
FROM THE BIOLOGICAL STUDY AREA VICINITY**

Common Name	Scientific Name	Status			General Habitat Description	Habitat Present/Absent	Rationale
		USFWS	CDFW	CRPR			
salt spring checkerbloom	<i>Sidalcea neomexicana</i>	-	-	2B.2	Perennial herb. Alkaline and mesic soils within chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, and playas; 49–5,020 ft. Southern California County Distribution: Kern, Los Angeles (Presumed extirpated), Orange, Riverside, San Bernardino, San Diego, Ventura. Blooming period: March–June.	HP	Not expected to occur. Suitable habitat in the BSA, but nearby records are historic (CCH 2017) and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
western bristly scaleseed	<i>Spermolepis lateriflora</i>	-	-	2A	Annual herb. Sandy or rocky Sonoran desert scrub; 1,198–2,198 ft. Southern California County Distribution: Los Angeles (Occurrence confirmed, but possibly extirpated), San Diego. Blooming period: March–April.	A	Not expected to occur. No suitable desert scrub habitat in the BSA, outside the known elevation range, last reported from California in 1952 (CNPS 2017), and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.

**SPECIAL STATUS PLANT SPECIES REPORTED  
FROM THE BIOLOGICAL STUDY AREA VICINITY**

Common Name	Scientific Name	Status			General Habitat Description	Habitat Present/Absent	Rationale
		USFWS	CDFW	CRPR			
estuary seablite	<i>Suaeda esteroa</i>	-	-	1B.2	Perennial herb. Coastal salt marshes and swamps; 0–16 ft. Southern California County Distribution: Los Angeles, Orange, San Diego, Ventura. Blooming period: May–January.	HP	Not expected to occur. Suitable habitat in the BSA, but not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
woolly seablite	<i>Suaeda taxifolia</i>	-	-	4.2	Evergreen shrub. Coastal bluff scrub, coastal dunes, and the margins of coastal salt marshes and swamps; 0–164 ft. Southern California County Distribution: Los Angeles, Orange, San Diego, Ventura. Blooming period: January–December.	HP	Low potential to occur. Suitable habitat in the BSA and reported from coastal brackish marsh habitat in the western end of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017), but not observed during current surveys of the BSA.
San Bernardino aster	<i>Symphotrichum defoliatum</i>	-	-	1B.2	Perennial rhizomatous herb. Near ditches, streams, and springs in cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and	HP	Not expected to occur. Suitable habitat in the BSA, but not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.

**SPECIAL STATUS PLANT SPECIES REPORTED  
FROM THE BIOLOGICAL STUDY AREA VICINITY**

Common Name	Scientific Name	Status			General Habitat Description	Habitat Present/Absent	Rationale
		USFWS	CDFW	CRPR			
					seeps, marshes and swamps, and vernal mesic grassland; 7–6,693 ft. Southern California County Distribution: Imperial, Kern, Los Angeles, Orange, Riverside, San Bernardino, San Diego. Blooming period: July–November.		
Greata's aster	<i>Symphyotrichum greatae</i>	–	–	1B.3	Perennial rhizomatous herb. Mesic soils in chaparral, cismontane and riparian woodland, broadleaved upland and lower montane coniferous forest; 984–6,593 ft. Southern California County Distribution: Los Angeles, San Bernardino, Ventura. Blooming period: June–October.	A	Not expected to occur. No suitable chaparral, woodland, or forest habitat in the BSA; outside the current known range; and not observed during recent surveys of the Ballona Wetlands Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
Sonoran maiden fern	<i>Thelypteris puberula</i> var. <i>sonorensis</i>	–	–	2B.2	Perennial rhizomatous herb. Meadows, seeps, and streams; 164–2,001 ft. Southern	HP	Not expected to occur. Suitable habitat in the BSA, but outside the elevation range and not observed during recent surveys of the Ballona Wetlands



**SPECIAL STATUS PLANT SPECIES REPORTED  
FROM THE BIOLOGICAL STUDY AREA VICINITY**

Common Name	Scientific Name	Status			General Habitat Description	Habitat Present/Absent	Rationale
		USFWS	CDFW	CRPR			
					California County Distribution: Los Angeles, Riverside, San Bernardino. Blooming period: January–September.		Ecological Reserve (USACE and CDFW 2017; surveys between 1979 and 2011) or current surveys of the BSA.
<p>USFWS: U.S. Fish and Wildlife Service; CDFW: California Department of Fish and Wildlife; CRPR: California Rare Plant Rank; msl: mean sea level; ft: feet;                      HP: habitat present, species may or may not be present; A: no habitat present; P: species present; BSA: Biological Study Area</p> <p><b>STATUS DESIGNATIONS</b></p> <p><b>Federal (USFWS) Designations:</b>                      FE Listed by the federal government as an Endangered species                      FT Listed by the federal government as a Threatened species</p> <p><b>State (CDFW) Designations:</b>                      SE Listed as Endangered by the State of California                      ST Listed as Threatened by the State of California                      SR Listed as Rare by the State of California</p> <p><b>California Rare Plant Rank (CRPR)</b>                      1A. Presumed extirpated in California and rare or extinct elsewhere                      1B. Rare, Threatened, or Endangered in California and elsewhere                      2A. Presumed extirpated in California, but more common elsewhere                      2B. Rare, Threatened, or Endangered in California, but more common elsewhere                      3. Plants for which we need more information - Review list                      4. Plants of limited distribution - Watch list</p> <p><b>CRPR Threat Rank Extensions</b>                      None Plants lacking any threat information                      .1 Seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat)                      .2 Fairly threatened in California (20-80% of occurrences threatened; moderate degree and immediacy of threat)                      .3 Not very threatened in California (&lt;20% of occurrences threatened; low degree and immediacy of threat or no current threats known)</p> <p><b>Sources:</b>                      General Habitat Description: California Native Plant Society (CNPS). 2017. <u>Inventory of Rare and Endangered Plants of California</u> (online edition, v8-03). Sacramento, CA: CNPS. <a href="http://www.rareplants.cnps.org">http://www.rareplants.cnps.org</a>.                      Status: California Department of Fish and Wildlife (CDFW). 2018 (January). Special Vascular Plants, Bryophytes, and Lichens List. Sacramento, CA: CDFW, Natural Heritage Division.</p>							



# **Appendix E** Results of a Habitat Assessment for Burrowing Owl

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October 3, 2017

Sean Haeri, P.E.  
Division Manager - Sr. Transportation Engineer  
Transportation Planning & Land Use Review West LA/Coastal  
Los Angeles Department of Transportation

**VIA EMAIL**  
**sean.haeri@lacity.org**

**Subject:** Results of a Habitat Assessment for Burrowing Owl for the State Route 1/Lincoln Boulevard Multi-Modal Improvement Project, City of Los Angeles, California.

Dear Mr. Haeri:

This letter report summarizes the findings of habitat assessment to determine absence or presence of suitable habitat for burrowing owl (*Athene cunicularia*) for the State Route (SR) 1/Lincoln Boulevard Multi-Modal Improvement Project (hereinafter referred to as the “Project”), located in the City of Los Angeles, Los Angeles County, California (Figure 1). The surveys were completed in accordance with the California Department of Fish and Wildlife’s (CDFW’s) 2012 *Staff Report on Burrowing Owl Mitigation*. Surveys were conducted by Biologists familiar with the species.

### **PROJECT LOCATION AND DESCRIPTION**

The Project site is located on Lincoln Boulevard between Jefferson Boulevard and Fiji Way in the City of Los Angeles, California. It is approximately two miles west of Interstate (I) 405, three miles south of I-10 and three miles north of I-105 (Figure 1).

The proposed Project would include replacement of the existing Lincoln Boulevard Bridge over Ballona Creek and reconstruction of the Culver Boulevard/Lincoln Boulevard interchange. Both the Lincoln Bridge over Ballona Creek and Lincoln Boulevard within the Project limits will be widened to accommodate a “complete street” approach comprised of six dedicated vehicle lanes, bike lanes, sidewalks, and space for a reserve lane for future transit facilities. The improvements on Lincoln Boulevard will provide continuity between the six-lane State Route (SR) 1 (Pacific Coast Highway) segments extending north and south of the Ballona Creek Bridge. Currently, vehicles traveling north or south on Pacific Coast Highway must merge into the narrower (two or four) lanes of the existing Lincoln Boulevard Bridge. The Culver Boulevard Bridge will be widened to accommodate additional bike lanes while maintaining the existing two travel lanes. All proposed widening is anticipated to fit within the existing Caltrans right-of-way. The proposed improvements are to be designed to minimize any potential impacts to the adjacent Ballona Wetlands and Ballona Creek. (Figure 2)

## BIOLOGICAL STUDY AREA

The Biological Study Area (BSA) is located approximately 20 feet above msl and is surrounded by urban development and open space which includes the Ballona Wetlands Ecological Reserve (Figure 3). The BSA is located on the U.S. Geological Survey's (USGS') Venice 7.5-minute topographic quadrangle. Elevations in the BSA range from approximately 9 to 30 feet above msl. The BSA includes all areas of potential direct and indirect effects where improvements would be made plus a buffer of 500 feet surrounding the Project site, for a total length of just over 2 miles along Lincoln Boulevard and a total area of approximately 131.81 acres. Surrounding land uses include residential, public, commercial, infrastructure, and undeveloped.

The soils in the BSA consist of well inundated floodplain soils in the northern portion of the BSA north of Ballona Creek and west of Lincoln Boulevard and urban fill east of Lincoln Boulevard and south of Ballona Creek. Three drainage features cross the BSA: Ballona Creek bisects the BSA in the east west direction, and 2 smaller drainage features traverse the BSA.

## SPECIES BACKGROUND

The western burrowing owl is a grassland specialist distributed throughout western North America where it occupies open areas with short vegetation and bare ground within shrub, desert, and grassland environments. Burrowing owls use a wide variety of arid and semi-arid environments, with well-drained, level to gently sloping areas characterized by sparse vegetation and bare ground (Haug and Didiuk 1993; Dechant et al. 2003). Burrowing owls in Florida excavate their own burrows, but western burrowing owls are dependent upon the presence of burrowing mammals (such as ground squirrels [*Otospermophilus beecheyi*]) whose burrows are used for roosting and nesting (Haug and Didiuk 1993). The presence or absence of colonial mammal burrows is often a major factor that limits the presence or absence of burrowing owls. Where mammal burrows are scarce, burrowing owls have been found occupying man-made cavities, such as buried and non-functioning drain pipes, stand-pipes, and dry culverts. Burrowing mammals may burrow beneath rocks, debris or large, heavy objects such as abandoned cars, concrete blocks, or concrete pads. Large, hard objects at burrow entrances stabilize the entrance from collapse and may inhibit excavation by predators. Burrowing owls often use "satellite", or non-nesting burrows, moving chicks into them from the nesting burrow, presumably to reduce the risk of predation (Desmond and Savidge 1998) and possibly to avoid nest parasites (Dechant et al. 2003). One pair may use up to ten satellite burrows (James and Seabloom 1968). Individual burrowing owls have a moderate-to-high site fidelity to previously used burrow complexes and often use the same burrows for nesting year after year.

