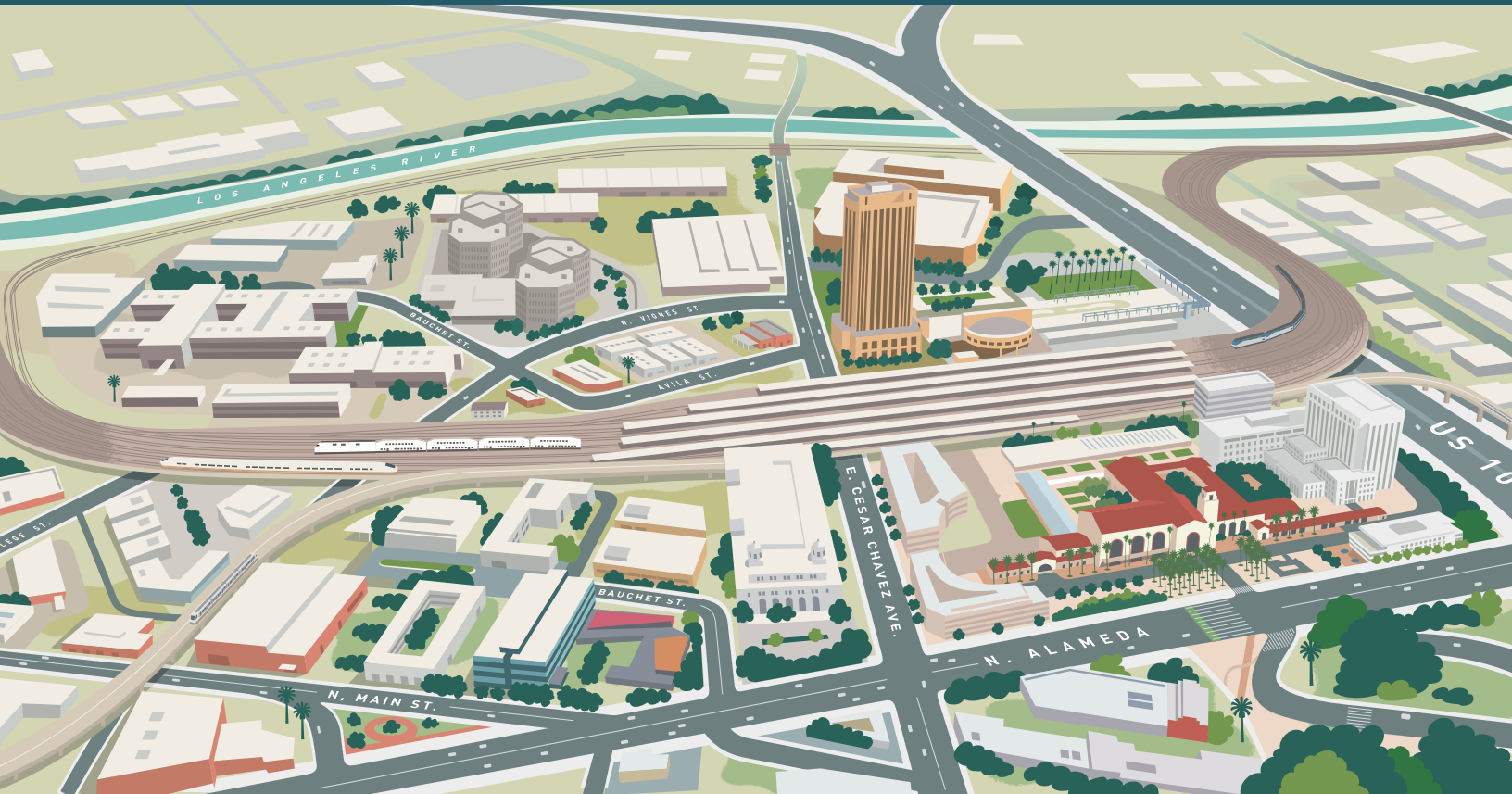


Link Union Station

Natural Environment Study (Minimal Impacts)

June 2019



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CONTENTS

ES.0 Executive Summary..... v

1.0 Introduction..... 1

1.1 Project Location and Study Area..... 1

1.2 Proposed Project Overview..... 2

1.3 Build Alternative Overview..... 3

2.0 Study Methods 9

2.1 Federal Laws and Regulations 9

2.1.1 Federal Endangered Species Act 9

2.1.2 Migratory Bird Treaty Act..... 9

2.1.3 Clean Water Act – Section 404 (United States Army Corps of Engineers) 9

2.1.4 Clean Water Act – Section 401 (Regional Water Quality Control Board)..... 12

2.2 State and Local Laws and Regulations 13

2.2.1 California Endangered Species Act..... 13

2.2.2 California Environmental Quality Act..... 13

2.2.3 Lake and Streambed Alteration Program 14

2.2.4 Fully Protected Species 14

2.2.5 City of Los Angeles Local Tree Ordinance..... 14

2.2.6 City of Los Angeles General Plan..... 15

2.3 Studies Required 15

2.3.1 Definition of Biological Study Area..... 15

2.3.2 Literature Review 16

2.3.3 General Surveys and Habitat Assessments 16

2.3.4 Botanical Surveys 16

2.3.5 Wildlife Surveys 16

2.4 Agency Coordination and Professional Contacts..... 17

2.5 Limitations That May Influence Results..... 17

3.0 Results: Environmental Setting..... 31

3.1 Existing Biological and Physical Conditions..... 31

3.1.1 Biological Study Area 31

3.1.2 Physical Conditions..... 31

3.1.3 Biological Conditions in the Biological Study Area..... 35

3.2 Regional Species and Habitats of Concern..... 47

3.2.1 Special-Status Plants..... 47

3.2.2 Special-Status Animals 47

3.2.3 Natural Communities of Special Concern 61

3.2.4 Habitat Connectivity..... 61

4.0 Results: Biological Resources, Discussion of Impacts and Mitigation 69

4.1 Natural Communities of Special Concern..... 69

4.2 Special-Status Plant Species 69

4.2.1 Project Impacts 69

4.3 Special-Status Animal Species..... 70

4.3.1 Project Impacts 70

4.3.2 Mitigation Measures 72

4.3.3 Compensatory Mitigation 74

4.3.4 Cumulative Impacts 74

4.4	Jurisdictional Areas	74
4.5	Habitat Connectivity.....	75
4.5.1	Project Impacts	75
4.6	Local Tree Ordinance.....	76
4.6.1	Project Impacts	76
4.6.2	Mitigation Measures.....	76
4.6.3	Compensatory Mitigation.....	77
5.0	Conclusions and Regulatory Determination	79
5.1	Federal Endangered Species Act Consultation Summary	79
5.2	California Endangered Species Act Summary.....	79
5.3	Regulatory Permits.....	79
5.4	Invasive Plant Species.....	79
5.5	Migratory Bird Treaty Act.....	79
6.0	References	81

TABLES

Table 3-1. Listed, Proposed, and Special-Status Plant Species Potentially Occurring or Known to Occur in the Vicinity of the Biological Study Area..... 49

Table 3-2. Listed, Proposed, and Special-Status Animal Species Potentially Occurring or Known to Occur in the Vicinity of the Biological Study Area 63

FIGURES

Figure 1-1. Project Location and Regional Vicinity 5

Figure 1-2. Project Study Area..... 7

Figure 2-1. Biological Study Area Index Map 19

Figure 2-2. Biological Study Area Detail Map 1 21

Figure 2-3. Biological Study Area Detail Map 2..... 23

Figure 2-4. Biological Study Area Detail Map 3..... 25

Figure 2-5. Biological Study Area Detail Map 4..... 27

Figure 2-6. Biological Study Area Detail Map 5..... 29

Figure 3-1. United States Geological Survey Soils Map..... 33

Figure 3-2. Vegetation Communities and Land Cover Types in the Biological Study Area (Detail Map 1) 37

Figure 3-3. Vegetation Communities and Land Cover Types in the Biological Study Area (Detail Map 2) 39

Figure 3-4. Vegetation Communities and Land Cover Types in the Biological Study Area (Detail Map 3) 41

Figure 3-5. Vegetation Communities and Land Cover Types in the Biological Study Area (Detail Map 4) 43

Figure 3-6. Vegetation Communities and Land Cover Types in the Biological Study Area (Detail Map 5) 45

APPENDICES

- Appendix A: Literature Review
- Appendix B: List of Plant and Animal Species Observed in the Biological Study Area
- Appendix C: Site Photographs

ACRONYMS

AMSL	above mean sea level
BSA	biological study area
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFP	California Fully Protected
CFR	Code of Federal Regulations
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
CWA	Clean Water Act
FC	Federal Candidate
FE	Federally Endangered
FT	Federally Threatened
IPaC	Information for Planning and Consultation
LAUS	Los Angeles Union Station
MBTA	Migratory Bird Treaty Act
Metro	Los Angeles County Metropolitan Transportation Authority
No.	number
project	Link Union Station Project
ROW	right-of-way
RWQCB	Regional Water Quality Control Board
SE	State Endangered
ST	State Threatened
SSC	species of special concern
USACE	United States Army Corps of Engineers
U.S. EPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service

ES.0 Executive Summary

This Natural Environment Study (Minimal Impacts) includes an evaluation of potential impacts on biological resources, utilizing the biological study area (BSA) that encompasses the maximum extent of physical disturbance associated with the proposed project and build alternative. This Natural Environment Study (Minimal Impacts) identifies potential impacts based on literature searches and a general biological resources survey conducted in 2015. Based on the results of the reconnaissance-level biological resources survey and habitat assessment performed to document existing conditions within the BSA, the area that encompasses the maximum extent of physical disturbance associated with the proposed project or build alternative consists primarily of developed land uses, ornamental plantings, and disturbed habitat.

No impacts are anticipated to occur on any federally or state-listed or candidate plant or animal species, other special-status plant species, natural communities of special concern, or areas potentially subject to United States (U.S.) Army Corps of Engineers (USACE) and/or California Department of Fish and Wildlife (CDFW) jurisdiction. Implementation of the proposed project or build alternative may result in impacts on two California species of special concern (SSC) animal species (western mastiff bat and western yellow bat), as well as maternity bat roost sites, nesting birds provided protection under the federal Migratory Bird Treaty Act (MBTA), and trees protected under the City of Los Angeles Municipal Code. Temporary and permanent impacts would only occur on urban/developed areas and disturbed habitat. Mitigation measures in the form of preconstruction surveys for roosting bats, nesting birds, and protected trees are proposed to reduce potential impacts on biological resources. Upon implementation of mitigation measures, impacts on protected biological resources would be reduced to a level less than significant. No significant impacts on biological resources would occur.

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1.0 Introduction

The Los Angeles County Metropolitan Transportation Authority (Metro) is proposing the Link Union Station Project (project) to transform Los Angeles Union Station (LAUS) from a “stub-end tracks station” into a “run-through tracks station” with a new passenger concourse that would improve the efficiency of the station and accommodate future growth and transportation demands in the region

1.1 Project Location and Study Area

LAUS is located at 800 Alameda Street in the City of Los Angeles, California. LAUS is bounded by US-101 to the south, Alameda Street to the west, Cesar Chavez Avenue to the north, and Vignes Street to the east. Figure 1-1 depicts the regional location and general vicinity of LAUS.

Figure 1-2 depicts the project study area, which encompasses the extent of environmental study associated with potential direct, indirect, and cumulative impacts from implementation of the project. The project study area includes three main segments (Segment 1: Throat Segment, Segment 2: Concourse Segment, and Segment 3: Run-Through Segment). The existing conditions within each segment are summarized north to south below.

- **Segment 1: Throat Segment** – This segment, known as the LAUS throat, includes the area north of the platforms, from Main Street at the north to Cesar Chavez Avenue at the south. In the throat segment, all arriving and departing trains traverse five lead tracks into and out of the rail yard, except for one location near the Vignes Street Bridge where the tracks reduce to four lead tracks. Currently, special track work consisting of multiple turnouts and double-slip switches are used in the throat to direct trains into and out of the appropriate assigned terminal platform tracks.
- **Segment 2: Concourse Segment** – This segment is between Cesar Chavez Avenue and US-101 and includes LAUS, the rail yard, the Garden Tracks (stub-end tracks where private train cars are currently stored, just north of the platforms and adjacent to the existing Gold Line aerial guideway), the East Portal building, the baggage handling building with aboveground parking areas and access roads, the ticketing/waiting halls, and the pedestrian passageway with connecting ramps and stairways below the rail yard.
- **Segment 3: Run-Through Segment** – This segment is south of LAUS and extends east/west from Alameda Street to the west bank of the Los Angeles River and north/south from Keller Yard to Control Point (CP) Olympic. This segment includes US-101, the Commercial Street/Ducommun Street corridor, Metro Red and Purple Lines Maintenance Yard (Division 20 Rail Yard), BNSF West Bank Yard, Keller Yard, the main line tracks on the west bank of the Los Angeles River, from Keller Yard to CP Olympic, and the “Amtrak Lead Track” connecting the main line tracks with Amtrak’s Los Angeles Maintenance Facility. Businesses within the run-through segment are primarily industrial and manufacturing related.

The project study area has a dense street network ranging from major highways to local city streets. The roadways within the project study area include the El Monte Busway, US-101, Bolero Lane, Leroy Street, Bloom Street, Cesar Chavez Avenue, Commercial Street, Ducommun Street, Jackson Street, East Temple Street, Banning Street, First Street, Alameda Street, Garey Street, Vignes Street, Main Street, Aliso Street, Avila Street, Bauchet Street, and Center Street.

1.2 Proposed Project Overview

The proposed project components are summarized north to south below.

- **Throat and Elevated Rail Yard** – The proposed project includes subgrade and structural improvements in Segment 1 of the project study area (throat segment) to increase the elevation of the tracks leading to the rail yard. The proposed project includes the addition of one new lead track in the throat segment for a total of six lead tracks to facilitate enhanced operations for regional/intercity rail service providers (Metrolink/Amtrak) and accommodate the planned High-Speed Rail (HSR) system within a shared track alignment. Regional/intercity and HSR trains would share the two western lead tracks in the throat segment. The rail yard would be elevated approximately 15 feet. New passenger platforms with individualized canopies would be constructed on the elevated rail yard, with an underlying assumption that the platform infrastructure and associated vertical circulation elements (stairs, escalators, and elevators) would be modified at a later date to accommodate the planned HSR system. The existing railroad bridges in the throat segment at Vignes Street and Cesar Chavez Avenue would also be reconstructed. North of CP Chavez, the proposed project also includes safety improvements at the Main Street public at-grade crossing on the west bank of the Los Angeles River (medians, restriping, signals, and pedestrian and vehicular gate systems) to facilitate future implementation of a quiet zone by the City of Los Angeles.
- **Above-Grade Passenger Concourse with New Expanded Passageway** – The proposed project includes an above-grade passenger concourse with new expanded passageway in Segment 2 of the project study area (concourse segment). The above-grade passenger concourse with new expanded passageway would include space dedicated for passenger circulation, waiting areas, ancillary support functions (back-of-house uses, baggage handling, etc.), transit-serving retail, office/commercial uses, and open spaces and terraces. The new passenger concourse would create an opportunity for an outdoor, community-oriented space and enhance Americans with Disabilities Act accessibility at LAUS. The elevated portion of the above-grade passenger concourse would be located above the rail yard, approximately 90 feet above the existing grade with new plazas east and west of the elevated rail yard (East and West Plazas). The new expanded passageway would be located below the rail yard to provide additional passenger travel-path convenience and options. Amtrak ticketing and baggage check-in services would occur at two locations at the east and west ends of LAUS, and new carousels would be constructed within the new expanded passageway. The above-grade passenger concourse includes a canopy over the West Plaza up to 70 feet in height, with individual canopies that would extend up to 25 feet over each platform. New vertical circulation elements would also be constructed throughout the concourse to enhance passenger movements

throughout LAUS while meeting Americans with Disabilities Act and National Fire Protection Association platform egress code requirements.

- **Run-Through Tracks** – The proposed project includes up to 10 new run-through tracks (including a new loop track) south of LAUS in Segment 3 of the project study area (run-through segment). The run-through tracks would facilitate connections for regional/intercity rail trains and HSR trains from LAUS to the main line tracks on the west bank of the Los Angeles River. A “common” viaduct/deck over US-101 and embankment south of US-101, from Vignes Street to Center Street, would be constructed wide enough to support regional/intercity rail run-through service, and future run-through service for the planned HSR system.

The proposed project would also require modifications to US-101 and local streets (including potential street closures and geometric modifications); railroad signal, positive train control, and communications-related improvements; modifications to the Gold Line light rail platform and tracks; modifications to the main line tracks on the west bank of the Los Angeles River; modifications to Keller Yard and BNSF West Bank Yard (First Street Yard); modifications to the Amtrak lead track; new access roadways to the railroad right-of-way (ROW); additional ROW; new utilities; utility relocations, replacements, and abandonments; and new drainage facilities/water quality improvements.

1.3 Build Alternative Overview

The primary differences between the proposed project and the build alternative are related to the lead tracks north of LAUS and the new passenger concourse. Compared to the proposed project, the build alternative includes the following:

- **Dedicated Lead Tracks North of LAUS** – The build alternative includes reconstruction of the throat, with two new lead tracks that would be located outside of the existing railroad ROW, facilitating a dedicated track alignment, with a total of seven lead tracks. Reconfiguration of Bolero Lane and Leroy Street would also be required.
- **At-Grade Passenger Concourse** – The build alternative includes an at-grade passenger concourse below the rail yard.

All other infrastructure elements are similar to the proposed project. The components of the build alternative are described north to south below.

- **Throat and Elevated Rail Yard** – The build alternative accommodates future HSR trains on dedicated lead tracks in the throat segment. The build alternative includes the addition of two new lead tracks for a total of seven lead tracks in the throat segment (with future HSR trains and some express/intercity services using the two western dedicated lead tracks and most regional/intercity trains using the five eastern lead tracks). The rail yard would be elevated approximately 15 feet. New passenger platforms with a grand canopy covering the elevated rail yard would be constructed, with an underlying assumption that the platform infrastructure and associated vertical circulation elements (stairs, escalators, and elevators) would be modified at a later date to accommodate the

planned HSR system. The existing railroad bridges in the throat segment at Vignes Street and Cesar Chavez Avenue would also be reconstructed under the build alternative. North of CP Chavez, the build alternative also includes safety improvements at the Main Street public at-grade crossing on the west bank of the Los Angeles River (medians, restriping, signals, and pedestrian and vehicular gate systems) to facilitate future implementation of a quiet zone by the City of Los Angeles.

