

Appendix E Biological Resources Technical Report

Appendices

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Biological Resources Technical Report

Freeway Corridor Specific Plan

NOVEMBER 2023

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Acronyms and Abbreviations

Acronym	Definition
Amsl	above mean sea level
BMP	best management practice
Cal-IPC	California Invasive Plant Council
CDFW	California Department of Fish and Wildlife
CEHC	California Essential Habitat Connectivity
CEQA	California Environmental Quality Act
CEQA Guidelines	State of California CEQA Guidelines
CESA	California Endangered Species Act
CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
City	City of Yucaipa
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
CWA	Clean Water Act
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
Esri	Environmental Systems Research Institute
FESA	federal Endangered Species Act
General Plan	City of Yucaipa General Plan
GIS	geographic information system
I	Interstate
MBTA	Migratory Bird Treaty Act
MM	Mitigation Measure
MSHCP	Multiple Species Habitat Conservation Plan
NPDES	National Pollutant Discharge Elimination System
OHWM	ordinary high water mark
Project	Freeway Corridor Specific Plan
RWQCB	Regional Water Quality Control Board
Rule	final Revised Definition of “Waters of the United States” rule
SWPPP	Stormwater Pollution Prevention Plan
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

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1 Introduction

This report documents the results of surveys conducted to identify potential biological resource impacts for the Freeway Corridor Specific Plan (Project) located in the City of Yucaipa (City), San Bernardino County, California. Figure 1, Vicinity Map (all figures provided within Appendix A), shows the regional location of the Project and the site vicinity.

The purpose of this report is to (1) describe the conditions of biological resources within the Project site in terms of vegetation communities, plants, wildlife, wildlife habitats, wildlife corridors, and aquatic resources; (2) quantify potential direct and indirect impacts to special-status biological resources that would result from the Project; (3) discuss those impacts in terms of biological significance in view of federal, state, and local laws; and (4) specify measures to avoid, minimize, and/or mitigate any significant impacts that would occur to special-status biological resources as a result of Project implementation.

1.1 Project Description

1.1.1 Project Location

The approximately 1,237.6-acre Specific Plan area, hereafter referred to as the “Project site,” is located in the southwestern portion of the City, which is located in southwestern San Bernardino County (Figure 1). The Project site is intersected by Interstate 10 (I-10) running from east to west in the northern portion of the Project site, Live Oak Canyon Road running north to south in the western portion of the Project site, and a small portion of West County Line Road running east to west in the southern portion of the Project site. The Project site consists of 49 Assessor’s Parcel Numbers, as listed in Table 1. Specifically, the Project site is located in Sections 3, 4, 8, 9, 10, and 11, Township 2 South, Range 2 West, as depicted on the U.S. Geological Survey (USGS) Yucaipa 7.5-minute topographic quadrangle map. Regional access to the Project site is provided by I-10 from the east and west. Local access to the Project site is provided via Live Oak Canyon Road and West County Line Road, Oak Glen Road, Wildwood Canyon Road, and Calimesa Boulevard.

Table 1. Project Site Assessor’s Parcel Numbers

Accessor’s Parcel Numbers						
030116305	030120108	030120128	030120141	030122101	031811108	031821306
030116307	030120112	030120133	030120142	030122109	031811109	031821307
030118104	030120113	030120135	030121102	030122110	031811110	031821308
030119114	030120120	030120136	030121108	031807107	031811114	031821309
030119115	030120123	030120138	030121110	031807112	031811115	031821310
030119121	030120126	030120139	030121111	031811101	031821303	031821311
030120103	030120127	030120140	030121112	031811102	031821305	031821314

1.1.2 Project Description

The proposed Project would subdivide the Project site into a mixture of residential, commercial, business, public, agricultural tourism, and open space land uses. Approximately 40% (498 acres) is proposed to be left as open space, comprising 159.5 acres designated as Open Space – Conservation that would be conserved as a part of Project implementation, and 338.5 acres of non-conserved Open Space that would allow for agriculture-related activities that would buffer different land uses, described further below. In addition, the Project includes 225.8 acres designated for residential use, 223.1 acres designated for business park development, 72.2 acres designated for regional commerce, 15.1 acres designated for circulation/right-of-way, 48.8 acres designated for agricultural tourism areas, and 154.6 acres designated as Not A Part (Figure 2A, Land Use Plan). The Project would be built in seven phases, as shown in Figure 2B, Phasing Plan.

Residential Use

The Project would allow for a maximum of 2,472 residential units. There are five different residential classifications with varying densities and product types. Densities vary from two to 24 dwelling units per acre, depending on product type and location, with lower density housing in areas closest to existing low-density housing adjacent to the Project site. Residential products/housing types, from low to high dwelling units per acre, include detached single-family units, attached single-family units including duplexes and walk-up townhomes, small lot single-family units, cluster housing, and multifamily residential units including courtyard housing and stacked flats.

The majority of the residences would be located in the southeastern and the northwestern portions of the Project site. Residences would be connected by trails and small sections of open space areas.

Business Park Use

The land designated for business park use would provide for light industrial and office uses. These uses would include light manufacturing; wholesale/warehouse uses, including high cube warehousing; logistics/distribution centers; contract/construction services; transportation services; agriculture support services; incidental services; and similar uses.

Regional Commerce Use

The land designated for regional commerce use would provide for retail and services, lodgings, office uses, recreation and entertainment, and other compatible uses that support the local and regional economy. Additionally, pursuant to the Open Space Standards of the Specific Plan, regional commerce lands would include open space areas in the form of plazas, landscaped courtyards, and/or squares.

Agriculture Tourism Use

The land designated for agriculture tourism would provide for agriculture-based commercial use, including the sale of produce, pumpkins, and agriculture-related goods, and supporting businesses such as restaurants and overnight accommodations that cater to the agriculture tourism industry.

Non-Conserved Open Space

The Project includes 336.1 acres (27% of the Project site) to be dedicated to open space that would not be conserved. This land use allows for agriculture-related activities where appropriate and for buffering and transitions between different land uses. Grading activities may be permitted within the Open Space designation provided that vegetated slopes that feature contour grading are implemented to maintain a naturalistic appearance.

Open Space – Conservation

The Project includes 155.0 acres (13% of the Project site) to be dedicated to open space that would be conserved. This includes ridgelines, hillsides, natural drainage courses, natural vegetation, and prominent views that would be preserved in perpetuity. The Open Space designation provides protection of hillsides, ridgelines, drainage courses, and sensitive habitat areas.

Infrastructure

The Project would require expansion of existing wastewater, water, and stormwater infrastructure.

Circulation Plan

The Project’s circulation plan would consist of a circuitous road system south of I-10, including a connection between Live Oak Canyon Road and County Line Road. New connections from all existing streets would create a complete roadway network supporting residential, commercial, and public land areas. Traffic-calming measures would be implemented, including narrower streets, roundabouts, intersection curb bump-outs, medians, shorter blocks, and tree canopies. The goal is to encourage slower vehicular speeds, improve safety, and facilitate a stronger sense of community.

Additionally, bicycle and pedestrian trail networks would provide connectivity within and between neighborhoods in the Project area. The Project proposes both multi-use trails and equestrian trails; this trail system would expand the existing trail network and recreational activity in the City and improve connectivity between Project neighborhoods.

Grading

The Project is characterized by relatively flat areas on plateaus and east–west-running valleys, surrounded by often steep hillsides. Elevation within the Project area has an overall elevation change of 450 feet from the lowest to the highest point. The goal of the grading plan is to respect the natural topography of the area while utilizing grading techniques that provide suitable pads for buildings and minimize abrupt elevation and slope transitions. Guiding principles include preserving plan areas designated as Open Space, situating building pads so that they complement adjacent natural topography, creating roads that follow the contours of existing topography, and minimizing grading to the extent possible while meeting the City’s design guidelines. Grading applied to the area would achieve a 2:1 ratio (height over distance), and structures would be placed as far from slopes as practicable to prevent structural damage caused by erosion, run-off, or slope instability.

Landscaping

Landscaping is a critical component of developing an appealing community and can enhance curb appeal by introducing variations of color and texture to lawn areas, conserving water, providing shade to help cool down the ambient temperature, reducing noise, and improving the overall safety of roadways by providing tree-lined streets.

Design considerations include creating a consistent landscape environment that complements the surrounding open space, providing screening, buffering, and shade where needed and incorporating water conservation techniques and drought-tolerant plant species.

Utilities and Infrastructure

The proposed Project would include the expansion of existing wastewater, water, and stormwater infrastructure.

Construction and Project Phasing

A 15- to 20-year development schedule is proposed for the Project, to proceed in approximately 7 phases that may overlap. Phases 1a–1c consist of development of the Business Park use areas south of I-10. Phases 2–7 consist of development of commercial and residential use areas. Phasing is conceptual only and is dependent on factors such as ownership patterns, market demand for specific commercial and residential products, and the timing of the California Department of Transportation’s improvements to regional access roads Live Oak Canyon Road and Wildwood Canyon Road. For development in Phases 5 and 6, secondary freeway access would be provided to connect to I-10, in accordance with City public safety and emergency response personnel.

CEQA Context

The proposed Project is an update to the Freeway Corridor Specific Plan. This Biological Resources Technical Report is intended to support the Subsequent Environmental Impact Report for the Freeway Corridor Specific Plan that documents the environmental impacts associated with the updated Freeway Corridor Specific Plan. The original Environmental Impact Report (EIR) was certified in 2008. On July 21, 2022, the City approved an Addendum to the 2008 Certified EIR for development of the Countyline Road Warehouse project.

Projects

Figure 2C, Projects, shows the approved, proposed, or contemplated projects within the Freeway Corridor Specific Plan.

County Line Road Warehouse. On July 21, 2022, the City approved an Addendum to the 2008 Certified EIR for development of the Countyline Road Warehouse project—an approximately 363,650-square-foot industrial warehouse totaling 19.3 acres at the northwest corner of 7th Place and County Line Lane in the eastern portion of Phase 1 (Figure 2B). This project would avoid all mapped aquatic resources within its study area (City of Yucaipa 2022). This approved project is considered Business Park in the Land Use Plan (Figure 2A).

Wildwood Canyon Road Interchange. As of 2022, the City, working with the California Department of Transportation who is serving as the Lead Agency, is in the project approval and environmental document phase for the proposed interchange at Wildwood Canyon Road, which would be the third interchange providing access to the Project site and would provide additional connectivity for the later phases of the proposed Project.

Pacific Oaks Commerce Center. The proposed Project includes a project-level analysis for buildout of the Pacific Oaks Commerce Center. The Pacific Oaks Commerce Center would result in development of two buildings that total up to 2,054,000 square feet. Building 1 would have 1,032,500 square feet of warehouse and 20,000 square feet of office use, for a total of 1,052,500 square feet of building space. Building 2 would have 981,500 square feet of warehouse and 20,000 square feet of office use, for a total of 1,001,500 square feet of building space.

2 Regulatory Setting

2.1 Federal

2.1.1 Federal Endangered Species Act

The federal Endangered Species Act (FESA) of 1973 (16 USC 1531 et seq.), as amended, is administered by the U.S. Fish and Wildlife Service (USFWS) for most plant and animal species, and by the National Oceanic and Atmospheric Administration National Marine Fisheries Service for certain marine species. This legislation is intended to provide a means to conserve the ecosystems upon which endangered and threatened species depend and provide programs for the conservation of those species, thus preventing the extinction of plants and wildlife. The FESA defines an endangered species as “any species that is in danger of extinction throughout all or a significant portion of its range.” A threatened species is defined as “any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.” Under FESA, it is unlawful to “take” any listed species; “take” is defined as, “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.”

FESA allows for the issuance of incidental take permits for listed species under Section 7, which is generally available for projects that also require other federal agency permits or other approvals, and under Section 10, which provides for the approval of habitat conservation plans on private property without any other federal agency involvement.

2.1.2 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) prohibits the intentional and unintentional take of any migratory bird or any part, nest, or eggs of any such bird. Under the MBTA, “take” is defined as pursuing, hunting, shooting, capturing, collecting, or killing, or attempting to do so (16 USC 703 et seq.). Currently, the Migratory Birds office considers nests that support eggs, nestlings, or juveniles to be active. Additionally, Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds, requires that any project with federal involvement address impacts of federal actions on migratory birds with the purpose of promoting conservation of migratory bird populations (66 FR 3853–3856). The Executive Order requires federal agencies to work with USFWS to develop a Memorandum of Understanding. USFWS reviews actions that might affect these species.

2.1.3 Clean Water Act

The Clean Water Act (CWA) is the major federal legislation governing water quality, providing guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation’s waters. Section 401 of the CWA requires an applicant for a federal license or permit that may result in a discharge of pollutants into waters of the United States to obtain state certification, thereby ensuring that the discharge would comply with provisions of the CWA. The State Water Resources Control Board and Regional Water Quality Control Boards (RWQCBs) administer the 401 certification program in California. Section 402 of the CWA establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the United States. Section 404 establishes a permit program administered by the U.S. Army Corps of Engineers (USACE) that regulates the discharge of dredged or fill material into waters of the United States, including wetlands. USACE implementing

regulations are found in 33 Code of Federal Regulations (CFR) Parts 320 to 332. Guidelines for implementation are referred to as the Section 404(b)(1) Guidelines, which were developed by the U.S. Environmental Protection Agency (EPA) in conjunction with USACE (40 CFR 230). The guidelines allow the discharge of dredged or fill material into the aquatic ecosystem only if there is no practicable alternative that would have less adverse impacts.

Wetlands and Other Waters of the United States

The definition of “waters of the United States” establishes the geographic scope for authority under Section 404 of the CWA; however, the CWA does not specifically define waters of the United States, leaving the definition open to statutory interpretation and agency rulemaking. The definition of what constitutes “waters of the United States” (provided in 33 CFR Section 328.3(a)) has changed multiple times over the past few decades starting with the *United States v. Riverside Bayview Homes, Inc.* court ruling in 1985. Subsequent court proceedings, rule makings, and congressional acts in 2001 (*Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers*), 2006 (*Rapanos v. United States*), 2015 (Clean Water Rule), 2018 (suspension of the Clean Water Rule), 2019 (formal repeal of the Clean Water Rule), 2020 (Navigable Waters Protection Rule), and 2021 (*Pasqua Tribe et al v. United States Environmental Protection Agency* resulting in remand and vacatur of the Navigable Waters Protection Rule and a return to “the pre-2015 regulatory regime”) have attempted to provide greater clarity to the term and its regulatory implementation. On December 30, 2022, the agencies announced the final Revised Definition of “Waters of the United States” rule (Rule) (88 CFR 3004–3144). The Rule was published in the Federal Register on January 18, 2023, and became effective on March 20, 2023, restoring federal jurisdiction over waters that were protected prior to 2015 under the CWA for traditional navigable waters, the territorial seas, interstate waters, and upstream water resources that significantly affect those waters. The Rule represents a re-expansion of federal jurisdiction over certain water bodies and wetlands previously exempt pursuant to the 2020 Navigable Waters Protection Rule. The Rule also considers various subsequent court decisions including two notable Supreme Court decisions.

There are two key changes that the Rule incorporates. Firstly, the Rule reinstates the “Significant Nexus” test. The “Significant Nexus” test refers to waters that either alone, or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of traditional navigable waters, interstate waters, or the territorial seas (86 FR 69372-69450). The “Significant Nexus” test attempts to establish a scientific connection between smaller water bodies (such as ephemeral or intermittent tributaries) and larger, more traditional navigable waters (such as rivers). Significant nexus evaluations take into consideration hydrologic and ecologic factors including, but not limited to, volume, duration, and the frequency of surface water flow in the resource and its proximity to a traditional navigable water, and the functions performed by the resource on adjacent wetlands. Second, the Rule adopts the “Relatively Permanent Standard” test. To meet the “Relatively Permanent Standard,” water bodies must be relatively permanent, standing, or continuously flowing and have a continuous surface connection to such waters.

On May 25, 2023, the Supreme Court issued its long-anticipated decision in *Sackett v. EPA*, in which it rejected the EPA’s claim that “waters of the United States,” as defined in the CWA, include wetlands with an ecologically significant nexus to traditional navigable waters. The Supreme Court held that only those wetlands with a continuous surface water connection to traditional navigable waterways would be afforded federal protection under the CWA. Specifically, to assert jurisdiction over an adjacent wetland under the CWA, a party must establish that (1) the adjacent body of water constitutes water(s) of the United States (i.e., a relatively permanent body of water connected to traditional interstate navigable waters) and (2) the wetland has a continuous surface connection with

that water, making it difficult to determine where the water ends and the wetland begins. The Rule will need to be modified by the Biden administration in light of this decision.

The term “wetlands” (a subset of waters of the United States) is defined in 33 CFR, Section 328.3(c)(16), as “areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.” In the absence of wetlands, the limits of USACE jurisdiction in non-tidal waters, such as intermittent streams, extend to the “ordinary high water mark,” which is defined in 33 CFR 328.3(c)(7) as “that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.”

2.2 State

2.2.1 California Endangered Species Act

The California Endangered Species Act (CESA) (California Fish and Game Code [CFGC], Section 2050–2068) provides protection and prohibits the take of plant, fish, and wildlife species listed by the State of California. Unlike FESA, under CESA state-listed plants have the same degree of protection as wildlife, but insects and other invertebrates may not be listed. “Take” is defined similarly to FESA and is prohibited for both listed and candidate species. Take authorization may be obtained by a project applicant from the California Department of Fish and Wildlife (CDFW) under CESA Section 2081, which allows take of a listed species for educational, scientific, or management purposes. In this case, private developers consult with CDFW to develop a set of measures and standards for managing the listed species, including full mitigation for impacts, funding of implementation, and monitoring of mitigation measures.

2.2.2 California Fish and Game Code

Fully Protected Species

Sections 3511, 4700, 5050, and 5515 of the CFGC 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. Furthermore, it is the responsibility of CDFW to maintain viable populations of all native species. Toward that end, CDFW has designated certain vertebrate species as Species of Special Concern because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction.

Sections 1600–1616

CDFW jurisdiction includes ephemeral, intermittent, and perennial watercourses (including dry washes) and lakes characterized by the presence of (1) definable bed and banks and (2) existing fish or wildlife resources. CDFW takes jurisdiction to the top of bank of the stream, or the limit of the adjacent riparian vegetation, which may include oak

woodlands in canyon bottoms. Historical court cases have further extended CDFW jurisdiction to include watercourses that seemingly disappear but reemerge elsewhere. Under the CDFW definition, a watercourse need not exhibit evidence of an ordinary high water mark (OHWM) to be claimed as jurisdictional. CDFW does not have jurisdiction over ocean or shoreline resources.

Under CFGC Sections 1600–1616, CDFW has the authority to regulate work that will 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. CDFW also has the authority to regulate work that will 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. This regulation takes the form of a requirement for a Lake or Streambed Alteration Agreement and is applicable to all projects. Applications to CDFW must include a complete certified California Environmental Quality Act (CEQA) document.

California Native Plant Protection Act

The Native Plant Protection Act of 1977 (see Section 1900 et seq. of the CFGC) directed CDFW to carry out the Legislature’s intent to “preserve, protect and enhance rare and endangered plants in this State.” The Native Plant Protection Act gave the California Fish and Game Commission the power to designate native plants as “endangered” or “rare” and protect endangered and rare plants from take. CESA expanded on the original Native Plant Protection Act and enhanced legal protection for plants, but the Native Plant Protection Act remains part of the CFGC. To align with federal regulations, CESA created the categories of “threatened” and “endangered” species. It converted all “rare” animals into the act as threatened species, but did not do so for rare plants. Thus, there are three listing categories for plants in California: rare, threatened, and endangered. Because rare plants are not included in CESA, mitigation measures for impacts to rare plants are specified in a formal agreement between CDFW and the Project proponent.