The western burrowing owl was once abundant and widely distributed in coastal southern California, but it has declined precipitously in counties such as Los Angeles, Orange, San Diego, Riverside, and San Bernardino. A petition was filed to list the California population of the western burrowing owl as an Endangered or Threatened species (Center for Biological Diversity 2003); however, the CDFW declined to list the burrowing owl as either Threatened or Endangered in consideration of its overall population throughout the state. However, the CDFW considers the burrowing owl to be a California Species of Special Concern (CDFW 2017b).

## VEGETATION TYPES AND OTHER AREAS

A total of 21 vegetation types and other areas are present on the BSA. Vegetation types in the BSA include a variety of woodland, shrubland, and herbaceous types of communities. The majority of the BSA is undeveloped, and only a southeastern quadrant of the BSA is developed. The dominant vegetation types include upland mustards (*Brassica* sp.), Menzies' goldenbush (*Isocoma menziesii* var. *menziesii*)

Sean Haeri, P.E.  
October 3, 2017  
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scrub, California sagebrush (*Artemisia californica*) scrub, coyote brush (*Baccharis pilularis* ssp. *Consanguinea*) scrub, degraded coyote brush scrub, hyssop-leaved bassia (*Bassia hyssopifolia*) stand, pickleweed mat (*Salicornia pacifica*), semi-natural herbaceous stand, and developed (Figure 4, Vegetation Communities). The majority of the understory consists of mustards (*Hirshfeldia incana*), crown daisy (*Glebionis coronaria*), slender leaf iceplant (*Mesembryanthemum nodiflorum*), and pickleweed (*Salicornia* sp.). Very few areas of bare ground were observed in the BSA because the BSA is mostly overgrown with mustards. The northwest quadrant of the BSA is dominated by upland mustards, California sagebrush scrub, followed by Menzies' goldenbush scrub, laurel sumac (*Malosma laurina*) scrub, big saltbush scrub (*Atriplex lentiformis*), semi-natural herbaceous stand, and parks and landscaping.

The northeast quadrant of the BSA is dominated by upland mustards, coyote brush scrub, degraded coyote brush scrub, big saltbush scrub, and cudweed (*Pseudognaphalium* sp.) special stand.

The southwest quadrant of the BSA is dominated by the hyssop-leaved bassia stand, alkali weed (*Cressa truxillensis*) playa, annual beard grass-ox-tongue (*Helminthotheca echioides*) grassland, pickleweed mat, arroyo willow (*Salix lasiolepis*) thicket, California bulrush marsh (*Schoenoplectus californicus*), and cattail marsh (*Typha* cf. *domingensis*). The edges of the quadrant are dominated by upland mustards, coyote bush scrub, and annual brome grassland (*Bromus madritensis* ssp. *Rubens*).

The southeast quadrant is developed with a residential community and lacks native vegetation.

## SURVEY METHODS

The CDFW's California Natural Diversity Database (CNDDDB) was reviewed prior to the site visit (CDFW 2017a).

Surveys for the burrowing owl are conducted during the breeding season, which extends from March 1 to August 31. These surveys are done in three phases: (1) habitat assessment; (2) burrow surveys; and (3) focused owl surveys. The CDFW guidelines specify specific time periods in which the four focused crepuscular surveys should be conducted during the breeding season: at least one survey between February 15 and April 15 and a minimum of three surveys, at least three weeks apart, between April 15 and July 15, with at least one survey after June 15 (CDFG 2012). This letter describes the results of the first and second phase of the survey: habitat assessment and burrow surveys.

The survey was conducted by Psomas Biologists Agnieszka Napiatek and Steve Morris on April 14, 2017, between 0630 and 1000 to determine the suitability of the habitat for burrowing owls. Biologists walked all suitable habitat (i.e., undeveloped areas) within the BSA in transects spaced 23 to 65 feet apart to achieve 100 percent visual coverage. Weather conditions during the survey ranged from 56 to 66 degrees Fahrenheit with clear and sunny skies, and no wind. The burrow survey was not conducted within five days of rain, which could have washed away potential sign. At least every 328 feet, the biologists scanned the BSA with binoculars to look for owls. Any natural or man-made cavities large enough to allow a burrowing owl to enter were inspected for evidence of occupation and mapped. Evidence of occupation may include prey remains, cast pellets, white wash, feathers, and observations of owls adjacent to burrows. Binoculars and mirrors were also used to inspect holes; crevices; and potential perches such as rocks, fence posts, and other elevated structures for the presence of owls while listening for owl calls. During the survey, particular attention was paid to the areas where the owls were previously reported in 2012; specifically, the intersection of Culver Street and Jefferson Boulevard and along the banks of the Ballona Creek.

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Any active burrows and/or burrowing owl sightings were mapped on an aerial photograph and recorded with a Global Positioning System (GPS) unit.

## **SURVEY RESULTS**

Based on the literature review and results of the habitat assessment, it was determined that, at the time of the survey, the BSA did not contain suitable habitat for burrowing owls; no potentially suitable burrows that could be used by burrowing owls were identified on site.

The most recent burrowing owl CNDDDB record is from 2012 at the intersection of Culver Street and Jefferson Boulevard (southwest quadrant) (Refer to Figure 3), where a pair was observed nesting on the banks on north side of Ballona Creek, west of Culver Boulevard. Burrowing owls were also reported from the Ballona Wetlands Ecological Reserve Comprehensive 5-Year Monitoring Report, from year 2 (2012) and year 3 (2013), respectively.

The northwest quadrant of the BSA is overgrown with mustards, and no areas with burrows suitable to support burrowing owls were identified at the time of the survey (Refer to Figures 5a-d). The northeast quadrant is also densely vegetated with mustards and crown daisy, with sparse patches of coastal sage scrub and very limited bare ground. Soils in this quadrant appear to be compacted and do not provide an optimum condition for burrowing owls. Only one area was observed with very small and old burrows, which are not suitable for burrowing owls (Figure 5d).

The southwest quadrant contains well-saturated soils and is covered with pickleweed and cudweed special stand, making it unsuitable for burrowing owls.

The southeast quadrant is developed and covered by ornamental vegetation and does not provide optimum habitat conditions for burrowing owls. In addition, no burrowing owls were observed during the time of the survey. The southeast quadrant is developed and is not expected to contain habitat for owls.

Because no suitable habitat was identified in the BSA at the time of the survey, no follow up focused survey was conducted. No burrowing owls or sign of their presence (e.g., feathers, pellets, white wash, burrow ornaments) were observed in the BSA during the breeding season; therefore, burrowing owls are currently considered absent from the BSA. However, it should be noted that 2017 was an unusually rainy year and, as such, the BSA has densely overgrown vegetation. During a dry year, the condition of the BSA will likely change, and less vegetated cover is expected; this would expose bare ground, making it more suitable for owls. Therefore, it is concluded that in the future the site may be suitable for owls, and owls may move in to the site.

## **LIMITATIONS AND RECOMMENDATIONS**

Although no burrowing owls currently occupy the BSA, burrowing owls may move into the BSA during the wintering season or a future breeding season. The following minimization measures would be recommended prior to Project construction:

- Fourteen days prior to construction activities, a qualified Biologist will conduct a pre-construction survey to determine if there are any active burrowing owl burrows and if any avoidance and minimization measures will be required. A final pre-construction survey will be conducted within 24 hours prior to ground disturbance. If no active burrows are observed, construction work can proceed.



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- If an active burrow is observed during the non-nesting season (September 1 to January 31) and the burrow is within the impact area, standard burrowing owl burrow closing procedures will be used to exclude burrowing owls (i.e., using passive relocation with one-way doors). Per the CDFW's 1995 recommendations, two artificial burrows will be provided for each burrow that is destroyed. The location of the artificial burrows will be determined in consultation with the CDFW.
- If an active burrow is observed during the non-nesting season (September 1 to January 31) and the burrow is not within the impact area, construction work will be restricted within 160 feet of the burrow (or as otherwise determined by the Project biologist in consultation with the CDFW).
- If an active burrow is present and nesting is believed to be occurring during the nesting season (February 1 to August 31), construction work and access will be restricted within 250 feet of the burrow (or as otherwise determined by the Project biologist in consultation with CDFW) until fledglings have left the burrow to ensure compliance with Section 3503.5 of the *California Fish and Game Code*. Results of the surveys will be provided to the CDFW.

If you have any questions, please contact Ms. Agnieszka Napiatek at (714) 751-7373.

Sincerely,  
**P S O M A S**



Agnieszka Napiatek, LEED AP BD+C, ENV SP  
Project Manager

Enclosures:    Figure 1 – Project Location  
                  Figure 2 – Project Aerial  
                  Figure 3 – Biological Study Area  
                  Figure 4 – Vegetation Communities  
                  Figure 5 – Site Photographs

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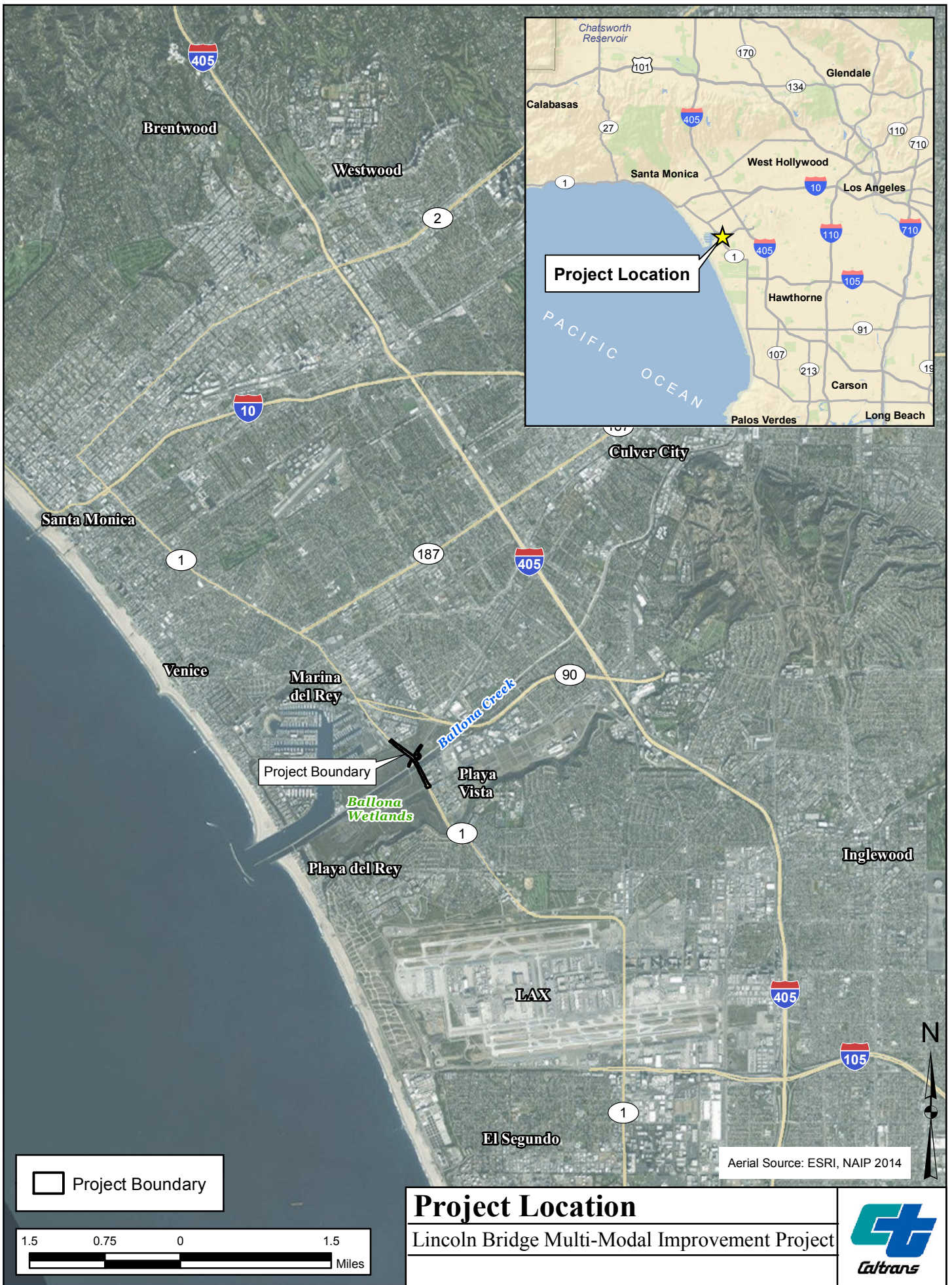