- **At-Grade Passenger Concourse** – The build alternative includes a new at-grade passenger concourse that would include space dedicated for passenger circulation, waiting areas, ancillary support functions (back-of-house uses, baggage handling, etc.), transit-serving retail, office/commercial uses, and open spaces and terraces. The at-grade passenger concourse would also create an opportunity for an outdoor, community-oriented space and enhanced Americans with Disabilities Act accessibility. The at-grade passenger concourse would be constructed below the elevated rail yard. Amtrak ticketing and baggage check-in services would occur at a centralized location where new carousels would be constructed at the concourse level. The at-grade passenger concourse also includes new plazas east and west of the elevated rail yard (East and West Plazas), and a grand canopy that would extend up to 70 feet above the elevated rail yard and West Plaza. New vertical circulation elements would also be constructed throughout the concourse to enhance passenger movements throughout LAUS while meeting Americans with Disabilities Act and National Fire Protection Association platform egress code requirements.
- **Run-Through Tracks** – The build alternative includes up to 10 new run-through tracks (including a new loop track) in the run-through segment. All infrastructure south of LAUS is the same as described above for the proposed project.

The build alternative would also require modifications to US-101 and local streets (including potential street closures and geometric modifications); railroad signal, positive train control, and communications-related improvements; modifications to the Gold Line light rail platform and tracks; modifications to the main line tracks on the west bank of the Los Angeles River; modifications to Keller Yard and BNSF West Bank Yard (First Street Yard); modifications to the Amtrak lead track; new access roadways to the railroad ROW; additional ROW; new utilities; utility relocations, replacements, and abandonments; and new drainage facilities/water quality improvements.

Figure 1-1. Project Location and Regional Vicinity



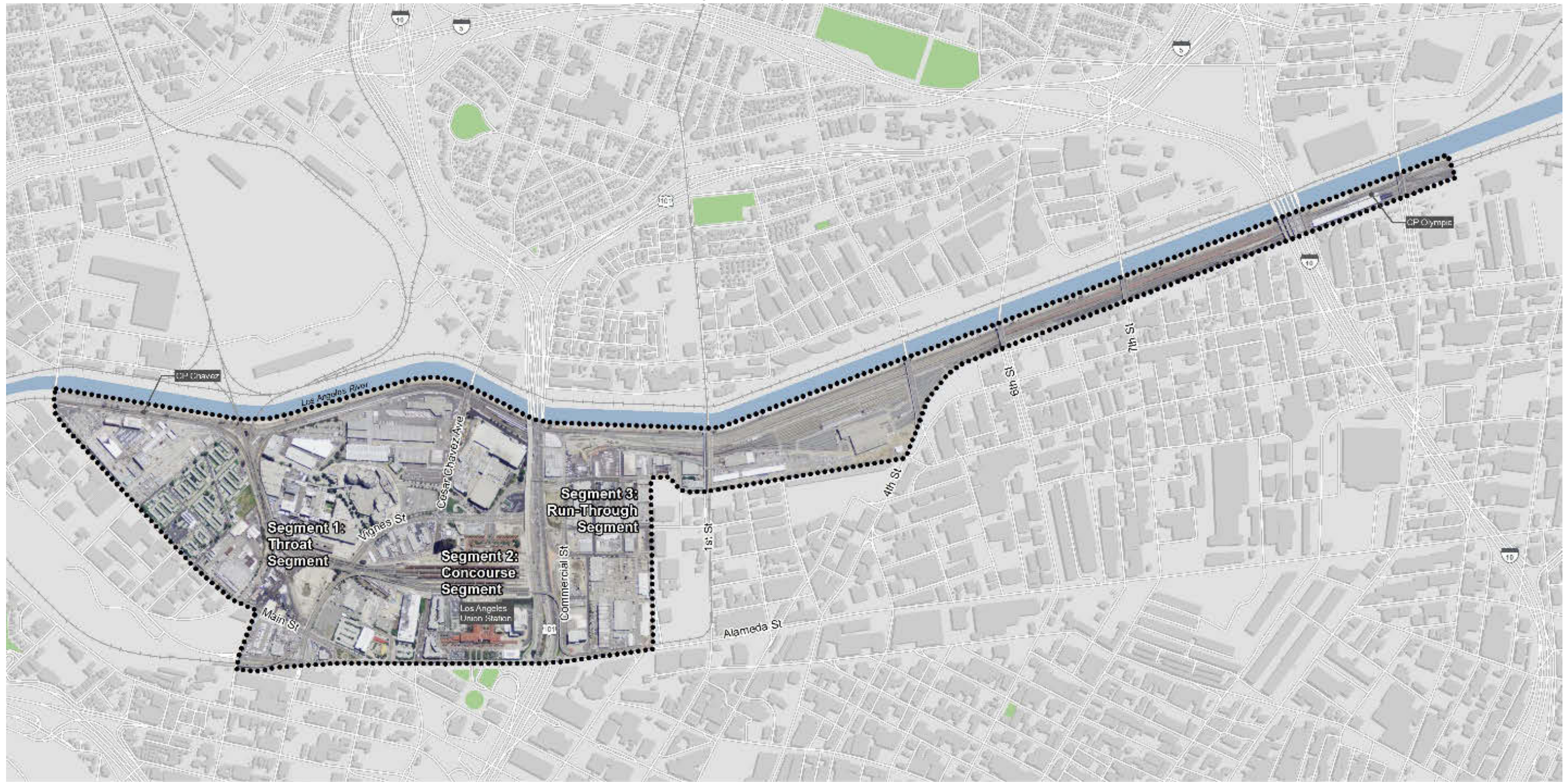
LEGEND
● Project Location

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Figure 1-2. Project Study Area



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Project Study Area

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2.0 Study Methods

2.1 Federal Laws and Regulations

2.1.1 Federal Endangered Species Act

The Endangered Species Act protects federally threatened and endangered plants and animals and their critical habitat. Impacts to federally listed species would require consultation with the U.S. Fish and Wildlife Service (USFWS), which administers the Endangered Species Act for all terrestrial species. A Section 7 consultation applies to projects directly undertaken by a federal agency or private projects requiring a federal permit or approval.

2.1.2 Migratory Bird Treaty Act

The MBTA provides special protection for migratory families of birds (i.e., those avian species that winter south of the U.S. but breed within the U.S.) by regulating hunting or trade. The MBTA prohibits anyone to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 Code of Federal Regulations (CFR) 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). Take is defined in 50 CFR 10.12 as, “[t]ake means to pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture or collect.” A December 22, 2017, Department of Interior Memorandum provides additional guidance, concluding that the MBTA’s “prohibitions on pursuing, hunting, taking, capturing, killing, or attempting to do the same apply only to affirmative actions that have as their purpose the taking or killing of migratory birds, their nests, or their eggs” (U.S. Department of the Interior 2017). Such activity is potentially punishable by fines and/or imprisonment. The use of families as opposed to individual species within the act means that numerous non-migratory birds are extended protection under the MBTA. Most nesting birds are covered by the MBTA.

2.1.3 Clean Water Act – Section 404 (United States Army Corps of Engineers)

Pursuant to Section 404 of the Clean Water Act (CWA) regulates the discharge (temporary or permanent) of dredged or fill material into waters of the U.S., including wetlands. A discharge of fill material includes, but is not limited to, grading, placing riprap for erosion control, pouring concrete, and stockpiling excavated material into waters of the U.S. Activities that generally do not involve a regulated discharge (if performed specifically in a manner to avoid discharges) include driving pilings, performing certain drainage channel maintenance activities, constructing temporary mining and farm/forest roads, and excavating without stockpiling.

The “Clean Water Rule: Definition of ‘Waters of the United States” was published in the *Federal Register* on June 29, 2015. The rule became effective August 28, 2015; however, after numerous lawsuits were filed challenging the regulation, the U.S. Court of Appeals for the Sixth Circuit issued a nationwide stay of the 2015 Final Clean Water Rule. The U.S. Environmental Protection Agency (U.S. EPA) and USACE issued a

joint memorandum on November 16, 2015, that stated the agencies will “implement the prior regulatory definition of ‘waters of the U.S.’ “as clarified by the 2008 *Rapanos* Guidance. The memorandum also stated that the “agencies should follow the 2007 Army-EPA joint memorandum on coordination as modified by the January 2008 USACE memorandum” (U.S. EPA and USACE 2007; USACE 2008a).

Subsequently, in response to “Executive Order 13778 of February 28, 2017, Restoring the Rule of Law, Federalism, and Economic Growth by Reviewing the ‘Waters of the United States’ Rule,” USACE and U.S. EPA published a proposed rule to rescind the 2015 Final Clean Water Rule and recodify the regulatory text that existed prior to the 2015 defining rule “waters of the U.S.” (*Federal Register* 82 (41), 12497, March 3, 2017). This was to be followed by a public notice-and-comment rulemaking in which the agencies would conduct a substantive reevaluation of the definition of “waters of the U.S.” (*Federal Register* 83 (134), 32227, July 12, 2018). U.S. EPA and USACE also issued a final rule adding a February 6, 2020, applicability date to the 2015 Final Clean Water Rule (*Federal Register* 83 (25), 5201, February 6, 2018), which further clarifies that agencies are to administer the regulations in place prior to the 2015 Final Clean Water Rule until February 6, 2020, or until a new rule goes into effect.

The proposed project and build alternative are located within the USACE Los Angeles District.

Waters of the United States

Prior to publication of the 2015 Final Clean Water Rule detailed above, the term “waters of the U.S.” is defined in USACE regulations at 33 CFR Part 328.3(a) as:

- (1) All waters which 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
- (2) All interstate waters, including interstate wetlands
- (3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters
 - (i) Which are or could be used by interstate or foreign travelers for recreation or other purposes
 - (ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce
 - (iii) Which are used or could be used for industrial purpose by industries in interstate commerce
- (4) All impoundments of waters otherwise defined as waters of the U.S. under the definition
- (5) Tributaries of waters identified in paragraphs (a) (1) through (4) of this section
- (6) The territorial seas

- (7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1) through (6) of this section
- (8) Waters of the U.S. do not include prior converted cropland

The limits of USACE jurisdiction in non-tidal waters extends to the ordinary high water mark, which is defined at 33 CFR 328.3(e) as:

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

Wetlands

The term wetlands (a subset of “waters of the U.S.”) is defined at 33 CFR 328.3(b) as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support...a prevalence of vegetation typically adapted for life in saturated soil conditions.” In 1987, USACE published a manual to guide its field personnel in determining jurisdictional wetland boundaries followed by the Arid West Region supplement in 2008 (Environmental Laboratory 1987). The methodology set forth in the 1987 Wetland Delineation Manual and the Arid West Region supplement generally requires that to be considered a wetland, the vegetation, soils, and hydrology of an area need to exhibit at least minimal hydric characteristics. While the manual provides great detail in methodology and allows for varying special conditions, a wetland should normally meet each of the following three criteria:

1. The plant community must be determined to be hydrophytic based on: (1) the dominance test applied using the 50/20 rule¹; or (2) where the vegetation fails the dominance test and wetland hydrology and hydric soils are present, vegetation is determined to be hydrophytic using the Prevalence Index test² based upon the indicator status (i.e., rated as facultative or wetter) in the *National List of Plant Species that Occur in Wetlands*);
2. Soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation (e.g., redoximorphic features with a matrix of low chroma indicating a relatively consistent fluctuation between aerobic and anaerobic conditions); and
3. Hydrologic characteristics must indicate that the ground is saturated to within 12 inches of the surface for a sufficient period to cause: (1) the formation of hydric soils; and (2) establishment of a hydrophytic plant community. A positive test for wetland hydrology is based on the presence of one primary or two secondary indicators.

¹ If a particular species accounts for more than 50 percent of the total coverage of vegetation in the stratum or for at least 20 percent of the total coverage in the stratum where the species was found that species is defined as dominant.

² A Prevalence Index is calculated using wetland indicator status and relative abundance for each vascular plant species present.

Supreme Court Decisions

Solid Waste Agency of North Cook County

On January 9, 2001, the Supreme Court of the U.S. issued a decision on *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers, et al.* with respect to whether USACE could assert jurisdiction over isolated waters. The Solid Waste Agency of North Cook County ruling stated that USACE does not have jurisdiction over “non-navigable, isolated, intrastate” waters.

Rapanos/Carabell

In the Supreme Court cases of *Rapanos v. United States* and *Carabell v. United States* (herein referred to as *Rapanos*), the court attempted to clarify the extent of USACE jurisdiction under the CWA (USACE 2008a). The nine Supreme Court justices issued five separate opinions (one plurality opinion, two concurring opinions, and two dissenting opinions) with no single opinion commanding a majority of the court. In light of the *Rapanos* decision, USACE will assert jurisdiction over traditional navigable waters, wetlands adjacent to traditional navigable waters, non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months) and wetlands that directly abut such tributaries. USACE will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a traditional navigable water: non-navigable tributaries that are not relatively permanent, wetlands adjacent to non-navigable tributaries that are not relatively permanent and wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary.

Flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary indicate whether they significantly affect the chemical, physical, and biological integrity of downstream traditional navigable waters. Analysis of potentially jurisdictional streams includes consideration of hydrologic and ecologic factors. The consideration of hydrological factors includes volume, duration, and frequency of flow, proximity to traditional navigable waters, size of watershed, average annual rainfall, and average annual winter snow pack. The consideration of ecological factors also includes the ability for tributaries to carry pollutants and flood waters to a traditional navigable water, the ability of a tributary to provide aquatic habitat that supports a traditional navigable water, the ability of wetlands to trap and filter pollutants or store flood waters, and maintenance of water quality.

According to a USACE guidance document (USACE 2008b), USACE generally will not assert jurisdiction over the following features: swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow) and ditches (including roadside ditches) excavated wholly in and draining only uplands that generally do not carry a relatively permanent flow of water.

2.1.4 Clean Water Act – Section 401 (Regional Water Quality Control Board)

The Regional Water Quality Control Board (RWQCB) regulates activities pursuant to Section 401(a)(1) of the CWA. Section 401 of the CWA specifies that certification from the state is required for any applicant

requesting a federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities that may result in any discharge into navigable waters.

Discharges of groundwater to surface waters resulting from construction dewatering activities would be covered under General National Pollutant Discharge Elimination System Permit Number (No.) CAG994004 from RWQCB. Such discharges must be demonstrated to not violate water quality objectives for the receiving waters (Los Angeles RWQCB 2013).

The proposed project and build alternative are located within the Los Angeles RWQCB Region 4 jurisdiction.

2.2 State and Local Laws and Regulations

2.2.1 California Endangered Species Act

Sections 2050 through 2098 of the Fish and Game Code outline the protection provided to California's rare, endangered, and threatened species. Section 2080 of the Fish and Game Code prohibits the taking of plants and animals listed under the California Endangered Species Act. Section 2081 established an incidental take permit program for state-listed species. In addition, the Native Plant Protection Act of 1977 (Fish and Game Code Section 1900 et seq.) gives CDFW authority to designate state endangered, threatened, and rare plants and provides specific protection measures for designated populations.

CDFW has also identified many SSCs. Species with this status have limited distribution or the extent of their habitats has been reduced substantially such that their populations may be threatened. Thus, their populations are monitored, and they may receive special attention during the environmental review process. While they do not have statutory protection, they may be considered rare under CEQA and are thereby warranted specific protection measures.

2.2.2 California Environmental Quality Act

Sensitive species that would qualify for listing but are not currently listed are afforded protection under CEQA. The CEQA Guidelines Section 15065 ("Mandatory Findings of Significance") identifies a substantial reduction in numbers of a rare or endangered species as a significant effect. CEQA Guidelines Section 15380 ("Rare or Endangered Species") provides for the assessment of unlisted species as rare or endangered under CEQA if the species can be shown to meet the criteria for listing. Plant species that are not federally or state listed but that occur on the California Native Plant Society's (CNPS) California Rare Plant Rank (CRPR) Lists 1 and 2 would typically be considered under CEQA. Plant populations of species meeting the CRPR List 3 and 4 designations that are locally significant may also warrant consideration under CEQA.

2.2.3 Lake and Streambed Alteration Program

The State of California regulates water resources under Section 1600-1616 of the California Fish and Game Code. Section 1602 states:

“An entity may not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.”

CDFW jurisdiction includes ephemeral, intermittent and perennial watercourses and extends to the top of the bank of a stream or lake if unvegetated, or to the limit of the adjacent riparian habitat located contiguous to the watercourse if the stream or lake is vegetated.

Projects that require a Streambed Alteration Agreement from CDFW may also require a permit from USACE under Section 404 of the CWA and a certification from RWQCB under Section 401 of the CWA. In these instances, the conditions of the Section 404 permit, Section 401 certification, and the Streambed Alteration Agreement may overlap.

The proposed project and build alternative are located in the CDFW South Coast Region jurisdiction.

2.2.4 Fully Protected Species

Sections 3500 to 5500 of the Fish and Game Code outline protection for fully protected species of mammals, birds, reptiles, amphibians, and fish. Species that are fully protected by these sections may not be taken or possessed at any time. CDFW cannot issue permits or licenses that authorize the “take” of any fully protected species, except under certain circumstances, such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock. Specific sections of the Fish and Game Code pertinent to the proposed project and build alternative include:

- Section 3503 (which prohibits the taking, possession, or needless destruction of the nest or eggs of any bird)
- Section 3503.5 (which prohibits the taking, possession, or destruction of any bird in the order *Falconiformes* or *Strigiformes* [birds-of-prey] or the taking, possession, or destruction of the nest or eggs of any such bird)
- Section 3513 (which prohibits the taking or possession of any migratory non-game bird as designated in the MBTA)

2.2.5 City of Los Angeles Local Tree Ordinance

The City of Los Angeles Ordinance No. 177404, Preservation of Protected Trees, of the city’s municipal code discourages the removal or relocation of protected trees. A protected tree is defined as any Southern California native tree species that measures 4 inches or more in cumulative diameter and 4.5 feet above

the ground level at the base of the tree. Protected tree species include oaks (*Quercus agrifolia*, *Quercus lobata*, and other tree oaks), Southern California black walnut (*Juglans californica* var. *californica*), western sycamore (*Platanus racemosa*), and California bay (*Umbellularia californica*). The term “removal” will include “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 part 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.”