Nesting Birds

Section 3503 of the CFGC states that it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Section 3503.5 protects all birds of prey (raptors) and their eggs and nests. Section 3511 states that fully protected birds or parts thereof may not be taken or possessed at any time. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA.

2.2.3 California Environmental Quality Act

CEQA requires identification of a project’s potentially significant impacts on biological resources and ways that such impacts can be avoided, minimized, or mitigated. The act also provides guidelines and thresholds for use by lead agencies for evaluating the significance of proposed impacts.

The State of California CEQA Guidelines (CEQA Guidelines) Section 15380(b)(1) defines endangered animals or plants as species or subspecies whose “survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors.” A rare animal or plant is defined in Section 15380(b)(2) as a species that, although not presently threatened with extinction, exists “in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or . . . [t]he species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered ‘threatened’ as that term is used in the federal

Endangered Species Act.” Additionally, an animal or plant may be presumed to be endangered, rare, or threatened if it meets the criteria for listing, as defined further in CEQA Guidelines Section 15380(c).

CDFW has developed a list of “Special Species” as “a general term that refers to all of the taxa the California Natural Diversity Database (CNDDDB) is interested in tracking, regardless of their legal or protection status.” This is a broader list than those species that are protected under the FESA, CESA, and other CFGC provisions, and includes lists developed by other organizations, including for example the Audubon Watch List Species. Guidance documents prepared by other agencies, including the Bureau of Land Management Sensitive Species and USFWS Birds of Special Concern, are also included on the CDFW Special Species list. Additionally, CDFW has concluded that plant species listed as California Rare Plant Rank (CRPR) 1 and 2 by the California Native Plant Society (CNPS), and potentially some CRPR 3 plants, are covered by CEQA Guidelines Section 15380.

Section IV, Appendix G (Environmental Checklist Form) of the CEQA Guidelines requires an evaluation of impacts to “any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service.”

2.2.4 Porter-Cologne Water Quality Control Act

Pursuant to provisions of the Porter-Cologne Act, the RWQCBs regulate discharging waste, or proposing to discharge waste, within any region that could affect a water of the state (California Water Code, Section 13260[a]). The State Water Resources Control Board defines a waters of the state as “any surface water or groundwater, including saline waters, within the boundaries of the state” (California Water Code, Section 13050[e]). All waters of the United States are waters of the state. Waters of the state include wetlands, and the State Water Resources Control Board definition of wetlands includes the following:

1. Natural wetlands
2. Wetlands created by modification of a surface water of the state
3. Artificial wetlands that meet any of the following criteria:
 - a. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration
 - b. Specifically identified in a water quality control plan as a wetland or other water of the state
 - c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape
 - d. Greater than or equal to 1 acre in size unless the artificial wetland was constructed and is currently used and maintained, primarily for one or more of the following purposes: industrial or municipal wastewater treatment or disposal; settling of sediment; detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial permitting program; treatment of surface waters; agricultural crop irrigation or stock watering; fire suppression; industrial processing or cooling water; active surface mining – even if the site is managed for interim wetlands functions and values; log storage; treatment, storage, or distribution of recycled water; maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits); or fields flooded for rice growing.

Wetlands that may not meet all of USACE’s wetland delineation criteria are considered wetland waters of the state if, “under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area’s vegetation is dominated by hydrophytes or the area lacks vegetation” (SWRCB 2019). Additionally, aquatic resources that USACE determines to not be waters of the United States because they lack a significant nexus to a traditional navigable water or are above the OHWM limit of federal jurisdiction may also be considered waters of the state. If a CWA Section 404 permit is not required for a project, the RWQCB may still require a permit (waste discharge requirements) for impacts to waters of the state under the Porter–Cologne Act.

2.3 Local

2.3.1 City of Yucaipa Development Code

2.3.1.1 Division 9 Plant Protection and Management

Per the City’s Municipal Development Code, Division 9, Plant Protection and Management, the City’s abundant and diverse plant resources shall be promoted by the provision of regulations and guidelines for the management of these plant resources within the incorporated areas of the City on property or combinations of property under private or public ownership.

89.0115: Tree Removal Permit

- A. A removal permit shall be required for the removal of any tree or plant that is subject to the provisions of this Division.
- B. A land use application, a building permit, and all other development permits (e.g., grading, mobile home setdowns, etc.) shall consider and include a review of any proposed tree or plant removal. Any approved land use application and/or development permit shall be a permit for the removal of trees or plants, if such land use application or development permit specifically reviews and approves such removals. Such reviews shall consider and require compliance with the provisions of this Division.
- C. The reviewing authority may require certification from an appropriate tree expert or plant expert that such tree removals are appropriate, supportive of a healthy environment, and in compliance with the provisions of this chapter.
- D. Removals of trees or plants that are not requested in conjunction with a land use application or development permit may be accomplished only under a permit issued by either the Community Development Director, Planning Commission, or local Fire Authority subject to the provisions of this chapter.
- E. The Building Official or the Community Development Director shall require a preconstruction inspection prior to approval of development permits.
- F. The duration of a plant or tree removal permit, when issued in conjunction with a land use application and/or a development permit, shall be coterminous with the duration of the associated application or permit, unless otherwise specified. The Reviewing Authority shall specify the expiration date for all other tree and/or plant removal permits.

89.0120: Findings for Removal

The Reviewing Authority shall authorize the removal of a tree or plant subject to the provisions of this chapter only if the following findings are made.

- A. The removal of the tree or plant is justified for one of the following reasons.
 - a. The location of the tree or plant and/or its dripline interferes with an allowed structure, sewage disposal area, paved area, or other approved improvement or ground disturbing activity.
 - b. The location of the tree or plant and/or its dripline interferes with the planned improvement of a street or development of an approved access to the subject or adjoining private property.
 - c. The location of the tree or plant is hazardous to pedestrian or vehicular travel or safety.
 - d. The tree or plant or its presence interferes with or is causing extensive damage to utility services or facilities, roadways, sidewalks, curbs, gutters, pavement, sewer line(s), drainage or flood control improvements, foundations, existing structures, or municipal improvements.
 - e. The condition or location of the plant or tree is adjacent to and in such close proximity to an existing or proposed structure that the plant or tree has or will sustain significant damage.

In the mountain area only, a Registered Professional Forester must certify in writing that the condition or location of the subject tree is contributing to an overstocked tree stand condition such that its removal will improve the overall health, safety, and vigor of the stand of trees containing

89.0125: Plot Plan Requirements

Prior to the issuance of a tree or plant removal permit in conjunction with a development permit and/or approval of a land use application which authorizes such removal, a plot plan shall be approved by the appropriate Review Authority for each site, indicating exactly which trees or plants are authorized to be removed. The required information can be added to any other required plot plan. Prior to issuance of development permits in areas with trees or plants that are subject to the provisions of this Division, a preconstruction inspection shall be conducted by the appropriate authority. Such preconstruction inspections may be combined with any other required inspection.

Construction Standards

During construction and prior to final inspection under a development permit, the following standards shall apply unless otherwise approved in writing by a Tree Expert.

- A. Tree trunks and plants shall not be enclosed within roof lines or decking.
- B. Utilities, construction signs, or other hardware shall not be attached so as to penetrate or abrade any live tree or plant.
- C. Grade Alterations

There shall be no grade alterations which bury any portion of a tree or plant or significantly undercut the root system within the dripline.

89.0205: Disposition of Coniferous Trees

Every person, firm, or corporation, whether as principal, agent, or employee, which has control of, or right of entry, or of access to, any land in the area described in Section 89.0215, shall comply with the provisions of this chapter. Except as otherwise provided by this chapter, any coniferous tree or portion thereof, including stumps, shall be treated in accordance with one of the methods specified in this section and Section 89.0210 within 15 days after such a tree or portion of such a tree has been cut. In the case of any construction activity, the Building Official or the City Planner shall not approve any development permit inspections until all felled coniferous trees or portions thereof are treated in accordance with the provisions of this section. The Building Official or the City Planner shall require a permittee to obtain, where necessary, a certificate from the local Fire Authority, or appropriately certified Pest Control Adviser, or a Qualified Applicator, that compliance with any measures that are not readily observable by the inspector on the construction site has been made in an acceptable manner.

Felled coniferous trees shall be treated by at least one or a combination of the following measures.

- A. Remove to a solid waste disposal site specifically designated by the City for such use.
- B. Burn sufficiently to consume the bark, when allowed by local Fire Protection Agency and Air Pollution Control District.
- C. Lop and scatter material less than four inches in diameter so that it is piled no higher than 24 inches above the ground, when allowed by the local Fire Protection Agency.
- D. Remove the bark.
- E. Chip or grind.
- F. Split and scatter with bark toward the sun for a minimum of 45 consecutive days or until final inspection is completed, whichever is less.
- G. Stack in the sun and cover with six mil clear plastic, which has a continuous seal from the outside for at least 180 days.
- H. Spray with a commercial insecticide for such purposes as approved by the City Planner for such insects and purposes.
- I. Treat under any other method approved by the enforcement officer in writing.

89.0210: Stump Treatment

Any fresh-cut stumps of any live coniferous trees shall be protected from infection by Annosus Root Rot (*Fomes annosus*) with borax powder (granular tech, 10 mole) as soon as possible after felling, covering the entire newly-exposed cut and/or broken surface completely with a thin uniform layer of white borax within two hours.

89.0410: Riparian Plant Conservation

The removal of any vegetation within 200 feet of the bank of a stream or in an area indicated as a protected riparian area on an overlay map or Specific Plan shall be subject to a tree or plant removal permit in accordance with the procedures detailed by Chapter 3 of this Division, and shall be subject to environmental review, except as otherwise provided or excepted by the provisions of this Division. For the purposes of this chapter, streams include those shown on U.S. Geological Survey Quadrangle topographic maps as perennial or intermittent, blue or brown lines (solid or dashed), and river wash areas. Pre-construction inspections shall include the verification of the presence

of any riparian vegetation. Any necessary conditions of approval for removal of riparian vegetation may be imposed in addition to and in combination with any condition imposed pursuant to Chapter 3 of this Division.

89.0510 Oak Tree Conservation

Any person who owns, controls, has custody or possession of any real property within the City that is improved or has been approved for development, or which is part of or associated with the City approved development of another piece of property, such as any parcel to be maintained as permanent open space or for recreational purposes, shall maintain all oak tree(s) located thereon in a state of good health pursuant to the Oak Tree Conservation and Protection Guidelines adopted by City Council resolution. Failure to do so will constitute a violation of this article.

89.0515: Oak Tree Permit

(a) Permit required. No person shall cut, remove, encroach into the protected zone, or relocate any oak tree on any public or private property within the City unless a valid oak tree permit has been issued by the City pursuant to the provisions of this chapter and the Oak Tree Conservation and Protection Guidelines. The status of limbs or trees as deadwood or dead trees must be confirmed by an Oak Tree Conservation Consultant.

(b) Exemptions. A permit is not required to cut or remove a tree(s) under the following circumstances:

1. Trees that do not exceed two inches (2") in diameter when measured at a point four and half feet (4 1/2') above the tree's natural grade.
2. Trees damaged by thunderstorms, windstorms, floods, earthquakes, fires or other natural disasters and determined to be dangerous by the Planning Agency. The Department of Community Development shall be promptly notified of the nature of the emergency and action taken.
3. When removal is determined necessary by fire department.
4. Trees planted, grown and/or held for sale as part of a licensed nursery business.
5. Use of explosives. All tree fellers, tree surgeons, or anyone using explosives within the City limits in connection with the cutting down or removal of any oak tree shall first apply to the City Manager for a permit to do so and shall furnish such bond or insurance as the City Manager shall deem necessary for the protection of the property owner or any other person from any possible damage as a result of such work.

89.0520: Processing of Oak Tree Removal Permits

(a) Processing. The applicant shall furnish all necessary information as required by the Oak Tree Conservation and Protection Guidelines in a clear and accurate format to the Community Development Department and pay the appropriate filing fee prescribed by City Council resolution. The Community Development Director may approve, deny, or conditionally approve a request for removal of three or fewer oak trees on a single parcel. For requests involving three or fewer trees, the decision of the Director may be appealed to the Planning Commission and the Commission's decision may be appealed to the City Council pursuant to the provisions of this code. Any request for removal of four or more oak trees on a single parcel shall be reviewed by the Planning Commission which shall make recommendations to the Council which shall approve or deny the permit.

(b) Standards. An oak tree may be removed based upon one of the following findings by the decisionmaker:

1. The condition or location of the oak tree requires cutting to maintain or aid its health, balance or structure.

2. The condition of the tree(s) with respect to disease, danger of falling, proximity to existing structures, high pedestrian traffic areas such as parking lots, pedestrian walkways or interference with utility services cannot be controlled or remedied through reasonable preservation and/or preventative procedures and practices.
3. A permit may be approved when necessary to remove, relocate, cut or encroach into the protected zone of an oak tree to enable the reasonable and conforming use of the subject property which is otherwise prevented by the presence of the tree. Reasonable use of the property shall be determined in accordance with the Oak Tree Conservation and Protection Guidelines.

89.0525: Condition on Removal of Oak Trees

The conditions may be imposed on the permit at the discretion of the decisionmaker including, but not limited to, any of the following:

- A. A condition requiring the replacement or placement of additional trees on the subject property to offset the impacts associated with the loss of a tree, limbs or encroachment into the protected zone of an oak tree;
- B. The relocating of a tree on-site or off-site, or the planting of a new tree off-site within the City to offset the loss of a tree;
- C. A condition requiring an objectively observable maintenance and care program be initiated to insure the continued health and care of oak tree(s) on the property;
- D. Payment of a fee equal to the replacement cost of the tree or donation of a boxed tree to the City or other public agency to be used elsewhere in the community should a suitable replacement location of the tree not be possible on-site or off-site.

2.3.1.2 Division 5 Overlay Districts

85.030220 Development Standards

When a land use is proposed or an existing land use is increased by more than 25% within a Biotic Resources Overlay District, the applicant shall have a report prepared identifying all biotic resources located on the site, as well as those on adjacent parcels, which could be impacted by the proposed development. The report shall outline mitigating measures designed to reduce or eliminate impacts to the identified resource(s), and shall be submitted along with the application for the proposed development. The report shall be prepared by an appropriate expert such as a qualified biologist, botanist, herpetologist or other professional “life scientist.”

The conditions of approval of any land use application shall incorporate the identified mitigating measures to protect and preserve the habitats of the identified plants and/or animals.

2.3.2 City of Yucaipa General Plan

2.3.2.1 Community Design and Land Use

Chapter 2 of the City of Yucaipa General Plan (General Plan) (Placeworks 2016) specifies the permitted land uses within the community, along with how design concepts can improve the City. Goal CDL-2, Hillsides and Ridgelines, of the General

Plan calls for the “preservation of prominent ridgelines and hillsides to project viewsheds, recreational opportunities, sensitive biological resources, and ecological benefits while allowing development where appropriate.”

Per Goal CDL-2, the following policies apply to the Project:

CDL-2.3 Development Projects. Concentrate hillside development in areas with the least environmental impacts. Density, open space, and building design and site planning are to be correlated with steepness of the terrain; allow clustering to maximize open space.

CDL-2.4 Grading. Encourage natural grading techniques that blend with existing topography; grading should use rounded contours on slopes to minimize disturbance. Encourage the preservation of the physical shape of the hillside and views where feasible.

CDL-2.5 Slope Protection. Require revegetation with native and/or naturalized species where grading or other activities have disturbed the site. In general, planting species that are native to the region, drought resistant, and effective at erosion control.

Goal CDL-3, Community Design Features, of the General Plan calls for “attractive and well-maintained landscaping lighting, signage, and public art that instill pride, beautify Yucaipa, and convey a positive image of the City.” Per Goal CDL-3, the following policy applies to the Project:

CDL-3.1 Public Landscaping. Ensure that all public landscaping in public right-of-ways (landscaping outside of parks) is attractive, adequately maintained, and utilizes California native, drought-tolerant, and/or other sustainable plant material.

2.3.2.2 Parks, Recreation, Trails, and Open Space

Chapter 4 of the General Plan addresses the provision, use, and conservation of open space for parks, recreation, and trails, as well as lands for biological resources. Goal PR-3, Multipurpose Trails, calls for a “comprehensive trail system that allows residents to travel, explore, and enjoy Yucaipa on foot, bicycle, or horseback.”

Per Goal PR-3, the following policies apply to the Project:

PR-3.3 Environmental Protection. Locate, design, and regulate the use of multipurpose trails so that they do not have a significant negative impact on natural habitat, wildlife, landforms, and cultural resources.

PR-3.6 Regional Connectivity. Coordinate with adjacent cities to connect Yucaipa’s trail network to the trails of neighboring cities to form a multi-jurisdictional system that extends to the forest, badlands, and other areas.

Goal PR-4, Natural Open Spaces, calls for the “conservation of Yucaipa’s open spaces, hills, canyons, ridgelines, and channels for visual, recreational, wildlife, and educational benefits.” Per Goal PR-4, the following policies apply to the Project:

PR-4.3 Hillside Preservation. Protect lands with steep topography, prominent natural features, ridgelines, and view sheds through adherence to Yucaipa’s Hillside Preservation Ordinance.

- PR-4.4 Oak Tree Preservation. Preserve the City’s heritage oak trees through adherence to the Oak Tree Conservation regulations in the Yucaipa Municipal Code, proper tree care and maintenance, and other efforts.
- PR-4.5 Creek Preservation and Restoration. Protect the integrity of natural drainage channels; secure grants and support to restore and preserve Yucaipa’s creeks in a naturalized state for aesthetic, recreational, and wildlife value to the extent practical.
- PR-4.6 Development Regulations. Require proposed private and public development to respect the integrity of the natural terrain of the city; ensure that potential impacts are fully mitigated, to the extent practical.
- PR-4.7 Scenic Resources. Protect Yucaipa’s scenic resources, including scenic corridors along roads and views of the hillsides, prominent ridgelines, canyons, and other significant natural features, to the extent practical.
- PR-4.9 Dark Skies. Protect views of night skies in appropriate locations in Yucaipa through the regulation of project design, street lights, lighting and glare from buildings and land uses, and other features, to the extent practical.

Goal PR-5, Biological Resources, calls for the “preservation, conservation, and management of Yucaipa biological resources, including habitats, wildlife, and natural environments.” Per Goal PR-5, the following policies apply to the Project:

- PR-5.1 Resource Protection. Protect and conserve Yucaipa’s biological resources, with a special focus on sensitive, rare, or endangered plant and wildlife species in accordance with state and federal resource agency requirements.
- PR-5.2 Habitat Conservation. Support habitat conservation efforts to set aside and preserve suitable habitats, with priority given to habitats for rare and endangered species in Yucaipa in accordance with state and federal resource agency requirements.
- PR-5.3 Wildlife Corridors. Participate in the planning of drainage channels, ridgelines, and other areas that provide potential wildlife linkages between open space areas in the community and the vicinity.
- PR-5.4 Biotic Resources Overlay. Require proposed land uses and development projects to conduct appropriate biological resource studies and propose mitigations where needed to address potential resource impacts.
- PR-5.5 Channels and Creeks. While completing necessary safety improvements, preserve the ecological integrity of watersheds and creek corridors that support riparian and wildlife resources by restoring native plants and other best practices to the extent practical.
- PR-5.6 Interagency Coordination. Coordinate with the CDFW and USFWS in the review of biological resource assessments and surveys for land development applications in accordance with state and federal resource agency requirements.