Figure 1



1

Fiji Way

Culver Blvd

Ballona Creek

Lincoln Blvd


Culver Blvd


W Jefferson Blvd

1

Aerial Source: LAR-IAC 2014



 Project Boundary

500 250 0 500  
 Feet

# Project Aerial

Lincoln Bridge Multi-Modal Improvement Project



Figure 2

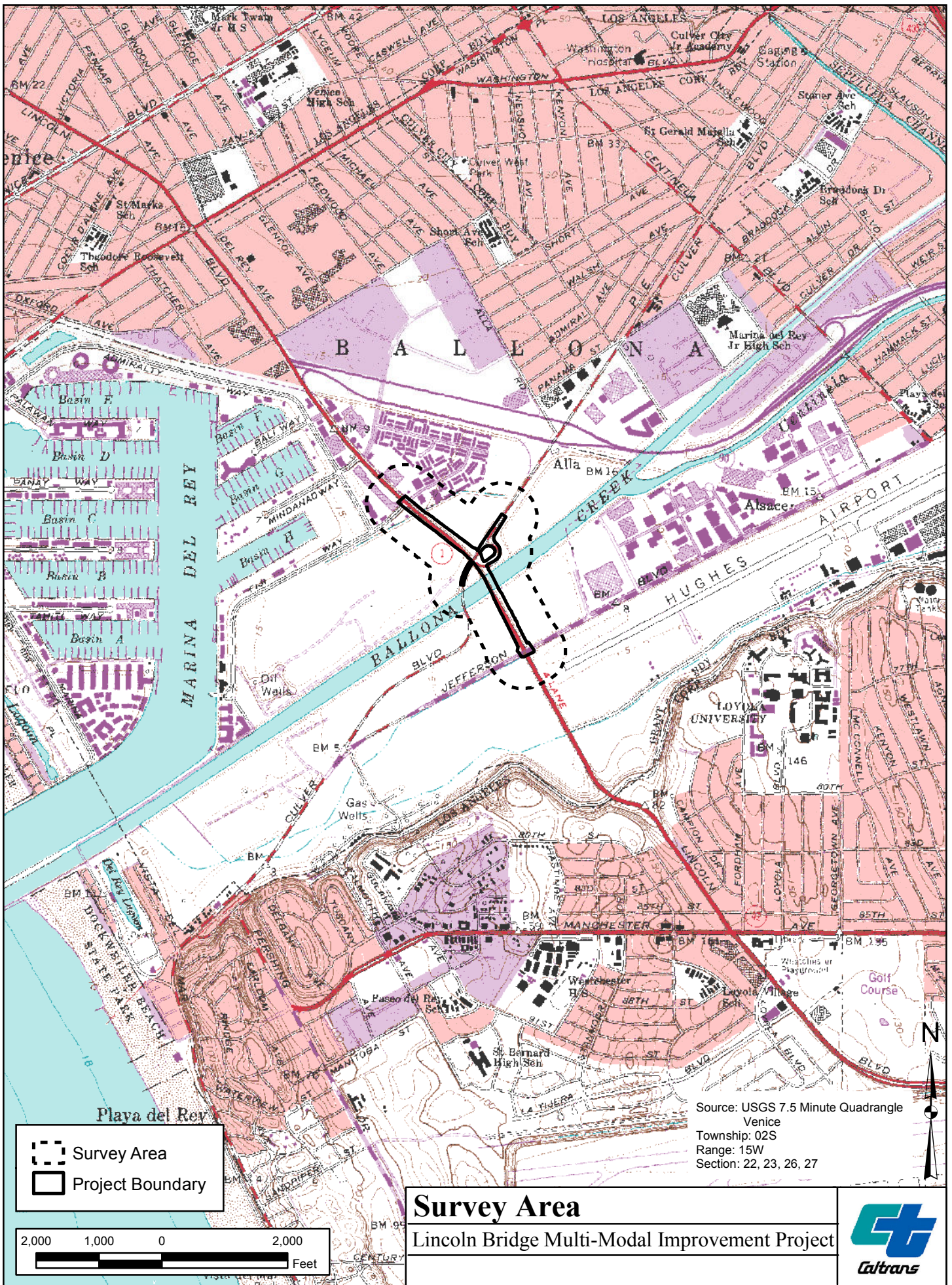


Figure 3

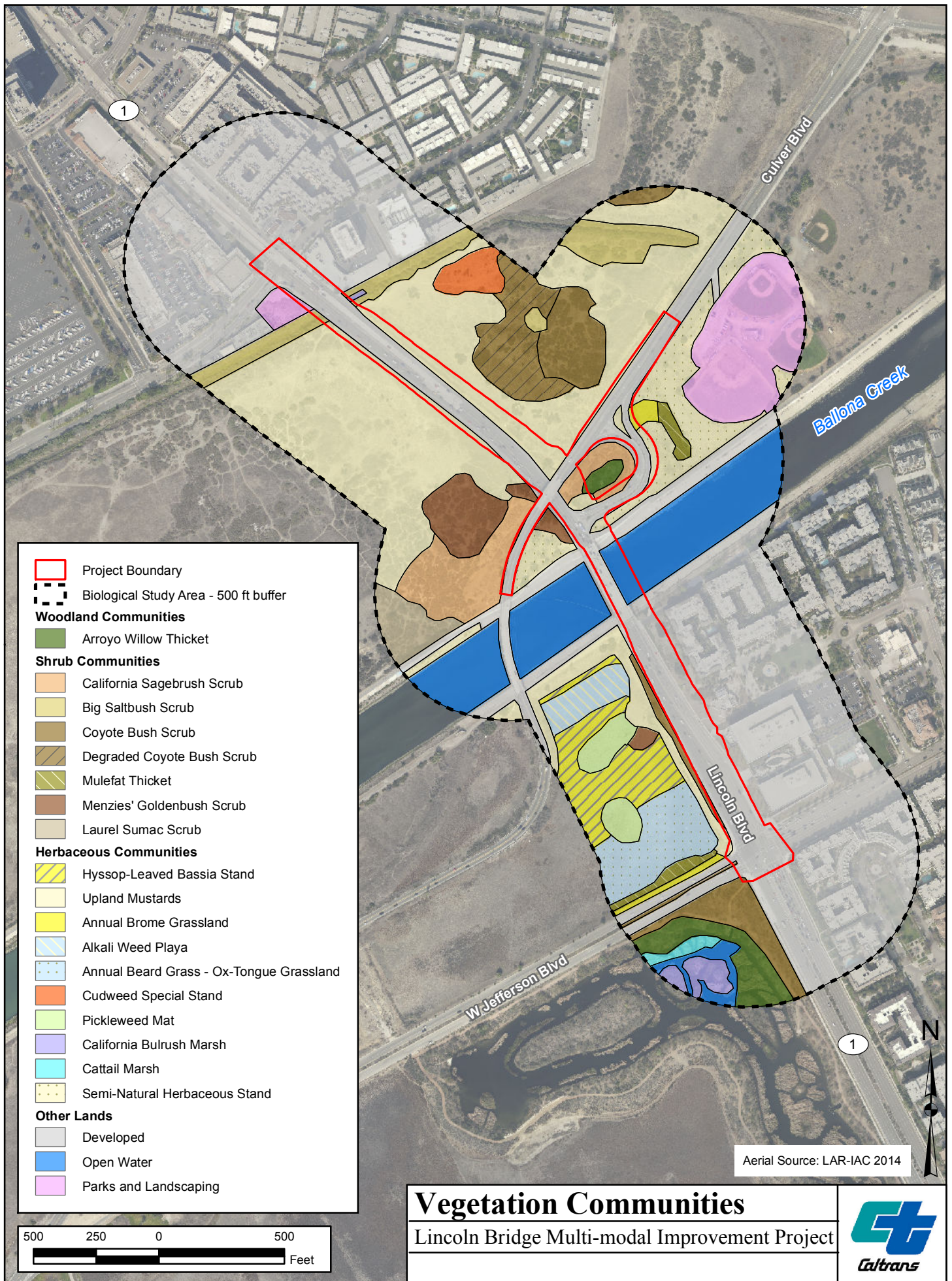


Figure 4



Northeast quadrant, looking northwest.



Northeast quadrant, looking northwest.

**Representative Site Photos**

Lincoln Bridge Multi-Modal Improvement Project



**Figure 5a**



Northeast quadrant, looking east.



Northeast quadrant, looking west towards Lincoln Bridge.

**Representative Site Photos**

Lincoln Bridge Multi-Modal Improvement Project



**Figure 5b**





Northwest quadrant, looking south.



Northwest quadrant, looking west.