2.2.6 City of Los Angeles General Plan

The Open Space and Conservation chapter of the General Plan includes conservation policies that seek ways to create and utilize open space, addressing matters of land use, urban form, and parks development. Policies include conservation and watershed development goals to protect, conserve, and enhance natural resources.

2.3 Studies Required

The purpose of the biological survey and subsequent analysis provided in this Natural Environment Study (Minimal Impacts) is summarized below.

- To characterize vegetation and habitats within the BSA
- To identify known or potential wildlife and fish migration corridors that may be affected by the proposed project or build alternative
- To identify wetlands and waters potentially under the jurisdiction of USACE and evaluate the need for USACE/RWQCB permits for impacts on waters of the U.S. or waters of the State
- To evaluate the need for a Streambed Alteration Agreement with CDFW for potential impacts on streambeds
- To identify the known or potential presence of federally listed special-status plant and wildlife species or designated critical habitat
- To identify the known or potential presence of California-listed special-status plant and wildlife species
- To identify sensitive species, including state species of concern, and other protections under federal and state regulations (i.e., fully protected species)

2.3.1 Definition of Biological Study Area

The BSA is the maximum area of physical disturbance associated with the proposed project and build alternative (Figure 2-1 through Figure 2-6). Because the proposed project and build alternative are located in an urban developed area with commercial, industrial, and residential properties, only areas that were

publically accessible were surveyed. The BSA was used as the study limit boundaries for the general biological survey.

2.3.2 Literature Review

A list of special-status species and habitats that have the potential to occur within the vicinity of the BSA was prepared using information provided by the CDFW's California Natural Diversity Database RareFind 5 program (CDFW 2018) and the CNPS Inventory of Rare and Endangered Plants of California (CNPS 2018). Searches of these databases were conducted for the nine U.S. Geological Survey quadrangles surrounding the BSA, which include the Los Angeles, Hollywood, Burbank, Pasadena, El Monte, Mount Wilson, Whittier, South Gate, and Inglewood, California U.S. Geological Survey 7.5-minute quadrangles. A USFWS Information for Planning and Conservation (IPaC) Trust Resource Report Official Species List, valid for 90 days, was generated for the BSA on April 2, 2018 (USFWS 2018). In addition, a list of threatened or endangered species under jurisdiction of the National Oceanic and Atmospheric Administration's National Marine Fisheries Service was received on October 3, 2016. Appendix A includes the California Natural Diversity Database, CNPS, IPaC, and National Marine Fisheries Service records search results and species lists.

2.3.3 General Surveys and Habitat Assessments

HDR biologists conducted a general biological survey of the BSA on February 19, 2015, between the hours of 9 AM and noon. Weather conditions were conducive for surveying, with temperatures ranging between 60 and 70 degrees Fahrenheit, cloudy to clear skies, and winds from 0 to 2 miles per hour. All plant and wildlife species observed during the biological survey are included in Appendix B. General site photographs are located in Appendix C.

Vegetation was classified using the Holland system of natural communities as described in *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986). Botanical species discussed in this report follow both Latin and common names taken from the online Jepson eFlora (Jepson Flora Project 2018).

Wildlife species were detected by sight and/or specific calls. Binoculars were used to aid in the identification of wildlife species, potential nest locations, and foraging areas.

2.3.4 Botanical Surveys

No focused botanical surveys were conducted due to the lack of suitable habitat present within, and in the vicinity of, the BSA. All plant species identified during the general biological survey are included in Appendix B.

2.3.5 Wildlife Surveys

No focused wildlife surveys were conducted for federally or state-listed species due to the lack of suitable habitat for such species within or in the vicinity of the BSA. However, the BSA does contain marginally

suitable habitat for two bat SSCs; therefore, preconstruction surveys to determine the presence/absence of these species are recommended (Section 4.3.2). All wildlife species observed during the general biological survey were documented and are included in Appendix B.

2.4 Agency Coordination and Professional Contacts

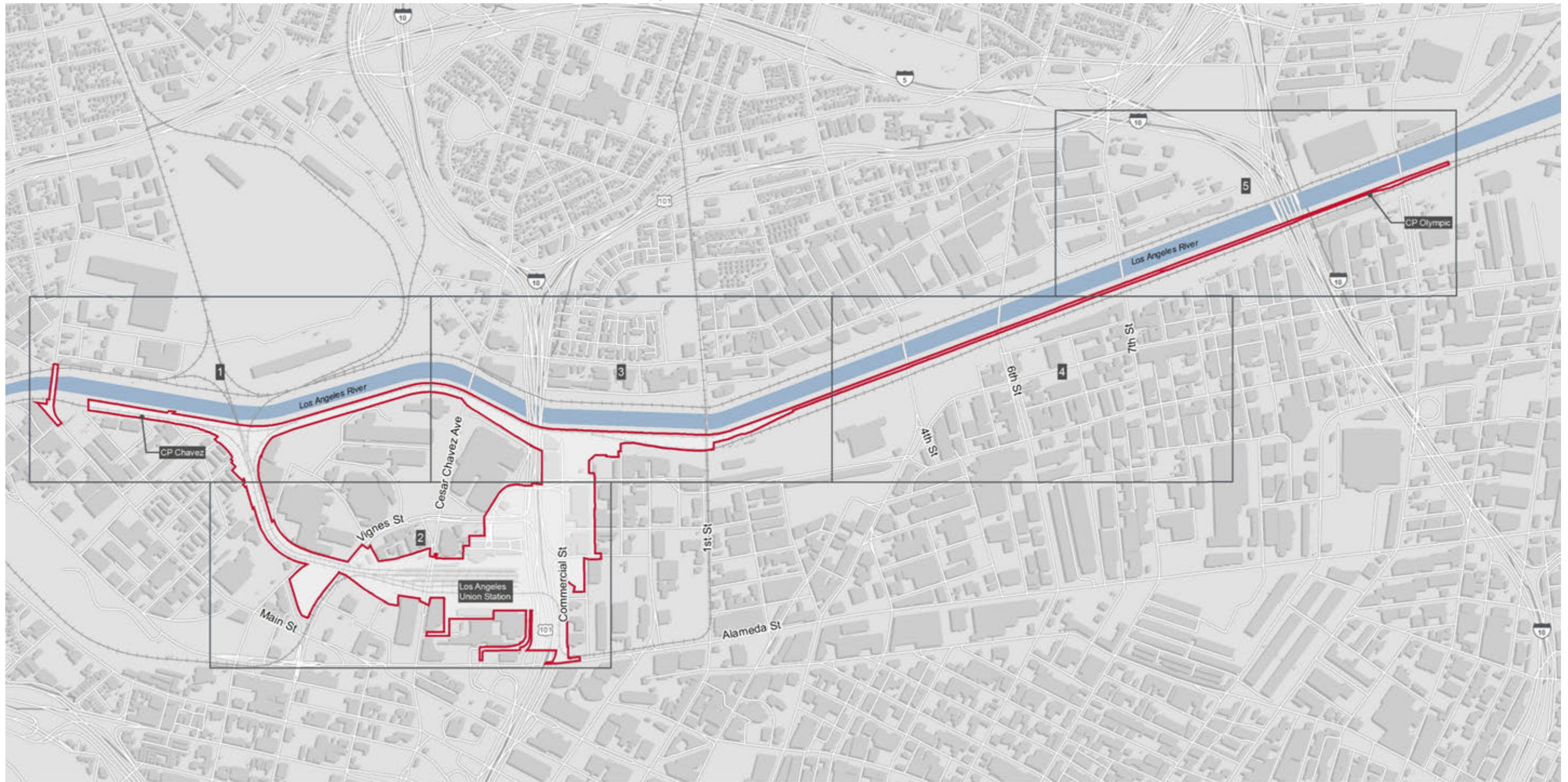
A USFWS official species list was acquired using the online IPaC tool on April 2, 2018. The IPaC tool provides a list of proposed, threatened, or endangered species and critical habitat potentially occurring in the vicinity of a project. This list is provided in Appendix A.

2.5 Limitations That May Influence Results

The BSA is located within an urbanized area with industrial, commercial, and residential development. Planted non-native (ornamental) species of trees and shrubs were identified only to the extent that the field surveyors were able to identify them in the field. Because plants were located on private property, samples were not collected to use for later identification. However, most of the inaccessible areas appeared to include disturbed habitat dominated by non-native plants and would not be expected to provide suitable habitat for sensitive plant species. There are no limitations that would severely influence the results or substantially alter the findings of the general biological survey.

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Figure 2-1. Biological Study Area Index Map



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[Red Outline] Biological Study Area
[Black Outline] Detailed Map Index

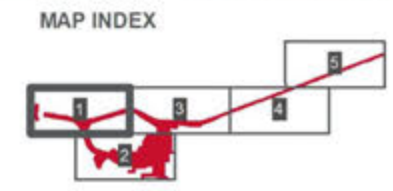
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Figure 2-2. Biological Study Area Detail Map 1



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[Red Outline] Biological Study Area



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Figure 2-3. Biological Study Area Detail Map 2



LEGEND
[Red Outline] Biological Study Area



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Figure 2-4. Biological Study Area Detail Map 3



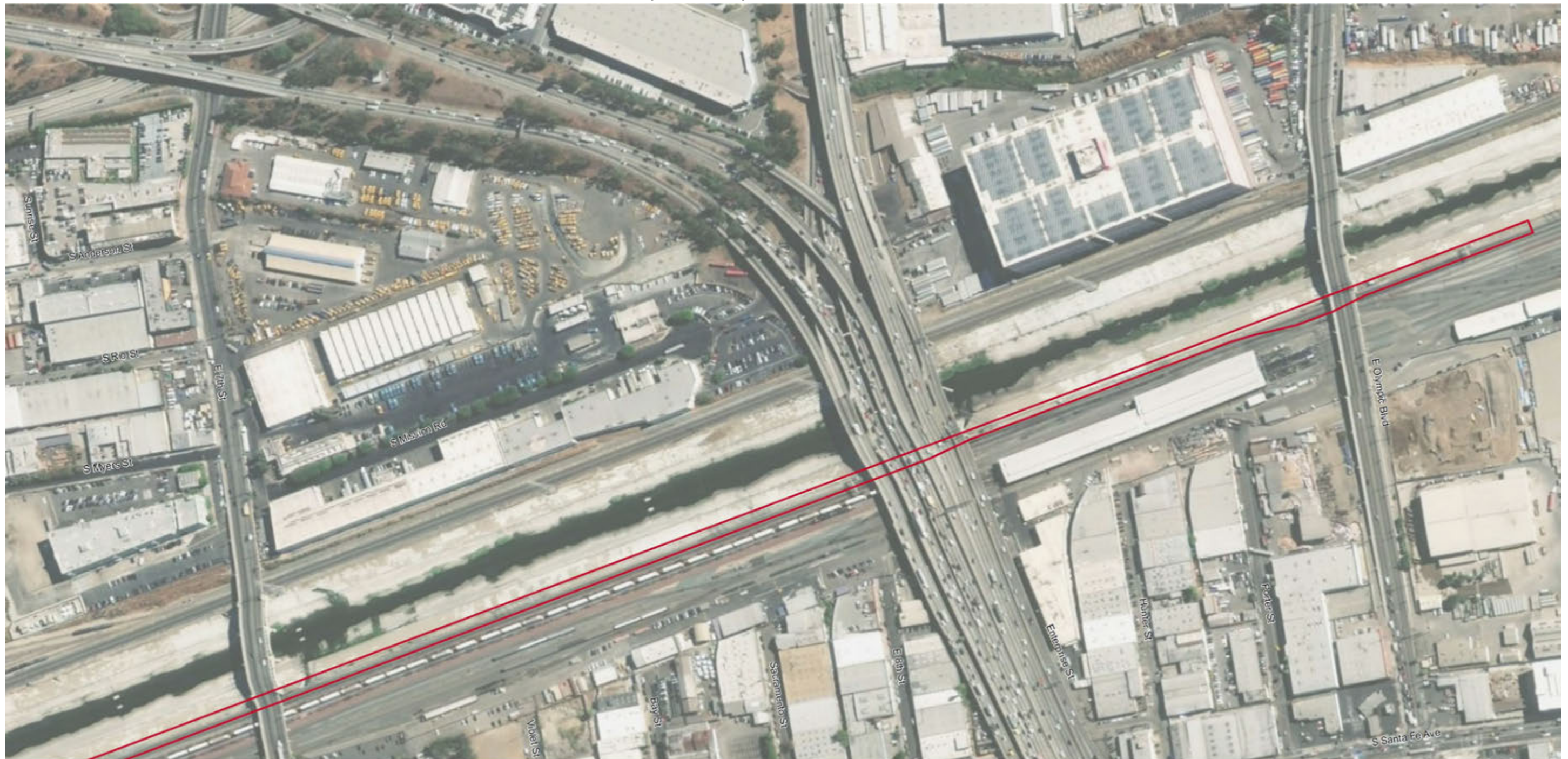
LEGEND
[Red Outline] Biological Study Area



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Figure 2-6. Biological Study Area Detail Map 5



LEGEND
 Biological Study Area



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3.0 Results: Environmental Setting

3.1 Existing Biological and Physical Conditions

The proposed project and build alternative are located in Downtown Los Angeles. Land uses immediately surrounding the BSA are commercial, industrial, and residential. Vegetation in the BSA consists primarily of urban ornamental (non-native) landscaping, as well as native and non-native plant species characteristic of disturbed areas.

3.1.1 Biological Study Area

The BSA occurs within an industrial, commercial, and residential area in the City of Los Angeles, Los Angeles County, California (Figure 2-1 through Figure 2-6).

3.1.2 Physical Conditions

Vegetation within the BSA was identified as disturbed and urban/developed habitat. The elevation within the BSA is approximately 312 feet (95 meters) above mean sea level (AMSL). The average annual rainfall for the City of Los Angeles is approximately 18.7 inches (U.S. Climate Data 2018). The average annual high temperature is 71.7 degrees Fahrenheit and the average annual low temperature is 55.9 degrees Fahrenheit (U.S. Climate Data 2018).

Soils

Soils within the BSA were identified using the Natural Resources Conservation Service's Web Soil Survey (U.S. Department of Agriculture 2018). The BSA supports one soil series, Hanford fine sandy loam, as described below (Figure 3-1).

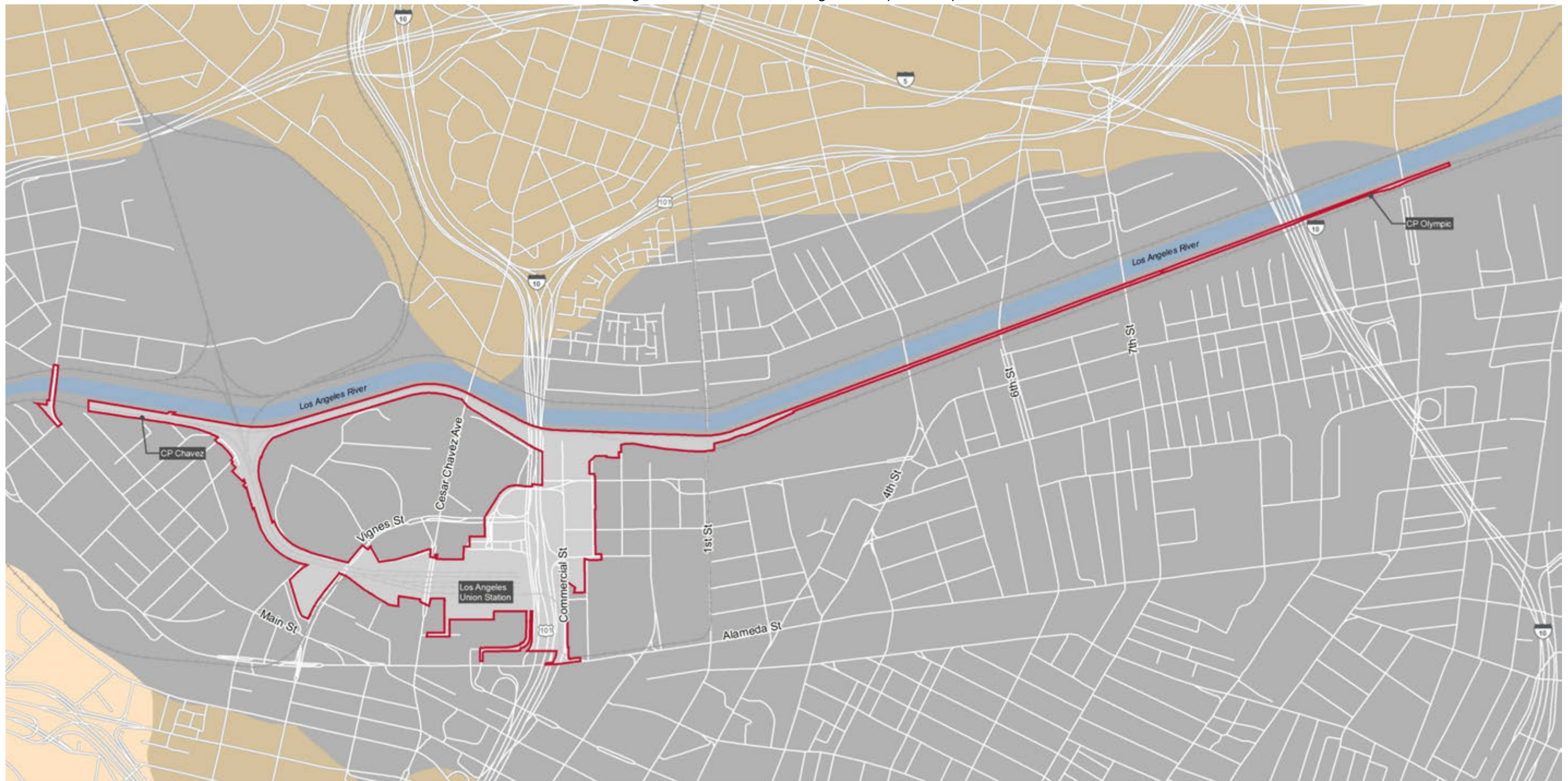
- *Hanford fine sandy loam, 0 to 15 percent slopes*— this soil type is slightly acid to neutral and usually occurs on stream bottoms, floodplains, and alluvial fans formed in deep, moderately coarse textured alluvium derived predominantly from granite. Hanford fine sandy loam occurs at elevations of less than 150 feet to 3,500 feet. These soils are very deep and well drained, with negligible to low runoff.