3 Methods

Data regarding biological resources present within the 1,367.8-acre study area, which includes the Project site plus a 100-foot buffer, were obtained through a review of pertinent literature, field reconnaissance, habitat assessments, and protocol/focused surveys, which are described in detail in this section. While vegetation mapping and the jurisdictional delineation were conducted throughout the study area, focused surveys were conducted within the 500.9-acre focused survey area, which includes the Pacific Oaks Commerce Center project boundary plus an approximately 500-foot buffer to allow for flexibility in the design of Pacific Oaks Commerce Center¹. Focused surveys were not conducted in the remainder of the Project site because these portions of the Project have not been delineated beyond the conceptual level and the final locations of the Project impacts are not yet known. In addition, the County Line Warehouse project and remaining area of planning area BP6 were not included in the focused survey area. Both projects were separately evaluated (City of Yucaipa 2022; Kidd Biological Inc. 2022); the results of which are summarized herein.

For purposes of this report, special-status resources are defined as follows:

- Special-status plant species include:
 - Species designated as either rare, threatened, or endangered by CDFW or USFWS and protected under either the CESA (CFGC Section 2050 et seq.) or the FESA (16 USC 1531 et seq.)
 - Species that are candidate species being considered or proposed for listing under FESA or CESA
 - Species that are included on the CDFW Special Vascular Plants, Bryophytes, and Lichens List (CDFW 2023a) with a CRPR of 1 or 2 (CNPS 2023a)
- Special-status wildlife species include:
 - Species designated as either rare, threatened, or endangered by CDFW or USFWS and protected under either the CESA (CFGC Section 2050 et seq.) or the FESA (16 USC 1531 et seq.)
 - Species that are candidate species being considered or proposed for listing under FESA or CESA
 - Species that are included on the CDFW Special Animals List as endangered, threatened, fully protected, or Species of Special Concern (CDFW 2023b)
- Special-status vegetation communities are those designated as sensitive by CDFW.

3.1 Literature Review

Prior to conducting a field assessment, a literature search and database review were conducted by Dudek biologists to evaluate the natural resources found or potentially occurring within the study area. The database review included the most recent versions of the CNDDDB and special-status species lists (CDFW 2023a, 2023b, 2023c, 2023d), the CNPS Inventory (CNPS 2023a), and an Information for Planning and Consultation Report (USFWS 2023a). These databases were reviewed to identify sensitive biological resources present or potentially present for the USGS 7.5-minute quadrangle on which the study area is located (Yucaipa) and the eight surrounding quadrangles (Redlands, Forest Falls, Harrison Mountain, Keller Peak, Big Bear Lake, Sunnymead, El Casco, and Beaumont). Potential and/or historical drainages and aquatic features were investigated based on a review of USGS

¹ The first pass of the burrowing owl surveys covered a larger buffer than 500 feet due to uncertainty in the final project boundary of Pacific Oaks Commerce Center.

topographic maps (1:24,000-scale), aerial photographs, the USFWS National Wetlands Inventory database (USFWS 2023b), the USGS National Hydrography Dataset (USGS 2023), and the Natural Resources Conservation Service’s Web Soil Survey (USDA 2023a).

The literature review also included review of the 2008 Certified Final Revised Environmental Impact Report for the Yucaipa Freeway Corridor Specific Plan (City of Yucaipa 2008), the 2022 Addendum to the Yucaipa Freeway Corridor Specific Plan Environmental Impact Report (City of Yucaipa 2022), Transwestern Development Company County Line Road Warehouse Project Revised Biological Resources Assessment and Jurisdictional Delineation Report (Tom Dodson & Associates 2022), and General Biological Evaluation for a Temporary Use Permit for Parcel 031-821-314 in Yucaipa, California (Kidd Biological Inc. 2022).

3.2 Field Surveys

Dudek conducted the following biological surveys between April 2022 and January 2023: vegetation mapping, a general habitat assessment, a focused small mammal habitat assessment, a focused coastal California gnatcatcher (*Poliophtila californica californica*) habitat assessment, a focused arroyo toad (*Anaxyrus [Bufo] californicus*) habitat assessment, an aquatic resources delineation, focused surveys for special-status plants, protocol surveys for burrowing owl (*Athene cunicularia*), and protocol presence/absence surveys for least Bell’s vireo (*Vireo bellii pusillus*).

Table 2 lists the dates, focus, survey area, conditions, and personnel for each survey.

Table 2. Survey Conditions

Date	Biologist	Survey Pass	Survey Area	Times	Weather Conditions
Vegetation Mapping/General Habitat Assessment					
04/05/2022	BS, DA, ES KN, OK, SG	N/A	Entire Study Area	7:30 a.m.–4:10 p.m.	61°F–82°F; 0% cloud cover; 1–5 mph wind
07/20/2022	AC ¹ , SL	N/A	Entire Study Area	7:00 a.m.–1:31 p.m.	77–87°F; 40–50% cloud cover; 1–2 mph wind
01/13/2023	BS, SG	N/A	Entire Study Area	8:08 a.m.–3:40 p.m.	51 – 63°F; 20–30% cloud cover; 0-1 mph wind
01/18/2023	BS, KD	N/A	Entire Study Area	8:20 a.m.–3:52 p.m.	43–53°F; 0–40% cloud cover; 0–4 mph wind
California Gnatcatcher and Arroyo Toad Habitat Assessment					
04/15/2022	TM	N/A	Entire Study Area	N.R.	N.R.
Small Mammal Habitat Assessment					
12/29/2022	PB	N/A	Entire Study Area	8:00 a.m.–5:00 p.m.	N.R.
01/23/2023	PB	N/A	Entire Study Area	8:00 a.m.–5:00 p.m.	N.R.
02/07/2023	PB	N/A	Entire Study Area	8:00 a.m.–5:00 p.m.	N.R.

Table 2. Survey Conditions

Date	Biologist	Survey Pass	Survey Area	Times	Weather Conditions
02/09/2023	PB	N/A	Entire Study Area	8:00 a.m.–5:00 p.m.	N.R.
Burrowing Owl Protocol Surveys					
04/11/2022	DM, KC	Pass 1 and Burrow Mapping	Focused Survey Area Only	5:45 a.m.–10:00 a.m.	39°F–52°F; 0% cloud cover; 1–3 mph wind
04/12/2022	DM	Pass 1 and Burrow Mapping	Focused Survey Area Only	6:15 a.m.–10:15 a.m.	46°F–52°F; cloud cover N.R.; 5–8 mph wind
04/13/2022	DM	Pass 1 and Burrow Mapping	Focused Survey Area Only	6:00 a.m.–10:00 a.m.	36–52°F; 0–10% cloud cover; 0–3 mph wind
04/14/2022	DM	Pass 1 and Burrow Mapping	Focused Survey Area Only	6:00 a.m.–10:00 a.m.	39–52°F; 0% cloud cover
04/15/2022	BP, DJ, NC, RS	Pass 1 and Burrow Mapping	Focused Survey Area Only	5:45 a.m.–10:00 a.m.	42°F–62°F
05/16/2022	NC	Pass 2	Focused Survey Area Only	6:00 a.m.–10:00 a.m.	59°F–75°F; 0 mph wind
05/17/2022	AC2	Pass 2	Focused Survey Area Only	5:45 a.m.–10:00 a.m.	59°F–63°F; 0–5 mph wind
06/15/2022	AR, NT	Pass 3	Focused Survey Area Only	5:15 a.m.–9:30 a.m.	63–78°F; 0–30% cloud cover; 0–5 mph wind
07/12/2022	AR, AJ	Pass 4	Focused Survey Area Only	5:30 a.m.–9:00 a.m.	66–75°F; 10% cloud cover; 1–2 mph wind
Least Bell’s Vireo Protocol Survey					
05/03/2022	AC1	Pass 1	Suitable Habitat within Focused Survey Area Only	7:47 a.m.–9:20 a.m.	52–53°F; 100% cloud cover; 0–2 mph wind
05/17/2022	KN	Pass 2	Suitable Habitat within Focused	7:30 a.m.–11:00 a.m.	56–62°F; 20–100% cloud cover; 0–5 mph wind

Table 2. Survey Conditions

Date	Biologist	Survey Pass	Survey Area	Times	Weather Conditions
			Survey Area Only		
05/27/2022	DA	Pass 3	Suitable Habitat within Focused Survey Area Only	8:15 a.m.–11:17 a.m.	56–64 °F; 10–60% cloud cover; 3–5 mph wind
06/13/2022	TP	Pass 4	Suitable Habitat within Focused Survey Area Only	7:06 a.m.–10:18 a.m.	62–68 °F; N.R. for cloud cover or wind speed
06/23/2022	KN	Pass 5	Suitable Habitat within Focused Survey Area Only	8:00 a.m.–11:00 a.m.	78–85 °F; 0–10% cloud cover; 0–5 mph wind
07/07/2022	DA	Pass 6	Suitable Habitat within Focused Survey Area Only	8:34 a.m.–10:26 a.m.	71–77 °F; 0–20% cloud cover; 1–5 mph wind
07/18/2022	KN	Pass 7	Suitable Habitat within Focused Survey Area Only	7:30 a.m.–11:00 a.m.	79–89 °F; 10% cloud cover; 0–4 mph wind
07/29/2022	SC	Pass 8	Suitable Habitat within Focused Survey Area Only	7:45 a.m.–11:00 a.m.	74–84 °F; 10–50% cloud cover; 1–5 mph wind
Special-Status Plant Focused Surveys					
05/12/2022	CS, KD	Pass 1	Focused Survey Area Only	6:59 a.m.–3:47 p.m.	48 °F–86 °F; 0%–10% cloud cover; 0–5 mph wind
05/16/2022	CS, JH, LL	Pass 1	Focused Survey Area Only	7:02 a.m.–3:47 p.m.	65–87 °F; 0% cloud cover; 0–5 mph wind

Table 2. Survey Conditions

Date	Biologist	Survey Pass	Survey Area	Times	Weather Conditions
5/17/2022	CS, JH, LL	Pass 1	Focused Survey Area Only	N.R.	N.R.
05/18/2022	LL, OK	Pass 1	Focused Survey Area Only	7:00 a.m.–3:45 p.m.	56–82 °F; 0–100% cloud cover; 1–5 mph wind
05/19/2022	KD	Pass 1	Focused Survey Area Only	7:42 a.m.–1:48 p.m.	55–77 °F; 0–100% cloud cover; 0–2 mph wind
09/23/2022	SG, ZP	Pass 2	Suitable Habitat within Focused Survey Area Only	7:20 a.m.–1:28 p.m.	65–88 °F; 0% cloud cover; 0–5 mph wind
Aquatic Resources Delineation					
07/13/2022	AC ¹ , MC, SL	N/A	Entire Study Area	7:23 a.m.–2:25 p.m.	67–90 °F; 0% cloud cover; 0–4 mph wind
07/14/2022	AC ¹ , BS	N/A	Entire Study Area	6:30 a.m.–1:00 p.m.	66–91 °F; 10–60% cloud cover; 1–3 mph wind
07/20/2022	AC ¹ , SL	N/A	Entire Study Area	7:00 a.m.–1:31 p.m.	77–87 °F; 40–50% cloud cover; 1–2 mph wind
01/13/2023	BS	N/A	Entire Study Area	8:08 a.m.–3:40 p.m.	51–63 °F; 20–30% cloud cover; 0–1 mph wind
01/18/2023	BS, KD	N/A	Entire Study Area	8:20 a.m.–3:52 p.m.	43–53 °F; 0–40% cloud cover; 0–4 mph wind
01/19/2023	DA, KD	N/A	Entire Study Area	8:15 a.m.–12:42 p.m.	53–59 °F; 10–30% cloud cover; 0–2 mph wind

Notes: N/A = not applicable; °F = degrees Fahrenheit; mph = miles per hour; N.R. = not recorded.

Personnel: AC¹ = Anna Cassady; AC² = Alex Chaney, AR = Austin Robbins; AJ = Angela Johnson; BP = Bryce Perog; BS = Britney Schultz; CS = Cecile Shohet; DJ = David Jirsa; DA = Dylan Ayers; DM = Dilip Mahto; ES = Eileen Salas; JH = Jeannette Halderman; KD = Kathleen Dayton; KC = Kamal Chand; KN = Kimberly Narel; LL = Lasthenia Lee; MC = Megan Correa; NC = Natalie Cibel; NT = Nevada Trager; OK = Olivia Koziel; PB = Phil Brylski; RS = Rachel Smith; SG = Sarah Greely; SC = Shana Carey; SL = Sierra Lippert; TM = Tommy Molioo; TP = Tracy Park; ZP = Zarina Pringle

3.2.1 Vegetation Community and Land Cover Mapping

Vegetation communities and land uses within the study area were mapped in the field using Environmental Systems Research Institute (Esri) Field Maps, a mobile data collection application, on a digital aerial-based background. Following completion of the fieldwork, all vegetation linework was finalized using ArcGIS and a geographic information system (GIS) coverage was created. Once in ArcGIS, the acreage of each vegetation community and land cover present within the study area was determined.

Vegetation community classifications used in this report follow A Manual of California Vegetation, online edition (CNPS 2023b), and the California Natural Community List (CDFW 2023d), where feasible, with modifications made

to accommodate the lack of conformity of the observed communities (e.g., developed/disturbed land uses) using Oberbauer et al. (2008). Vegetation communities were classified based on site factors, descriptions, distribution, and characteristic species present within an area. Each natural community was mapped to the association level, where feasible. These classification systems focus on a quantified, hierarchical approach that includes both floristic (plant species) and physiognomic (community structure and form) factors as currently observed (as opposed to predicting climax or successional stages).

Minimum mapping units were established to standardize the scale and appropriate evaluation of stands, as recommended by CDFW (2020). Mapping standards call for a minimum mapping unit of not greater than 10 acres for upland natural communities not considered sensitive. Dudek biologists used a minimum mapping unit of 1 or 2 acres for communities not considered sensitive and 0.25 acres for sensitive vegetation communities and wetland or riparian vegetation communities. Visible disturbance factors were also noted during vegetation mapping.

3.2.2 Flora

Latin and common names for plant species with a CRPR follow the CNPS Rare Plant Inventory (CNPS 2023). For plant species without a CRPR, Latin names follow the Jepson Online Interchange for California Floristics (Jepson Flora Project 2023) and common names follow the California Natural Community List (CDFW 2023d) or the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service Plants Database (USDA 2023b).

3.2.3 Fauna

All wildlife species detected during the field surveys by sight, vocalizations, burrows, tracks, scat, and other signs were recorded. The site was visually scanned with and without binoculars to identify wildlife. Latin and common names of animals follow Crother (2017) for reptiles and amphibians, American Ornithological Society (2021) for birds, Mammal Diversity Database (2021) for mammals, North American Butterfly Association (2016) or San Diego Natural History Museum (2002) for butterflies, and Moyle (2002) for fish.

3.2.4 Special-Status and Regulated Resources

3.2.4.1 Special-Status Plant Survey

Focused surveys for special-status plants consisted of two survey passes: May and September 2022. All natural vegetation within the focused survey area was surveyed for the first pass. The second pass focused on identification of San Bernardino aster (*Symphyotrichum defoliatum*), which is associated with ditches, streams, and springs (CNPS 2023a). Therefore, suitable habitat for that pass was defined as a 100-foot buffer surrounding all jurisdictional resources and non-jurisdictional swales. Focused survey areas for each pass are depicted in Figure 3, Special-Status Plant Focused Survey Area.

Field survey methods and mapping of special-status plants conformed to CNPS Botanical Survey Guidelines (CNPS 2001), Protocols for Surveying and Evaluating Impacts to Special Status Native Populations and Natural Communities (CDFW 2018), and General Rare Plant Survey Guidelines (Cypher 2002). Surveys were conducted at the appropriate phenological stage of the plant (blooming and fruiting) to detect and identify the target species, confirmed by reference checks at nearby known populations, further discussed in this section. The surveys were conducted by walking approximately 20-meter meandering transects within all suitable habitat to detect target

species. Target plant observations were mapped in the field using Esri Collector equipped with a GPS receiver to record the extent of target plant populations.

Plant species detected during the focused surveys were identified to subspecies or variety, if applicable and feasible, to determine sensitivity status. All plant species observed within the study area were noted, and plants that could not be identified in the field were collected and identified later using a microscope with taxonomic keys. Plants with a CRPR 3 or 4 were also mapped if incidentally observed.

Reference Population Checks

White-bracted spineflower (*Chorizanthe xanti* var. *leucotheca*), a CRPR 1B.2, was observed on March 31, 2022, near Keenbrook Road in San Bernardino County with only two plants in bloom; most were still vegetative. Parry's spineflower (*Chorizanthe parryi* var. *parryi*), a CRPR 1B.1, was observed in early flower on April 14, 2022. For the second pass, research grade observations of San Bernardino aster, a CRPR 1B.2, were recorded in the iNaturalist database in September 2022 (iNaturalist 2023).

3.2.4.2 Burrowing Owl Protocol-Level Survey

Dudek conducted protocol burrowing owl surveys within the focused survey area to determine the presence or absence of burrowing owl. These surveys were conducted in accordance with Appendix D of the Staff Report on Burrowing Owl Mitigation (CDFW 2012). The protocol states that four survey passes shall be performed, with the first visits occurring between February 15 and April 15 and the remaining three visits, at least 3 weeks apart, between April 15 and July 15, with at least one visit after June 15.

Concurrent with the first pass of the burrowing owl surveys, Dudek biologists walked the entire focused survey area to identify areas with suitable burrowing owl habitat (i.e., relatively open habitat with low gradients and burrow resources) and mapped all suitable burrows or burrow surrogates (i.e., ground-level cavities with openings of 4 inches in diameter or greater) using Esri Field Maps². Following completion of the first survey pass, which included the burrow survey, polygons were drawn around large clusters of burrow resources; individual burrows that could not be easily clustered were buffered by 25 feet to create a burrowing owl survey area. The remaining three survey passes were conducted within this refined burrowing owl survey area and completed using a combination of pedestrian transects spaced approximately 20 meters apart and spot checks where suitable burrows and the surrounding areas were investigated to determine the status of suitable burrows in these areas. To ensure accurate documentation of observations and prevent inadvertent flushing of potential individuals, the burrows and surrounding area were initially scanned from a distance using binoculars. Any burrowing owl individuals and status of the burrows were documented. If needed, the biologists carefully approached the burrowing owl survey area while scanning the area for burrowing owl individuals and investigating suitably sized burrows for any signs of activity. The use of pedestrian transects or spot checks was determined in the field by the spatial distribution and density of suitable burrows or burrow features. Protocol survey areas for each pass are depicted in Figure 4, Special-Status Wildlife Focused Survey Area.

² The first pass of burrowing owl surveys was conducted over a larger area than the focused survey area depicted in Project figures. The remaining three survey passes were conducted within the focused survey area. This was due to a change in scope for the Project-level analysis that occurred between the first burrowing owl pass and the remaining three. For this reason, Project figures will show potential burrowing owl burrows that were mapped outside of the focused survey area.