## Representative Site Photos

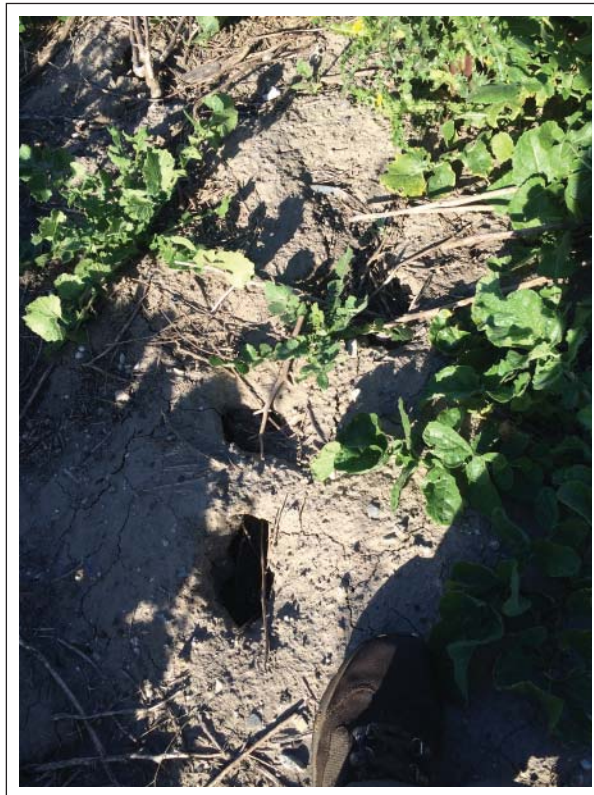
Lincoln Bridge Multi-Modal Improvement Project



Figure 5c



Southwest quadrant, looking south.



Representative site burrows, Northeast quadrant.

## Representative Site Photos

Lincoln Bridge Multi-Modal Improvement Project



Figure 5d

**Appendix F** Results of Focused Breeding  
Season Presence/Absence  
Surveys for Coastal California  
Gnatcatcher

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September 12, 2017

Sean Haeri, P.E.  
Division Manager – Sr. Transportation Engineer  
Transportation Planning & Land Use Review West LA/Coastal  
Los Angeles Department of Transportation

**VIA EMAIL**  
**sean.haeri@lacity.org**

**Subject:** Results of Focused Breeding Season Presence/Absence Surveys for Coastal California Gnatcatcher for the Lincoln Bridge Multi-Modal Improvement Project, City of Los Angeles, California

Dear Mr. Haeri:

This Letter Report presents the results of focused breeding season surveys for the coastal California gnatcatcher (*Polioptila californica californica*) for the Lincoln Bridge Multi-Modal Improvement Project (hereinafter referred to as the “Project”) located in the City of Los Angeles, California (Figure 1). The purpose of the focused surveys was to determine the presence or absence of this species within or immediately adjacent to the project site. Surveys were conducted by a Biologist who holds the required Federal Endangered Species Act survey permits according to guidelines established by the U.S. Fish and Wildlife Service (USFWS). Notification of the intent to conduct protocol-level surveys was submitted to the USFWS on March 1, 2017. No coastal California gnatcatchers were observed or detected in the survey area during the focused surveys.

## **PROJECT LOCATION AND DESCRIPTION**

The project site is located on Lincoln Boulevard between Jefferson Boulevard and Fiji Way in the City of Los Angeles, California. It is approximately two miles west of Interstate (I) 405, three miles south of I-10, and three miles north of I-105 (Figure 1). The Project site is located approximately 20 feet above mean sea level (msl) and is surrounded by urban development and open space, including the Ballona Wetlands Ecological Reserve (Figure 2). The survey area for the proposed Project is shown on the U.S. Geological Survey’s (USGS’) Venice 7.5-minute topographic quadrangle and consists of the Project impact boundary and a 500-foot buffer around the impact area (Figure 3).

The proposed Project would include replacement of the existing Lincoln Boulevard Bridge over Ballona Creek and reconstruction of the Culver Boulevard/Lincoln Boulevard interchange. Both the Lincoln Bridge over Ballona Creek and Lincoln Boulevard within the Project limits will be widened to accommodate a “complete street” approach comprised of six dedicated vehicle lanes, bike lanes, sidewalks, and space for a reserve lane for future transit facilities. The improvements on Lincoln Boulevard will provide continuity between the six-lane State Route (SR) 1 (Pacific Coast Highway) segments extending north and south of the Ballona Creek Bridge. Currently, vehicles traveling north or

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south on Pacific Coast Highway must merge into the narrower (two or four) lanes of the existing Lincoln Boulevard Bridge. The Culver Boulevard Bridge will be widened to accommodate additional bike lanes while maintaining the existing two travel lanes. All proposed widening is anticipated to fit within the existing Caltrans right-of-way. The proposed improvements are to be designed to minimize any potential impacts to the adjacent Ballona Wetlands and Ballona Creek.

A total of 21 vegetation types and other areas are present on the project site, including arroyo willow thicket, California sagebrush scrub, big saltbush scrub, coyote bush scrub, degraded coyote bush scrub, mulefat thicket, Menzies' goldenbush scrub, laurel sumac scrub, hyssop-leaved bassia stand, upland mustards, annual brome grassland, alkali weed playa, annual beard grass–ox-tongue grassland, cudweed special stand, pickleweed mat, California bulrush marsh, cattail marsh, semi-natural herbaceous stand, developed, open water, and parks and landscaping. Focused surveys for the coastal California gnatcatcher were conducted within all suitable habitats (i.e., California sagebrush scrub, coyote bush scrub, degraded coyote bush scrub) in the survey area (Figure 4). The suitable habitats present in the survey area primarily consist of the following plant species: California sagebrush (*Artemisia californica*), Menzies' coastal goldenbush (*Isocoma menziesii* var. *menziesii*), leafy California buckwheat (*Eriogonum fasciculatum* var. *foliolosum*), big saltbush (*Atriplex lentiformis*), coyote brush (*Baccharis pilularis* ssp. *consanguinea*), California encelia (*Encelia californica*), and laurel sumac (*Malosma laurina*). Photographs of the survey area are provided in Attachment A.

## SPECIES BACKGROUND

The coastal California gnatcatcher is a federally Threatened species and a California Species of Special Concern. This subspecies occurs in most of Baja California, Mexico's arid regions, but is extremely localized in the United States, where it predominantly occurs in coastal regions of highly urbanized Los Angeles, Orange, Riverside, and San Diego Counties (Atwood 1992). In California, this subspecies is an obligate resident of coastal sage scrub vegetation types. The breeding season for the coastal California gnatcatcher ranges from mid-March to the end of June. Nests are generally located in various materials in sagebrush about three feet above ground. Brood parasitism by brown-headed cowbirds (*Molothrus ater*) and loss of habitat to urban development have been cited as causes of the coastal California gnatcatcher population's decline (Unitt 1984; Atwood 1990).

Taxonomic studies indicate that the California gnatcatcher consists of four subspecies that extend from southwestern California to southern Baja California, Mexico (Atwood and Lerman 2006; Mellink and Rea 1994). The coastal California gnatcatcher, the northernmost gnatcatcher subspecies, is restricted to lowland areas from central Ventura County through Los Angeles, San Bernardino, Riverside, Orange, and San Diego Counties to the Baja California, Mexico border (Atwood and Lerman 2006; Mellink and Rea 1994). Formerly, the coastal California gnatcatcher was common from the San Fernando Valley eastward along the base of the San Gabriel Mountains to Claremont (Atwood 1990). It is now rare in the northern part of this range, with only a handful of sightings from Santa Clarita to Tujunga Wash, though a small population persists near the City of Moorpark in Ventura County.

The coastal California gnatcatcher has been recorded from sea level to approximately 3,000 feet above msl (USFWS 2003); however, more than 90 percent of gnatcatcher records are from between sea level and 820 feet above msl along the coast and between sea level and 1,800 feet above msl inland (Atwood and Bolsinger 1992). The USFWS estimates that there are about 3,000 coastal California gnatcatcher pairs in Southern California (Atwood and Bontrager 2001). In the *Coastal California Gnatcatcher 5-Year Review: Summary and Evaluation* of the gnatcatcher, the USFWS states that a recent study (Winchell and Doherty 2008) estimated that there were approximately 1,324 gnatcatcher pairs over approximately 111,000 acres on public and quasi-public lands in Orange and San Diego Counties. Because the Winchell

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and Doherty study only covered a portion of the U.S. range (focusing on the coast and limited to one year), this study cannot extrapolate beyond the sampling region; however, the USFWS states that it is likely there are more gnatcatchers in the U.S. portion of the range than was suggested by earlier estimates (USFWS 2010).

The coastal California gnatcatcher typically occurs in coastal and inland sage scrub vegetation types. Sage scrub often occurs in a patchy distribution pattern throughout the range of the gnatcatcher. Coastal California gnatcatchers also use chaparral, grassland, and riparian habitats that are near sage scrub. These non-sage scrub habitats are used for dispersal and foraging (Atwood et al. 1998; Campbell et al. 1998; USFWS 2003). Availability of these non-sage scrub areas is essential during certain times of the year, particularly during drought conditions or for dispersal, foraging, or nesting (USFWS 2003).

The USFWS published a Revised Final Rule designating Critical Habitat for the coastal California gnatcatcher in 2007. This Revised Rule designates 197,303 acres of Critical Habitat in San Diego, Orange, Riverside, San Bernardino, Los Angeles, and Ventura Counties, California (USFWS 2007). The survey area is not located within the designated Critical Habitat area for this species.

## **SURVEY METHODS**

The USFWS coastal California gnatcatcher survey protocol recommends six visits to all potentially occupied habitat areas for surveys conducted entirely within the breeding season, which extends from March 15 to June 30 (USFWS 1997a, 1997b). All visits must take place at least 1 week apart during the morning hours, and no more than 80 acres of suitable habitat may be surveyed per visit. Following the USFWS protocol for the species, Psomas Senior Biologist Lindsay Messett (USFWS Permit No. TE067064-3) conducted all six surveys on the project site. Surveys were conducted on April 6, 13, and 24 and May 5, 19, and 30, 2017. The surveys covered all potentially suitable habitats for the coastal California gnatcatcher in the survey area.

Weather conditions met the USFWS survey protocol requirements for optimal gnatcatcher detection. Weather conditions that were too cold (below 55 degrees Fahrenheit [°F]), too hot (above 95°F), or too windy (wind speed greater than 15 miles per hour) were avoided. Surveys were conducted by slowly walking through all appropriate habitats while listening and watching for gnatcatcher activity. A combination of taped recordings of gnatcatcher vocalizations and “pishing” sounds was used to elicit responses from any gnatcatchers present. The frequency of vocalization playback and “pishing” varied depending on conditions such as habitat patch size and topography in each area. All wildlife species detected during the survey were recorded, including notable observations of special status species (Attachment B).

## **SURVEY RESULTS**

No coastal California gnatcatchers were observed or detected in the survey area during the focused surveys. Survey dates, times, and weather data for the focused coastal California gnatcatcher surveys are shown in Table 1.