Hydrology

The proposed project and build alternative are located within the Los Angeles River Watershed, which encompasses approximately 834 square miles. The Los Angeles River spans from the Santa Monica Mountains to the Simi Hills in the east and from Santa Susana Mountain to the San Gabriel Mountains in the north. From the headwaters in the mountains, the Los Angeles River flows eastward to Griffith Park before turning south through Glendale Narrows and into San Pedro Bay near Long Beach. Large portions of the Los Angeles River are concrete-lined, including the section below the Main Street Bridge and other areas near the proposed project and build alternative.

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Figure 3-1. United States Geological Survey Soils Map



LEGEND
[Red Outline] Biological Study Area [Grey] Hanford Fine Sandy Loam
[Light Orange] Altamont Clay Loam [Tan] Ramona Loam

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3.1.3 Biological Conditions in the Biological Study Area

The BSA supports two vegetation community/land cover types identified as urban/developed and disturbed habitat (Figure 3-2 through Figure 3-6). Photographs of these vegetation community/land cover types are provided in Appendix C. Vegetation communities in this report generally follow Holland (1986) with updated scientific names as reported in the online Jepson eFlora (Jepson Flora Project 2018).

Urban/Developed (Holland Code 12000)

Urban/developed land occupies 108.1 acres within the BSA. According to Holland, urban/developed land is comprised of areas of intensive use with much of the land constructed upon or otherwise physically altered to an extent that native vegetation is no longer supported. Developed land is highly modified and characterized by permanent or semi-permanent structures, pavement, and unvegetated areas.

Developed areas, particularly residential developments and areas with landscaped vegetation, can provide moderate habitat value for wildlife. The planting and maintenance of shrubs, trees, ornamental plants, and lawns in residential, business, and park areas enhance this habitat for wildlife species that can coexist with humans. The moderate numbers of planted trees in the study area provide some habitat value for resident or migratory birds and may serve as nesting sites for such species.

Disturbed Habitat (Holland Code 11300)

Disturbed habitat occupies 5.7 acres within the BSA. Disturbed habitat is primarily used to identify areas of severe impacts on natural communities to the extent that they are no longer self-sustaining or functioning naturally. These areas have been previously physically disturbed but continue to retain a soil substrate. Disturbed areas consist of predominantly non-native, weedy species. This is not a natural community and generally does not provide habitat for wildlife or sensitive species. Disturbed habitat includes areas within the BSA that consist of partially paved areas with trash and are dominated by non-native vegetation. Only a few native plant species were observed within the BSA, including common horseweed (*Erigeron canadensis*), common sunflower (*Helianthus annuus*), lupine (*Lupinus* sp.), and jimsonweed (*Datura wrightii*). These native plants are typically more tolerant of disturbance than other native plant species.

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Figure 3-2. Vegetation Communities and Land Cover Types in the Biological Study Area (Detail Map 1)

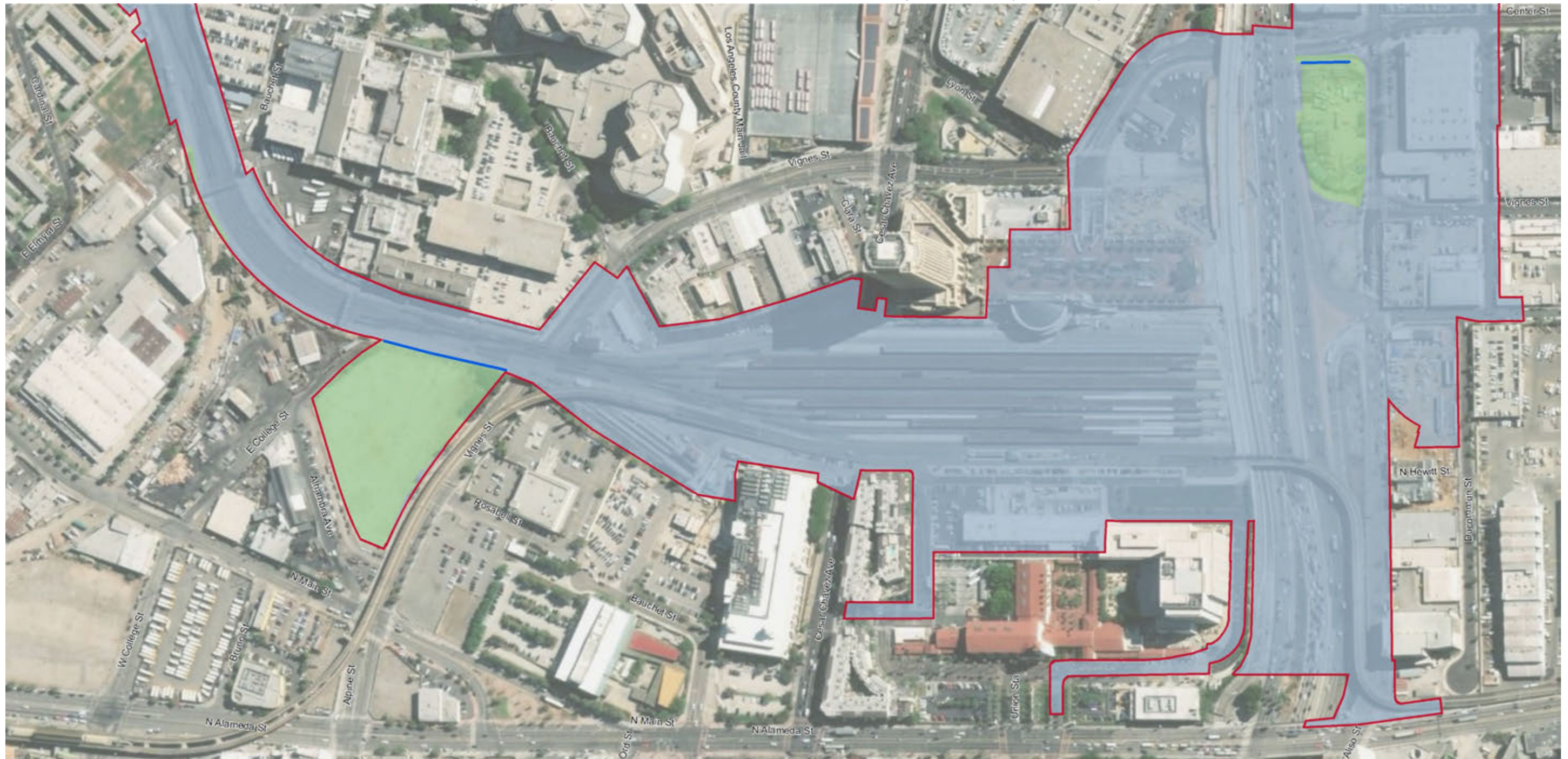


LEGEND
[Red Outline] Biological Study Area
[Blue Fill] Urban/Developed



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Figure 3-3. Vegetation Communities and Land Cover Types in the Biological Study Area (Detail Map 2)



LEGEND

- Biological Study Area
- Disturbed
- Urban/Developed
- Non-Jurisdictional Ditch

MAP INDEX

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Figure 3-4. Vegetation Communities and Land Cover Types in the Biological Study Area (Detail Map 3)



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 Biological Study Area
 Urban/Developed

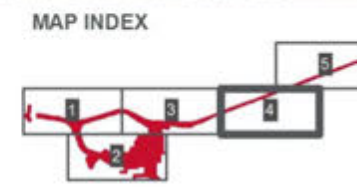


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Figure 3-5. Vegetation Communities and Land Cover Types in the Biological Study Area (Detail Map 4)



LEGEND
[Red outline] Biological Study Area
[Blue shaded] Urban/Developed



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Figure 3-6. Vegetation Communities and Land Cover Types in the Biological Study Area (Detail Map 5)



LEGEND

- Biological Study Area
- Urban/Developed

MAP INDEX

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3.2 Regional Species and Habitats of Concern

This section documents the potential occurrence of special-status plant and wildlife species and natural communities, species protected under the MBTA, and wildlife dispersal corridors or linkages within the BSA. While the BSA consists entirely of urban/developed land and disturbed habitat, surrounding areas support a variety of native vegetation communities in addition to developed areas. Information based on the literature review for the special-status species in the BSA is provided in this section.

3.2.1 Special-Status Plants

Special-status plants include those listed by USFWS as endangered, threatened, or candidates for listing by USFWS and CDFW and those considered sensitive by the CNPS (CRPR Lists 1, 2, and, in cases where plant populations are locally significant, CRPR Lists 3 and 4). The literature review indicated 37 special-status plant species with known occurrences within the 9 U.S. Geological Survey quadrangles surrounding the BSA (Appendix A). Eleven of these special-status plant species are federally and/or state-listed endangered, threatened, or candidate species.

Due to the lack of native, undisturbed habitat within the BSA, none of the special-status plants listed by USFWS and/or CDFW are expected to occur within the BSA. No special-status plants were observed within the BSA during the field visit, and none are expected to occur due to a lack of suitable soils and/or habitat or due to the BSA occurring outside of the known elevation range of the species. Further information on these species, including their status, habitat requirements, and potential for occurrence in the BSA, is summarized in Table 3-1.

3.2.2 Special-Status Animals

Special-status animals are species or subspecies listed as threatened, endangered, or being evaluated (proposed) for listing by USFWS or by CDFW and/or are considered sensitive by CDFW. A sensitive designation includes those listed as SSCs. In addition, nesting birds provided protection under the MBTA are considered special-status animals.

The literature review indicated 33 special-status wildlife species with known occurrences within the 9 U.S. Geological Survey quadrangles including and surrounding the BSA (Appendix A). Nine of these species are federally and/or state-listed as endangered or threatened, or proposed endangered or threatened, or are considered fully protected species by the State of California.

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Table 3-1. Listed, Proposed, and Special-Status Plant Species Potentially Occurring or Known to Occur in the Vicinity of the Biological Study Area

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
CARROT FAMILY		APIACEAE			
San Diego button-celery	<i>Eryngium aristulatum</i> var. <i>parishii</i>	Federal: FE State: SE CRPR: 1B.1	Annual/Perennial herb. Occurs in mesic soils in coastal scrub, valley and foothill grassland, and vernal pools from 66 to 2,034 feet (20 to 620 meters) AMSL. Blooms April through June.	Absent	Not Expected. The BSA does not support suitable soils or habitat.
SUNFLOWER FAMILY		ASTERACEAE			
Southern tarplant	<i>Centromadia parryi</i> ssp. <i>australis</i>	Federal: None State: None CRPR: 1B.1	Annual herb. Occurs in marshes and swamps, valley and foothill grassland, and vernal pools below 1,575 feet (480 meters) AMSL. Blooms May through November.	Absent	Not Expected. The BSA does not support suitable habitat.
Smooth tarplant	<i>Centromadia pungens</i> ssp. <i>laevis</i>	Federal: None State: None CRPR: 1B.1	Annual herb. Occurs in alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, and valley and foothill grassland below 2,100 feet (640 meters) AMSL. Blooms Apr through September.	Absent	Not Expected. The BSA does not support suitable soils or habitat.
Coulter's goldfields	<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Federal: None State: None CRPR: 1B.1	Annual herb. Occurs in coastal salt marshes and swamps, playas, and vernal pools below 4,000 feet (1,220 meters) AMSL. Blooms February through June.	Absent	Not Expected. The BSA does not support suitable habitat.

Table 3-1. Listed, Proposed, and Special-Status Plant Species Potentially Occurring or Known to Occur in the Vicinity of the Biological Study Area

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
White rabbit-tobacco	<i>Pseudognaphalium leucocephalum</i>	Federal: None State: None CRPR: 2B.2	Perennial herb. Occurs in sandy, gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian woodland below 6,900 feet (2,100 meters) AMSL. Blooms July through December.	Absent	Not Expected. The BSA does not support suitable soils or habitat.
San Bernardino aster	<i>Symphotrichum defoliatum</i>	Federal: None State: None CRPR: 1B.2	Perennial rhizomatous herb. Occurs near ditches, streams, and springs in cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, and valley and foothill grassland from 7 to 6,700 feet (2 to 2,040 meters) AMSL. Blooms July through November.	Absent	Not Expected. The BSA does not support suitable habitat.
Greata's aster	<i>Symphotrichum greatae</i>	Federal: None State: None CRPR: 1B.3	Perennial rhizomatous herb. Occurs in mesic soils in broadleaved upland forest, chaparral, cismontane woodland, lower montane coniferous forest, and riparian woodland from 985 to 6,595 feet (300 to 2,010 meters) AMSL. Blooms June through October.	Absent	Not Expected. The BSA does not support suitable soils or habitat and occurs below the known elevation range for this species.

Table 3-1. Listed, Proposed, and Special-Status Plant Species Potentially Occurring or Known to Occur in the Vicinity of the Biological Study Area					
Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
BARBERRY FAMILY	BERBERIDACEAE				
Nevin's barberry	<i>Berberis nevinii</i>	Federal: FE State: SE CRPR: 1B.1	Annual herb. Occurs in sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian scrub from 900 to 2,707 feet (274 to 825 meters) AMSL. Blooms February through June.	Absent	Not Expected. The BSA does not support suitable soils or habitat and occurs below the known elevation range for this species.
BORAGE FAMILY	BORAGINACEAE				
Brand's star phacelia	<i>Phacelia stellaris</i>	Federal: None State: None CRPR: 1B.1	Annual herb. Occurs in coastal dunes and scrub below 1,312 feet (400 meters) AMSL. Blooms March through June.	Absent	Not Expected. The BSA does not support suitable habitat.
MUSTARD FAMILY	BRASSICACEAE				
Gambel's water cress	<i>Nasturtium gambelii</i>	Federal: FE State: ST CRPR: 1B.1	Perennial rhizomatous herb. Occurs in freshwater or brackish marshes and swamps from 16 to 1,083 feet (5 to 330 meters) AMSL. Blooms April through October.	Absent	Not Expected. The BSA does not support suitable habitat.
PINK FAMILY	CARYOPHYLLACEAE				
Marsh sandwort	<i>Arenaria paludicola</i>	Federal: FE State: SE CRPR: 1B.1	Perennial stoloniferous herb. Occurs in sandy openings in freshwater or brackish marshes and swamps from 10 to 558 feet (3 to 170 meters) AMSL. Blooms May through August.	Absent	Not Expected. The BSA does not support suitable habitat.

Table 3-1. Listed, Proposed, and Special-Status Plant Species Potentially Occurring or Known to Occur in the Vicinity of the Biological Study Area					
Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
GOOSEFOOT FAMILY		CHENOPODIACEAE			
Coulter's saltbush	<i>Atriplex coulteri</i>	Federal: None State: None CRPR: 1B.2	Perennial herb. Found in alkaline or clay soils in coastal bluff scrub, coastal dunes, coastal scrub, and valley and foothill grassland from 10 to 1,510 feet (3 to 460 meters) AMSL. Blooms March through October.	Absent	Not Expected. The BSA does not support suitable soils or habitat.
Parish's brittlescale	<i>Atriplex parishii</i>	Federal: None State: None CRPR: 1B.1	Annual herb. Found in alkaline soils in chenopod scrub, playas, and vernal pools from 95 to 6,234 feet (29 to 1,900 meters) AMSL. Blooms June through October.	Absent	Not Expected. The BSA does not support suitable soils or habitat.
Davidson's saltscale	<i>Atriplex serenana</i> var. <i> davidsonii</i>	Federal: None State: None CRPR: 1B.2	Annual herb. Occurs in alkaline soils in coastal bluff scrub and coastal scrub from 33 to 656 feet (10 to 200 meters) AMSL. Blooms April through October.	Absent	Not Expected. The BSA does not support suitable soils or habitat.
MORNING-GLORY FAMILY		CONVOLVULACEAE			
Peruvian dodder	<i>Cuscuta obtusiflora</i> var. <i> glandulosa</i>	Federal: None State: None CRPR: 2B.2	Annual parasitic vine. Occurs in freshwater marshes and swamps from 50 to 980 feet (15 to 280 meters) AMSL. Blooms July through October.	Absent	Not Expected. The BSA does not support suitable habitat.

Table 3-1. Listed, Proposed, and Special-Status Plant Species Potentially Occurring or Known to Occur in the Vicinity of the Biological Study Area

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Lucky morning-glory	<i>Calystegia felix</i>	Federal: None State: None CRPR: 1B.1	Annual rhizomatous herb. Historically associated with wetland and marshy places but possibly in drier situations, as well. Possibly occurs in silty loam and alkaline soils in meadows and seeps and alluvial riparian scrub from 100 to 705 feet (30 to 215 meters). Blooms March through September.	Absent	Not Expected. The BSA does not support suitable soils or habitat.
STONECROP FAMILY	CRASSULACEAE				
Many-stemmed dudleya	<i>Dudleya multicaulis</i>	Federal: None State: None CRPR: 1B.2	Perennial herb. Occurs in clay soils in chaparral, coastal scrub, and valley and foothill grassland from 50 to 2,592 feet (15 to 790 meters) AMSL. Blooms April through July.	Absent	Not Expected. The BSA does not support suitable soils or habitat.
SEDGE FAMILY	CYPERACEAE				
California sawgrass	<i>Cladium californicum</i>	Federal: None State: None CRPR: 2B.2	Perennial rhizomatous herb. Occurs in meadows, seeps, marshes, and alkaline or freshwater swamps from 197 to 5,250 feet (60 to 1,600 meters) AMSL. Blooms June through September.	Absent	Not Expected. The BSA does not support suitable habitat.