If observed, any direct observations (visual or audible) or active burrow sign (e.g., molted feathers, pellets, prey remains, whitewash) of burrowing owls was recorded. The surveys were conducted when conditions were suitable for detecting owls (no rain, high winds [greater than 20 mph], dense fog, or temperatures over 90°F). If observed, any burrowing owl sightings, occupied burrows, and burrows with burrowing owl signs were mapped and recorded.

3.2.4.3 Small Mammal Habitat Assessment

The focused habitat assessment for Stephens' kangaroo rat (*Dipodomys stephensi*) and San Bernardino kangaroo rat (*Dipodomys merriami parvus*) was conducted by Phil Brylski, PhD, who holds Section 10(A) permits and Memoranda of Understanding with CDFW for Stephens' kangaroo rat and San Bernardino kangaroo rat surveys. A field survey that examined soil, vegetation, and topographic and disturbance features was carried out to assess habitat suitability for Stephens' kangaroo rat and San Bernardino kangaroo rat on the Project site. Surveys were conducted on December 29, 2022, and January 23, February 7, and February 9, 2023, and covered all parts of the Project site to assess habitat and search for kangaroo rat burrows and sign (scat, dust bowls, footprints, and tail-drag marks). For Stephens' kangaroo rat, preferred habitat is sparse grassland and sparse sage scrub stands on loamy soils. For San Bernardino kangaroo rat, preferred habitat is sparse to moderate alluvial fan sage scrub and disturbed areas near to alluvial channels. Areas with steep slopes were not surveyed as these areas are unsuitable for Stephens' kangaroo rat and San Bernardino kangaroo rat.

Distributional records and ranges for San Bernardino kangaroo rat and Stephens' kangaroo rat locality records were compiled from the USFWS database of locality records (USFWS 2023a) and the CDFW (2023c) CNDDDB.

3.2.4.4 Arroyo Toad Habitat Assessment

Dudek biologist Tommy Molioo conducted a focused habitat assessment for arroyo toad on April 15, 2022, within the study area. The habitat assessment focused on determining whether semi-arid areas near washes and sandy riverbanks that would be suitable for arroyo toad are present on site.

3.2.4.5 Coastal California Gnatcatcher Habitat Assessment

Dudek biologist Tommy Molioo conducted a focused habitat assessment for coastal California gnatcatcher on April 15, 2022, within the study area. The habitat assessment focused on determining whether vegetation on site would be suitable for coastal California gnatcatcher based on the presence and extent of coastal sage scrub plant species. According to USFWS's critical habitat designation, few breeding territories have been documented in habitats devoid of California sagebrush (50 CFR Part 17).

3.2.4.6 Least Bell's Vireo Protocol Surveys

Dudek conducted protocol presence/absence surveys for least Bell's vireo in suitable habitat within the focused survey area. These surveys followed the currently accepted least Bell's vireo USFWS survey guidelines (USFWS 2001), which state that a minimum of eight survey visits should be made to all riparian areas and any other potential least Bell's vireo habitats between April 10 and July 31. The site visits are required to be conducted at least 10 days apart to maximize the detection of early and late arrivals, females, non-vocal birds, and nesting pairs.

Dudek biologists conducted protocol least Bell's vireo surveys between May 3 and July 29, 2022. Surveys involved walking all suitable habitat areas within the study area while listening for least Bell's vireo calls and scanning the

surrounding area and vegetation with binoculars. Taped playback of the species' vocalizations was not used during the surveys. If observed, any direct observations (visual or audible) of least Bell's vireo were recorded and mapped directly in the field using Esri Field Map. The surveys were conducted between dawn and noon and were not conducted during periods of excessive or abnormal cold, heat, wind, rain, or any other inclement weather (Table 2).

3.2.4.7 Aquatic Resources Delineation

Before conducting fieldwork for the aquatic resources delineation, Dudek reviewed aerial maps from the USFWS National Wetlands Inventory (USFWS 2023b), the USGS National Hydrography database (USGS 2023), the Natural Resources Conservation Service (USDA 2023a, 2023c), and historical aerials and topographic maps (Google 2023; Historic Aerials Online 2023). Survey datasheets and forms are included in the Aquatic Resources Delineation Report (Appendix B), which is summarized in Section 5.3.4, Potential Aquatic Resources. The surveys were conducted on foot to visually cover the study area. Topographic contours were used to aid the delineation in areas that were difficult to access on foot due to challenging topography. Both current and historical imagery was used to supplement field investigation efforts, particularly on private lands or in areas where anthropogenic impacts have obscured aquatic indicators normally found in the field. Small portions of the study area were inaccessible and were delineated via topographical data and available aerial imagery. Remote sensing was not used during this delineation.

Dudek conducted a delineation of state and federal jurisdictional waters and wetlands within the study area in accordance with current policies. Federal wetlands were mapped based on the procedures in the Corps of Engineers Wetlands Delineation Manual (USACE 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (USACE 2008a). Non-wetland waters were mapped at the OHWM based on the procedures defined in A Field Guide to the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (USACE 2008b). Waters of the state were mapped in accordance with the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (SWRCB 2019). CDFW jurisdictional areas were mapped to include the bank of the stream/channel and outer dripline of adjacent riparian vegetation, as set forth under CFGC Section 1602.

To aid in the delineation and in conformance with the USACE 2008 Field Guide, nine OHWM datasheets (T-01 through T-09) were recorded at potential non-wetland waters within the study area to determine the OHWM indicators within those features. Furthermore, in conformance with the USACE 1987 Wetlands Manual and the RWQCB Wetland Procedures (SWRCB 2019), nine wetland determination data forms were completed at certain points within drainages or vegetation communities where a predominance of hydrophytic vegetation was present. The jurisdictional delineation did not contain any features that met the USACE or RWQCB wetland criteria.

The limits of aquatic resources were collected in the field using a Trimble R1 GPS unit and Esri Collector mobile application with sub-meter accuracy. In some areas with challenging topography, topographic contours were used to interpolate the linework. The geographic extents were digitized in a GIS based on the GPS data and data collected directly onto field maps into a Project-specific GIS using ArcGIS software.

3.2.5 Survey Limitations

Survey limitations during the field visits included limited access to the study area due to steep topography and difficult terrain that prevented 100% visual coverage of the hillslopes throughout the study area. Vegetation and jurisdictional delineation information collected on the Project site was used to map resources within the buffer areas where there was no permission to access. The vegetation mapping was conducted during the day and during

months of the year when most annuals and perennials would have been evident or identifiable. However, due to the timing of the biological survey, some annuals and cryptic perennials may not have been detectable.

Limitations of the field surveys include a diurnal bias for most species and the absence of focused trapping for mammals and reptiles because trapping is generally only performed for select listed species. Surveys were conducted mostly during the daytime to maximize visibility and detection of plants and most animals. As such, birds represent the largest component of vertebrate fauna recorded during the surveys, as they are usually most active during daytime hours. In contrast, daytime surveys usually result in few observations of mammals, many of which may only be active at night, particularly bat species. Many species of reptiles and amphibians are similarly nocturnal and/or cryptic in their habits and are difficult to observe using standard meandering transects. However, despite these limitations, the survey work conducted in the study area provides an adequate overall assessment of faunal resources for purposes of evaluating potential biological constraints.

Rainfall in 2022 was below average, which has potential to limit the growth of flora. However, initial botanical reference searches were conducted prior to focused special-status plant surveys. These search results are discussed further in Section 3.2.4.1, Special-Status Plant Survey, of this report. Conditions were monitored prior to collecting data to ensure target species would be identifiable if present.

4 Environmental Setting

The purpose of this section is to describe the general existing conditions within and adjacent to the study area to document the baseline conditions for this report and subsequent analysis.

4.1 Land Use

The study area sits in the southwestern portion of the City, west of the city of Calimesa, and southeast of the city of Redlands. The study area is intersected by the I-10 freeway and Calimesa Boulevard in the northern portion, and Live Oak Canyon Road in the western portion. The study area encompasses undeveloped open space that is intersected by Yucaipa Creek and Oak Glen Creek and contains both active agricultural and developed areas. The southern portion of the study area contains developed areas with facilities and dirt roads, while the central northern portion of the study area contains graded disturbed areas used for vehicle storage, ornamental plantings, and active agricultural operations run by Live Oak Canyon Farm.

The study area is located in the southwestern corner of the City. The northern and eastern portions of the study area abut residential and commercial development. To the west is the Herngt 'Aki' Preserve and to the south is San Timoteo Canyon Park.

4.2 Climate

The study area is located in the inland valley region of southwest San Bernardino County. Maximum and minimum air temperatures near Yucaipa range from 41 °F to 103 °F (CIMIS 2022). The average annual precipitation for the last 5 years is 14.3 inches (CIMIS 2022). Periods of extended drought are common throughout the region.

4.3 Geology and Topography

The developed portions of the City and the San Bernardino National Forest foothills lie to the north and east of the study area. San Timoteo Canyon lies south of the study area.

The study area is composed of hills and depressions with some areas of level ground predominantly in the northwestern portion of the study area. While agricultural areas and dirt roads are ubiquitous throughout the study area, the eastern and central northern portion of the study area are subject to the highest disturbance as this is where the study area is intersected by I-10 and Live Oak Canyon Road, and where the majority of Live Oak Canyon Farms' agricultural operations are located. The study area's surface elevation ranges between approximately 1,950 and 2,380 feet above mean sea level (amsl), with the lowest point located in the southwest portion of the study area and the highest point in the southeast portion of the study area.

4.4 Soils

The study area contains the following soil complexes: Hanford coarse sandy loam (2% to 9% slopes); Placentia fine sandy loam (0% to 5% slopes); Ramona sandy loam (15% to 30% slopes), eroded; Ramona sandy loam (2% to 5% slopes), eroded; Ramona sandy loam (2% to 9% slopes); Ramona sandy loam (9% to 15% slopes); Ramona sandy loam, moderately deep (8% to 15% slopes), eroded; Ramona very fine sandy loam, (0% to 8% slopes), eroded;

Ramona very fine sandy loam, moderately deep (0% to 8% slopes), eroded; San Emigdio fine sandy loam (2% to 8% slopes), eroded; San Emigdio fine sandy loam (2% to 9% slopes); San Emigdio loam (8% to 15% slopes), eroded; San Emigdio sandy loam (9% to 15% slopes); San Timoteo loam (30% to 50% slopes); San Timoteo loam (25% to 50% slopes); San Timoteo loam (8% to 25% slopes); Saugus sandy loam (30% to 50% slope); Tujunga gravelly loamy sand (0% to 9% slopes); and Psamments, Fluvents, and Frequently flooded soils. These soil types are described in more detail below and are presented on Figure 5, Soils Map.

Hanford Series consists of very deep, well-drained soils that are formed in alluvium from granitic sources. These soils are typically found within floodplains, stream bottoms, and alluvial fans. This series is typically found at elevations of 890 to 2,860 feet amsl. Vegetation associated with this series include annual grasses and associated herbaceous plants (USDA 2023a).

Placentia Series consists of well or moderately well drained soils formed in alluvium from granite or similar sources. These soils have a slightly acidic A horizon and are typically found within fans and terraces from 50 to 2,500 amsl. Vegetation associated with this series include uncultivated areas with grasses and forbs (USDA 2023a).

Ramona Series consists of well-drained soils that are formed in alluvium derived from mostly granitic and related rock sources. These soils typically occur on terraces and fans at elevations of 250 to 3,500 feet amsl. Cultivated vegetation associated with this series includes cultivated crops or pasture. Uncultivated areas have a cover of annual grasses, forbs, chamise, or chaparral (USDA 2023a).

San Emigdio Series consists of very deep, well-drained soils that form in dominantly sedimentary alluvium. San Emigdio soils are on floodplains and alluvial fans at elevations of 100 to 2,000 feet amsl. These soils have negligible to low runoff and moderately rapid permeability. These soils form the southeastern portion of the study area and are not considered hydric (USDA 2023a).

San Timoteo Series consists of moderately deep, somewhat excessively drained soils that form in material weathered from shale, sandstone, and calcified weathered granite. San Timoteo soils are on typically found on uplands at elevations of 300 to 3,500 feet amsl. These soils are used mostly for grazing, with some small cultivated areas. Naturalized vegetation consists mostly of California sagebrush, flattop buckwheat, yucca, sugarbush, and annual grasses (USDA 2023a).

Saugus Series consists of deep, well-drained soils formed from weakly consolidated sediments. These soils typically occur on terraces and foothills at elevations of 600 to 2,500 feet amsl. Vegetation associated with this series includes chamise and other shrubs plus minor amounts of perennial grasses. Naturalized grasses and forbs make up a small to large portion of the vegetation (USDA 2023a).

Tujunga Series consists of very deep, somewhat excessively drained soils formed in alluvium from granitic sources. These soils typically occur on alluvial fans and floodplains, including urban areas at elevations of 10 to 1,500 feet amsl. Vegetation associated with this series includes shrubs, annual grasses, and forbs (USDA 2023a).

Psamments, Fluvents, and Frequently Flooded Soils Series consists of sandy soils formed in recent water-deposited sediments on floodplains, fans, and deltas along rivers and small stream courses at elevations of 10 to 1,500 feet amsl. These soils are frequently flooded (USDA 2023a).

4.5 Watersheds and Hydrology

The study area is located within the Yucaipa Creek subwatershed (Hydrologic Unit Code 180702030402), which lies within the San Timoteo Wash watershed (Hydrologic Unit Code 1807020304) and the Santa Ana subbasin (Figure 6, Hydrologic Setting). The Yucaipa Creek subwatershed is 45.6 square miles (29,266 acres) and contains Yucaipa Creek, Wilson Creek, and Oak Glen Creek as prominent features in the watershed. Wilson Creek and Oak Glen Creek flow into Yucaipa Creek. Yucaipa Creek flows west and north through several downstream features before converging with the Santa Ana River. The Santa Ana River flows south and west, terminating at the Pacific Ocean. The entire study area is bisected by Yucaipa Creek and the northwestern portion of the study area is bisected by Oak Glen Creek.

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5 Results

This section describes the results of the literature review and field surveys within the study area.

5.1 Vegetation Communities and Land Covers

A total of 35 vegetation communities or land cover types were mapped within the study area. The spatial distribution of the vegetation communities and land covers are presented on Figures 7-1 through 7-7, Vegetation Communities and Land Cover Types. The acreages of the mapped vegetation alliances/associations and other land covers in the study area are presented in Table 3. The alliances/associations and other land covers are grouped in Table 3 by the generalized habitat types included on the study area vegetation map (Figures 7-1 through 7-7). Vegetation communities considered sensitive biological resources by CDFW under CEQA (CDFW 2023d) are noted in Table 3 with an asterisk. Photos of the study area can be found in Appendix C.

CDFW state rankings of 1, 2, or 3 are considered sensitive and impacts to these communities typically require mitigation.

Table 3. Vegetation Communities and Land Cover Types within the Study Area

Vegetation Community or Land Cover Type	Floristic Alliance	Association	State Ranking ¹	Acreage
Grass and Herb Dominated				
Non-Native Grassland General Habitat	N/A	N/A	N/A	725.0
Upland mustards or star-thistle fields	<i>Brassica nigra</i> - <i>Centaurea (solstitialis, melitensis)</i>	<i>Hirschfeldia incana</i>	SNA	22.2
<i>Grass and Herb Dominated Subtotal²</i>				747.2
Scrub				
California buckwheat - Parish's goldeneye scrub	<i>Eriogonum fasciculatum</i> - <i>Viguiera parishii</i>	<i>Eriogonum fasciculatum</i> (Wash)	N/A	2.3
California buckwheat scrub	<i>Eriogonum fasciculatum</i>	<i>Eriogonum fasciculatum</i>	S5	4.3
Menzies's golden bush scrub	<i>Isocoma menziesii</i>	<i>Isocoma menziesii</i> *	S3	1.0
California sagebrush - (purple sage) scrub	<i>Artemisia californica</i> - (<i>Salvia leucophylla</i>)	<i>Artemisia californica</i> - <i>Eriogonum fasciculatum</i>	S4	3.8
Brittle bush scrub	<i>Encelia farinosa</i>	<i>Encelia farinosa</i>	S4	0.4
Fourwing saltbush scrub	<i>Atriplex canescens</i>	<i>Atriplex canescens</i>	S4	0.9

Table 3. Vegetation Communities and Land Cover Types within the Study Area

Vegetation Community or Land Cover Type	Floristic Alliance	Association	State Ranking ¹	Acreage
Palmer's goldenbush scrub	<i>Ericameria palmeri</i>	<i>Ericameria palmeri</i> *	S3?	11.1
<i>Scrub Subtotal</i> ²				23.6
Chaparral				
Chamise chaparral	<i>Adenostoma fasciculatum</i>	<i>Adenostoma fasciculatum</i>	S5	140.1
		<i>Adenostoma fasciculatum</i> - <i>Diplacus aurantiacus</i>	S4	4.6
		<i>Adenostoma fasciculatum</i> - <i>Eriogonum fasciculatum</i>	S4	12.1
Chamise - Sage chaparral	<i>Adenostoma fasciculatum</i> - <i>Salvia</i> spp.	<i>Adenostoma fasciculatum</i> - <i>Salvia mellifera</i> - <i>Artemisia californica</i>	S4	7.1
		<i>Adenostoma fasciculatum</i> - <i>Salvia mellifera</i> - <i>Rhus ovata</i> *	S3	0.8
Scrub oak chaparral	<i>Quercus berberidifolia</i>	<i>Quercus</i> (<i>berberidifolia</i> , × <i>acutidens</i>) - <i>Adenostoma fasciculatum</i>	S4	0.3
		<i>Quercus berberidifolia</i>	S4	6.8
<i>Chaparral Subtotal</i> ²				171.9
Riparian				
Scale broom scrub	<i>Lepidospartum squamatum</i>	<i>Eriogonum fasciculatum</i> - <i>Lepidospartum squamatum</i> alluvial fan*	S3	3.4
		<i>Lepidospartum squamatum</i> / ephemeral annuals*	S2	0.6
Fremont cottonwood forest and woodland	<i>Populus fremontii</i> - <i>Fraxinus velutina</i> - <i>Salix gooddingii</i>	<i>Populus fremontii</i> *	S3	4.8
		<i>Populus fremontii</i> - <i>Salix gooddingii</i> / <i>Baccharis salicifolia</i> *	S3	5.5
		<i>Populus fremontii</i> - <i>Sambucus nigra</i> *	S3	0.8
Goodding's willow - red willow riparian woodland and forest	<i>Salix gooddingii</i> - <i>Salix laevigata</i>	<i>Salix gooddingii</i> *	S3	0.9
Basket bush - river hawthorn - desert olive patches	<i>Rhus trilobata</i> - <i>Crataegus rivularis</i> - <i>Forestiera pubescens</i>	<i>Sambucus nigra</i> *	S3?	3.2
Mulefat thickets	<i>Baccharis salicifolia</i>	<i>Baccharis salicifolia</i>	S5	19.6
		<i>Baccharis salicifolia</i> - <i>Sambucus nigra</i>	S4	1.1
<i>Riparian Subtotal</i> ²				39.8

Table 3. Vegetation Communities and Land Cover Types within the Study Area

Vegetation Community or Land Cover Type	Floristic Alliance	Association	State Ranking ¹	Acreage
Woodland				
Coast live oak woodland and forest	<i>Quercus agrifolia</i>	<i>Quercus agrifolia</i>	S4	18.1
		<i>Quercus agrifolia</i> / grass	S4	48.1
Eucalyptus - tree of heaven - black locust groves	<i>Eucalyptus spp.</i> - <i>Ailanthus altissima</i> - <i>Robinia pseudoacacia</i>	N/A	SNA	1.1
		<i>Ailanthus altissima</i>	SNA	4.1
		<i>Eucalyptus (globulus, camaldulensis)</i>	SNA	1.0
<i>Woodland Subtotal²</i>				72.4
Disturbed and Developed				
Disturbed Habitat	N/A	N/A	N/A	91.5
General Agriculture	N/A	N/A	N/A	88.6
Open Water	N/A	N/A	N/A	0.3
Ornamental Plantings	N/A	N/A	N/A	3.3
Urban/Developed	N/A	N/A	N/A	129.3
<i>Disturbed and Developed Subtotal²</i>				312.9
Grand Total²				1,367.8

Notes:

- ¹ The conservation status of a vegetation community is designated by a number from 1 to 5. The numbers have the following meaning (NatureServe 2023):
 - 1 = critically imperiled
 - 2 = imperiled
 - 3 = vulnerable to extirpation or extinction
 - 4 = apparently secure
 - 5 = demonstrably widespread, abundant, and secure
 - N/A = not applicable
 - SNA = unranked, subnational rank not yet assessed
- ² Totals may not sum due to rounding.
- * Association is sensitive under CEQA and listed by California Department of Fish and Wildlife as sensitive (i.e., State Rank [S] 1, 2, or 3) (CDFW 2023d).