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**TABLE 1  
 SUMMARY OF COASTAL CALIFORNIA GNATCATCHER SURVEYS**

Date	Time (Start/End)	Surveyor	Weather Conditions			Gnatcatchers Observed and/or Detected
			Temperature (°F) (Start/End)	Wind (mph) (Start/End)	Cloud Cover (%) (Start/End)	
April 6, 2017	0700/1030	Messett	59/68	0-1/0-3	90/75	None observed or detected
April 13, 2017	0700/0930	Messett	56/66	0-2/0-4	Clear/90	None observed or detected
April 24, 2017	0700/0940	Messett	63/65	0-1/0-1	50/75	None observed or detected
May 5, 2017	0730/0915	Messett	61/63	0-2/0-4	100/100	None observed or detected
May 19, 2017	0700/0900	Messett	60/69	0-1/0-2	Clear/Clear	None observed or detected
May 30, 2017	0715/0930	Messett	62/62	0-1/0-3	100/100	None observed or detected

°F: degrees Fahrenheit; mph: miles per hour


**ADDITIONAL SENSITIVE SPECIES**

Notable wildlife species incidentally observed during the surveys included the least Bell’s vireo (*Vireo bellii pusillus*, a federally and State-listed Endangered species), double-crested cormorant (*Phalacrocorax auritus*, a Watch List species), northern harrier (*Circus cyaneus*, a California Species of Special Concern), and yellow warbler (*Dendroica petechia brewsteri*, a California Species of Special Concern). These species are tracked by the California Department of Fish and Wildlife’s (CDFW) California Natural Diversity Database (CNDDDB). CNDDDB forms will be submitted to the CDFW for all special status species observed during the focused surveys. Brown-headed cowbirds were not observed or detected in the survey area during the focused surveys.


Please contact Agnieszka Napiatek at (714) 751-7373 if you have questions or comments.

Sincerely,  
**PSOMAS**

  
 Agnieszka Napiatek  
 Project Manager

  
 Lindsay A. Messett  
 Senior Biologist

I certify that the information in this survey report and enclosed figures fully and accurately present my work.

  
 Lindsay A. Messett, CWB®  
 Senior Biologist  
 (TE067064-3)



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Enclosures: Figure 1 – Project Location  
 Figure 2 – Project Aerial  
 Figure 3 – Study Area  
 Figure 4 – Vegetation Communities

Attachments: A – Site Photographs  
 B – Wildlife Compendium

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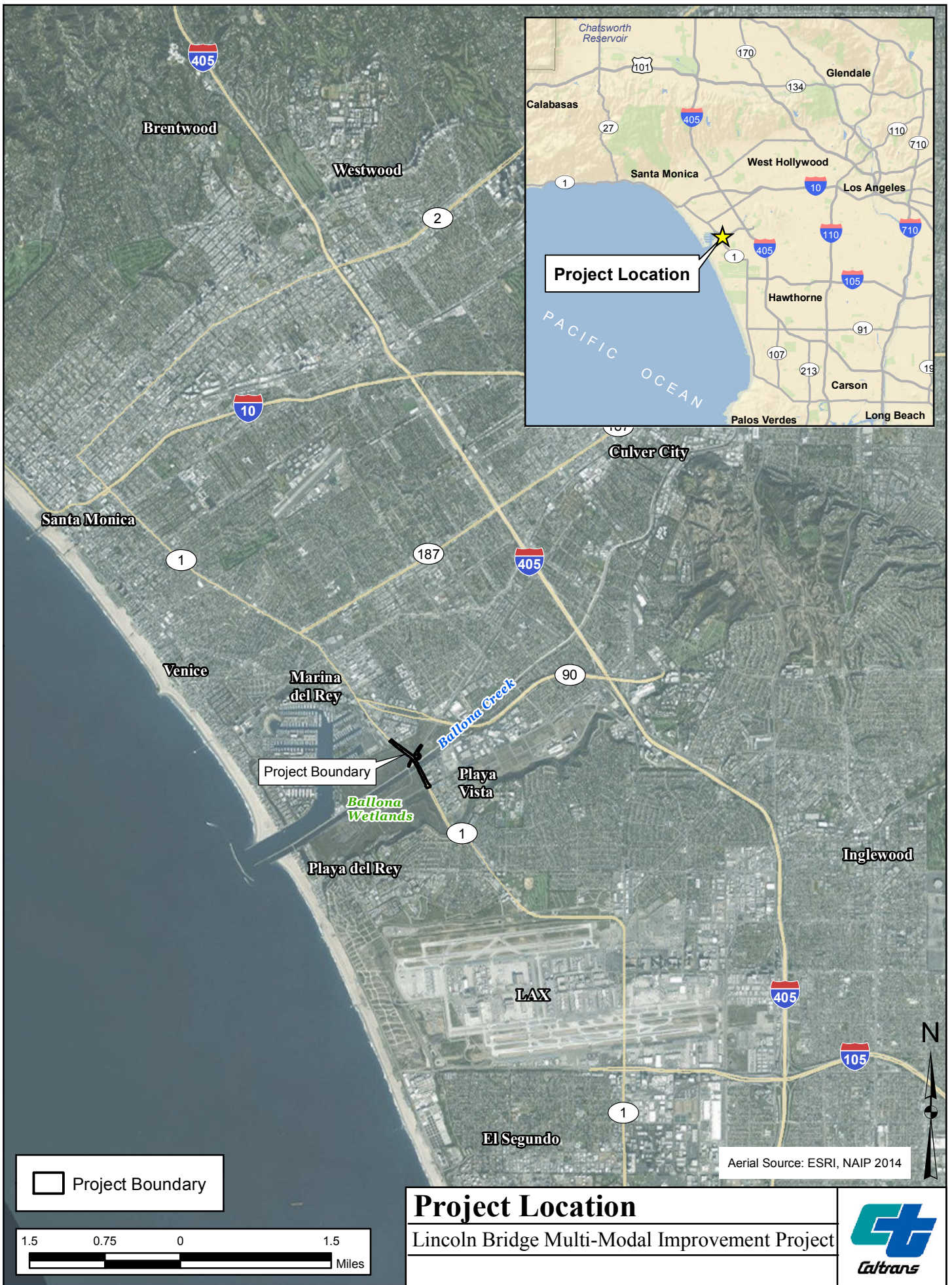