Table 3-1. Listed, Proposed, and Special-Status Plant Species Potentially Occurring or Known to Occur in the Vicinity of the Biological Study Area					
Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
HEATH FAMILY		ERICACEAE			
San Gabriel manzanita	<i>Arctostaphylos glandulosa</i> ssp. <i>gabrielensis</i>	Federal: None State: None CRPR: 1B.2	Perennial evergreen shrub. Occurs in rocky chaparral from 1,952 to 4,922 feet (595 to 1,500 meters) AMSL. Blooms in March.	Absent	Not Expected. The BSA does not support suitable soils or habitat and occurs below the known elevation range for this species.
PEA FAMILY		FABACEAE			
Braunton's milkvetch	<i>Astragalus brauntonii</i>	Federal: FE State: None CRPR: 1B.1	Perennial herb. Occurs in recent burns or disturbed areas, usually sandstone with carbonate layers in chaparral, coastal scrub, and valley and foothill grassland from 13 to 2,100 feet (4 to 640 meters) AMSL. Blooms January through August.	Absent	Not Expected. The BSA does not support suitable soils or habitat.
Ventura marsh milkvetch	<i>Astragalus pycnostachyus</i> var. <i>lanosissimus</i>	Federal: FE State: SE CRPR: 1B.1	Perennial herb. Occurs in coastal dunes, coastal scrub, and the edges of coastal salt or brackish marshes and swamps below 115 feet (35 meters) AMSL. Blooms June through October.	Absent	Not Expected. The BSA does not support suitable habitat and occurs above the known elevation range for this species.
Coastal dunes milkvetch	<i>Astragalus tener</i> var. <i>titi</i>	Federal: FE State: SE CRPR: 1B.1	Annual herb. Often occurs in vernal mesic areas in sandy coastal bluff scrub, coastal dunes, and coastal prairie below 165 feet (50 meters) AMSL. Blooms March through May.	Absent	Not Expected. The BSA does not support suitable soils or habitat and occurs above the known elevation range for this species.

Table 3-1. Listed, Proposed, and Special-Status Plant Species Potentially Occurring or Known to Occur in the Vicinity of the Biological Study Area

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
MINT FAMILY		LAMIACEAE			
Southern mountains skullcap	<i>Scutellaria bolanderi</i> ssp. <i>austromontana</i>	Federal: None State: None CRPR: 1B.2	Perennial rhizomatous herb. Occurs in mesic soils in chaparral, cismontane woodland, and lower montane coniferous forest from 1,395 to 6,562 feet (425 to 2,000 meters) AMSL. Blooms June through August.	Absent	Not Expected. The BSA does not support suitable soils or habitat and occurs below the known elevation range for this species.
LILY FAMILY		LILIACEAE			
Slender mariposa lily	<i>Calochortus clavatus</i> var. <i>gracilis</i>	Federal: None State: None CRPR: 1B.2	Perennial bulbiferous herb. Occurs in chaparral, coastal scrub, and valley and foothill grassland from to 1,050 to 3,280 feet (320 to 1,000 meters) AMSL. Blooms March through November.	Absent	Not Expected. The BSA does not support suitable habitat and occurs below the known elevation range for this species.
Intermediate mariposa lily	<i>Calochortus weedii</i> var. <i>intermedius</i>	Federal: None State: None CRPR: 1B.2	Perennial bulbiferous herb. Occurs in rocky, calcareous soils in chaparral, coastal scrub, and valley and foothill grassland from 345 to 2,805 feet (105 to 855 meters) AMSL. Blooms May through July.	Absent	Not Expected. The BSA does not support suitable soils or habitat.

Table 3-1. Listed, Proposed, and Special-Status Plant Species Potentially Occurring or Known to Occur in the Vicinity of the Biological Study Area					
Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
MALLOW FAMILY	MALVACEAE				
Davidson's bush-mallow	<i>Malacothamnus davidsonii</i>	Federal: None State: None CRPR: 1B.2	Perennial deciduous shrub. Occurs in chaparral, cismontane woodland, coastal scrub, and riparian woodland from 607 to 2,805 feet (185 to 855 meters) AMSL. Blooms June through January.	Absent	Not Expected. The BSA does not support suitable habitat and occurs below the known elevation range for this species.
Salt spring checkerbloom	<i>Sidalcea neomexicana</i>	Federal: None State: None CRPR: 1B.2	Perennial herb. Occurs in alkaline and mesic soils in chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, and playas from 50 to 5,020 feet (15 to 1530 meters) AMSL. Blooms March through June.	Absent	Not Expected. The BSA does not support suitable habitat and occurs below the known elevation range for this species.
GRASS FAMILY	POACEAE				
California Orcutt grass	<i>Orcuttia californica</i>	Federal: FE State: SE CRPR: 1B.1	Annual herb. Occurs in vernal pools from 50 to 2,165 feet (15 to 660 meters) AMSL. Blooms April through August.	Absent	Not Expected. The BSA does not support suitable habitat.
PHLOX FAMILY	POLEMONIACEAE				
San Gabriel linanthus	<i>Linanthus concinnus</i>	Federal: None State: None CRPR: 1B.2	Annual herb. Occurs in rocky openings in chaparral and lower and upper montane coniferous forests from 4,987 to 9,186 feet (1,520 to 2,800 meters) AMSL. Blooms April through July.	Absent	Not Expected. The BSA does not support suitable soils or habitat and occurs below the known elevation range for this species.

Table 3-1. Listed, Proposed, and Special-Status Plant Species Potentially Occurring or Known to Occur in the Vicinity of the Biological Study Area

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Spreading navarretia	<i>Navarretia fossalis</i>	Federal: FT State: None CRPR: 1B.1	Annual herb. Occurs in chenopod scrub, shallow freshwater marshes and swamps, playas, and vernal pools from 98 to 2,150 feet (30 to 655 meters) AMSL. Blooms April through June.	Absent	Not Expected. The BSA does not support suitable habitat.
Prostrate vernal pool navarretia	<i>Navarretia prostrata</i>	Federal: None State: None CRPR: 1B.1	Annual herb. Occurs in mesic soils in coastal scrub, meadows and seeps, alkaline valley and foothill grasslands, and vernal pools from 10 to 3,970 feet (3 to 1,210 meters) AMSL. Blooms April through July.	Absent	Not Expected. The BSA does not support suitable soils or habitat.
BUCKWHEAT FAMILY	POLYGONACEAE				
San Fernando Valley spineflower	<i>Chorizanthe parryi</i> var. <i>fernandina</i>	Federal: FC State: SE CRPR: 1B.1	Annual herb. Occurs in sandy soils in coastal scrub and valley and foothill grassland from 492 to 4,002 feet (150 to 1,220 meters) AMSL. Blooms April through July.	Absent	Not Expected. The BSA does not support suitable habitat and occurs below the known elevation range for this species.
Parry's spineflower	<i>Chorizanthe parryi</i> var. <i>parryi</i>	Federal: None State: None CRPR: 1B.1	Annual herb. Occurs in sandy or rocky openings in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland from 902 to 4,002 feet (275 to 1,220 meters) AMSL. Blooms April through June.	Absent	Not Expected. The BSA does not support suitable habitat and occurs below the known elevation range for this species.

Table 3-1. Listed, Proposed, and Special-Status Plant Species Potentially Occurring or Known to Occur in the Vicinity of the Biological Study Area

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Slender-horned spineflower	<i>Dodecahema leptoceras</i>	Federal: FE State: SE CRPR: 1B.1	Annual herb. Occurs in sandy soils in chaparral, cismontane woodland, and alluvial fan sage scrub from 656 to 2,493 feet (200 to 760 meters) AMSL. Blooms April through June.	Absent	Not Expected. The BSA does not support suitable habitat and occurs below the known elevation range for this species.
ROSE FAMILY	ROSACEAE				
Mesa horkelia	<i>Horkelia cuneata</i> var. <i>puberula</i>	Federal: None State: None CRPR: 1B.1	Perennial herb. Occurs in sandy or gravelly soils in maritime chaparral, cismontane woodland, and coastal scrub from 230 to 2,657 feet (70 to 810 meters) AMSL. Blooms February through September.	Absent	Not Expected. The BSA does not support suitable soils or habitat.
MADDER FAMILY	RUBIACEAE				
San Gabriel bedstraw	<i>Galium grande</i>	Federal: None State: None CRPR: 1B.2	Perennial deciduous shrub. Occurs in broadleaved upland forest, chaparral, cismontane woodland, and lower montane coniferous forest from 1,394 to 4,921 feet (425 to 1,500 meters) AMSL. Blooms January through July.	Absent	Not Expected. The BSA does not support suitable habitat and occurs below the known elevation range for this species.

Table 3-1. Listed, Proposed, and Special-Status Plant Species Potentially Occurring or Known to Occur in the Vicinity of the Biological Study Area

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
THELYPTERIS FAMILY	THELYPTERIDACEAE				
Sonoran maiden fern	<i>Thelypteris puberula</i> var. <i>sonorensis</i>	Federal: None State: None CRPR: 2B.2	Perennial rhizomatous herb. Occurs in meadows, seeps, and streams from 164 to 2,000 feet (50 to 610 meters) AMSL. Blooms January through September.	Absent	Not Expected. The BSA does not support suitable habitat.

Notes:

AMSL=above mean sea level; BSA=biological study area; CRPR=California Rare Plant Rank; FE=Federally Endangered; FT=Federally Threatened; FC=Federal Candidate for listing; SE=State Endangered; ST=State Threatened;

List 1B=Plants rare, threatened or endangered in California and elsewhere.

List 2B=Plants rare, threatened or endangered in California but more common elsewhere.

0.1 Seriously endangered in California

0.2 Fairly endangered in California

0.3 Not very endangered in California

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Due to the lack of native, undisturbed habitat within the BSA, most of the special-status animals listed by USFWS and/or CDFW are not expected to occur within the BSA. The reach of the Los Angeles River is identified as the action area for the federally endangered Southern California distinct population segment of steelhead (*Oncorhynchus mykiss*); however, this species is not known from the Los Angeles River and is not expected to occur in the BSA (Appendix A).

Marginally suitable roosting and foraging habitat for two SSCs, western mastiff bat (*Eumops perotis californicus*) and western yellow bat (*Lasiurus xanthinus*), occurs in several areas throughout the BSA. These species can occur around bridges, near buildings, and in trees, including naturally occurring or planted (ornamental) trees (e.g., palm or other trees). No special-status animals, including western mastiff bat and western yellow bat, were observed within the BSA; however, surveys were conducted during the daytime when bats are typically roosting and are more difficult to observe. Further information on special-status animal species, including their status, habitat requirements, and potential for occurrence in the BSA, is summarized in Table 3-2.

Suitable habitat for nesting birds protected under the MBTA is present in the BSA. Suitable habitat includes mature trees (greater than 24 inches in diameter), ornamental vegetation, utility poles, building rafters and eaves, and bridges. Several migratory bird species were observed in the BSA, including American kestrel (*Falco sparverius*), mourning dove (*Zenaida macroura*), American crow (*Corvus brachyrhynchos*), house finch (*Carpodacus mexicanus*), and lesser goldfinch (*Carduelis psaltria*). Suitable habitat that would support breeding, roosting, and foraging migratory birds, including, but not limited to the above species, is present in the BSA.

3.2.3 Natural Communities of Special Concern

Natural communities are considered to be of special concern based on (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the habitat requirements of special-status plants or animals occurring in those habitats. No natural communities are located within or adjacent to the BSA.

3.2.4 Habitat Connectivity

The BSA occurs within a heavily developed urban area more than 5 miles east and north of any significant open space patches. While there are larger open space patches to the north and east of the project, these areas are separated from the project by Interstate 5 and State Route 110. The reach of the Los Angeles River located below the Main Street Bridge and adjacent to the BSA may support some north-south movement for urban-adapted wildlife, but this function would be limited due to the lack of vegetated cover throughout the study area. Arroyo Seco, located approximately 0.8 mile to the north of the project study area, may support some east-west wildlife movements.

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Table 3-2. Listed, Proposed, and Special-Status Animal Species Potentially Occurring or Known to Occur in the Vicinity of the Biological Study Area

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
FISH					
Southern California distinct population segment of steelhead	<i>Oncorhynchus mykiss</i>	FE	Freshwater streams as juveniles, open ocean as adults.	Absent	Not Expected. The BSA lacks suitable habitat for this species.
AMPHIBIANS					
AMPHIBIA					
Arroyo toad	<i>Anaxyrus californicus</i>	FE, SSC	Breeding habitat = slow moving streams with shallow pools, nearby sandbars, and adjacent stream terraces. Often breed in shallow, sandy pools bordered by sand/gravel flood terraces. Inhabit upland habitats when not breeding, such as sycamore-cottonwood woodlands, oak woodlands, coastal sage scrub, chaparral, and grassland.	Absent	Not Expected. The BSA lacks suitable habitat for this species.
Southern mountain yellow-legged frog	<i>Rana muscosa</i>	FE, SE	Streams, rivers, perennial creeks with bank and pool substrates. Open gravel banks and rocks projecting above or just beneath the surface and downed logs and branches.	Absent	Not Expected. The BSA lacks suitable habitat for this species.
Western spadefoot	<i>Spea hammondi</i>	SSC	Cismontane woodland, coastal scrub, valley and foothill grassland, vernal pool, and wetlands.	Absent	Not Expected. The BSA lacks suitable habitat for this species.
Coast range newt	<i>Taricha torosa</i>	SSC	Wet forests, oak forests, chaparral, and rolling grasslands.	Absent	Not Expected. The BSA lacks suitable habitat for this species.
REPTILES					
REPTILIA					
California legless lizard	<i>Anniella</i> sp. 1	SSC	Chaparral, coastal dunes, desert scrub, and washes.	Absent	Not Expected. The BSA lacks suitable habitat for this species.

Table 3-2. Listed, Proposed, and Special-Status Animal Species Potentially Occurring or Known to Occur in the Vicinity of the Biological Study Area

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent	Rationale
Southern California legless lizard	<i>Anniella stebbinsi</i>	SSC	Sparsely vegetated areas of beach dunes, chaparral, pine-oak woodland, desert scrub, sandy washes, and stream terraces.	Absent	Not Expected. The BSA lacks suitable habitat for this species.
California glossy snake	<i>Arizona elegans occidentalis</i>	SSC	Arid scrub, rocky washes, grasslands, chaparral.	Absent	Not Expected. The BSA lacks suitable habitat for this species.
Coastal whiptail	<i>Aspidoscelis tigris stejnegeri</i>	SSC	Chaparral, woodland, and riparian habitats.	Absent	Not Expected. The BSA lacks suitable habitat for this species.
Western pond turtle	<i>Emys marmorata</i>	SSC	Aquatic, artificial flowing waters, marshes, swamps, and wetlands.	Absent	Not Expected. The BSA lacks suitable habitat for this species.
Coast horned lizard	<i>Phrynosoma blainvillii</i>	SSC	Chaparral, cismontane woodland, coastal bluff scrub, coastal scrub, riparian scrub, riparian woodland, and valley and foothill grasslands.	Absent	Not Expected. The BSA lacks suitable habitat for this species.
Two-striped garter snake	<i>Thamnophis hammondi</i>	SSC	Marshes, swamps, riparian scrub, riparian woodland, and wetlands.	Absent	Not Expected. The BSA lacks suitable habitat for this species.
BIRDS	AVES				
Tricolored blackbird	<i>Agelaius tricolor</i>	SSC	Cattail or tule marshes. Forages in fields, farms. Nests in large freshwater marshes, in dense stands of cattails or bulrushes.	Absent	Not Expected. The BSA lacks suitable habitat for this species.
Burrowing owl	<i>Athene cunicularia</i>	SSC	Coastal prairie, coastal scrub, and valley and foothill grassland.	Absent	Not Expected. The BSA lacks suitable habitat for this species.
Swainson's hawk	<i>Buteo swainsoni</i>	ST	Prairies, grasslands, agricultural fields, pastures, and other open habitats.	Absent	Not Expected. The BSA lacks suitable habitat for this species.

Table 3-2. Listed, Proposed, and Special-Status Animal Species Potentially Occurring or Known to Occur in the Vicinity of the Biological Study Area

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Western yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>	FT, SE	Riparian forest.	Absent	Not Expected. The BSA lacks suitable habitat for this species.
Yellow rail	<i>Coturnicops noveboracensis</i>	SSC	Densely vegetated marshes.	Absent	Not Expected. The BSA lacks suitable habitat for this species.
Black swift	<i>Cypseloides niger</i>	SSC	Nests on sea coast cliffs, waterfalls, and caves.	Absent	Not Expected. The BSA lacks suitable habitat for this species.
Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	FE, SE	Nests in early successional, willow-dominated riparian habitats.	Absent	Not Expected. The BSA lacks suitable habitat for this species.
American peregrine falcon	<i>Falco peregrinus anatum</i>	CFP	Nests on cliffs with open habitat along barrier islands, mudflats, coastlines, lake edges, and mountain chains.	Absent	Not Expected. The BSA lacks suitable habitat for this species.
Coastal California gnatcatcher	<i>Poliopitila californica</i>	FT, SSC	Coastal sage scrub dominated by California sagebrush (<i>Artemisia californica</i>).	Absent	Not Expected. The BSA lacks suitable habitat for this species.
Bank swallow	<i>Riparia riparia</i>	ST	Chaparral, cismontane woodland, and lower montane coniferous forest.	Absent	Not Expected. The BSA lacks suitable habitat for this species.
Least Bell's vireo	<i>Vireo bellii pusillus</i>	FE, SE	Dense brush and mesquite associated with riparian systems, willow-cottonwood forest, and streamside thickets.	Absent	Not Expected. The BSA lacks suitable habitat for this species.