5.1.1 Grass and Herb Dominated

5.1.1.1 Non-Native Grassland

California non-native grassland or California annual grassland is described in the first edition of A Manual of California Vegetation (Sawyer et al. 1995) as being dominated by annual grasses and herbs in the ground layer including bromes (*Bromus spp.*), California poppy (*Eschscholzia californica*), filaree (*Erodium spp.*), lupine (*Lupinus spp.*), mustards (*Brassica spp.*), and oats (*Avena spp.*).

Vegetation community composition within the study area coincided with this vegetation community description, as no vegetation association or alliance in CNPS (2023b) appropriately characterized this type of vegetation within the study area. The community in CNPS (2023b) nearest to describing vegetation on the site is annual brome

grasslands. This community is characterized by the dominance of several species of annual brome grasses, but grassland communities on the site are more diverse. Although annual brome grasses and wild oats are the dominant plant species in this community composition, native annual forbs also constitute significant cover.

Neither CDFW (2023d) nor CNPS (2023b) gives California annual grassland/annual brome grasslands a rarity ranking as they are non-native plant communities.

Associated species observed within this habitat type in the field included brome species, mouse barley (*Hordeum murinum*), short-pod mustard (*Hirschfeldia incana*), wild oat (*Avena barbata*), and fiddleneck (*Amsinckia* spp.).

On site, non-native grassland is ubiquitous in large patches and covers the largest number of acres compared to other vegetation communities present.

5.1.1.2 Upland Mustards or Star Thistle Fields (42.013.00)

The upland mustards or star thistle fields alliance communities include black mustard (*Brassica nigra*), field mustard (*Brassica rapa*), Italian plumeless thistle (*Carduus pycnocephalus*), Maltese star-thistle (*Centaurea melitensis*), yellow star-thistle (*Centaurea solstitialis*), artichoke thistle (*Cynara cardunculus*), carnation spurge (*Euphorbia terracina*), short-pod mustard, woad (*Isatis tinctoria*), radish (*Raphanus sativus*), or similar ruderal forbs that are dominant in the herbaceous layer. Emergent trees and shrubs may be present at low cover. The upland mustards or star thistle fields alliance has an open to continuous canopy less than 3 meters (9.8 feet) in height (CNPS 2023b).

The upland mustards or star thistle fields alliance is a semi-natural alliance, and as such it is not ranked by CDFW (CDFW 2023d); therefore, this community is not considered sensitive under CEQA.

The only association within the upland mustards or star thistle fields alliance mapped on site is *Hirschfeldia incana*. Associated species observed within this alliance in the field included short-pod mustard, redstem stork's bill (*Erodium cicutarium*), fiddleneck, and compact brome (*Bromus madritensis*). On site, the upland mustards or star thistle fields comprise a large linear patch in the eastern portion of the site, parallel to Yucaipa Creek, and four smaller patches in the center of the site.

5.1.2 Scrub

5.1.2.1 California Buckwheat - Parish's Goldeneye Scrub (33.032.00)

The California buckwheat–Parish's goldeneye scrub alliance communities include California buckwheat (*Eriogonum fasciculatum*) and/or Parish's goldeneye (*Viguiera parishii*) as the dominant or co-dominant shrubs in the canopy. California buckwheat–Parish's goldeneye scrub has a continuous or intermittent shrub canopy less than 2 meters (7 feet) in height with an open to intermittent herbaceous layer with seasonal annuals (CNPS 2023b). Species associated with this alliance include big sage brush (*Artemisia tridentata*), cheesebush (*Ambrosia salsola*), *Ericameria* sp., sugarbush (*Rhus ovata*), and other arid and semi-arid species. Emergent trees or tall shrubs may be present at low cover, including California juniper (*Juniperus californica*) and Utah juniper (*Juniperus osteosperma*) (CNPS 2023b).

The California buckwheat–Parish's goldeneye scrub alliance is ranked by CDFW (2023d) as a G4S4 alliance. This ranking indicates that it is apparently secure both globally and within California (CDFW 2023d; NatureServe 2023).

The only association mapped within the California buckwheat–Parish’s goldeneye scrub alliance mapped on site was *Eriogonum fasciculatum* (Wash). Like the overall alliance, this association also has a G4S4 rank.

Associated species observed within this alliance in the field included California buckwheat (without Parish’s goldeneye), blue elderberry (*Sambucas nigra*), and mulefat (*Baccharis salicifolia*).

The California buckwheat–Parish’s goldeneye scrub alliance occurs in one patch adjacent to a riparian corridor in the northeastern portion of the site.

5.1.2.2 California Buckwheat Scrub (32.040.00)

California buckwheat scrub alliance communities include California buckwheat as the dominant or co-dominant shrub in the canopy. California buckwheat scrub has a continuous or intermittent shrub canopy less than 2 meters (7 feet) in height with a variable ground layer that may be grassy (CNPS 2023b). Species associated with the California buckwheat scrub alliance include California sagebrush (*Artemisia californica*), bush mallow (*Malacothamnus fasciculatus*), California brittle bush (*Encelia farinosa*), coyote brush (*Baccharis pilularis*), deer weed (*Acmispon glaber*), black sage (*Salvia mellifera*), and white sage (*Salvia apiana*) (CNPS 2023b).

The California buckwheat scrub alliance is ranked by CDFW (2023d) as a G5S5 alliance. This ranking indicates that globally and within California, the alliance is widespread, abundant, and secure (CDFW 2023d; NatureServe 2023).

The only association within the California buckwheat scrub alliance mapped on site was *Eriogonum fasciculatum*. Like the overall alliance, this association also has a G5S5 rank.

Associated species observed within this alliance in the field included California sagebrush, blue elderberry, deer weed, and California aster (*Corethrogyne filaginifolia*).

California buckwheat scrub occurs in small patches mainly scattered throughout the northeastern portion of the site, with some patches bordering existing paved or dirt roads, and others adjacent to Yucaipa Creek.

5.1.2.3 California Sagebrush - (Purple Sage) Scrub (32.015.00)

Purple sage scrub alliance communities include California sagebrush and/or purple sage (*Salvia leucophylla*) as dominant or co-dominant in the shrub canopy. Purple sage scrub has an intermittent to continuous shrub canopy less than 2 meters (7 feet) in height with a variable ground layer (CNPS 2023b). Some species associated with the purple sage scrub alliance include ashy buckwheat (*Eriogonum cinereum*), California buckwheat, black sage, white sage, bush monkeyflower (*Diplacus aurantaicus*), California sagebrush, chaparral yucca (*Hesperoyucca whipplei*), deer weed, laurel sumac (*Malosma laurina*), and lemonade berry (*Rhus integrifolia*). Emergent trees or tall shrubs may be present at low cover, including Southern California black walnut (*Juglans californica*), coast live oak (*Quercus agrifolia*), and blue elderberry (CNPS 2023b).

The purple sage scrub alliance is ranked by CDFW (2023d) as a G5S5 alliance. This ranking indicates that it is widespread, abundant, and secure both globally and within California (CDFW 2023d; NatureServe 2023).

The only association within the purple sage scrub alliance mapped on the site is *Artemisia californica* - *Eriogonum fasciculatum*. Despite the alliance’s overall ranking, this this association has a G4S4 rank, indicating that it is apparently secure both globally and within California.

Associated species observed within purple sage scrub alliance in the field include California buckwheat, blue elderberry, California aster, and short-pod mustard.

On site, purple sage scrub primarily occurs in linear patches parallel to Live Oak Canyon Road, in the western portion of the site, and in one small patch just south of I-10 in the center of the site.

5.1.2.4 Brittle Bush Scrub (33.030.00)

Brittle bush scrub alliance communities include brittle bush as the dominant or co-dominant shrub in the canopy. Brittle bush scrub has an open to intermittent shrub canopy less than 2 meters (6.5 feet) in height with a with a sparse ground layer of seasonal annuals (CNPS 2023b). Species associated with the Brittle bush scrub alliance include white bursage (*Ambrosia dumosa*), California sagebrush, California buckwheat, chaparral yucca, and white sage (CNPS 2023b).

The brittle bush scrub alliance is ranked by CDFW (2023d) as a G5S4 alliance. This ranking indicates that this alliance is secure globally and apparently secure within California (CDFW 2023d; NatureServe 2023).

The only association within the brittle bush scrub alliance mapped on site is *Encelia farinosa*. Like the overall alliance, this association also has a G5S4 rank.

Brittle bush scrub comprises one small patch in the northeastern portion of the site, adjacent to Wildwood Canyon Road.

5.1.2.5 Menzies’s Golden Bush Scrub (32.044.00)

Menzies’s golden bush scrub alliance communities includes Menzies’s golden bush (*Isocoma menziesii*) as the dominant or co-dominant species in the shrub canopy. Menzies’s golden bush scrub has an open to intermittent shrub canopy less than 1 meter (3.3 feet) in height with an open to continuous ground layer (CNPS 2023b). Species associated with the Menzies’s golden bush scrub alliance include California sagebrush, coyote brush, broom baccharis (*Baccharis sarothroides*), and California matchweed (*Gutierrezia californica*).

The Menzies’s golden bush scrub alliance is ranked by CDFW (2023d) as a G3S3 alliance. This ranking indicates that globally and within California the alliance is considered vulnerable to extirpation or extinction (CDFW 2023d; NatureServe 2023). Therefore, this alliance is considered a sensitive natural community by CDFW.

The only association within the Menzies’s golden bush scrub alliance on site is *Isocoma menziesii*. Like the overall alliance, this association also has a G3S3 rank. This association and all others within the alliance are considered sensitive by CDFW and under CEQA (CDFW 2023d).

Associated species observed within this alliance in the field included redstem stork’s bill and various brome species.

On site, the Menzies’s golden bush scrub alliance comprises one small patch in the northeastern portion of the site.

5.1.2.6 Fourwing Saltbush Scrub (36.310.00)

Fourwing saltbush scrub alliance communities includes fourwing saltbush (*Atriplex canescens*) as the dominant or co-dominant species in the shrub canopy. Fourwing saltbush has an open or intermittent canopy less than 3 meters (9.8 feet) in height, with a variable herbaceous layer (CNPS 2023b). Species associated with this

alliance include white bursage, cheesebush, yellow rabbitbrush (*Chrysothamnus viscidiflorus*), bladderpod (*Peritoma arborea*), green ephedra (*Ephedra viridis*), and creosote bush (*Larrea tridentata*). Emergent trees may be present at low cover, including honey mesquite (*Prosopis glandulosa*).

The fourwing saltbush scrub alliance is ranked by CDFW (2023d) as a G5S4 alliance. This ranking indicates that globally the alliance is widespread, abundant, and secure and within California it is apparently secure (CDFW 2023d; NatureServe 2023).

The only association mapped within the fourwing saltbush scrub alliance on site is *Atriplex canescens*. Like the overall alliance, this association also has a G5S4 rank.

Associated species within the fourwing saltbush scrub alliance in the field include fourwing saltbush and brittle bush.

On site, the fourwing saltbush scrub alliance comprises four small patches adjacent to Wildwood Canyon Road, in the northeastern portion of the site.

5.1.2.7 Palmer’s Goldenbush Scrub (38.130.00)

Palmer’s goldenbush scrub alliance communities include Palmer’s goldenbush (*Ericameria palmeri*) as the dominant shrub in the canopy. Palmer’s goldenbush has an open shrub canopy less than 1.5 meters (4.9 feet) in height with a continuous herbaceous layer (CNPS 2023b). Species associated with the Palmer’s goldenbush alliance include California buckwheat, California matchweed, and sawtooth goldenbush (*Hazardia squarrosa*) (CNPS 2023b).

The Palmer’s goldenbush alliance is ranked by CDFW (2023d) as a G3S3 (provisional) alliance. This ranking indicates that globally and within California the alliance is considered vulnerable to extirpation or extinction (CDFW 2023d; NatureServe 2023). Therefore, this alliance is considered a sensitive natural community by CDFW and under CEQA.

The only association within the Palmer’s goldenbush alliance is *Ericameria palmeri*. Like the overall alliance, this association also has a G3S3 rank.

Associated species observed within this alliance in the field included mouse barley, redstem stork’s bill, Missouri gourd (*Cucurbita foetidissima*), Menzies’s golden bush, *Eriogonum* species, and various non-native grass species.

On site, Palmer’s goldenbush scrub comprises several small patches that are primarily concentrated in the eastern portion of the site, with two other small patches in the western and northern portion of the site.

5.1.3 Chaparral

5.1.3.1 Chamise Chaparral (37.101.00)

The chamise chaparral alliance includes chamise (*Adenostoma fasciculatum*) as the dominant shrub with an intermittent to continuous canopy of less than 4 meters (13 feet) in height (CNPS 2023b). Species associated with the chamise chaparral alliance include redshanks (*Adenostoma sparsifolium*), various manzanitas (*Arctostaphylos* spp.), ceanothus (*Ceanothus* spp.), bush monkeyflower, California buckwheat, chaparral yucca, toyon (*Heteromeles*

arbutifolia), scrub oak (*Quercus berberidifolia*), interior live oak (*Quercus wislizeni*), various sage species (*Salvia* spp.), and poison oak (*Toxicodendron pubescens*). Emergent trees may be present at low cover (CNPS 2023b).

The chamise chaparral alliance is ranked by CDFW (2023d) as a G5S5 alliance. This ranking indicates that globally and within California the alliance is widespread, abundant, and secure (CDFW 2023d; NatureServe 2023); therefore, the community is not considered sensitive under CEQA.

Associations within the chamise chaparral alliance mapped on site include *Adenostoma fasciculatum*, *Adenostoma fasciculatum* - *Diplacus aurantiacus*, and *Adenostoma fasciculatum* - *Eriogonum fasciculatum*. Despite the alliance's overall G5S5 ranking, both *Adenostoma fasciculatum* - *Diplacus aurantiacus* and *Adenostoma fasciculatum* - *Eriogonum fasciculatum* have a rank of G4S4, indicating that they are apparently secure both globally and within California (CDFW 2023d; NatureServe 2023). Like the overall alliance, the *Adenostoma fasciculatum* association has a G5S5 ranking.

Associated species observed in the field within the *Adenostoma fasciculatum* association include sugarbush, California sagebrush, black sage, and fiddlenecks and brome species.

Associated species observed in the field within the *Adenostoma fasciculatum* - *Diplacus aurantiacus* alliance include bush monkeyflower, coast live oak, and blue elderberry.

Associated species observed in the field within the *Adenostoma fasciculatum* - *Eriogonum fasciculatum* association include California buckwheat, scrub oak, sugarbush, and coast live oak.

On site, chamise chaparral is primarily distributed along the hillsides within the southern portion of the study area.

5.1.3.2 Chamise - Sage Chaparral (37.110.00)

In the chamise – sage chaparral alliance community, chamise, white sage, and black sage are co-dominant in the shrub canopy. The chamise – sage chaparral alliance has an open to continuous shrub canopy less than 3 meters (9.8 feet) in height with a sparse to intermittent herbaceous later (CNPS 2023b). Species associated with the chamise – sage chaparral alliance include manzanita species, California sagebrush, California buckwheat, Ceanothus species, and brittle bush (CNPS 2023b).

The chamise – sage chaparral alliance is ranked by CDFW (2023d) as a G4S4 alliance. This ranking indicates that globally and within California the alliance is widespread, abundant, and secure (CDFW 2023d; NatureServe 2023).

Associations within the chamise - sage chaparral alliance mapped on site include *Adenostoma fasciculatum* - *Salvia mellifera* - *Artemisia californica* and *Adenostoma fasciculatum* - *Salvia mellifera* - *Rhus ovata*. Despite the alliance's overall G4S4 ranking, *Adenostoma fasciculatum* - *Salvia mellifera* - *Rhus ovata* has a G3S3 ranking, indicating that globally and within California the alliance is considered vulnerable to extirpation or extinction (CDFW 2023d; NatureServe 2023). Therefore, this association is considered a sensitive natural community by CDFW and under CEQA. Like the overall alliance, the *Adenostoma fasciculatum* - *Salvia mellifera* - *Artemisia californica* association also has a G4S4 rank.

Associated species observed in the field within the *Adenostoma fasciculatum* - *Salvia mellifera* - *Artemisia californica* include black sage, California sagebrush, sugarbush, and brome species. Associated species observed in the field within the *Adenostoma fasciculatum* - *Salvia mellifera* - *Rhus ovata* include black sage, sugarbush, and toyon.

On site, chamise - sage chaparral occurs in a medium- and small-sized patch in the central portion of the site on upland slopes south of Yucaipa Creek, and in one other small patch in the southeastern portion of the site near the Project boundary.

5.1.3.3 Scrub Oak Chaparral (37.407.00)

The scrub oak chaparral alliance communities include scrub oak as the dominant or co-dominant shrub in the canopy. Scrub oak chaparral has a continuous shrub canopy less than 6 meters (19.7 feet) in height with a variable ground layer (CNPS 2023b). Species associated with the scrub oak chaparral alliance include redshanks, various manzanitas, ceanothus, alder-leaf mountain-mahogany (*Cercocarpus montanus*), coffee berry (*Frangula californica*), California ash (*Fraxinus dipetala*), toyon, and sugarbush (CNPS 2023b).

The scrub oak chaparral alliance is ranked by CDFW (2023d) as a G4S4 alliance. This ranking indicates that it is apparently secure both globally and within California (CDFW 2023d; NatureServe 2023); therefore, this community is not considered sensitive under CEQA.

The following associations within the scrub oak chaparral alliance were mapped within the study area: *Quercus berberidifolia* and *Quercus (berberidifolia, × acutidens) - Adenostoma fasciculatum*. Like the overall alliance, these associations also have a G4S4 rankings.

Associated species observed in the field within the scrub oak alliance include spiny red berry, redstem stork's bill, cheeseweed mallow (*Malva parviflora*), mouse barley, and coast live oak.