Figure 1



1

Fiji Way

Culver Blvd

Ballona Creek

Lincoln Blvd


Culver Blvd


W Jefferson Blvd

1



Aerial Source: LAR-IAC 2014

 Project Boundary

500 250 0 500  
 Feet

# Project Aerial

Lincoln Bridge Multi-Modal Improvement Project



Figure 2

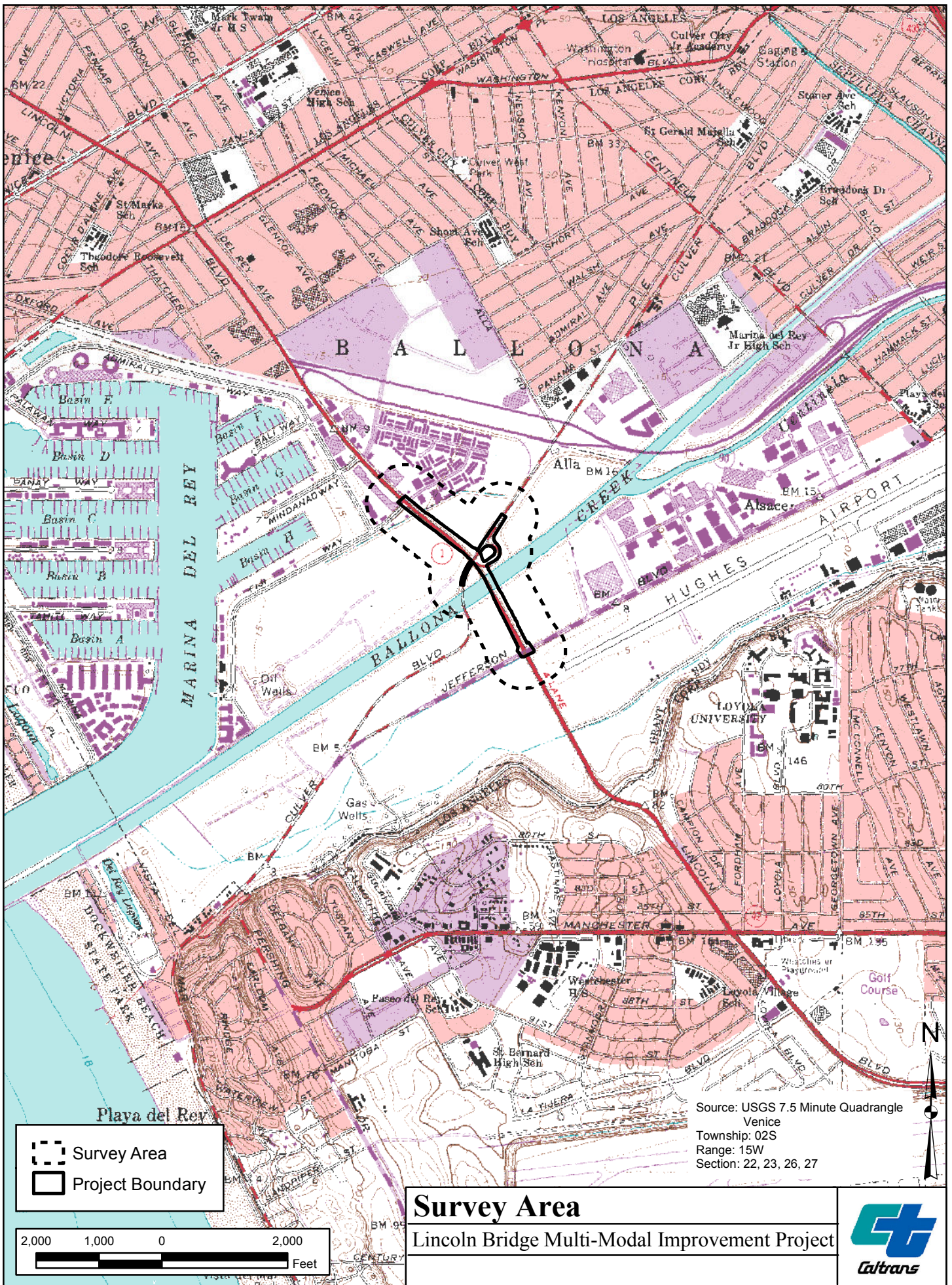


Figure 3

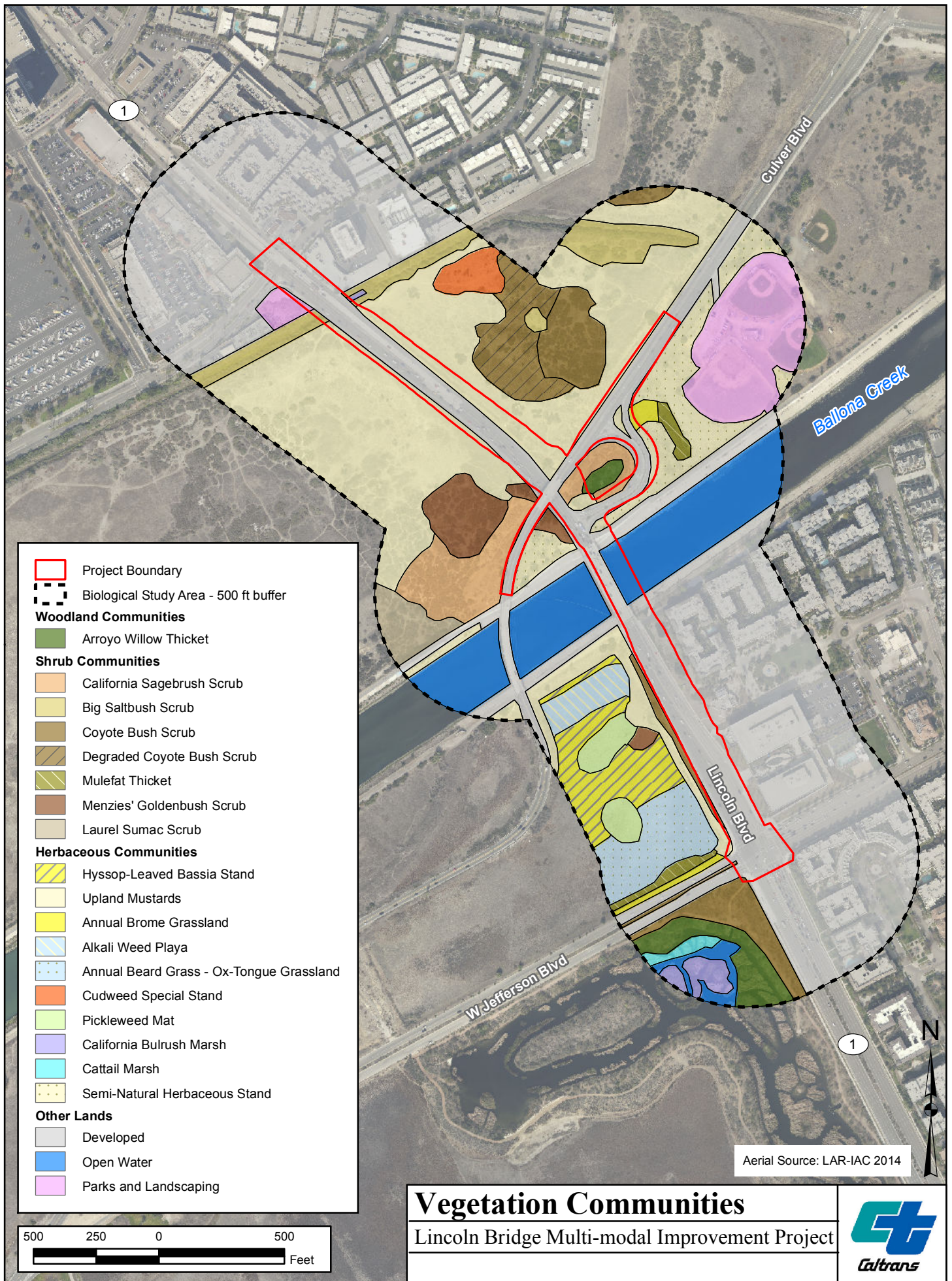


Figure 4

**ATTACHMENT A**  
**SITE PHOTOGRAPHS**



Representative site photograph depicting coyote bush scrub vegetation located in the northeastern portion of the survey area.



Representative site photograph depicting California sagebrush scrub vegetation located in the central portion of the survey area, east of Lincoln Boulevard.

## Site Photographs

Lincoln Bridge Multi-Modal Improvement Project







Representative site photograph depicting California sagebrush scrub vegetation located in the central portion of the survey area, west of Lincoln Boulevard.



Representative site photograph depicting coyote bush scrub vegetation located in the southern portion of the survey area.

## Site Photographs

Lincoln Bridge Multi-Modal Improvement Project



**ATTACHMENT B**  
**WILDLIFE COMPENDIUM**

## WILDLIFE SPECIES DETECTED DURING SURVEYS

Species		Special Status
Scientific Name	Common Name	
RANIDAE - TRUE FROG FAMILY		
<i>Lithobates catesbeianus</i> *	American bullfrog	
HYLIDAE - TREEFROG FAMILY		
<i>Pseudacris hypochondriaca</i>	Baja California treefrog	
PHRYNOSOMATIDAE - SPINY LIZARD FAMILY		
<i>Sceloporus occidentalis</i>	western fence lizard	
<i>Uta stansburiana</i>	common side-blotched lizard	
ANATIDAE - SWAN, GOOSE, AND DUCK FAMILY		
<i>Branta canadensis</i>	Canada goose	
<i>Anas strepera</i>	gadwall	
<i>Anas platyrhynchos</i>	mallard	
<i>Anas discors</i>	blue-winged teal	
<i>Anas cyanoptera</i>	cinnamon teal	
<i>Oxyura jamaicensis</i>	ruddy duck	
COLUMBIDAE - PIGEON AND DOVE FAMILY		
<i>Zenaida macroura</i>	mourning dove	
TROCHILIDAE - HUMMINGBIRD FAMILY		
<i>Calypte anna</i>	Anna's hummingbird	
<i>Selasphorus sasin</i>	Allen's hummingbird	
RALLIDAE - RAIL AND COOT FAMILY		
<i>Porzana carolina</i>	sora	
<i>Fulica americana</i>	American coot	
PHALACROCORACIDAE - CORMORANT FAMILY		
<i>Phalacrocorax auritus</i>	double-crested cormorant	WL
ARDEIDAE - HERON FAMILY		
<i>Ardea herodias</i>	great blue heron	
<i>Ardea alba</i>	great egret	
<i>Egretta thula</i>	snowy egret	
<i>Butorides virescens</i>	green heron	
<i>Nycticorax nycticorax</i>	black-crowned night-heron	
ACCIPITRIDAE - HAWK FAMILY		
<i>Circus cyaneus</i>	northern harrier	SSC
ALCEDINIDAE - KINGFISHER FAMILY		
<i>Megaceryle alcyon</i>	belted kingfisher	
FALCONIDAE - FALCON FAMILY		
<i>Falco sparverius</i>	American kestrel	
TYRANNIDAE - TYRANT FLYCATCHER FAMILY		
<i>Sayornis nigricans</i>	black phoebe	
<i>Sayornis saya</i>	Say's phoebe	
<i>Tyrannus verticalis</i>	western kingbird	
VIREONIDAE - VIREO FAMILY		
<i>Vireo bellii</i>	Bell's vireo	FE, SE
CORVIDAE - JAY AND CROW FAMILY		
<i>Corvus brachyrhynchos</i>	American crow	

**WILDLIFE SPECIES DETECTED DURING SURVEYS**

Species		Special Status
Scientific Name	Common Name	
HIRUNDINIDAE - SWALLOW FAMILY		
<i>Stelgidopteryx serripennis</i>	northern rough-winged swallow	
<i>Hirundo rustica</i>	barn swallow	
AEGITHALIDAE - BUSHTIT FAMILY		
<i>Psaltriparus minimus</i>	bushtit	
TROGLODYTIDAE - WREN FAMILY		
<i>Thryomanes bewickii</i>	Bewick's wren	
STURNIDAE - STARLING FAMILY		
<i>Sturnus vulgaris</i> *	European starling*	
PASSERIDAE - OLD WORLD SPARROW FAMILY		
<i>Passer domesticus</i> *	house sparrow*	
ICTERIIDAE - BLACKBIRDS AND ORIOLES		
<i>Icteria virens</i>	yellow-breasted chat	SSC
FRINGILLIDAE - FINCH FAMILY		
<i>Haemorhous mexicanus</i>	house finch	
<i>Spinus psaltria</i>	lesser goldfinch	
PARULIDAE - WOOD-WARBLER FAMILY		
<i>Geothlypis trichas</i>	common yellowthroat	
<i>Setophaga petechia</i>	yellow warbler	SSC
EMBERIZIDAE - SPARROW FAMILY		
<i>Pipilo maculatus</i>	spotted towhee	
<i>Melospiza crissalis</i>	California towhee	
<i>Zonotrichia leucophrys</i>	white-crowned sparrow	
ICTERIDAE - BLACKBIRDS AND ORIOLES		
<i>Agelaius phoeniceus</i>	red-winged blackbird	
<i>Quiscalus mexicanus</i>	great-tailed grackle	
SCIURIDAE - SQUIRREL FAMILY		
<i>Otospermophilus beecheyi</i>	California ground squirrel	
LEPORIDAE - HARE AND RABBIT FAMILY		
<i>Sylvilagus audubonii</i>	desert cottontail	
<p><b>LEGEND:</b>                      * = Non-native or invasive species</p> <p><b>Special Status:</b></p> <p><b>Federal (USFWS):</b>                      FE = Endangered</p> <p><b>State (CDFW):</b>                      SE = Endangered                      SSC = Species of Concern                      WL = Watch List</p>		

**Appendix G** Results of Focused Breeding  
Season Presence/Absence  
Surveys for the Least Bell's  
Vireo

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September 12, 2017

Sean Haeri, P.E.  
Division Manager – Sr. Transportation Engineer  
Transportation Planning & Land Use Review West LA/Coastal  
Los Angeles Department of Transportation

VIA EMAIL  
sean.haeri@lacity.org

Subject: Results of Focused Breeding Season Presence/Absence Surveys for Least Bell's Vireo for the Lincoln Bridge Multi-Modal Improvement Project, City of Los Angeles, California

Dear Mr. Haeri:

This Letter Report presents the results of focused breeding season surveys for the least Bell's vireo (*Vireo bellii pusillus*) conducted for the Lincoln Bridge Multi-Modal Improvement Project (hereinafter referred to as the "Project") located in the City of Los Angeles, California (Figure 1). The purpose of the surveys was to determine the presence or absence of the least Bell's vireo on or immediately adjacent to the project site. Surveys were conducted by a Biologist who holds the required Federal Endangered Species Act survey permits according to guidelines established by the U.S. Fish and Wildlife Service (USFWS).

## PROJECT LOCATION AND DESCRIPTION

The Project site is located on Lincoln Boulevard between Jefferson Boulevard and Fiji Way in the City of Los Angeles, California. It is approximately two miles west of Interstate (I) 405, three miles south of I-10 and three miles north of I-105 (Figure 1). The project site is located approximately 20 feet above mean sea level (msl) and is surrounded by urban development and open space which includes the Ballona Wetlands Ecological Reserve (Figure 2). The survey area for the proposed Project is shown on the U.S. Geological Survey's (USGS') Venice 7.5-minute topographic quadrangle and consists of the Project impact boundary and a 500-foot buffer around the impact area (Figure 3).

The proposed Project would include replacement of the existing Lincoln Boulevard Bridge over Ballona Creek and reconstruction of the Culver Boulevard/Lincoln Boulevard interchange. Both the Lincoln Bridge over Ballona Creek and Lincoln Boulevard within the Project limits will be widened to accommodate a "complete street" approach comprised of six dedicated vehicle lanes, bike lanes, sidewalks, and space for a reserve lane for future transit facilities. The improvements on Lincoln Boulevard will provide continuity between the six-lane State Route (SR) 1 (Pacific Coast Highway) segments extending north and south of the Ballona Creek Bridge. Currently, vehicles traveling north or south on Pacific Coast Highway must merge into the narrower (two or four) lanes of the existing Lincoln Boulevard Bridge. The Culver Boulevard Bridge will be widened to accommodate additional bike lanes while maintaining the existing two travel lanes. All proposed widening is anticipated to fit within the existing Caltrans right-of-way. The proposed improvements are to be designed to minimize any potential impacts to the adjacent Ballona Wetlands and Ballona Creek.