Table 3-2. Listed, Proposed, and Special-Status Animal Species Potentially Occurring or Known to Occur in the Vicinity of the Biological Study Area

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
MAMMALS	MAMMALIA				
Pallid bat	<i>Antrozous pallidus</i>	SSC	Chaparral, coastal scrub, riparian woodland, upper montane coniferous forest, and valley and foothill grasslands. This species is known to roost in bridges.	Present	Not Expected. There is suitable foraging habitat available in surrounding areas within this species' 3- to 6-mile foraging range. However, this species is highly intolerant of urban development (Miner and Stokes 2005).
Townsend's big-eared bat	<i>Corynorhinus townsendii</i>	SSC	Variety of locations that range from coniferous forests and woodlands, deciduous riparian woodland, semi-desert and montane shrublands.	Absent	Not Expected. The BSA lacks suitable habitat for this species.
Western mastiff bat	<i>Eumops perotis californicus</i>	SSC	Chaparral, cismontane woodland, coastal scrub, and valley and foothill grasslands. Roosts in rock crevices, may roost in bridges, although not documented to do so in California.	Present	Low potential for roosting in bridges within the BSA. Suitable foraging habitat does not occur within the BSA but is available in surrounding areas.
Western yellow bat	<i>Lasiurus xanthinus</i>	SSC	Valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. May roost in native or non-native trees, including planted (ornamental) trees such as palm or other trees. Does not roost in bridges.	Present	Low potential for occurrence in BSA in naturally occurring or planted (ornamental) trees.
South coast marsh vole	<i>Microtus californicus stephensi</i>	SSC	Tidal marsh habitat.	Absent	Not Expected. The BSA lacks suitable habitat for this species.

Table 3-2. Listed, Proposed, and Special-Status Animal Species Potentially Occurring or Known to Occur in the Vicinity of the Biological Study Area

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
San Diego desert woodrat	<i>Neotoma lepida intermedia</i>	SSC	Coastal scrub habitat.	Absent	Not Expected. The BSA lacks suitable habitat for this species.
Pocketed free-tailed bat	<i>Nyctinomops femorosaccus</i>	SSC	Rugged cliffs, and high rocky outcrops and slopes.	Absent	Not Expected. The BSA lacks suitable habitat for this species.
Big free-tailed bat	<i>Nyctinomops macrotis</i>	SSC	Rugged cliffs, and high rocky outcrops and slopes.	Absent	Not Expected. The BSA lacks suitable habitat for this species.
Southern grasshopper mouse	<i>Onychomys torridus ramona</i>	SSC	Chenopod scrub habitat.	Absent	Not Expected. The BSA lacks suitable habitat for this species.
American badger	<i>Taxidea taxus</i>	SSC	Variety of habitats, including chaparral, chenopod scrub, cismontane woodland, freshwater marsh, swamps, meadows and seeps, riparian forest, riparian scrub, riparian woodland, and valley and foothill grassland.	Absent	Not Expected. The BSA lacks suitable habitat for this species.

Notes:

Federal

FE=Federally Endangered

FT=Federally Threatened

State

SE=State Endangered

ST=State Threatened

SSC=Species of Special Concern

CFP=California Fully Protected

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4.0 Results: Biological Resources, Discussion of Impacts and Mitigation

No impacts are anticipated to occur on any federally or state-listed or candidate plant or animal species, other special-status plant or animal species, natural communities of special concern, or areas potentially subject to USACE and/or CDFW jurisdiction. Implementation of the proposed project or build alternative may result in impacts on two animal species that are considered SSCs (western mastiff bat and western yellow bat), as well as nesting birds provided protection under the MBTA. Temporary and permanent impacts would only occur on urban/developed areas and disturbed habitat. Potential impacts on biological resources are discussed in further detail below.

4.1 Natural Communities of Special Concern

Implementation of the proposed project or build alternative would not result in impacts on any natural communities of special concern, as none of these communities are located within or adjacent to the BSA. Waters of the U.S., also considered special-status by both federal and state agencies, are discussed in more detail in Section 4.4.

4.2 Special-Status Plant Species

Eleven of the 37 special-status plant species evaluated for their potential to occur in the BSA are federally and/or state-listed as endangered, threatened, or candidate species. These species include San Diego button-celery (*Eryngium aristulatum* var. *parishii*), Nevin's barberry (*Berberis nevinii*), Gambel's water cress (*Nasturtium gambelii*), marsh sandwort (*Arenaria paludicola*), Braunton's milkvetch (*Astragalus brauntonii*), Ventura marsh milkvetch (*Astragalus pycnostachyus* var. *lanosissimus*), coastal dunes milkvetch (*Astragalus tener* var. *titi*), California Orcutt grass (*Orcuttia californica*), spreading navarretia (*Navarretia fossalis*), San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina*), and slender-horned spineflower (*Dodecahema leptoceras*).

No federally or state-listed, candidate, or other special-status plant species were observed during general biological surveys conducted in 2015. None are expected to occur within or in the vicinity of the BSA due to a lack of suitable soils and/or habitat or because the BSA occurs outside of the known elevation range of the plant species listed in Table 3-1.

4.2.1 Project Impacts

Implementation of the proposed project or build alternative would not impact any federally or state-listed, candidate, or other special-status plant species. Therefore, no mitigation would be required.

4.3 Special-Status Animal Species

Nine of the 36 special-status animal species evaluated for their potential to occur in the BSA are federally and/or state-listed as endangered, threatened, or candidate species. These species include arroyo toad (*Anaxyrus californicus*), southern mountain yellow-legged frog (*Rana muscosa*), Swainson's hawk (*Buteo swainsoni*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), southwestern willow flycatcher (*Empidonax traillii extimus*), American peregrine falcon (*Falco peregrinus anatum*), coastal California gnatcatcher (*Polioptila californica californica*), bank swallow (*Riparia riparia*), and least Bell's vireo (*Vireo bellii pusillus*). As noted in Table 3-2, the BSA either does not contain suitable habitat for or is outside the known geographic range of these animal species.

No special-status animal species were observed in the BSA during the general biological survey and habitat assessment survey conducted in 2015. However, as noted in Table 3-2, the BSA, a highly urbanized environment, contains marginally suitable habitat for two SSC species: western mastiff bat and western yellow bat. These species roost either in buildings, under bridges, or in trees, including naturally occurring or planted (ornamental) trees (e.g., palm or other trees) that occur in the BSA. With the exception of western mastiff bat and western yellow bat, the BSA does not exhibit suitable habitat for the other special-status animal species listed in Table 3-2, and they are not expected to occur within the BSA. The BSA also has suitable roosting habitat for non-sensitive bat species. Due to the large numbers of bats present at maternity roost sites, impacts on such sites would be considered significant even if the individual bat species is not considered sensitive. CEQA requires impacts on potential nursery sites for native wildlife species be assessed.

Birds provided protection under the MBTA are also considered special-status animal species. As mentioned in Section 3.2.2, suitable habitat for nesting birds protected under the MBTA that is present in the BSA includes mature trees (greater than 24 inches in diameter), ornamental vegetation, utility poles, building rafters and eaves, and bridges.

4.3.1 Project Impacts

Implementation of the proposed project or build alternative would not impact any federally or state-listed or candidate animal species.

Special-Status Bats

Modifications to the existing bridges (Vignes Street and Cesar Chavez Avenue), removal of trees, including naturally occurring or planted (ornamental) trees (e.g., palm or other trees), and quiet zone-ready safety improvements at Main Street could result in direct and/or indirect construction-related impacts on western mastiff bats, western yellow bats, or a maternity colony of native bat species that may use these areas to roost, if present in the BSA. The Vignes Street and Cesar Chavez Avenue Bridge design modifications would take into account entrances and flight paths of bat species, if present, to minimize potential construction-related impacts, including abandonment of roost sites. Safety improvements on the Main Street Bridge crossing of the Los Angeles River would not be conducted on the underside of the bridge

where bats could be roosting; however, improvements at this location could result in indirect impacts on special-status bats and maternity colonies. Temporary, indirect impacts of the proposed project or build alternative on bridge- and tree-dwelling bats may include noise, vibration, dust, night lighting, and human encroachment. Construction-related direct and indirect impacts on special-status bat species and maternity colonies of native bat species is considered a significant impact.

Mitigation Measure BIO-1 (discussed in Section 4.3.2) is proposed to reduce indirect impacts on roosting bats to the maximum extent feasible.

Operation-related impacts on special-status bats, if present in the BSA, may result due to increased train traffic and associated increases in noise levels as well as periodic maintenance in the railroad ROW. Based on the limited availability of suitable habitat for special-status bat species within the BSA, the corresponding impacts of these operations on each species (i.e., increased risk of a maternity roost being disturbed by maintenance activities or vibration, noise and dust resulting from increased train traffic) are not anticipated to substantially reduce the regional population size of these species. In addition, based on preliminary noise analysis, it is anticipated that operations-related noise levels for the proposed project or build alternative may be 5 A-weighted decibels above current ambient levels. Little information is available on the impacts of noise on bats or species' specific threshold noise levels above which species would abandon a roost site. However, if bats are utilizing the bridges or trees as roost sites in the BSA, which is highly urbanized, they are urban-adapted species, and the slight increase in operational noise levels is not anticipated to result in a permanent impact.

Migratory Bird Treaty Act Species

As mentioned in Section 3.2.2, suitable habitat for nesting birds protected under the MBTA that is present in the BSA includes mature trees (greater than 24 inches in diameter), ornamental vegetation, utility poles, building rafters and eaves, and bridges. Construction of the track, bridge improvements at Vignes Street and Cesar Chavez Avenue, safety improvements at the Main Street bridge crossing of the Los Angeles River, and other construction activities may interfere with nesting birds protected under the MBTA. This is considered a significant impact.

Temporary, indirect impacts that may affect MBTA-covered species during operations include increased noise, vibration, dust, night lighting, and human encroachment. As a result of the urban nature of the project site, any birds utilizing the site for breeding during project operations are expected to be urban-adapted. The corresponding impacts of operations on these species (e.g., increased risk of being struck by a train) are not anticipated to substantially reduce their regional population sizes. Impacts are considered less than significant.

4.3.2 Mitigation Measures

Implementation of the following mitigation measures would reduce direct and indirect impacts on special-status bat species to a level less than significant.

BIO-1 Bats: Preconstruction surveys for roosting special-status bats (including western mastiff bats and western yellow bats) and other native bat species shall be conducted by a Metro-approved qualified bat biologist within 2 weeks prior to construction. Surveys shall be conducted where suitable habitat and/or bridge structures that will be removed or that will have modifications to the substructure are present. All locations with suitable roosting habitat (including potential maternity roosts) shall be surveyed using an appropriate combination of structure inspection, exit counts, acoustic surveys, or other suitable methods. Surveys shall be conducted during the appropriate season and time of day/night to ensure detection of day- and night-roosting bats (i.e., preferably one daytime and one nighttime survey shall be conducted at each location with suitable roosting habitat during the maternity season, May 1 through August 31). If no roosts are detected, trees that provide suitable roosting habitat may be removed under the guidance of the qualified bat biologist.

If a roost is detected, passive exclusion shall include monitoring the roost for 3 days to determine if the roost is active. If the roost is determined to support a reproductive female with young, the roost shall be avoided until it is no longer active. If the roost remains active during the 3 monitoring days and observations confirm it is not a maternity colony, a temporary bat exclusion device shall be installed under the supervision of a Metro-approved qualified bat biologist. At the discretion of the biologist, an alternative roosting structure(s) may be constructed and installed prior to the installation of exclusion devices. Exclusion shall be conducted during the fall (September or October) to avoid trapping flightless young inside during the summer months or torpid (overwintering) individuals during the winter. If it cannot be determined whether an active roost site supports a maternity colony, the roost site shall not be disturbed, and construction within 300 feet shall be postponed or halted until the roost is vacated and the young are volant (able to fly). Exclusion efforts shall be monitored on a weekly basis and continued for the duration of project construction activities and removed when no longer necessary.

The following avoidance and minimization measures shall be implemented during construction:

- All work conducted on bridges shall occur during the day. If this is not feasible, lighting and noise shall be directed away from night roosting and foraging areas.
- Combustion equipment (such as generators, pumps, and vehicles) shall not be parked or operated under a bridge. Construction personnel shall not be present directly under a roosting colony. Construction activities shall not severely restrict airspace access to the roosts.

- Removal of mature trees that provide suitable bat roosting habitat shall be conducted outside of the maternity season (May 1 through August 31); that is, removal shall be conducted between September 1 and April 30. Because bats may be present in a torpid state during the winter, suitable roosting habitat shall be removed before the onset of cold weather (approximately November 1 or as determined by a qualified bat biologist).
- When removing palm trees, the dead fronds shall be removed first before felling the palm to allow any bats to escape.

Implementation of the following avoidance and minimization measure would reduce impacts on nesting birds protected under the MBTA to below a level of significance:

BIO-2 MBTA Species: Vegetation removal shall be conducted outside of the bird nesting season (February 1 through September 30) to the extent feasible. If vegetation removal cannot be conducted outside of the nesting season, a Metro-approved qualified bird biologist shall conduct preconstruction surveys to locate active nests within 7 days prior to vegetation removal in each area with suitable nesting habitat. If nesting birds are found during preconstruction surveys, an exclusionary buffer (150 feet for passerines and 500 feet for raptors) suitable to prevent nest disturbance shall be established by the biologist. The buffer may be reduced based on species-specific and site-specific conditions as determined by the qualified biologist. This buffer shall be clearly marked in the field by construction personnel under the guidance of the biologist, and construction or vegetation removal shall not be conducted within the buffer until the biologist determines that the young have fledged or the nest is no longer active.

Exclusionary devices (hard surface materials, such as plywood, or plexiglass, flexible materials, such as vinyl, or a similar mechanism that keeps birds from building nests) shall be installed over suitable nest sites at the bridges that will be removed or that will have modifications to the substructure before the nesting season (February 1 through September 30) to prevent nesting at the bridges by bridge- and crevice-nesting birds (i.e., swifts and swallows). Netting shall not be used as an exclusionary material because it can injure or kill birds, which would be in violation of the MBTA.

In addition, if work on bridges with potential nest sites that will be removed or that will have modifications to the substructure is to be conducted between February 1 and September 30, all bird nests shall be removed prior to February 1. Immediately prior to nest removal, a qualified biologist shall inspect each nest for the presence of torpid bats, which are known to use old swallow nests. Nest removal shall be conducted under the guidance and observation of a qualified biologist. Removal of swallow nests on bridges that are under construction shall be repeated as frequently as necessary to prevent nest completion unless a nest exclusion device has already been installed. Nest removal and exclusion device installation shall be monitored

by a qualified biologist. Such exclusion efforts shall be continued to keep the structures free of swallows until October or the completion of construction.

4.3.3 Compensatory Mitigation

Implementation of Measure BIO-1 includes provisions such that the proposed project or build alternative would not directly impact special-status bat species, including western mastiff bats and western yellow bats, as well as maternity colonies of native bat species, if present in the BSA. No direct impacts on other special-status animal species are anticipated as a result of the proposed project or build alternative. Therefore, compensatory mitigation is not required.

Implementation of Measure BIO-2 (discussed in Section 4.3.2) includes provisions such that the proposed project or build alternative would not directly impact MBTA species. Therefore, compensatory mitigation is not required.

4.3.4 Cumulative Impacts

Implementation of Measure BIO-1 would avoid or minimize short-term, temporary construction-related direct and indirect impacts on special-status and maternity roosting bat species, if present within the BSA. Long-term, permanent impacts on special-status bat species determined to be present within the BSA may occur through the removal of naturally occurring or planted (ornamental) trees (e.g., palm or other trees) that provide suitable roosting habitat. However, the proposed project or build alternative would include landscaping of trees (including palm trees) that have the potential to provide roosting habitat for bats. Therefore, the loss of this habitat, in combination with other cumulative projects, is not anticipated to be substantial relative to available foraging and roosting habitat throughout the range for these species, which encompasses a variety of habitats located throughout California.

Implementation of Measure BIO-2 (discussed in Section 4.3.2) would avoid or minimize short-term, temporary construction-related direct and indirect impacts on MBTA species, if present within the BSA. Long-term, permanent impacts on MBTA species are not anticipated because the loss of suitable nesting habitat within the highly urbanized BSA (planted trees) would be minimal. Therefore, the proposed project or build alternative, in combination with other cumulative projects, is not anticipated to result in substantial cumulative impacts on MBTA species.

The proposed project or build alternative would not result in any loss of natural habitats that would support any other special-status animal species known to occur in the area. Therefore, the proposed project or build alternative, in combination with other cumulative projects, is not anticipated to result in substantial cumulative impacts on special-status animal species.

4.4 Jurisdictional Areas

No USACE or CDFW jurisdictional areas, including wetlands, would be impacted by the proposed project or build alternative. The reach of the Los Angeles River located below the Main Street Bridge is a concrete-lined flood control channel surrounded by commercial, industrial, and residential development.

The proposed project or build alternative would be constructed outside the boundaries of the channel (i.e., above the Main Street bridge crossing of the Los Angeles River) and would not modify or otherwise impact the existing channel in this area or any other areas associated with construction or operation of the build alternative or proposed project.

Two ditches are present within the BSA (Figure 3-3 through Figure 3-6). The first ditch is located west of the existing railroad tracks, east of a disturbed lot containing trees, bushes, and non-native vegetation, and north of Alpine Street (Figure 3-3). A chainlink fence prevented access to the ditch, which was overgrown with vegetation, during general biological surveys. The second ditch is a 2-foot-wide concrete ditch located along the fence line on the corner of Commercial and Center Streets (Figure 3-4 and Figure 3-5, Appendix C, Photograph 9). This ditch flows into an existing storm drain. These two ditches were constructed in uplands and are, therefore, proposed non-jurisdictional.

4.5 Habitat Connectivity

4.5.1 Project Impacts

As indicated in Section 3.2.4, the BSA occurs within a heavily developed urban area more than 5 miles east and north of any significant open space patches. Any larger open space patches to the north and east of the project are separated from the project by highways. The reach of the Los Angeles River located below the Main Street Bridge in the project study area may support some north-south movement for urban-adapted wildlife, but this function would be limited due to the lack of vegetated cover throughout the study area. Arroyo Seco, located approximately 0.8 mile to the north of the project study area, may support some east-west wildlife movements.

Project construction would not obstruct local north-south wildlife movement that may be occurring via the Los Angeles River, or local east-west movements that may be occurring via the Arroyo Seco; therefore, they would not result in significant impacts on wildlife movement.

Noise and light from project construction could inhibit what limited wildlife movement occurs in the Los Angeles River. However, given the unvegetated, concrete-lined nature of the river and the urban nature of the surroundings, any wildlife utilizing the river is expected to be urban adapted. Therefore, the corresponding indirect impacts on these species from construction are not anticipated to substantially reduce their regional population sizes or interfere substantially with their movement. Therefore, impacts are considered less than significant.