On site, scrub oak chaparral comprises five small- to medium-sized patches that occur on upland slopes in the eastern portion of the site, and one small patch in the southwestern portion of the site.

5.1.4 Riparian

5.1.4.1 Mulefat Thickets (63.510.00)

The mulefat thickets alliance features mulefat as the dominant or co-dominant shrub in the canopy. Mulefat thicket communities are characterized by a continuous two-tiered canopy that is less than 5 meters (16 feet) in height, with one tier under 5 meters and the secondary tier under 2 meters (6.5 feet) in height. Mulefat thickets commonly have a sparse herbaceous layer (CNPS 2023b). Species associated with this alliance include California sagebrush, coyote brush, laurel sumac, tree tobacco (*Nicotiana glauca*), arrow weed (*Pluchea sericea*), blackberry (*Rubus* spp.), sandbar willow (*Salix exigua*), arroyo willow (*Salix lasiolepis*), blue elderberry, and tamarisk (*Tamarix ramosissima*). Emergent trees present at low covers may include foothill pine (*Pinus sabiniana*), California sycamore (*Platanus racemosa*), Fremont cottonwood (*Populus fremontii*), oak trees (*Quercus* spp.), and willows (*Salix* spp.) (CNPS 2023b).

The mulefat thickets alliance is ranked by CDFW (2023d) as a G5S4 alliance. This ranking indicates that globally this community is widespread, abundant, and secure, and within California the alliance is apparently secure (CDFW 2023d; NatureServe 2023); therefore, this community is not considered sensitive under CEQA.

Associations within the mulefat thickets alliance include *Baccharis salicifolia* and *Baccharis salicifolia-Sambucus nigra*, which were mapped on site accordingly. Despite the alliance's overall G5S4 ranking, *Baccharis salicifolia* has

a G5S5 ranking, indicating both globally and in California, the alliance is widespread, abundant, and secure. Like the overall alliance, the *Baccharis salicifolia*-*Sambucus nigra* association has a G5S4 ranking.

Associated species observed within the *Baccharis salicifolia* association in the field include tree of heaven (*Ailanthus altissima*), blue elderberry, California sagebrush, California buckwheat, and an understory of short-pod mustard and various grass species.

Associated species observed within the *Baccharis salicifolia*-*Sambucus nigra* association in the field include tree of heaven, blue elderberry, California buckwheat, California sagebrush, and an understory of short-pod mustard and various grass species.

On site, mulefat thickets occur in long linear sections adjacent portions of Yucaipa Creek and Oak Glen Creek, in the northeastern, central, and southwestern portions of the study area.

5.1.4.2 Fremont Cottonwood Forest and Woodland (61.130.00)

Within the Fremont cottonwood forest and woodland alliance, Fremont cottonwood is the dominant or co-dominant tree in the canopy. This alliance has an open to intermittent canopy that is less than 115 feet (35 meters) in height, with an herbaceous layer that is typically sparse or grassy. Species associated with the Fremont cottonwood forest alliance include white alder (*Alnus rhombifolia*), Southern California black walnut, coast live oak, valley oak (*Quercus lobata*), sandbar willow, Goodding’s willow (*Salix gooddingii*), Oregon ash (*Fraxinus latifolia*), red willow (*Salix laevigata*), arroyo willow, Peruvian peppertree (*Schinus molle*), and California bay laurel (*Umbellularia californica*). This alliance occurs on floodplains; along low-gradient rivers, perennial or seasonally intermittent streams, and springs; in lower canyons in desert mountains; in alluvial fans; and in valleys with a dependable subsurface water supply that varies considerably during the year (CNPS 2023b).

The Fremont cottonwood forest and woodland alliance is ranked by CDFW (2023d) as a G4S3 alliance. This ranking indicates that globally the association is apparently secure, but vulnerable within California (CDFW 2023d; NatureServe 2023) Therefore, this alliance is considered a sensitive natural community by CDFW.

Associations within the within the Fremont cottonwood forest and woodland alliance mapped on site include *Populus fremontii*, *Populus fremontii* - *Sambucus nigra*, and *Populus fremontii* - *Salix gooddingii* / *Baccharis salicifolia*.

Populus fremontii is currently ranked as G2S3 by CDFW (2023d) despite the overall alliance’s G4S3 ranking, indicating that it is imperiled globally. However, the distinctiveness of this association is questionable, and resolution of this uncertainty may result in the association having a lower-priority (numerically higher) conservation status rank. Additionally, the *Populus fremontii* - *Salix gooddingii* / *Baccharis salicifolia* association has a rank of G2S3, indicating that it is imperiled and at high risk globally, as well as vulnerable in California. Like the overall alliance, *Populus fremontii* - *Sambucus nigra* has a rank of G4S3. Therefore, these associations and all others in the alliance are ranked as sensitive by CDFW and under CEQA (CDFW 2023d).

Associated species observed within the *Populus fremontii* association include tree of heaven, California buckwheat, mulefat, and California sagebrush.

Associated species observed within the *Populus fremontii* - *Sambucus nigra* association include blue elderberry, mulefat, with an understory of horehound (*Marrubium vulgare*) and various grass species.

On site, Fremont cottonwood forest and woodland occurs in long linear sections adjacent portions of Yucaipa Creek and Oak Glen Creek throughout the site.

5.1.4.3 Goodding’s Willow–Red Willow Riparian Woodlands (61.216.00)

The Goodding’s willow–red willow riparian woodlands alliance features Goodding’s willow or red willow as the dominant or co-dominant tree in the canopy. This alliance has an open to continuous tree canopy that is less than 30 meters (26 feet) in height with a variable herbaceous layer (CNPS 2023b). Some tree species associated with the alliance include white alder, Oregon ash, California sycamore, Fremont cottonwood, coast live oak, and valley oak. Shrubs may form a sparse to continuous canopy and include mulefat, California rose (*Rosa californica*), blue elderberry, and sandbar willow (CNPS 2023b).

The Goodding’s willow–red willow riparian woodlands alliance is ranked by CDFW (2023d) as a G4S3 alliance. This ranking indicates that it is apparently secure globally, but vulnerable and at moderate risk within California (CDFW 2023d; NatureServe 2023). Therefore, this alliance is considered a sensitive natural community by CDFW.

The only association within the Goodding’s willow–red willow riparian woodlands alliance mapped on site is *Salix gooddingii*. Like the overall alliance, this association has a G3S3 ranking. This associations and all others in the alliance are ranked as sensitive by CDFW and under CEQA (CDFW 2023d).

Associated species observed within this alliance in the field included mulefat, Southern California black walnut, and tree of heaven.

On site, Goodding’s willow–red willow riparian woodlands occur in two small patches near Yucaipa Creek in the northeastern corner of the site.

5.1.4.4 Basket Bush – River Hawthorn – Desert Olive Patches (61.580.00)

Within the basket bush – river hawthorn – desert olive patches alliance, desert olive (*Forestiera pubescens*), skunkbush sumac (*Rhus trilobata*), and/or blue elderberry are dominant or co-dominant in the shrub canopy. The basket bush – river hawthorn – desert olive patches alliance has an intermittent to continuous canopy that may be two tiered and is less than 5 meters (16 feet) in height, with a sparse to intermittent herbaceous layer. Species associated with this alliance include fourwing saltbush, coyote brush, broom snakeweed (*Gutierrezia sarothrae*), and sandbar willow. Emergent trees may be present at low cover, including Fremont cottonwood, oak species, or red willow.

The basket bush – river hawthorn – desert olive patches alliance is ranked by CDFW (2023d) as G4S3. This ranking indicates that globally the association is apparently secure, but vulnerable within California (CDFW 2023d; NatureServe 2023). Therefore, this alliance is considered a sensitive natural community by CDFW.

The only association within the basket bush – river hawthorn – desert olive patches alliance mapped on site is *Sambucus nigra*. Like the overall alliance, this association has a G4S3 ranking. This association and all others in the alliance are considered sensitive by CDFW and under CEQA (CDFW 2023d).

Associated species observed within the basket bush – river hawthorn – desert olive patches alliance include Peruvian peppertree and coast live oak.

On site, the basket bush – river hawthorn – desert olive patches alliance comprises a single medium-sized patch in the northeastern portion of the site along a portion of Yucaipa Creek.

5.1.4.5 Scale Broom Scrub (32.070.00)

The scale broom scrub alliance is dominated by scale broom (*Lepidospartum squamatum*) and often occurs in semi-alluvial environments. The alliance usually displays an open to continuous two-tiered shrub canopy less than 2 meters (6.5 feet) in height; the herbaceous layer is variable and may be grassy (CNPS 2023b). Species associated with this alliance include cheesebush, California sagebrush, mulefat, bladderpod, California cholla (*Cylindropuntia californica*), California buckwheat, chaparral yucca, poison oak, and other arid scrub and wash species. Emergent trees or tall shrubs may be present at low cover and include mountain mahogany (*Cercocarpus ledifolius*), California juniper, California sycamore, Fremont cottonwood, or blue elderberry (CNPS 2023b).

The scale broom scrub alliance is ranked by CDFW (2023d) as a G3S3 alliance. This ranking indicates that globally and within California the alliance is considered vulnerable and at moderate risk (CDFW 2023d; NatureServe 2023). Therefore, this alliance is considered a sensitive natural community by CDFW and under CEQA.

Two associations within the scale broom scrub alliance are mapped on site: *Eriogonum fasciculatum* – *Lepidospartum squamatum* alluvial fan and *Lepidospartum squamatum*–ephemeral annuals. The *Lepidospartum squamatum*–ephemeral annuals association is ranked as G2S2, despite the overall alliance ranking of G3S3. This ranking indicates that the association is imperiled and at high risk globally and within California (CDFW 2023d; NatureServe 2023). Like the overall alliance, the *Eriogonum fasciculatum* – *Lepidospartum squamatum* alluvial fan association has a G3S3 rank. Therefore, these associations and all others within the alliance are considered sensitive natural communities by CDFW and under CEQA (CDFW 2023d).

On site, scale broom scrub alliance comprises three small- to medium-sized patch in the eastern portion of the site along a portion of Yucaipa Creek.

5.1.5 Woodland

5.1.5.1 Coast Live Oak Woodland and Forest (71.060.00)

Coast live oak woodland and forest alliance communities include coast live oak as the dominant or co-dominant tree in the canopy. The coast live oak woodland and forest alliance has an open to continuous or savanna-like canopy less than 30 meters (98.4 feet) in height with a sparse to intermittent shrub layer and a sparse or grassy herbaceous layer (CNPS 2023b). Species associated with the coast live oak woodland and forest alliance include bigleaf maple (*Acer macrophyllum*), Pacific madrone (*Arbutus menziesii*), Southern California black walnut, and various oaks (CNPS 2023b).

The coast live oak woodland alliance is ranked by CDFW (2023d) as a G5S4 alliance. This ranking indicates that globally the alliance is widespread, abundant, and secure, and within California it is apparently secure (CDFW 2023d; NatureServe 2023); therefore, this community is not considered sensitive under CEQA.

Associations within the coast live oak woodland and forest alliance mapped on site include *Quercus agrifolia* and *Quercus agrifolia* / grass. Despite the alliance’s overall G5S5 rank, the *Quercus agrifolia* association has a G5S5 rank, indicating that it is widespread, abundant, and secure both globally and in California. Like the overall alliance, the *Quercus agrifolia* / grass association is ranked as G5S4.

Associated species observed within the *Quercus agrifolia* association include California scrub oak and redberry buckthorn (*Rhamnus crocea*).

Associated species observed within the *Quercus agrifolia* / grass include redberry buckthorn, California buckwheat, bush monkeyflower, chamise, compact brome, and fiddlenecks.

On site, the coast live oak woodland and forest alliance consists of large, narrow patches on upland slopes primarily concentrated in the eastern half of the study area.

5.1.5.2 Eucalyptus–Tree of Heaven–Black Locust Groves (79.100.00)

Eucalyptus–tree of heaven–black locust groves alliance communities include black acacia (*Acacia melanoxyton*), *Acacia* spp., tree of heaven, *Eucalyptus* spp., or black locust (*Robinia pseudoacacia*) as the dominant tree in the canopy. Eucalyptus–tree of heaven–black locust groves have an open to continuous canopy less than 60 meters (196.9 feet) in height with a sparse to intermittent shrub and herbaceous layer (CNPS 2023b).

The eucalyptus–tree of heaven–black locust groves alliance is a semi-natural stand, and as such it is included in the California Natural Community List, but not ranked. It is denoted as GNA/SNA (global/state rank not applicable) (CDFW 2023d); therefore, this community is not considered sensitive under CEQA.

Associations within the eucalyptus–tree of heaven–black locust groves alliance mapped on site included *Ailanthus altissima* and *Eucalyptus* (*globulus*, *camaldulensis*).

Associated species observed within this alliance in the field include river redgum (*Eucalyptus camaldulensis*), tree of heaven, arroyo willow, and mulefat.

On site, the majority of the eucalyptus–tree of heaven–black locust groves alliance is in long linear sections bordering Yucaipa Creek and Oak Glen Creek in the northwestern portion of the site.

5.1.6 Disturbed and Developed

5.1.6.1 Ornamental Plantings

Parks and ornamental plantings refer to areas where non-native ornamental species and landscaping schemes have been installed and maintained, usually as part of commercial or residential property/park. This habitat type typically supports myriad ornamental species, including, but not limited to, Bermuda grass (*Cynodon dactylon*), hottentot fig (*Carpobrotus edulis*), Peruvian peppertree, Brazilian peppertree (*Schinus terebinthifolius*), and red apple iceplant (*Aptenia cordifolia*).

Parks and ornamental plantings are not a listed vegetation community under the California Natural Community List (CDFW 2023d), but this category has been used in this report because it best describes what was observed in the field. As such, this community is not globally or state ranked and is not considered a sensitive natural community under CEQA.

Within the study area, ornamental plantings primarily occur in a few small patches in the southeastern corner of the site.

5.1.6.2 Urban/Developed

Urban or developed land covers refer to areas that have been constructed on or otherwise physically altered to the point where vegetation is no longer present. Urban or developed areas are characterized by permanent or semi-permanent structures, hardscapes, and landscaped areas that require irrigation.

Developed land is not a listed vegetation community under the California Natural Community List (CDFW 2023d), but it has been used in this report because it best describes what was observed in the field. As such, this community is not globally or state ranked and is not considered a sensitive natural community under CEQA.

Within the study area, the urban/developed land cover consists of graded roads that border and intersect the site, paved pads, and agriculture-related structures in the southwestern portion of the site.

5.1.6.3 Disturbed Habitat

Disturbed habitat refers to areas where soils have been recently or repeatedly disturbed by grading, compaction, or clearing of vegetation. Structures are typically not present within disturbed habitats, and these areas provide relatively low value for most plant and wildlife species. When vegetated, disturbed habitat supports predominantly non-native plant species such as ornamentals or ruderal exotic species that take advantage of disturbance.

Disturbed habitat is not a listed vegetation community under the California Natural Community List (CDFW 2023d), but it has been used in this report because it best describes what was observed in the field. As such, this community is not globally or state ranked and is not considered a sensitive natural community under CEQA.

Within the study area, disturbed habitat occurs within unpaved roads and in numerous large patches throughout the majority of the site, with the exception of the southeastern portion of the study area.

5.1.6.4 General Agriculture

Agricultural lands are an anthropogenic land cover and are not described in CDFW (2023d) or CNPS (2023b). Within the study area, agricultural lands consisted of row crops. On-site farming practices include soil disking and plowing, as well as regular anthropogenic maintenance and disturbance associated with ongoing management actions.

General agriculture areas occur in large patches, primarily in the central portion of the study area.

5.1.6.5 Open Water

Although not recognized by the Manual of California Vegetation, Online Edition (CNPS 2023b), or the Natural Community List (CDFW 2023d), open water is described by Oberbauer et al. (2008). Oberbauer et al. (2008) describes open water as ponded bodies of water persisting year-round that consist of less than 10% vegetative cover. Open water may support submerged aquatic communities and can contain various substrate compositions, largely determined by the surrounding environment (Oberbauer et al. 2008).

Open water is not a listed vegetation community under the California Natural Community List (CDFW 2023d). As such, this mapping unit would not be considered a sensitive natural community by CDFW; however, open water may be considered jurisdictional as an aquatic resource, which is further discussed in Section 5.3.4 of this report.

Areas mapped as open water within the study area consist of a human-made pond in the southeastern corner of the study area.

5.2 Plants and Wildlife Observed

5.2.1 Plants

A total of 238 species of native or naturalized plants, 156 native (66%) and 82 non-native (34%), were recorded within the study area. A list of observed plant species observed is provided in Appendix D, Plant Compendium.

5.2.2 Wildlife

A total of 63 wildlife species, consisting of 61 native species (97%) and 2 non-native species (3%), were recorded within the study area or vicinity during surveys (Appendix E, Wildlife Compendium). Birds detected on or in the immediate vicinity of the study area included Bullock's oriole (*Icterus bullockii*), American kestrel (*Falco sparverius*), ash-throated flycatcher (*Myiarchus cinerascens*), Cooper's hawk (*Accipiter cooperii*), Anna's hummingbird (*Calypte anna*), blue-gray gnatcatcher (*Polioptila caerulea*), great horned owl (*Bubo virginianus*), greater roadrunner (*Geococcyx californianus*), phainopepla (*Phainopepla nitens*), cliff swallow (*Petrochelidon pyrrhonota*), yellow-rumped warbler (*Setophaga coronate*), and rufous-crowned sparrow (*Aimophila ruficeps*). In addition, bald eagle (*Haliaeetus leucocephalus*) was observed flying overhead and yellow warbler (*Setophaga petechia*) was observed on site.

Mammals detected included coyote (*Canis latrans*), desert cottontail (*Sylvilagus audubonii*), California ground squirrel (*Otospermophilus beecheyi*), and northern raccoon (*Procyon lotor*).

Reptiles detected included western fence lizard (*Sceloporus occidentalis*), common side-blotched lizard (*Uta stansburiana*), western skink (*Plestiodon skiltonianus*), and Belding's orange-throated whiptail (*Aspidoscelis hyperythra beldingi*).

5.3 Special-Status and Regulated Resources

Appendix F and Appendix G provide tables of all special-status species (plants and wildlife, respectively) whose geographic ranges fall within the general study area vicinity. Special-status species' potential to occur within the study area were evaluated based on known species distribution, species-specific habitat preferences, and Dudek biologists' knowledge of regional biological resources. Species potentially occurring within the study area are identified as having moderate or high potential to occur based on habitat conditions on site, and species for which there is little or no suitable habitat are identified as not expected to occur or having low potential to occur.

5.3.1 Sensitive Vegetation Communities

Sensitive vegetation communities include those ranked S1 through S3 by CDFW (CDFW 2023d). Table 4 includes the subset of vegetation communities considered sensitive within the study area. Descriptions of these communities are included in Section 5.1, Vegetation Communities and Land Covers, above and their locations are shown on Figures 7-1 through 7-7.