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A total of 21 vegetation types and other areas are present on the Project site, including arroyo willow thicket, California sagebrush scrub, big saltbush scrub, coyote bush scrub, degraded coyote bush scrub, mulefat thicket, Menzies' goldenbush scrub, laurel sumac scrub, hyssop-leaved bassia stand, upland mustards, annual brome grassland, alkali weed playa, annual beardgrass–ox-tongue grassland, cudweed special stand, pickleweed mat, California bulrush marsh, cattail marsh, semi-natural herbaceous stand, developed, open water, and parks and landscaping. Focused surveys for the least Bell's vireo were conducted within all suitable habitats (i.e., arroyo willow thicket and mulefat thicket) in the survey area (Figure 4). The suitable habitats present in the survey area primarily consist of the following plant species: arroyo willow (*Salix lasiolepis*), mule fat (*Baccharis salicifolia* ssp. *salicifolia*), and Hinds' willow (*Salix exigua* var. *hindsiana*). Other species include mugwort (*Artemisia douglasiana*) and California bulrush (*Schoenoplectus californicus*). Portions of the survey area are surrounded by open water. Photographs of the survey area are provided in Attachment A.

## SPECIES BACKGROUND

The least Bell's vireo was historically common and widespread, but eventually became rare and local summer residents of Southern California's lowland riparian woodlands (Grinnell and Miller 1986; Garrett and Dunn 1981). The substantial population declines experienced by this avian species over the latter half of the twentieth century are attributable to loss and degradation of riparian habitats and brood parasitism by the brown-headed cowbird (*Molothrus ater*). As a result, the State of California listed the least Bell's vireo as Endangered on October 2, 1980; it became federally listed as Endangered on May 2, 1986 (CDFW 2015).

Bell's vireo is a Neotropical migrant that breeds in central and southwestern North America from northern Mexico to Southern California, Nevada, and Utah; east to Louisiana; and north to North Dakota, Wisconsin, and Indiana in the central United States (AOU 1998). Although not well known, the winter range of the Bell's vireo is believed to be the western coast of Central America from southern Sonora south to northwestern Nicaragua, including the cape region of Baja California, Mexico (Brown 1993). Of the four Bell's vireo subspecies, only two breed in California: the least Bell's vireo (*V. b. pusillus*) and the Arizona Bell's vireo (*V. b. arizonae*), which breeds in the Colorado River Valley (Garrett and Dunn 1981; Rosenberg et al. 1991). Though the least Bell's vireo was formerly considered a common breeder in riparian habitats throughout the Central Valley and other low-elevation riverine systems in California and Baja California, Mexico, it has been eliminated from much of its historical range (Franzreb 1989; Brown 1993). However, since its listing, the least Bell's vireo has begun to recolonize areas it historically occupied, increasing its breeding territories tenfold to 2,968 territories. This increase is credited to improvements in habitat abundance and quality and effective cowbird control. Continued cowbird control and exotic plant removal in riparian areas are considered necessary actions in order to continue this trend for the foreseeable future (USFWS 2006).

Breeding habitat for the least Bell's vireo consists of riparian woodland dominated by willows (*Salix* spp.), western sycamore (*Platanus racemosa*), and cottonwoods (*Populus* spp.) with dense understory vegetation; shrubs such as mule fat and California rose (*Rosa californica*) are often a component of the understory (Goldwasser 1981). The least Bell's vireo generally nests in early successional stages of riparian habitats, with nest sites frequently located in willows that are between four and ten feet high (RECON 1988; Franzreb 1989). The most critical factor in habitat structure is the presence of a dense understory shrub layer from approximately two to ten feet above ground (Goldwasser 1981; Salata 1983; Franzreb 1989).

On February 2, 1994, the U.S. Fish and Wildlife Service (USFWS) issued their Final Determination of Critical Habitat for the least Bell's vireo, designating approximately 37,560 acres in Santa Barbara,



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Ventura, Los Angeles, San Bernardino, Riverside, and San Diego Counties (USFWS 1994). The survey area is not located in the designated critical habitat area for this species.

**SURVEY METHODS**

The USFWS protocol for the least Bell’s vireo requires that at least eight surveys be conducted from April 10 to July 31 with a ten-day interval between each site visit. The survey area for the least Bell’s vireo consists of all areas where suitable habitat for this species (i.e., arroyo willow thicket, mule fat thicket) is present (Figure 4). Psomas Senior Biologist Lindsay Messett (TE-067064-3) conducted the focused surveys in all riparian habitats potentially suitable for occupation by breeding least Bell’s vireo in the survey area. Surveys were conducted on April 13 and 24; May 5, 19, and 30; June 15 and 29; and July 14, 2017.

Ms. Messett systematically surveyed the riparian habitats by walking slowly and methodically along the margins of riparian habitat or by using meandering transects through riparian habitat. As the least Bell’s vireo survey protocol does not require the playback of least Bell’s vireo vocalizations, recorded least Bell’s vireo vocalizations were not used during the surveys. “Pishing” sounds were also used opportunistically to elicit responses from any potentially present least Bell’s vireos. Any least Bell’s vireos were recorded with a Global Positioning System (GPS) unit (Garmin Vista); territories recorded were numbered chronologically as they were detected. All surveys were conducted under optimal weather conditions and during early morning hours when bird activity is at a peak. All wildlife species detected during the surveys were recorded and are included in Attachment B. Survey times and weather conditions are summarized in Table 1 below.

**TABLE 1  
 SUMMARY OF LEAST BELL’S VIREO SURVEYS**

Dates	Surveyor	Time (Start/End)	Weather Conditions			LBV Observed/Detected
			Temperature (°F) (Start/End)	Wind (mph) (Start/ End)	Cloud Cover (%) (Start/ End)	
April 13, 2017	Messett	0930/1100	66/69	0–4/0–2	90/75	1 LBV territory observed/detected.
April 24, 2017	Messett	0940/1115	65/69	0–1/0–2	75/80	1 LBV territory observed/detected.
May 5, 2017	Messett	0915/1100	63/66	0–4/0–2	100/100	1 LBV territory observed/detected.
May 19, 2017	Messett	0900/1110	69/73	0–2/0–1	Clear/Clear	1 LBV territory observed/detected.
May 30, 2017	Messett	0930/1115	62/64	0–3/0–3	100/100	No LBV territories observed/detected.
June 15, 2017	Messett	0700/0945	66/75	0–3/0–6	Clear/Clear	No LBV territories observed/detected.
June 29, 2017	Messett	0710/0930	64/70	0–3/0–1	100/40	No LBV territories observed/detected.
July 14, 2017	Messett	0715/0940	64/69	0–4/0–2	60/30	No LBV territories observed/detected.

LBV: Least Bell's Vireo; °F: degrees Fahrenheit; mph: miles per hour

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**SURVEY RESULTS**


One least Bell’s vireos territory was detected in the survey area during the focused surveys. A male least Bell’s vireo was detected through vocalization in the arroyo willow thicket vegetation located in the southern portion of the survey area during the first four focused surveys (Figure 4). However, no least Bell’s vireos were observed or detected during the last four focused surveys. Throughout the duration of focused surveys, vector control was conducting vegetation removal and insecticide application. These practices occurred immediately adjacent to the least Bell’s vireo location within the arroyo willow thicket, cattail marsh, bulrush marsh, and open water portions of the survey area. Due to the close proximity of these activities to the least Bell’s vireo, they may have contributed to the failure of the territory, resulting in the vireo relocating outside the survey area where it remained undetected for the remainder of the focused surveys.

Notable wildlife species incidentally observed during the surveys include the yellow-breasted chat (*Icteria virens*, a California Species of Special Concern) and yellow warbler (*Setophaga petechia*, a California Species of Special Concern) (Figure 4). These species are tracked by the California Department of Fish and Wildlife’s (CDFW) California Natural Diversity Database (CNDDDB). CNDDDB forms will be submitted to the CDFW for all special status species observed during the focused surveys. Brown-headed cowbirds were observed and/or detected in the southern portion of the survey area during the focused surveys.


Please contact Agnieszka Napiatek at (714) 751-7373 if you have questions or comments.

Sincerely,  
**P S O M A S**

  
Agnieszka Napiatek  
Project Manager

  
Lindsay A. Messett  
Senior Biologist

I certify that the information in this survey report and attached figures fully and accurately represents my work.

  
Lindsay A. Messett, CWB®  
Senior Biologist  
(TE-067064-3)

- Enclosures:    Figure 1 – Project Location  
                      Figure 2 – Project Aerial  
                      Figure 3 – Study Area  
                      Figure 4 – Vegetation Communities

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Attachments    A – Site Photographs  
                       B – Wildlife Compendium  
                       C – Least Bell’s Vireo Survey Data Summary Form

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**Project Location**  
 Lincoln Bridge Multi-Modal Improvement Project