Once operational, the project would involve increased train traffic and periodic maintenance of in the railroad ROW. The project is over 0.8 mile away from Arroyo Seco and project operations are not expected to impact any wildlife movement occurring there. Additional noise and light from project operations could inhibit what limited wildlife movement occurs in the Los Angeles River. Given the unvegetated, concrete-lined nature of the river and the urban nature of the surroundings, any wildlife utilizing the river is expected to be urban-adapted. The corresponding indirect impacts on these species from operations are

not anticipated to substantially reduce their regional population sizes or interfere substantially with their movement. Therefore, impacts are considered less than significant.

No permanent or temporary impacts on habitat connectivity would result from implementation of the proposed project or build alternative and no mitigation is required.

4.6 Local Tree Ordinance

The BSA contains several individual trees of one native species (western sycamore) that would be considered a Protected Tree under the City of Los Angeles Tree Ordinance. All individual western sycamore trees greater than or equal to 4 inches in diameter at breast height, measured at 4.5 feet, would also be protected under the tree ordinance. Impacts of the proposed project or build alternative on this species or other species observed during preconstruction surveys through either direct removal or indirect impacts that may result in the death of protected trees would be inconsistent with this local ordinance unless prior authorization is granted by the City of Los Angeles for either pruning or removal.

4.6.1 Project Impacts

Western sycamore trees were observed within the BSA during general biological surveys in 2015. These trees were found within disturbed habitat within one or more of the proposed staging areas. Implementation of the proposed project or build alternative could include removal of these trees, which may require a permit from the City of Los Angeles. Impacts to specimens that are greater than or equal to 4 inches in diameter at breast height resulting from implementation of the proposed project or build alternative are considered significant.

4.6.2 Mitigation Measures

Implementation of the following mitigation measures would reduce direct and indirect impacts on western sycamore or other protected trees under the City of Los Angeles Ordinance No. 177404, Preservation of Protected Trees, to below a level of significance:

BIO-3 Protected Trees – Preconstruction surveys for protected trees (native trees 4 inches or more in cumulative diameter as measured at 4.5 feet above the ground level that are subject to protection under Ordinance No. 177404, Preservation of protected trees of the City of Los Angeles’ municipal code, including oaks, Southern California black walnut, western sycamore, and California bay), shall be conducted by a registered consulting arborist with the American Society of Consulting Arborists at least 120 days prior to construction. The locations and sizes of all protected trees shall be identified prior to construction and overlaid on project footprint maps to determine which trees may be protected in accordance with Ordinance No. 177404. The registered consulting arborist shall prepare a Protected Tree Report and shall submit three copies to the City of Los Angeles Department of Public Works. Any protected trees that must be removed due to project construction shall be replaced at a 2:1 ratio (or up to a 4:1 ratio for protected trees on private property) except when the protected tree is relocated on the same property, the City of Los Angeles has approved the tree for removal, and the

relocation is economically reasonable and favorable to the survival of the tree. Each replacement tree shall be at least a 15-gallon specimen, measuring 1 inch or more in diameter 1 foot above the base, and shall be at least 7 feet in height measured from the base.

4.6.3 Compensatory Mitigation

Implementation of Measure BIO-3 includes provisions such that that impacts on Protected Trees are properly addressed in accordance with the City of Los Angeles' municipal code. At this time, it is not anticipated that additional compensatory mitigation for impacts on Protected Trees would be required.

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5.0 Conclusions and Regulatory Determination

5.1 Federal Endangered Species Act Consultation Summary

The proposed project and build alternative do not have the potential to affect any species listed or candidates for listing under the Endangered Species Act. Therefore, no consultation with USFWS is necessary, and no mitigation is required.

5.2 California Endangered Species Act Summary

The California Endangered Species Act protects plant and animal species that are state-listed as rare, threatened, or endangered. CDFW authorizes take of endangered, threatened, or candidate species through the provisions of Sections 2081 and 2081.1 of the California Fish and Game Code. No significant impacts on state-listed species or candidates for state listing are anticipated to occur. Therefore, authorization from CDFW for take of any endangered, threatened, or candidate species is not required for the proposed project or build alternative.

5.3 Regulatory Permits

No drainages, streambeds, or other features subject to the jurisdiction of USACE, CDFW, or RWQCB would be impacted by the proposed project or build alternative. Therefore, no regulatory permits are required for the proposed project or build alternative.

5.4 Invasive Plant Species

Most of the plant species observed within the BSA are non-native, and several species are considered invasive (high or moderate invasive rankings [Appendix B]) by the California Invasive Plant Council. Due to the large amount of developed land and disturbed habitat already present in the BSA, the proposed project and build alternative are not expected to result in an increase in the introduction or spread of non-native invasive plant species. Therefore, no mitigation would be required.

5.5 Migratory Bird Treaty Act

As mentioned in Sections 3.2.2 and 4.3, suitable habitat for nesting birds protected under the MBTA occurs in the BSA. Impacts on nesting birds protected under the MBTA would be considered a significant impact. Implementation of Mitigation Measure BIO-2 (provided in Section 4.3.2) would reduce impacts on nesting birds protected under the MBTA to below a level of significance.

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6.0 References

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Appendix A: Literature Review

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Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad IS (Los Angeles (3411812) OR Hollywood (3411813) OR Burbank (3411823) OR Pasadena (3411822) OR El Monte (3411811) OR Mt. Wilson (3411821) OR Whittier (3311881) OR South Gate (3311882) OR Inglewood (3311883))

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Agelaius tricolor</i> tricolored blackbird	G2G3 S1S2	None Candidate Endangered	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_EN-Endangered NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	43 43	951 S:1	0	0	0	0	1	0	1	0	0	1	0
<i>Aimophila ruficeps canescens</i> southern California rufous-crowned sparrow	G5T3 S3	None None	CDFW_WL-Watch List	693 693	226 S:1	0	1	0	0	0	0	0	1	1	0	0
<i>Anaxyrus californicus</i> arroyo toad	G2G3 S2S3	Endangered None	CDFW_SSC-Species of Special Concern IUCN_EN-Endangered	2,760 2,760	139 S:1	0	0	0	0	0	1	0	1	1	0	0
<i>Anniella sp. 1</i> California legless lizard	G3G4 S3S4	None None	CDFW_SSC-Species of Special Concern	570 570	25 S:1	0	0	1	0	0	0	0	1	1	0	0
<i>Anniella stebbinsi</i> southern California legless lizard	G3 S3	None None	CDFW_SSC-Species of Special Concern USFS_S-Sensitive	1,328 1,328	50 S:1	0	0	0	1	0	0	0	1	1	0	0
<i>Antrozous pallidus</i> pallid bat	G5 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive WBWG_H-High Priority	260 900	411 S:7	0	0	0	0	0	7	7	0	7	0	0
<i>Arctostaphylos glandulosa ssp. gabrielensis</i> San Gabriel manzanita	G5T3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_RSABG-Rancho Santa Ana Botanic Garden USFS_S-Sensitive	3,150 3,150	35 S:2	0	0	0	0	0	2	0	2	2	0	0
<i>Arenaria paludicola</i> marsh sandwort	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_SBBG-Santa Barbara Botanic Garden	100 100	16 S:1	0	0	0	0	1	0	1	0	0	0	1



Summary Table Report

California Department of Fish and Wildlife California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Arizona elegans occidentalis</i> California glossy snake	G5T2 S2	None None	CDFW_SSC-Species of Special Concern	490 2,546	260 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Aspidoscelis tigris stejnegeri</i> coastal whiptail	G5T5 S3	None None	CDFW_SSC-Species of Special Concern	480 5,600	133 S:4	0	1	0	0	0	3	0	4	4	0	0
<i>Astragalus brauntonii</i> Braunton's milk-vetch	G2 S2	Endangered None	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden SB_SBBG-Santa Barbara Botanic Garden	940 1,350	42 S:4	0	2	0	0	2	0	2	2	2	1	1
<i>Astragalus tener var. titi</i> coastal dunes milk-vetch	G2T1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden		6 S:1	0	0	0	0	1	0	1	0	0	1	0
<i>Athene cunicularia</i> burrowing owl	G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	280 790	1957 S:3	0	1	0	0	0	2	2	1	3	0	0
<i>Atriplex coulteri</i> Coulter's saltbush	G3 S1S2	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden		102 S:1	0	0	0	0	1	0	1	0	0	0	1
<i>Atriplex parishii</i> Parish's brittlescale	G1G2 S1	None None	Rare Plant Rank - 1B.1 USFS_S-Sensitive	525 525	16 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Atriplex serenana var. davidsonii</i> Davidson's saltscale	G5T1 S1	None None	Rare Plant Rank - 1B.2		27 S:2	0	0	0	0	2	0	2	0	0	2	0
<i>Berberis nevinii</i> Nevin's barberry	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden SB_SBBG-Santa Barbara Botanic Garden	220 1,637	31 S:6	0	0	2	0	0	4	2	4	6	0	0
<i>Bombus crotchii</i> Crotch bumble bee	G3G4 S1S2	None None		100 2,000	234 S:11	0	0	0	0	0	11	11	0	11	0	0



Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Buteo swainsoni</i> Swainson's hawk	G5 S3	None Threatened	BLM_S-Sensitive IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	375 375	2460 S:1	0	0	0	0	1	0	1	0	0	1	0
<i>California Walnut Woodland</i> California Walnut Woodland	G2 S2.1	None None		520 560	76 S:2	0	0	0	0	1	1	2	0	1	0	1
<i>Calochortus clavatus var. gracilis</i> slender mariposa-lily	G4T2T3 S2S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_RSABG-Rancho Santa Ana Botanic Garden USFS_S-Sensitive	1,500 1,800	105 S:2	0	1	0	0	0	1	0	2	2	0	0
<i>Calochortus plummerae</i> Plummer's mariposa-lily	G4 S4	None None	Rare Plant Rank - 4.2 SB_RSABG-Rancho Santa Ana Botanic Garden	700 5,000	230 S:25	1	4	3	3	1	13	5	20	24	1	0
<i>Calochortus weedii var. intermedius</i> intermediate mariposa-lily	G3G4T2 S2	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden USFS_S-Sensitive	610 1,290	136 S:4	0	0	3	1	0	0	0	4	4	0	0
<i>Calystegia felix</i> lucky morning-glory	G1Q S1	None None	Rare Plant Rank - 1B.1	100 100	10 S:3	0	0	0	0	0	3	3	0	3	0	0
<i>Carolella busckana</i> Busck's gallmoth	G1G3 SH	None None		225 225	4 S:1	0	0	0	0	1	0	1	0	0	0	1
<i>Centromadia parryi ssp. australis</i> southern tarplant	G3T2 S2	None None	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden	60 1,150	87 S:10	0	0	2	0	2	6	8	2	8	1	1
<i>Centromadia pungens ssp. laevis</i> smooth tarplant	G3G4T2 S2	None None	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden		117 S:1	0	0	0	0	1	0	1	0	0	0	1
<i>Chorizanthe parryi var. fernandina</i> San Fernando Valley spineflower	G2T1 S1	Proposed Threatened Endangered	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden USFS_S-Sensitive	300 600	21 S:2	0	0	0	0	2	0	2	0	0	2	0



Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Chorizanthe parryi</i> var. <i>parryi</i> Parry's spineflower	G3T2 S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_RSABG-Rancho Santa Ana Botanic Garden USFS_S-Sensitive	1,250 4,000	127 S:3	0	0	0	0	0	3	3	0	3	0	0
<i>Cladium californicum</i> California saw-grass	G4 S2	None None	Rare Plant Rank - 2B.2 USFS_S-Sensitive	1,000 1,000	13 S:1	0	0	0	0	1	0	1	0	0	0	1
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	G5T2T3 S1	Threatened Endangered	BLM_S-Sensitive NABCI_RWL-Red Watch List USFS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	60 275	155 S:3	0	0	0	0	3	0	3	0	0	1	2
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	G3G4 S2	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive WBWG_H-High Priority	1,276 1,276	626 S:1	0	1	0	0	0	0	0	1	1	0	0
<i>Coturnicops noveboracensis</i> yellow rail	G4 S1S2	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern NABCI_RWL-Red Watch List USFS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	307 307	45 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Cuscuta obtusiflora</i> var. <i>glandulosa</i> Peruvian dodder	G5T4T5 SH	None None	Rare Plant Rank - 2B.2		6 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Cypseloides niger</i> black swift	G4 S2	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern NABCI_YWL-Yellow Watch List USFWS_BCC-Birds of Conservation Concern	2,400 2,400	46 S:1	1	0	0	0	0	0	1	0	1	0	0



Summary Table Report
California Department of Fish and Wildlife
California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Dodecahema leptoceras</i> slender-horned spineflower	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden	700 1,800	38 S:5	0	0	0	0	4	1	5	0	1	1	3
<i>Dudleya multicaulis</i> many-stemmed dudleya	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_RSABG-Rancho Santa Ana Botanic Garden USFS_S-Sensitive		146 S:2	0	0	0	0	1	1	2	0	1	1	0
<i>Empidonax traillii extimus</i> southwestern willow flycatcher	G5T2 S1	Endangered Endangered	NABCI_RWL-Red Watch List	280 280	70 S:3	0	0	0	0	0	3	3	0	3	0	0
<i>Emys marmorata</i> western pond turtle	G3G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable USFS_S-Sensitive	220 2,000	1322 S:6	0	0	0	0	5	1	6	0	1	5	0
<i>Eryngium aristulatum var. parishii</i> San Diego button-celery	G5T1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden		79 S:1	0	0	0	0	1	0	1	0	0	0	1
<i>Eumops perotis californicus</i> western mastiff bat	G5T4 S3S4	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern WBWG_H-High Priority	50 840	294 S:12	0	0	0	0	0	12	12	0	12	0	0
<i>Falco peregrinus anatum</i> American peregrine falcon	G4T4 S3S4	Delisted Delisted	CDF_S-Sensitive CDFW_FP-Fully Protected USFWS_BCC-Birds of Conservation Concern	850 850	55 S:1	0	0	0	0	0	1	0	1	1	0	0
<i>Galium grande</i> San Gabriel bedstraw	G1 S1	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive USFS_S-Sensitive	2,400 2,600	9 S:3	0	1	1	0	0	1	1	2	3	0	0
<i>Helianthus nuttallii ssp. parishii</i> Los Angeles sunflower	G5TH SH	None None	Rare Plant Rank - 1A	120 700	7 S:3	0	0	0	0	3	0	3	0	0	0	3
<i>Horkelia cuneata var. puberula</i> mesa horkelia	G4T1 S1	None None	Rare Plant Rank - 1B.1 USFS_S-Sensitive	400 5,400	103 S:14	0	0	0	0	9	5	14	0	5	3	6



Summary Table Report
California Department of Fish and Wildlife
California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Lasionycteris noctivagans</i> silver-haired bat	G5 S3S4	None None	IUCN_LC-Least Concern WBWG_M-Medium Priority		139 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Lasiurus blossevillii</i> western red bat	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern WBWG_H-High Priority	1,163 1,163	126 S:1	0	1	0	0	0	0	0	1	1	0	0
<i>Lasiurus cinereus</i> hoary bat	G5 S4	None None	IUCN_LC-Least Concern WBWG_M-Medium Priority	450 1,060	236 S:10	0	0	0	0	0	10	10	0	10	0	0
<i>Lasiurus xanthinus</i> western yellow bat	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern WBWG_H-High Priority	2,650 2,650	58 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Lasthenia glabrata ssp. coulteri</i> Coulter's goldfields	G4T2 S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_RSABG-Rancho Santa Ana Botanic Garden	160 175	97 S:4	0	0	0	0	3	1	4	0	1	3	0
<i>Lepidium virginicum var. robinsonii</i> Robinson's pepper-grass	G5T3 S3	None None	Rare Plant Rank - 4.3	2,000 2,000	142 S:3	0	0	0	0	0	3	3	0	3	0	0
<i>Linanthus concinnus</i> San Gabriel linanthus	G2 S2	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden USFS_S-Sensitive	5,550 5,550	31 S:1	0	0	0	0	0	1	0	1	1	0	0
<i>Malacothamnus davidsonii</i> Davidson's bush-mallow	G2 S2	None None	Rare Plant Rank - 1B.2	1,000 1,919	69 S:4	0	0	2	0	0	2	1	3	4	0	0
<i>Microtus californicus stephensi</i> south coast marsh vole	G5T1T2 S1S2	None None	CDFW_SSC-Species of Special Concern	200 300	7 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Muhlenbergia californica</i> California muhly	G4 S4	None None	Rare Plant Rank - 4.3	5,600 5,600	5 S:1	0	0	0	0	0	1	1	0	1	0	0



Summary Table Report
California Department of Fish and Wildlife
California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Nasturtium gambelii</i> Gambel's water cress	G1 S1	Endangered Threatened	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden SB_SBBG-Santa Barbara Botanic Garden		13 S:1	0	0	0	0	1	0	1	0	0	0	1
<i>Navarretia fossalis</i> spreading navarretia	G2 S2	Threatened None	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden		78 S:1	0	0	0	0	1	0	1	0	0	0	1
<i>Navarretia prostrata</i> prostrate vernal pool navarretia	G2 S2	None None	Rare Plant Rank - 1B.1	40 40	60 S:5	0	0	0	0	5	0	5	0	0	4	1
<i>Neotoma lepida intermedia</i> San Diego desert woodrat	G5T3T4 S3S4	None None	CDFW_SSC-Species of Special Concern	800 800	118 S:2	0	0	2	0	0	0	0	2	2	0	0
<i>Nyctinomops femorosaccus</i> pocketed free-tailed bat	G4 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern WBWG_M-Medium Priority	100 100	90 S:1	0	0	0	0	1	1	0	1	0	0	
<i>Nyctinomops macrotis</i> big free-tailed bat	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern WBWG_MH-Medium-High Priority	300 600	32 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Onychomys torridus ramona</i> southern grasshopper mouse	G5T3 S3	None None	CDFW_SSC-Species of Special Concern	1,000 1,300	28 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Open Engelmann Oak Woodland</i> Open Engelmann Oak Woodland	G2 S2.2	None None		560 600	2 S:2	0	0	0	0	2	0	2	0	0	0	2
<i>Orcuttia californica</i> California Orcutt grass	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden	125 125	37 S:2	0	0	0	0	2	0	2	0	0	0	2
<i>Phacelia stellaris</i> Brand's star phacelia	G1 S1	None None	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden	90 300	15 S:2	0	0	0	0	2	0	2	0	0	2	0



Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database



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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Phrynosoma blainvillii</i> coast horned lizard	G3G4 S3S4	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	60 5,600	771 S:14	0	0	0	0	6	8	14	0	8	4	2
<i>Polioptila californica californica</i> coastal California gnatcatcher	G4G5T2Q S2	Threatened None	CDFW_SSC-Species of Special Concern NABCI_YWL-Yellow Watch List	200 1,200	830 S:9	1	2	0	0	1	5	4	5	8	0	1
<i>Pseudognaphalium leucocephalum</i> white rabbit-tobacco	G4 S2	None None	Rare Plant Rank - 2B.2		62 S:5	0	0	0	0	0	5	5	0	5	0	0
<i>Rana muscosa</i> southern mountain yellow-legged frog	G1 S1	Endangered Endangered	CDFW_WL-Watch List IUCN_EN-Endangered USFS_S-Sensitive	800 3,000	186 S:6	0	0	0	0	6	0	6	0	0	2	4
<i>Ribes divaricatum var. parishii</i> Parish's gooseberry	G5TX SX	None None	Rare Plant Rank - 1A	210 1,000	5 S:4	0	0	0	0	4	0	4	0	0	4	0
<i>Riparia riparia</i> bank swallow	G5 S2	None Threatened	BLM_S-Sensitive IUCN_LC-Least Concern		297 S:2	0	0	0	0	2	0	2	0	0	0	2
<i>Riversidian Alluvial Fan Sage Scrub</i> Riversidian Alluvial Fan Sage Scrub	G1 S1.1	None None		680 1,180	30 S:3	0	0	0	0	2	1	3	0	1	0	2
<i>Scutellaria bolanderi ssp. austromontana</i> southern mountains skullcap	G4T3 S3	None None	Rare Plant Rank - 1B.2 USFS_S-Sensitive	300 300	32 S:1	0	0	0	0	1	0	1	0	0	1	0
<i>Sidalcea neomexicana</i> salt spring checkerbloom	G4 S2	None None	Rare Plant Rank - 2B.2 USFS_S-Sensitive		30 S:3	0	0	0	0	1	2	3	0	2	1	0
<i>Southern Coast Live Oak Riparian Forest</i> Southern Coast Live Oak Riparian Forest	G4 S4	None None		560 2,480	246 S:25	0	0	0	0	8	17	25	0	17	0	8
<i>Southern Cottonwood Willow Riparian Forest</i> Southern Cottonwood Willow Riparian Forest	G3 S3.2	None None		480 480	111 S:1	0	0	0	0	1	0	1	0	0	0	1
<i>Southern Sycamore Alder Riparian Woodland</i> Southern Sycamore Alder Riparian Woodland	G4 S4	None None		560 2,920	230 S:27	0	0	0	0	5	22	27	0	22	0	5



Summary Table Report
California Department of Fish and Wildlife
California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Spea hammondi</i> western spadefoot	G3 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened	1,100 1,100	462 S:1	0	1	0	0	0	0	1	0	1	0	0
<i>Symphotrichum defoliatum</i> San Bernardino aster	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive USFS_S-Sensitive		102 S:3	0	0	0	0	3	0	3	0	0	0	3
<i>Symphotrichum greatae</i> Greata's aster	G2 S2	None None	Rare Plant Rank - 1B.3 BLM_S-Sensitive	1,950 4,500	56 S:8	0	0	0	0	2	6	8	0	6	2	0
<i>Taricha torosa</i> Coast Range newt	G4 S4	None None	CDFW_SSC-Species of Special Concern	1,300 1,812	88 S:2	0	1	0	0	0	1	0	2	2	0	0
<i>Taxidea taxus</i> American badger	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	280 280	544 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Thamnophis hammondi</i> two-striped gartersnake	G4 S3S4	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive	1,909 2,640	170 S:2	1	0	0	0	0	1	0	2	2	0	0
<i>Thelypteris puberula var. sonorensis</i> Sonoran maiden fern	G5T3 S2	None None	Rare Plant Rank - 2B.2 USFS_S-Sensitive	1,400 1,400	27 S:3	0	0	0	0	0	3	3	0	3	0	0
<i>Vireo bellii pusillus</i> least Bell's vireo	G5T2 S2	Endangered Endangered	IUCN_NT-Near Threatened NABCI_YWL-Yellow Watch List	50 1,030	482 S:19	1	2	1	0	12	3	12	7	7	12	0
<i>Walnut Forest</i> Walnut Forest	G1 S1.1	None None		700 700	6 S:1	0	1	0	0	0	0	1	0	1	0	0



United States Department of the Interior



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

In Reply Refer To:

April 02, 2018

Consultation Code: 08ECAR00-2018-SLI-0791

Event Code: 08ECAR00-2018-E-01793

Project Name: LINK US

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

To Whom It May Concern:

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

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

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

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

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

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

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

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

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

Attachment(s):

- Official Species List
-

Official Species List

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

This species list is provided by:

Carlsbad Fish And Wildlife Office

2177 Salk Avenue - Suite 250

Carlsbad, CA 92008-7385

(760) 431-9440

Project Summary

Consultation Code: 08ECAR00-2018-SLI-0791

Event Code: 08ECAR00-2018-E-01793

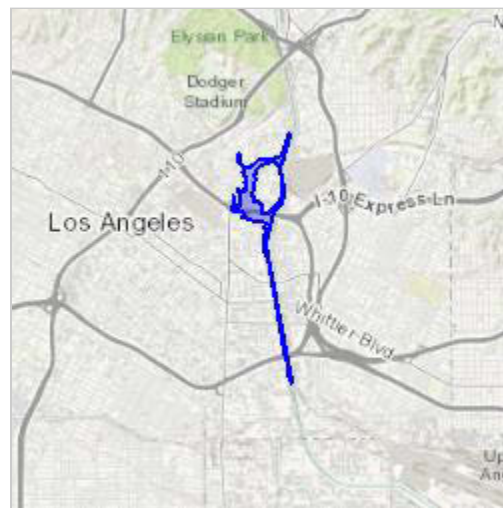
Project Name: LINK US

Project Type: TRANSPORTATION

Project Description: Los Angeles Union Station (LAUS) is located at 800 North Alameda Street in the City of Los Angeles, California. LAUS is bounded by US-101 to the south, Alameda Street to the west, Cesar E. Chavez Avenue to the north, and Vignes Street to the east. The FRA and Metro are proposing the Link US Project to transform LAUS from a “stub-end tracks station” into a “run-through tracks station” with a new passenger concourse that would serve LAUS as a multimodal modern station into the future to improve the efficiency of the station and accommodate future growth and transportation demands in the region.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/34.04536466202809N118.23016350502527W>



Counties: Los Angeles, CA

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

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

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

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

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

Birds

NAME	STATUS
Coastal California Gnatcatcher <i>Polioptila californica californica</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Plant List

Inventory of Rare and Endangered Plants

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

Search Criteria

California Rare Plant Rank is one of [1B, 2B], FESA is one of [Endangered, Threatened, Candidate, Not Listed], CESA is one of [Endangered, Threatened, Rare, Not Listed], Found in Quads 3411823, 3411822, 3411821, 3411813, 3411812, 3411811, 3311883, 3311882 and 3311881; Elevation is below 500 feet

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

Scientific Name	Common Name	Family	Lifeform	Blooming Period	Federal Listing Status	State Listing Status	CA Rare Plant Rank
Arenaria paludicola	marsh sandwort	Caryophyllaceae	perennial stoloniferous herb	May-Aug	FE	CE	1B.1
Astragalus brauntonii	Braunton's milk-vetch	Fabaceae	perennial herb	Jan-Aug	FE		1B.1
Astragalus pycnostachyus var. lanosissimus	Ventura marsh milk-vetch	Fabaceae	perennial herb	(Jun)Aug-Oct	FE	CE	1B.1
Astragalus tener var. titi	coastal dunes milk-vetch	Fabaceae	annual herb	Mar-May	FE	CE	1B.1
Atriplex coulteri	Coulter's saltbush	Chenopodiaceae	perennial herb	Mar-Oct			1B.2
Atriplex parishii	Parish's brittlescale	Chenopodiaceae	annual herb	Jun-Oct			1B.1
Atriplex serenana var. davidsonii	Davidson's saltscale	Chenopodiaceae	annual herb	Apr-Oct			1B.2
Berberis nevini	Nevin's barberry	Berberidaceae	perennial evergreen shrub	(Feb)Mar-Jun	FE	CE	1B.1
Calochortus weedii var. intermedius	intermediate mariposa lily	Liliaceae	perennial bulbiferous herb	May-Jul			1B.2
Calystegia felix	lucky morning-glory	Convolvulaceae	annual rhizomatous herb	Mar-Sep			1B.1
Centromadia parryi ssp. australis	southern tarplant	Asteraceae	annual herb	May-Nov			1B.1
Centromadia pungens ssp. laevis	smooth tarplant	Asteraceae	annual herb	Apr-Sep			1B.1
Chorizanthe parryi var. fernandina	San Fernando Valley spineflower	Polygonaceae	annual herb	Apr-Jul	FC	CE	1B.1
Cladium californicum	California sawgrass	Cyperaceae	perennial rhizomatous herb	Jun-Sep			2B.2
Cuscuta obtusiflora var. glandulosa	Peruvian dodder	Convolvulaceae	annual vine (parasitic)	Jul-Oct			2B.2
Dudleya multicaulis	many-stemmed	Crassulaceae	perennial herb	Apr-Jul			1B.2

	dudleya							
Horkelia cuneata var. puberula	mesa horkelia	Rosaceae	perennial herb	Feb-Jul(Sep)				1B.1
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Asteraceae	annual herb	Feb-Jun				1B.1
Nasturtium gambelii	Gambel's water cress	Brassicaceae	perennial rhizomatous herb	Apr-Oct	FE	CT		1B.1
Navarretia fossalis	spreading navarretia	Polemoniaceae	annual herb	Apr-Jun	FT			1B.1
Navarretia prostrata	prostrate vernal pool navarretia	Polemoniaceae	annual herb	Apr-Jul				1B.1
Orcuttia californica	California Orcutt grass	Poaceae	annual herb	Apr-Aug	FE	CE		1B.1
Phacelia stellaris	Brand's star phacelia	Hydrophyllaceae	annual herb	Mar-Jun				1B.1
Pseudognaphalium leucocephalum	white rabbit-tobacco	Asteraceae	perennial herb	(Jul)Aug-Nov(Dec)				2B.2
Sidalcea neomexicana	salt spring checkerbloom	Malvaceae	perennial herb	Mar-Jun				2B.2
Symphyotrichum defoliatum	San Bernardino aster	Asteraceae	perennial rhizomatous herb	Jul-Nov				1B.2
Thelypteris puberula var. sonorensis	Sonoran maiden fern	Thelypteridaceae	perennial rhizomatous herb	Jan-Sep				2B.2

Suggested Citation

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[The Consortium of California Herbaria](#)
[CalPhotos](#)

Questions and Comments

rareplants@cnps.org

**Appendix B:
List of Plant and Animal Species
Observed in the Biological Study Area**

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List of Plant Species Observed in the Biological Study Area			
Scientific Name	Common Name	Status Federal/State/CRPR ¹	California Invasive Plant Council Rating ²
CONIFEROPHYTA - CONE-BEARING PLANTS			
Pinaceae – Pine Family			
* <i>Pinus halepensis</i>	Aleppo pine	-/-/-	-
DICOTYLEDONES – “DICOTS”			
Aizoaceae – Fig-Marigold Family			
* <i>Mesembryanthemum crystallinum</i>	crystalline iceplant	-/-/-	Moderate
Amaranthaceae – Amaranth Family			
* <i>Amaranthus albus</i>	tumbling pigweed	-/-/-	-
Apocynaceae – Dogbane Family			
* <i>Nerium oleander</i>	oleander	-/-/-	-
Araliaceae – Ivy Family			
* <i>Hedera helix</i>	English ivy	-/-/-	High
Asteraceae – Sunflower Family			
* <i>Bidens pilosa</i>	hairy beggarticks	-/-/-	-
<i>Erigeron canadensis</i>	common horseweed	-/-/-	-
* <i>Hedypnois cretica</i>	cretanweed	-/-/-	-
<i>Helianthus annuus</i>	western sunflower	-/-/-	-
* <i>Lactuca serriola</i>	prickly lettuce	-/-/-	-
* <i>Senecio vulgaris</i>	common groundsel	-/-/-	-
* <i>Sonchus oleraceus</i>	common sow-thistle	-/-/-	-
Brassicaceae – Mustard Family			
* <i>Hirschfeldia incana</i>	shortpod mustard	-/-/-	Moderate
* <i>Sisymbrium irio</i>	London rocket	-/-/-	Moderate

List of Plant Species Observed in the Biological Study Area			
Scientific Name	Common Name	Status Federal/State/CRPR ¹	California Invasive Plant Council Rating ²
Chenopodiaceae – Goosefoot Family			
* <i>Atriplex semibaccata</i>	Australian saltbush	-/-/-	Moderate
* <i>Salsola tragus</i>	Russian thistle	-/-/-	Limited
Euphorbiaceae – Spurge Family			
* <i>Ricinus communis</i>	castor-bean	-/-/-	Limited
Fabaceae – Pea Family			
* <i>Acacia redolens</i>	bank catclaw	-/-/-	-
<i>Lupinus</i> sp.	lupine	-/-/-	-
* <i>Medicago polymorpha</i>	bur-clover	-/-/-	Limited
* <i>Melilotus indicus</i>	sourclover	-/-/-	-
Geraniaceae – Geranium Family			
* <i>Erodium cicutarium</i>	red-stemmed filaree	-/-/-	Limited
* <i>Erodium moschatum</i>	white-stemmed filaree	-/-/-	-
Malvaceae – Mallow Family			
* <i>Malva parviflora</i>	cheeseweed	-/-/-	-
Myrtaceae – Myrtle Family			
* <i>Eucalyptus citriodora</i>	lemon scented gum	-/-/-	-
Plantaginaceae – Plantain Family			
* <i>Plantago</i> c.f. <i>subnuda</i>	Mexican plantain	-/-/-	-
Platanaceae – Sycamore Family			
<i>Platanus racemosa</i>	western sycamore	-/-/-	-

List of Plant Species Observed in the Biological Study Area			
Scientific Name	Common Name	Status Federal/State/CRPR ¹	California Invasive Plant Council Rating ²
Plumbaginaceae – Leadwort Family			
* <i>Limonium perezii</i>	Perez's sea-lavender	-/-/-	-
Portulacaceae – Purslane Family			
* <i>Portulaca oleracea</i>	common purslane	-/-/-	-
Rosaceae – Rose Family			
* <i>Prunus</i> sp.	cherry	-/-/-	-
Solanaceae – Nightshade Family			
<i>Datura wrightii</i>	jimsonweed	-/-/-	-
* <i>Nicotiana glauca</i>	tree tobacco	-/-/-	Moderate
MONOCOTS			
Areceaceae – Palm Family			
* <i>Washingtonia robusta</i>	Mexican fan palm	-/-/-	Moderate
Poaceae – Grass Family			
* <i>Avena</i> sp.	wild oat	-/-/-	Moderate
* <i>Bromus diandrus</i>	common ripgut grass	-/-/-	Moderate
* <i>Bromus madritensis</i> ssp. <i>rubens</i>	red brome	-/-/-	High
* <i>Cynodon dactylon</i>	Bermuda grass	-/-/-	Moderate
* <i>Pennisetum setaceum</i>	fountain grass	-/-/-	Moderate
* <i>Schismus barbatus</i>	Mediterranean schismus	-/-/-	Limited

List of Plant Species Observed in the Biological Study Area

Scientific Name	Common Name	Status Federal/State/CRPR ¹	California Invasive Plant Council Rating ²
* <i>Stipa miliacea</i> var. <i>miliacea</i> [<i>Piptatherum mileaceum</i>]	smilo grass	-/-/-	Limited

Notes:

¹ CRPR = California Rare Plant Rank

² California Invasive Plant Council Ratings (2018):

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

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

Limited = These species are invasive but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic.

* = Non-native plant

List of Animal Species Observed in the Biological Study Area		
Common Name	Scientific Name	Status
CLASS: AVES (Birds)		
Falconinae		
American kestrel	<i>Falco sparverius</i>	-
Columbidae		
Rock pigeon	<i>Columba livia</i>	-
Mourning dove	<i>Zenaida macroura</i>	-
Corvidae		
American crow	<i>Corvus brachyrhynchos</i>	-
Sturnidae		
*European starling	<i>Sturnus vulgaris</i>	-
Parulidae		
Yellow-rumped warbler	<i>Dendroica coronata</i>	-
Fringillidae		
House finch	<i>Haemorhous mexicanus</i>	-
Lesser goldfinch	<i>Spinus psaltria</i>	-
Passeridae		
*House sparrow	<i>Passer domesticus</i>	-
CLASS: MAMMALIA (MAMMALS)		
Carnivora (Carnivores)		
Felidae (Cats)		
Domestic cat	<i>Felis domesticus</i>	-

Note: * = Non-native plant

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Appendix C: Site Photographs

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Photograph 1. Northeast corner of Biological Study Area overlooking ornamental vegetation between the parking lot and railroad ROW, looking south



Photograph 2. Planted pines along Keller Street and the rail, looking south



Photograph 3. Planted ornamental vegetation between tracks and fence line along Bolero Lane, looking west



Photograph 4. Disturbed habitat located on the northwest corner of the Biological Study Area (North Alhambra Avenue and Vignes Street), looking south along the property fence line and rail tracks to the left



Photograph 5. Southeast corner of the disturbed lot located on the northwest corner of the Biological Study Area (North Alhambra Avenue and Vignes Street), looking south



Photograph 6. Northeast corner of disturbed lot located on the northwest corner of the Biological Study Area, looking southwest



Photograph 7. Two-foot-wide drainage ditch along the fence line on the corner of Commercial and Center Streets, looking north



Photograph 8. Disturbed habitat looking west on the corner of Commercial Street and Center Street



Photograph 9. Looking north into disturbed habitat located north of Commercial Street

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