Table 4. Sensitive Vegetation Communities within the Study Area

Vegetation Community or Land Cover Type	Floristic Alliance	Association	State Ranking ¹	Acreage
Scrub				
Menzies's golden bush scrub	<i>Isocoma menziesii</i>	<i>Isocoma menziesii</i>	S3	1.0
Palmer's goldenbush scrub	<i>Ericameria palmeri</i>	<i>Ericameria palmeri</i>	S3?	11.1
<i>Scrub Subtotal</i> ²				12.1
Chaparral				
Chamise - Sage chaparral	<i>Adenostoma fasciculatum</i> - <i>Salvia</i> spp.	<i>Adenostoma fasciculatum</i> - <i>Salvia mellifera</i> - <i>Rhus ovata</i>	S3	0.8
<i>Chaparral Subtotal</i> ²				0.8
Riparian				
Scale broom scrub	<i>Lepidospartum squamatum</i>	<i>Eriogonum fasciculatum</i> - <i>Lepidospartum squamatum</i> alluvial fan	S3	3.4
		<i>Lepidospartum squamatum</i> / ephemeral annuals	S2	0.6
Fremont cottonwood forest and woodland	<i>Populus fremontii</i> - <i>Fraxinus velutina</i> - <i>Salix gooddingii</i>	<i>Populus fremontii</i>	S3	4.8
		<i>Populus fremontii</i> - <i>Salix gooddingii</i> / <i>Baccharis salicifolia</i>	S3	5.5
		<i>Populus fremontii</i> - <i>Sambucus nigra</i>	S3	0.8
Goodding's willow - red willow riparian woodland and forest	<i>Salix gooddingii</i> - <i>Salix laevigata</i>	<i>Salix gooddingii</i>	S3	0.9
Basket bush - river hawthorn - desert olive patches	<i>Rhus trilobata</i> - <i>Crataegus rivularis</i> - <i>Forestiera pubescens</i>	<i>Sambucus nigra</i>	S3?	3.2
<i>Riparian Subtotal</i> ²				19.1
Grand Total ²				32.0

Notes:

- ¹ The conservation status of a vegetation community is designated by a number from 1 to 5. The numbers have the following meaning (NatureServe 2023):
 - 1 = critically imperiled
 - 2 = imperiled
 - 3 = vulnerable to extirpation or extinction
 - 4 = apparently secure
 - 5 = demonstrably widespread, abundant, and secure
- ² Totals may not sum due to rounding.

5.3.2 Special-Status Plants

Special-status plants include those listed, or candidates for listing, as threatened or endangered by USFWS and CDFW, and species identified with CRPR rank of 1 or 2 by CDFW.

Dudek biologists performed an extensive desktop review of literature, existing documentation, and GIS data to evaluate the potential for special-status plant species to occur within the study area. Each special-status plant species was assigned a rating of “not expected,” “low,” “moderate,” or “high” potential to occur based on relative location to known occurrences, vegetation community, soil, and elevation. Listed species with any potential to occur and non-listed special-status species with a moderate or higher potential to occur are discussed herein. Those special-status plant species that occur in the region but are not expected or have low potential to occur in the study area due to a lack of suitable habitat, the study area being located outside of the species’ known geographic or elevation range, or not being observed during the focused 2022 special-status plant survey are also included in Appendix F; however, these species are not discussed further because no significant direct or indirect impacts to them are expected. In addition, there is no USFWS-designated critical habitat for listed plant species overlapping the study area (USFWS 2023c).

Based on the results of the literature review and database searches, 76 special-status plant species were reported in the CNDDDB and CNPS databases as occurring in the nine USGS 7.5-minute quadrangles containing and surrounding the study area.

Of these, the following species were determined to have a moderate to high potential to occur based on suitable soils and vegetation communities present within the study area and historical occurrences: Nevin’s barberry (*Berberis nevinii*), smooth tarplant (*Centromadia pungens* ssp. *laevis*), Parry’s spineflower, slender-horned spineflower (*Dodecahema leptoceras*), Santa Ana River woollystar (*Eriastrum densifolium* ssp. *sanctorum*), California satintail (*Imperata brevifolia*), Hall’s monardella (*Monardella macrantha* ssp. *hallii*), salt spring checkerbloom (*Sidalcea neomexicana*), and San Bernardino aster. Therefore, focused surveys for these species were conducted in the focused survey area, in May and September 2022. These target species are discussed in further detail in Table 5 below and their potential to occur has been updated based on the results of 2022 special-status plant focused surveys. No additional special-status plant species were determined to have a moderate or high potential to occur within study area based on the soils, vegetation communities (habitat) present, elevation range, previous known locations based on the CNDDDB and CNPS Inventory, and results of 2022 focused surveys (Appendix F).

Although not considered special status in the context of this report, three Southern California black walnut plants were observed during focused surveys along the ephemeral channel north of I-10. Southern California black walnut has a CRPR rank of 4.2, a watch list species.

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Table 5. Special-Status Plant Species with Potential to Occur within the Study Area

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/Blooming Period/ Elevation Range (feet)	Potential to Occur (Focused Survey Area)	Potential to Occur (Non-Focused Survey Area)
<i>Berberis nevini</i>	Nevin's barberry	FE/SE/1B.1	Chaparral, Cismontane woodland, Coastal scrub, Riparian scrub; Gravelly (sometimes), Sandy (sometimes)/perennial evergreen shrub/ (Feb)Mar-June/230-2,705	Absent. The study area is within the species' known elevation range and there is suitable chaparral, cismontane woodland, coastal scrub, and riparian scrub vegetation present. There are several CNDDDB records mapped approximately 5 miles east of the study area (CDFW 2023c). However, this species was not detected during spring 2022 focused rare plant surveys.	Moderate potential to occur. The study area is within the species' known elevation range and there is suitable chaparral, cismontane woodland, coastal scrub, and riparian scrub vegetation present. There are several CNDDDB records mapped approximately 5 miles east of the study area (CDFW 2023c).
<i>Centromadia pungens</i> ssp. <i>laevis</i>	smooth tarplant	None/None/1B.1	Chenopod scrub, Meadows and seeps, Playas, Riparian woodland, Valley and foothill grassland; Alkaline/annual herb/Apr-Sep/0-2,095	Absent. The study area is within the species' known elevation range and there is suitable riparian woodland and valley and foothill grassland vegetation present. Additionally, this is a disturbance tolerant species, which may be able to grow in many of the disturbed areas within the study area. There are several CNDDDB records less than 2 miles south of the study area (CDFW 2023c). However, this species was not detected during spring 2022 focused rare plant surveys.	High potential to occur. The study area is within the species' known elevation range and there is suitable riparian woodland and valley and foothill grassland vegetation present. Additionally, this is a disturbance tolerant species, which may be able to grow in many of the disturbed areas within the study area. There are several CNDDDB records less than 2 miles south of the study area (CDFW 2023c).
<i>Chorizanthe parryi</i> var. <i>parryi</i>	Parry's spineflower	None/None/1B.1	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland; Openings, Rocky (sometimes), Sandy (sometimes)/annual herb/ Apr-June/900-4,000	Absent. The study area is within the species' known elevation range and there is suitable chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland vegetation present. Additionally, the study area contains sandy soils that may be capable of supporting this species. The nearest mapped CNDDDB record is approximately 2.5 miles northeast of the study area (CDFW 2023c). However, this species was not detected during spring 2022 focused rare plant surveys.	Moderate potential to occur. The study area is within the species' known elevation range and there is suitable chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland vegetation present. Additionally, the study area contains sandy soils that may be capable of supporting this species. The nearest mapped CNDDDB record is approximately 2.5 miles northeast of the study area (CDFW 2023c).
<i>Dodecahema leptoceras</i>	slender-horned spineflower	FE/SE/1B.1	Chaparral, Cismontane woodland, Coastal scrub; Sandy/annual herb/Apr-June/655-2,490	Absent. The study area is within the species' known elevation range and there is suitable chaparral, cismontane woodland, and coastal scrub vegetation present. Additionally, the study area contains sandy soils suitable to this species (USDA 2022). The nearest mapped CNDDDB record is less than 1 mile northeast of the study area, however this record is mapped to the best guess (CDFW 2023c). However, this species was not detected during spring 2022 focused rare plant surveys.	High potential to occur. The study area is within the species' known elevation range and there is suitable chaparral, cismontane woodland, and coastal scrub vegetation present. Additionally, the study area contains sandy soils suitable to this species (USDA 2022). The nearest mapped CNDDDB record is less than 1 mile northeast of the study area, however this record is mapped to the best guess (CDFW 2023c).
<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>	Santa Ana River woollystar	FE/SE/1B.1	Chaparral, Coastal scrub; Gravelly (sometimes), Sandy (sometimes)/perennial herb/Apr-Sep/ 300-2,000	Absent. The study area is within the species' known elevation range and there is suitable chaparral and coastal scrub vegetation present. Additionally, the study area contains sandy/gravelly soils capable of supporting this species (USDA 2022). There are two records of this species within 3 miles of the study area (CDFW 2023c). However, this species was not detected during spring 2022 focused rare plant surveys.	High potential to occur. The study area is within the species' known elevation range and there is suitable chaparral and coastal scrub vegetation present. Additionally, the study area contains sandy/gravelly soils capable of supporting this species (USDA 2022). There are two records of this species within 3 miles of the study area (CDFW 2023c).
<i>Imperata brevifolia</i>	California satintail	None/None/2B.1	Chaparral, Coastal scrub, Meadows and seeps, Mojavean desert scrub, Riparian scrub; Mesic/perennial rhizomatous herb/Sep-May/0-3,985	Absent. The study area is within the species' known elevation range and there is suitable chaparral, coastal scrub, and riparian scrub vegetation present. The nearest mapped CNDDDB record is approximately 3 miles northwest of the study area; however, this is a historical record from 1891 (CDFW 2023c). Additionally, this species was not detected during spring 2022 focused rare plant surveys.	Moderate potential to occur. The study area is within the species' known elevation range and there is suitable chaparral, coastal scrub, and riparian scrub vegetation present. The nearest mapped CNDDDB record is approximately 3 miles northwest of the study area; however, this is a historical record from 1891 (CDFW 2023c).
<i>Monardella macrantha</i> ssp. <i>hallii</i>	Hall's monardella	None/None/1B.3	Broadleafed upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Valley	Absent. The study area is within the species' known elevation range and there is suitable chaparral, cismontane woodland, and valley and foothill grassland vegetation present. The nearest	Moderate potential to occur. The study area is within the species' known elevation range and there is suitable chaparral, cismontane woodland, and valley and foothill

Table 5. Special-Status Plant Species with Potential to Occur within the Study Area

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/Blooming Period/ Elevation Range (feet)	Potential to Occur (Focused Survey Area)	Potential to Occur (Non-Focused Survey Area)
			and foothill grassland/perennial rhizomatous herb/June–Oct/2,395–7,200	mapped CNDDDB record is approximately 6 miles northeast of the study area (CDFW 2023c). However, this species was not detected during spring 2022 focused rare plant surveys.	grassland vegetation present. The nearest mapped CNDDDB record is approximately 6 miles northeast of the study area (CDFW 2023c).
<i>Sidalcea neomexicana</i>	salt spring checkerbloom	None/None/2B.2	Chaparral, Coastal scrub, Lower montane coniferous forest, Mojavean desert scrub, Playas; Alkaline, Mesic/perennial herb/Mar–June/50–5,015	Absent. The study area is within the species’ known elevation range and there is suitable chaparral and coastal scrub vegetation present. Additionally, approximately 50% of soils within the study area are alkaline and capable of supporting this species. However, this species was not detected during spring 2022 focused rare plant surveys.	Moderate. The study area is within the species’ known elevation range and there is suitable chaparral and coastal scrub vegetation present. Additionally, approximately 50% of soils within the study area are alkaline, capable of supporting this species. The nearest CNDDDB record is approximately 3.5 miles northeast of the study area. However, this is a historical record from 1891 (CDFW 2023c).
<i>Symphyotrichum defoliatum</i>	San Bernardino aster	None/None/1B.2	Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Marshes and swamps, Meadows and seeps, Valley and foothill grassland; Streambanks/perennial rhizomatous herb/July–Nov/5–6,690	Absent. The study area is within the species’ known elevation range and there is suitable cismontane woodland, coastal scrub, and valley and foothill grassland vegetation present. Additionally, the study area contains streambank areas. However, this species was not detected during fall 2022 focused rare plant surveys.	Moderate potential to occur. The study area is within the species’ known elevation range and there is suitable cismontane woodland, coastal scrub, and valley and foothill grassland vegetation present. Additionally, the study area contains streambank areas. The nearest mapped CNDDDB record is approximately 2 miles southwest of the study area. However, this is a historical record (CDFW 2023c).

Notes: CNDDDB = California Natural Diversity Database.

Status Legend

Federal

FE: Federally listed as endangered

State

SE: State listed as endangered

CRPR: California Rare Plant Rank

1B: Plants rare, threatened, or endangered in California and elsewhere

2B: Plants rare, threatened, or endangered in California, but more common elsewhere

Threat Rank:

1: seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)

2: moderately threatened in California (20%–80% of occurrences threatened/moderate degree and immediacy of threat)

3: not very threatened in California (<20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

5.3.3 Special-Status Wildlife

Special-status wildlife include those listed, or candidates for listing, as threatened or endangered by USFWS and CDFW, fully protected species, and those designated as Species of Special Concern by CDFW and as sensitive by USFWS.

Similar to special-status plants, Dudek biologists performed an extensive desktop review of literature, existing documentation, and GIS data to evaluate the potential for special-status wildlife species to occur within the study area. Each special-status wildlife species was assigned a rating of “not expected,” “low,” “moderate,” or “high” potential to occur based on relative location to known occurrences and vegetation community/habitat association. Listed species with any potential to occur and non-listed special-status species with a moderate or higher potential to occur are discussed herein. Those special-status wildlife species that are not expected or have low potential to occur in the study area are also included in Appendix G; however, these species are not discussed further as no significant direct or indirect impacts are expected.

Based on the results of the literature review and database searches, 47 special-status wildlife species were reported in the CNDDDB and USFWS databases as occurring in the study area. Of these, arroyo toad, burrowing owl, coastal California gnatcatcher, least Bell’s vireo, San Bernardino kangaroo rat, and Stephens’ kangaroo rat were determined to have a potential to occur based on suitable habitat present within the study area and historical occurrences. Therefore, focused protocol-level surveys were conducted for burrowing owl and least Bell’s vireo, and focused habitat assessments were conducted for arroyo toad, coastal California gnatcatcher, San Bernardino kangaroo rat, and Stephens’ kangaroo rat. These species are discussed in further detail below. In addition, there is no USFWS-designated critical habitat for listed wildlife species overlapping the study area (USFWS 2023c).

Two special-status wildlife species—bald eagle and yellow warbler—were observed within the study area. An additional 19 special-status wildlife species were determined to have a moderate or high potential to occur (or low potential to occur for certain listed species) within the study area based on habitat present and/or previous known locations in CNDDDB records. The details of these species are presented below in Table 6.

Protocol-level surveys for burrowing owl were negative. Protocol-level surveys for least Bell’s vireo were negative. Finally, the focused habitat assessments for arroyo toad, coastal California gnatcatcher, San Bernardino kangaroo rat, and Stephens’ kangaroo rat indicated these species are not likely to occur on site. These species, in addition to the species observed and those with potential to occur within the study area, are detailed in the following discussion.

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Table 6. Special-Status Wildlife Species Observed or with Moderate or High Potential to Occur within the Study Area

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur (Focused Survey Area)	Potential to Occur (Non-Focused Survey Area)
Amphibians					
<i>Spea hammondi</i>	western spadefoot	None/SSC	Primarily grassland and vernal pools, but also in ephemeral wetlands that persist at least 3 weeks in chaparral, coastal scrub, valley-foothill woodlands, pastures, and other agriculture	Moderate potential to occur. The study area contains a marginal amount of suitable ephemeral water features in chaparral and coastal scrub habitat. The nearest mapped CNDDDB record is approximately 2.5 miles east of the study area where one adult was observed crossing Live Oak Canyon Road (CDFW 2023c).	Moderate potential to occur. The study area contains a marginal amount of suitable ephemeral water features in chaparral and coastal scrub habitat. The nearest mapped CNDDDB record is approximately 2.5 miles east of the study area where one adult was observed crossing Live Oak Canyon Road (CDFW 2023c).
Birds					
<i>Aquila chrysaetos</i> (nesting and wintering)	golden eagle	None/FP, WL	Nests and winters in hilly, open/semi-open areas, including shrublands, grasslands, pastures, riparian areas, mountainous canyon land, open desert rimrock terrain; nests in large trees and on cliffs in open areas and forages in open habitats	Low potential for nesting/wintering, Moderate potential for foraging. While the study area contains shrubland, grassland, and riparian habitat, it lacks large trees suitable for nesting. It may contain open habitat suitable for foraging. Additionally, this species is sensitive to human disturbance, reducing the likelihood that it would be present within the study area. The nearest mapped CNDDDB record is approximately 1.5 miles south of the study area in San Timoteo Canyon (CDFW 2023c).	Low potential for nesting/wintering, Moderate potential for foraging. While the study area contains shrubland, grassland, and riparian habitat, it lacks large trees suitable for nesting. It may contain open habitat suitable for foraging. Additionally, this species is sensitive to human disturbance, reducing the likelihood that it would be present within the study area. The nearest mapped CNDDDB record is approximately 1.5 miles south of the study area in San Timoteo Canyon (CDFW 2023c).
<i>Athene cunicularia</i> (burrow sites and some wintering sites)	burrowing owl	BCC/SSC	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows	Absent. While the study area contains small mammal burrows and grassland, open scrub, and agriculture areas that may be suitable habitat for this species, 2022 focused burrowing owl surveys were negative.	Moderate potential to occur. The study area contains small mammal burrows suitable for nesting with some signs of burrowing owl use. Additionally, the study area contains grassland, open scrub, and agriculture areas suitable for foraging. The nearest mapped CNDDDB record is approximately 8.5 miles northwest of the study area.
<i>Elanus leucurus</i> (nesting)	white-tailed kite	None/FP	Nests in woodland, riparian, and individual trees near open lands; forages opportunistically in grassland, meadows, scrubs, agriculture, emergent wetland, savanna, and disturbed lands	High potential to occur. The study area contains some riparian habitat and woodland areas that may be suitable for nesting, and grasslands, scrub land, and disturbed areas that may be suitable for foraging. Additionally, there are three CNDDDB records within 5 miles of the study area that report nesting adults or adults with fledglings (CDFW 2023c).	High potential to occur. The study area contains some riparian habitat and woodland areas that may be suitable for nesting, and grasslands, scrub land, and disturbed areas that may be suitable for foraging. Additionally, there are three CNDDDB records within 5 miles of the study area that report nesting adults or adults with fledglings (CDFW 2023c).
<i>Haliaeetus leucocephalus</i> (nesting and wintering)	bald eagle	FPD/FP, SE	Nests in forested areas adjacent to large bodies of water, including seacoasts, rivers, swamps, large lakes; winters near large bodies of water in lowlands and mountains	Not expected to nest or winter. While the study area lacks suitable forest habitats and surface water features necessary for nesting and foraging, a bald eagle was observed flying overhead during the 2022 field surveys. This species may move through the study area but is not expected to nest or winter.	Not expected to nest or winter. While the study area lacks suitable forest habitats and surface water features necessary for nesting and foraging, a bald eagle was observed flying overhead during the 2022 field surveys. This species may move through the study area but is not expected to nest or winter.
<i>Lanius ludovicianus</i> (nesting)	loggerhead shrike	None/SSC	Nests and forages in open habitats with scattered shrubs, trees, or other perches	Moderate potential to occur. The study area contains suitable open habitat with some scattered shrubs. The nearest mapped CNDDDB record is approximately 3 miles west of the study area San Timoteo Canyon Road (CDFW 2023c).	Moderate potential to occur. The study area contains suitable open habitat with some scattered shrubs. The nearest mapped CNDDDB record is approximately 3 miles west of the study area San Timoteo Canyon Road (CDFW 2023c).
<i>Setophaga petechia</i> (nesting)	yellow warbler	None/SSC	Nests and forages in riparian and oak woodlands, montane chaparral, open ponderosa pine, and mixed-conifer habitats	Present. The study area contains some riparian and chaparral habitat that may be suitable for nesting. Additionally, several auditory observations of this species were recorded in the study area during 2022 field surveys. The nearest mapped CNDDDB record is	Present. The study area contains some riparian and chaparral habitat that may be suitable for nesting. Additionally, this species was recorded in the western portion of the study area along Yucaipa Creek during 2022 field surveys. The nearest mapped CNDDDB record is