**Figure 1**



 Project Boundary

500    250    0    500  
 Feet

Aerial Source: LAR-IAC 2014

**Project Aerial**  
 Lincoln Bridge Multi-Modal Improvement Project



Figure 2

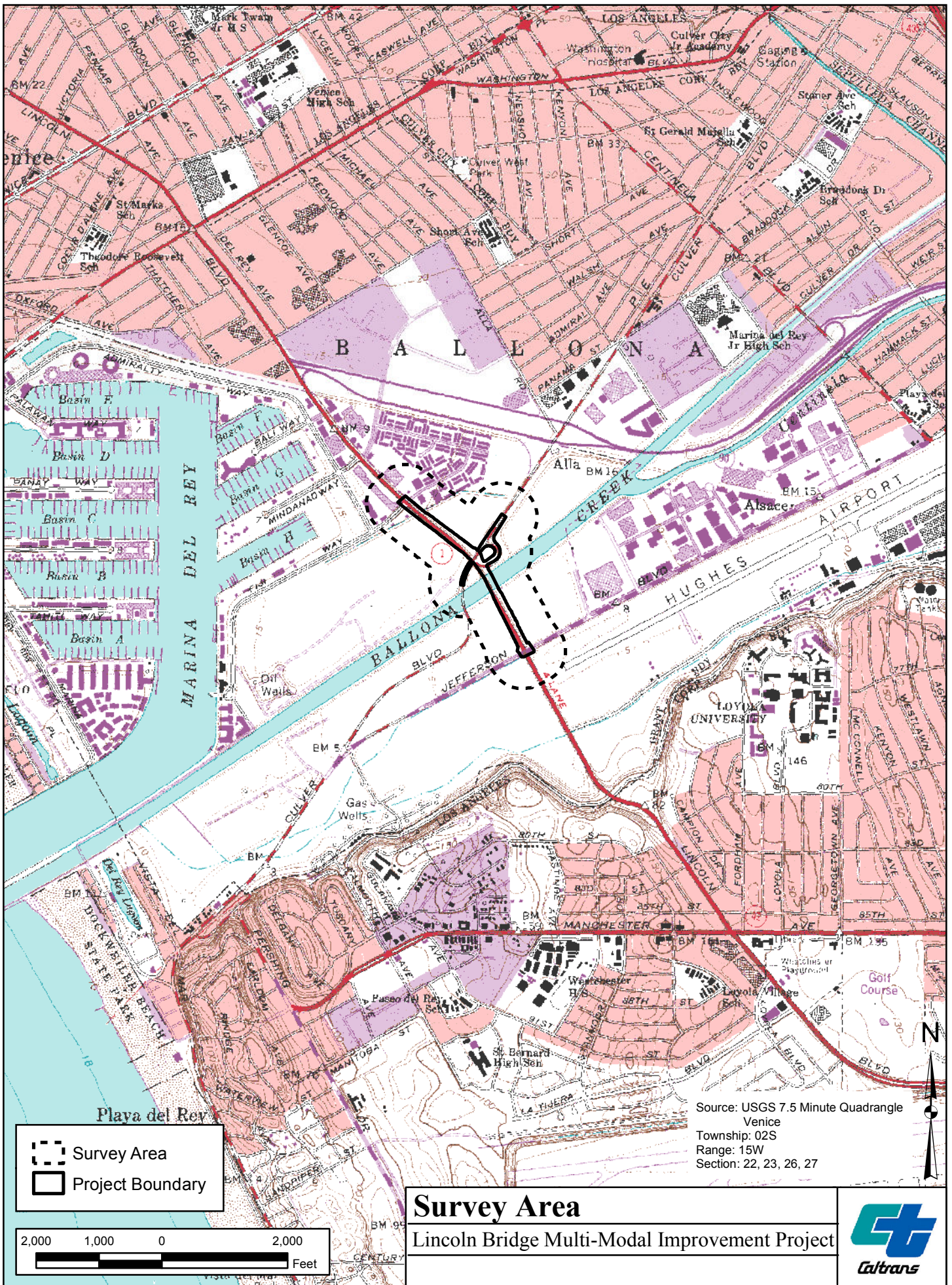


Figure 3

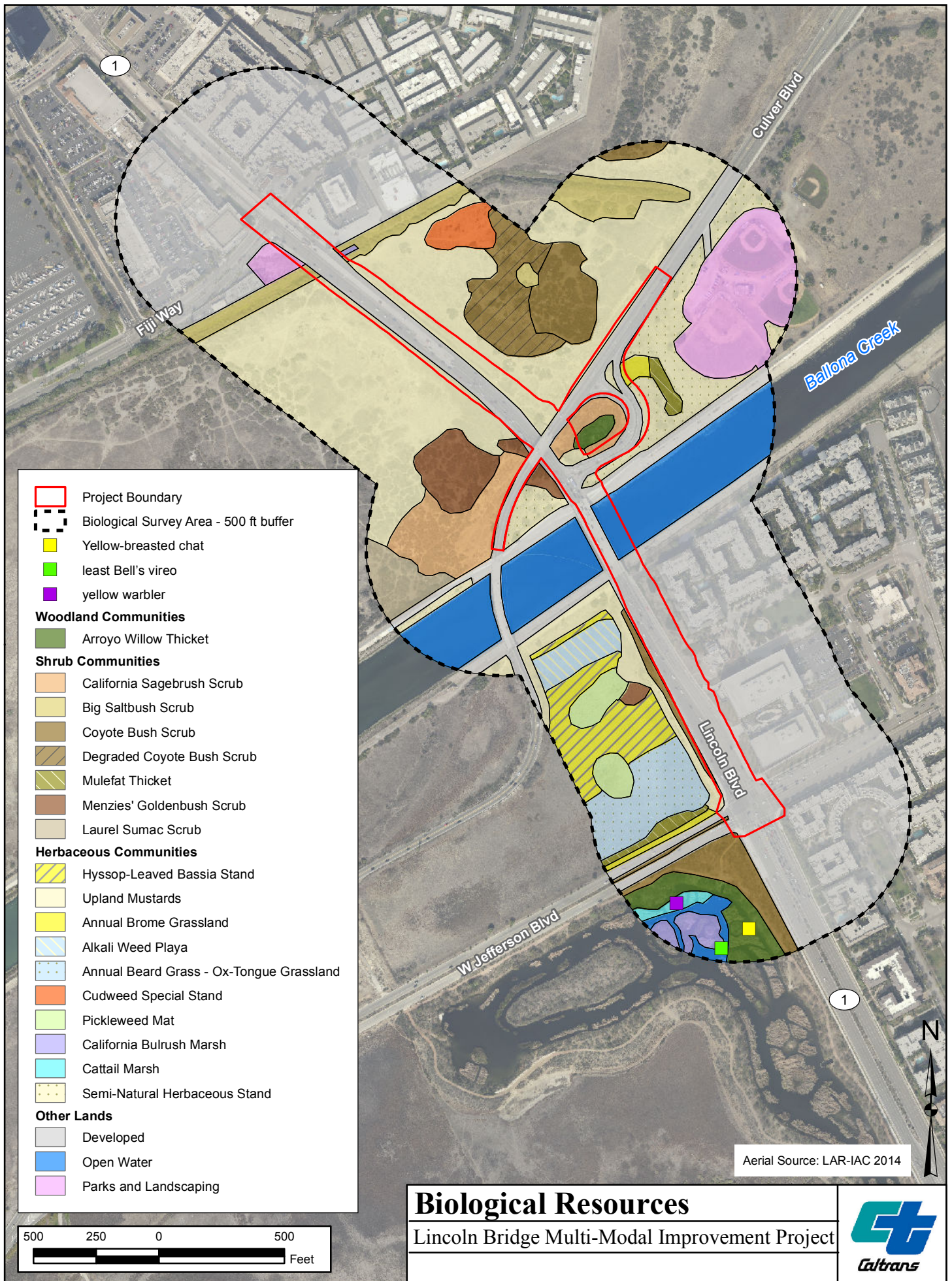


Figure 4

**ATTACHMENT A**  
**SITE PHOTOGRAPHS**





Representative site photograph depicting mulefat thicket vegetation located in the eastern portion of the survey area.



Representative site photograph depicting Arroyo willow thicket, cattail marsh, and bulrush marsh vegetation as well as open water located in the southern portion of the survey area.

## Site Photographs

Lincoln Bridge Multi-Modal Improvement Project



**ATTACHMENT B**  
**WILDLIFE COMPENDIUM**

## WILDLIFE SPECIES DETECTED DURING SURVEYS

Species		Special Status
Scientific Name	Common Name	
RANIDAE - TRUE FROG FAMILY		
<i>Lithobates catesbeianus</i> *	American bullfrog	
HYLIDAE - TREEFROG FAMILY		
<i>Pseudacris hypochondriaca</i>	Baja California treefrog	
PHRYNOSOMATIDAE - SPINY LIZARD FAMILY		
<i>Sceloporus occidentalis</i>	western fence lizard	
<i>Uta stansburiana</i>	common side-blotched lizard	
ANATIDAE - SWAN, GOOSE, AND DUCK FAMILY		
<i>Branta canadensis</i>	Canada goose	
<i>Anas strepera</i>	gadwall	
<i>Anas platyrhynchos</i>	mallard	
<i>Anas discors</i>	blue-winged teal	
<i>Anas cyanoptera</i>	cinnamon teal	
<i>Oxyura jamaicensis</i>	ruddy duck	
COLUMBIDAE - PIGEON AND DOVE FAMILY		
<i>Zenaida macroura</i>	mourning dove	
TROCHILIDAE - HUMMINGBIRD FAMILY		
<i>Calypte anna</i>	Anna's hummingbird	
<i>Selasphorus sasin</i>	Allen's hummingbird	
RALLIDAE - RAIL AND COOT FAMILY		
<i>Porzana carolina</i>	sora	
<i>Fulica americana</i>	American coot	
PHALACROCORACIDAE - CORMORANT FAMILY		
<i>Phalacrocorax auritus</i>	double-crested cormorant	WL
ARDEIDAE - HERON FAMILY		
<i>Ardea herodias</i>	great blue heron	
<i>Ardea alba</i>	great egret	
<i>Egretta thula</i>	snowy egret	
<i>Butorides virescens</i>	green heron	
<i>Nycticorax nycticorax</i>	black-crowned night-heron	
ACCIPITRIDAE - HAWK FAMILY		
<i>Circus cyaneus</i>	northern harrier	SSC
ALCEDINIDAE - KINGFISHER FAMILY		
<i>Megaceryle alcyon</i>	belted kingfisher	
FALCONIDAE - FALCON FAMILY		
<i>Falco sparverius</i>	American kestrel	
TYRANNIDAE - TYRANT FLYCATCHER FAMILY		
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<i>Sayornis saya</i>	Say's phoebe	
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VIREONIDAE - VIREO FAMILY		
<i>Vireo bellii</i>	Bell's vireo	FE, SE
CORVIDAE - JAY AND CROW FAMILY		
<i>Corvus brachyrhynchos</i>	American crow	

**WILDLIFE SPECIES DETECTED DURING SURVEYS**

Species		Special Status
Scientific Name	Common Name	
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<i>Stelgidopteryx serripennis</i>	northern rough-winged swallow	
<i>Hirundo rustica</i>	barn swallow	
AEGITHALIDAE - BUSHTIT FAMILY		
<i>Psaltriparus minimus</i>	bushtit	
TROGLODYTIDAE - WREN FAMILY		
<i>Thryomanes bewickii</i>	Bewick's wren	
STURNIDAE - STARLING FAMILY		
<i>Sturnus vulgaris</i> *	European starling*	
PASSERIDAE - OLD WORLD SPARROW FAMILY		
<i>Passer domesticus</i> *	house sparrow*	
ICTERIIDAE - BLACKBIRDS AND ORIOLES		
<i>Icteria virens</i>	yellow-breasted chat	SSC
FRINGILLIDAE - FINCH FAMILY		
<i>Haemorhous mexicanus</i>	house finch	
<i>Spinus psaltria</i>	lesser goldfinch	
PARULIDAE - WOOD-WARBLER FAMILY		
<i>Geothlypis trichas</i>	common yellowthroat	
<i>Setophaga petechia</i>	yellow warbler	SSC
EMBERIZIDAE - SPARROW FAMILY		
<i>Pipilo maculatus</i>	spotted towhee	
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<p><b>LEGEND:</b>                      * = Non-native or invasive species</p> <p><b>Special Status:</b></p> <p><b>Federal (USFWS):</b>                      FE = Endangered</p> <p><b>State (CDFW):</b>                      SE = Endangered                      SSC = Species of Concern                      WL = Watch List</p>		

**ATTACHMENT C**

**LEAST BELL'S VIREO SURVEY DATA SUMMARY FORM**