Table 6. Special-Status Wildlife Species Observed or with Moderate or High Potential to Occur within the Study Area

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur (Focused Survey Area)	Potential to Occur (Non-Focused Survey Area)
				approximately 2 miles south of the study area near San Timoteo Canyon Road (CDFW 2023c).	approximately 2 miles south of the study area near San Timoteo Canyon Road (CDFW 2023c).
<i>Vireo bellii pusillus</i> (nesting)	least Bell's vireo	FE/SE	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season	Absent. The study area contains riparian habitat along Yucaipa Creek that runs through the northern portion of the focused survey area; however, it is generally sparse and may only provide low quality habitat for this species. Additionally, 2022 focused least Bell's vireo surveys were negative.	Low potential to occur. The study area contains riparian habitat along the drainages Yucaipa Creek and Oak Glen Creek that run through portions of the study area; however, it is generally sparse and may only provide low quality habitat for this species. The nearest mapped CNDDDB record is approximately 3.5 miles west of the study area in San Timoteo Canyon (CDFW 2023c).
Invertebrates					
<i>Bombus crotchii</i>	Crotch bumble bee	None/SCT	Open grassland and scrub communities supporting suitable floral resources	High potential to occur. The study area contains grassland and scrub communities with <i>Phacelia</i> , <i>Clarkia</i> , <i>Eriogonum</i> , <i>Eschscholzia</i> , and <i>Antirrhinum</i> species that have been identified as preferred food plant genera. The eastern portion of the study area overlaps with CNDDDB record of this species in Calimesa; however, the exact location of the record is unknown (CDFW 2023c).	High potential to occur. The study area contains grassland and scrub communities with <i>Phacelia</i> , <i>Clarkia</i> , <i>Eriogonum</i> , <i>Eschscholzia</i> , and <i>Antirrhinum</i> species that have been identified as preferred food plant genera. The eastern portion of the study area overlaps with CNDDDB record of this species in Calimesa; however, the exact location of the record is unknown (CDFW 2023c). Finally, a <i>Bombus</i> sp. was incidentally observed during biological surveys.
Mammals					
<i>Chaetodipus californicus femoralis</i>	Dulzura pocket mouse	None/SSC	Open habitat, coastal scrub, chaparral, oak woodland, chamise chaparral, mixed-conifer habitats; disturbance specialist; 0 to 3,000 feet amsl	Moderate potential to occur. The study area contains suitable coastal scrub, chamise chaparral, and open habitat, and is within the elevation range that this species prefers. The nearest mapped CNDDDB record is approximately 11 miles southeast of the study area (CDFW 2023c).	Moderate potential to occur. The study area contains suitable coastal scrub, chamise chaparral, and open habitat, and is within the elevation range that this species prefers. The nearest mapped CNDDDB record is approximately 11 miles southeast of the study area (CDFW 2023c).
<i>Chaetodipus fallax fallax</i>	northwestern San Diego pocket mouse	None/SSC	Coastal scrub, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon-juniper, and annual grassland	High potential to occur. The study area contains suitable coastal scrub, chaparral, desert wash, and annual grassland habitat. Additionally, the southern border of the study area abuts a CNDDDB record and there are other CNDDDB records within 5 miles of the study area (CDFW 2023c).	High potential to occur. The study area contains suitable coastal scrub, chaparral, desert wash, and annual grassland habitat. Additionally, the southern border of the study area abuts a CNDDDB record and there are other CNDDDB records within 5 miles of the study area (CDFW 2023c).
<i>Eumops perotis californicus</i>	western mastiff bat	None/SSC	Chaparral, coastal and desert scrub, coniferous and deciduous forest and woodland; roosts in crevices in rocky canyons and cliffs where the canyon or cliff is vertical or nearly vertical, trees, and tunnels	Moderate potential to occur. The study area contains suitable chaparral and coastal scrub habitat. Additionally, the northwest portion of the study area contains some highly incised washes with vertical walls which may provide roosting habitat. The nearest mapped CNDDDB record is approximately 8 miles northwest of the study area (CDFW 2023c).	Moderate potential to occur. The study area contains suitable chaparral and coastal scrub habitat. Additionally, the northwest portion of the study area contains some highly incised washes with vertical walls which may provide roosting habitat. The nearest mapped CNDDDB record is approximately 8 miles northwest of the study area (CDFW 2023c).
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	None/SSC	Coastal scrub, desert scrub, chaparral, cacti, rocky areas	Moderate potential to occur. The study area contains some coastal scrub and chaparral habitat. However, the study area lacks cacti and rocky areas preferred by this species. The nearest mapped CNDDDB record is approximately 3 miles north of the study area (CDFW 2023c).	Moderate potential to occur. The study area contains some coastal scrub and chaparral habitat. However, the study area lacks cacti and rocky areas preferred by this species. The nearest mapped CNDDDB record is approximately 3 miles north of the study area (CDFW 2023c).
<i>Perognathus longimembris brevinasus</i>	Los Angeles pocket mouse	None/SSC	Lower-elevation grassland, alluvial sage scrub, and coastal scrub	Moderate potential to occur. The study area contains grassland and coastal scrub habitat. Additionally, the	Moderate potential to occur. The study area contains grassland and coastal scrub habitat. Additionally, the study

Table 6. Special-Status Wildlife Species Observed or with Moderate or High Potential to Occur within the Study Area

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur (Focused Survey Area)	Potential to Occur (Non-Focused Survey Area)
				study area is primarily composed of sandy soils, a preferred microhabitat characteristic of the Los Angeles pocket mouse (USDA 2022). The nearest mapped CNDDDB record is approximately 7 miles west of the study area (CDFW 2023c).	area is primarily composed of sandy soils, a preferred microhabitat characteristic of the Los Angeles pocket mouse (USDA 2022). The nearest mapped CNDDDB record is approximately 7 miles west of the study area (CDFW 2023c).
<i>Taxidea taxus</i>	American badger	None/SSC	Dry, open, treeless areas; grasslands, coastal scrub, agriculture, and pastures, especially with friable soils	High potential to occur. The study area contains dry, open, and treeless areas, as well as grasslands, coastal scrub, and agricultural areas. Additionally, the three most prominent soils series mapped in the area (Saugus, San Timoteo, and San Emigdio) are described as friable (USDA 2022). The nearest mapped CNDDDB record is approximately 6 miles east of the study area, however this is a historical record from 1908 (CDFW 2023c).	High potential to occur. The study area contains dry, open, and treeless areas, as well as grasslands, coastal scrub, and agricultural areas. Additionally, the three most prominent soils series mapped in the area (Saugus, San Timoteo, and San Emigdio) are described as friable (USDA 2022). The nearest mapped CNDDDB record is approximately 6 miles east of the study area, however this is a historical record from 1908 (CDFW 2023c).
Reptiles					
<i>Anniella stebbinsi</i>	southern California legless lizard	None/SSC	Coastal dunes, stabilized dunes, beaches, dry washes, valley-foothill, chaparral, and scrubs; pine, oak, and riparian woodlands; associated with sparse vegetation and moist sandy or loose, loamy soils	High potential to occur. The study area contains suitable dry washes, chaparral, scrub, and riparian habitat with areas of sparse vegetation and sandy loam soils. Additionally, the eastern half of the study area overlaps with a CNDDDB record of this species from 2018. While the exact location of this record was approximated, there are several other CNDDDB records less than 2 miles from the study area (CDFW 2023c).	High potential to occur. The study area contains suitable dry washes, chaparral, scrub, and riparian habitat with areas of sparse vegetation and sandy loam soils. Additionally, the eastern half of the study area overlaps with a CNDDDB record of this species from 2018. While the exact location of this record was approximated, there are several other CNDDDB records less than 2 miles from the study area (CDFW 2023c).
<i>Arizona elegans occidentalis</i>	California glossy snake	None/SSC	Arid scrub, rocky washes, grasslands, chaparral, open areas with loose soil	Moderate potential to occur. The study area contains grassland, chaparral, and open areas with loose sandy loam soils that may be suitable for this species. The nearest mapped CNDDDB record is approximately 6 miles northwest of the study area near the Santa Ana River (CDFW 2023c).	Moderate potential to occur. The study area contains grassland, chaparral, and open areas with loose sandy loam soils that may be suitable for this species. The nearest mapped CNDDDB record is approximately 6 miles northwest of the study area near the Santa Ana River (CDFW 2023c).
<i>Aspidoscelis tigris stejnegeri</i>	Coastal tiger whiptail	None/SSC	Hot and dry areas with sparse foliage, including chaparral, woodland, and riparian areas	High potential to occur. The study area contains sparse chaparral and riparian habitat that may be suitable to this species. The nearest mapped CNDDDB record is approximately 2 miles southwest of the study area where two adults were observed in 2015 (CDFW 2023c).	High potential to occur. The study area contains sparse chaparral and riparian habitat that may be suitable to this species. The nearest mapped CNDDDB record is approximately 2 miles southwest of the study area where two adults were observed in 2015 (CDFW 2023c).
<i>Crotalus ruber</i>	red diamondback rattlesnake	None/SSC	Coastal scrub, chaparral, oak and pine woodlands, rocky grasslands, cultivated areas, and desert flats	Moderate potential to occur. The study area contains coastal scrub, chaparral, and oak woodland that may be suitable to this species. While the study area lacks rocky areas, it does contain rodent burrows that may be used for cover. The nearest mapped CNDDDB record is approximately 2 miles southwest of the study area (CDFW 2023c).	Moderate potential to occur. The study area contains coastal scrub, chaparral, and oak woodland that may be suitable to this species. While the study area lacks rocky areas, it does contain rodent burrows that may be used for cover. The nearest mapped CNDDDB record is approximately 2 miles southwest of the study area (CDFW 2023c).
<i>Phrynosoma blainvillii</i>	Blainville's horned lizard	None/SSC	Open areas of sandy soil in valleys, foothills, and semi-arid mountains including coastal scrub, chaparral, valley-foothill hardwood, conifer, riparian, pine-cypress, juniper, and annual grassland habitats	Moderate potential to occur. The study area contains sandy soils with coastal scrub, chaparral, and annual grassland habitat. The nearest mapped CNDDDB record is approximately 4 miles northwest of the study area in Redlands. While this is a historical record, there are other more current CNDDDB records within 6 miles of the study area (CDFW 2023c).	Moderate potential to occur. The study area contains sandy soils with coastal scrub, chaparral, and annual grassland habitat. The nearest mapped CNDDDB record is approximately 4 miles northwest of the study area in Redlands. While this is a historical record, there are other more current CNDDDB records within 6 miles of the study area (CDFW 2023c).

Table 6. Special-Status Wildlife Species Observed or with Moderate or High Potential to Occur within the Study Area

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur (Focused Survey Area)	Potential to Occur (Non-Focused Survey Area)
<i>Salvadora hexalepis virgulata</i>	coast patch-nosed snake	None/SSC	Brushy or shrubby vegetation; requires small mammal burrows for refuge and overwintering sites	High potential to occur. The study area contains shrubby vegetation and small mammal burrows that may be suitable for refuge and wintering habitat. The nearest mapped CNDDDB record is approximately 2.5 miles southwest of the study area (CDFW 2023c).	High potential to occur. The study area contains shrubby vegetation and small mammal burrows that may be suitable for refuge and wintering habitat. The nearest mapped CNDDDB record is approximately 2.5 miles southwest of the study area (CDFW 2023c).

Notes: CNDDDB = California Natural Diversity Database; amsl = above mean sea level.

Status Designations:

BCC: U.S. Fish and Wildlife Service Bird of Conservation Concern

FE: Federally listed as endangered

FP: California Fully Protected Species

FT: Federally listed as threatened

FPD: Federally proposed for delisting

SCE: State candidate for listing as endangered

SCT: State candidate for listing as threatened

SSC: California Species of Special Concern

SE: State listed as endangered

ST: State listed as threatened

WL: California Watch List Species

The following discussion details the two special-status species observed within the study area (bald eagle and yellow warbler) and 19 special-status wildlife species determined to have a moderate or high potential to occur within the study area (or low potential to occur for certain listed species). This discussion also includes the results of the protocol-level surveys for burrowing owl and least Bell's vireo, and the focused habitat assessments for arroyo toad, California gnatcatcher, San Bernardino kangaroo rat, and Stephens' kangaroo rat.

5.3.3.1 Amphibians

Arroyo Toad

The arroyo toad is federally listed as endangered and a California Species of Special Concern. The arroyo toad is a relatively small (5 to 8.1 centimeters), stocky, blunt-nosed toad with spotted greenish gray to tan warty skin (Stebbins 2003). The arroyo toad is endemic to the coastal plains, mountains, and desert slopes of central and Southern California and northwestern Baja California from near sea level to about 8,000 feet (2,400 meters). In the 5-Year Review for the species, populations were reported to occur in the following counties: Monterey, San Luis Obispo, Santa Barbara, Ventura, Los Angeles, San Bernardino, Riverside, Orange, San Diego, and Imperial (USFWS 2009).

The arroyo toad evolved in an ecological system that is inherently dynamic, with marked seasonal and annual fluctuations in rainfall and flooding. Breeding habitat requirements are highly specialized and are the key factors when determining habitat suitability. Specifically, arroyo toad requires shallow, slow-moving stream and riparian habitats that are naturally disturbed on a regular basis, primarily by flooding (USFWS 2009). Streams and washes with sandy banks free of dense vegetation with mature willow stands, cottonwoods (*Populus* spp.), western sycamore (*Platanus racemosa*), riparian habitats of semi-arid areas, and small cobble streambeds provide suitable habitat for arroyo toad.

Larvae (tadpoles) are highly specialized feeders on loose organic material such as detritus, interstitial algae, bacteria, and diatoms (Sweet 1992). Adults feed on a variety of invertebrates, including snails, Jerusalem crickets, beetles, ants, caterpillars, moths, and occasionally newly metamorphosed individuals. They usually feed at night but may occasionally feed during the day (Zeiner et al. 1988).

The arroyo toad is not expected to occur within the study area. A focused habitat assessment for the arroyo toad was conducted within the study area by Dudek biologist Tommy Molioo. According to the habitat assessment, ephemeral water features within the study area lack steady hydrology necessary to support this species. Furthermore, the deep, incised nature of the channels limits adjacent uplands for arroyo toad.

Western Spadefoot

The western spadefoot (*Spea hammondi*) is a California Species of Special Concern. This species is endemic to California and northern Baja California (Jennings and Hayes 1994; Stebbins 2003). Although the species primarily occurs in lowlands, it also occurs in foothill and mountain habitats, occurring at elevations ranging from sea level to 4,000 feet amsl, but primarily occurs at elevations below 3,000 feet amsl (Stebbins 2003).

The western spadefoot requires two separate habitat components to complete their life cycle; they require upland areas for foraging and overwintering and adjacent wetland areas for breeding and reproduction (USFWS 2012). Spadefoot toads aestivate in upland habitats near potential breeding sites in burrows approximately 1 meter in depth (Stebbins 1972) and adults emerge from underground burrows during relatively warm rainfall events to

breed. The species is almost completely nocturnal (Holland and Goodman 1998) with most aboveground activity occurring on rainy nights (Zeiner et al. 1988). Western spadefoot tadpoles consume planktonic organisms and algae, but are also carnivorous and will forage on dead vertebrates and invertebrates (Bragg 1964).

Western spadefoot has a moderate potential to occur within the study area due to the presence of suitable habitat in the form of ephemeral water features in chaparral, coastal scrub, and valley-foothill woodland habitat.

5.3.3.2 Birds

Golden Eagle

The golden eagle (*Aquila chrysaetos*) is a California Fully Protected Species. This formerly common raptor is now considered an uncommon resident throughout California (Grinnell and Miller 1994). The golden eagle is one of the largest and fastest raptors in North America and has a Holarctic (northern parts of both the Old World and New World) distribution, extending as far south as North Africa, Arabia, the Himalayas, North America, and Mexico. It is a partial migrant within this distribution, with the northern breeding birds migrating south in winter and those in more temperate climates remaining within breeding territories year-round (Brown and Amadon 1968). It ranges from sea level up to 3,833 meters (11,500 feet) amsl (Grinnell and Miller 1944).

The golden eagle requires rolling foothills, mountain terrain, and wide arid plateaus deeply cut by streams and canyons, open mountain slopes and cliffs, and rock outcrops (Zeiner et al. 1990a). The food supply for this species includes medium to large mammals such as rabbits, hares, and squirrels, and it will also feed on reptiles, birds, and sometimes carrion (Olendorff 1976; Johnsgard 1990). This species nests on cliffs with canyons and escarpments and in large trees (generally occurring in open habitats) and is primarily restricted to rugged, mountainous country (Garrett and Dunn 1981; Johnsgard 1990).

Golden eagle has a low potential for nesting/wintering, and a moderate potential for foraging within the study area. The study area lacks large trees suitable for nesting, and this species is sensitive to human disturbance, reducing the likelihood that it would nest within the study area. However, the study area contains open habitat that may be suitable for foraging.

Burrowing Owl

Burrowing owl is a California Species of Special Concern. With a relatively wide-ranging distribution throughout the west, burrowing owls are considered to be habitat generalists (Lantz et al. 2004). In California, burrowing owls are yearlong residents of open, dry grassland and desert habitats and grass, forb, and open shrub stages of pinyon-juniper and ponderosa pine habitats (Zeiner et al. 1990a). Preferred habitat is generally typified by short, sparse vegetation with few shrubs, level to gentle topography, and well-drained soils (Haug et al. 1993).

The presence of burrows is the most essential component of burrowing owl habitat as they are required for nesting, roosting, cover, and catching prey (Coulombe 1971; Martin 1973; Green and Anthony 1989; Haug et al. 1993). In California, western burrowing owls most commonly live in burrows created by California ground squirrels. Burrowing owls may occur in human-altered landscapes such as agricultural areas, ruderal grassy fields, vacant lots, and pastures if the vegetation structure is suitable (i.e., open and sparse), usable burrows are available, and foraging habitat occurs in close proximity (Gervais et al. 2008). Debris piles, riprap, culverts, and pipes can be used for nesting and roosting.

Protocol surveys for burrowing owl were conducted by Dudek in 2022. Biologists mapped burrows throughout the focused survey area. The majority of burrows mapped were located in two clusters in the western portion of the study area, and two clusters in the eastern portion of the study area. Burrows occurred in non-native grassland habitat or disturbed areas (Figure 8, Biological Resources). Mapped burrows were at least 4 inches in diameter, and all were natural earthen burrows except two mapped pipes that were wide enough to be considered as suitable burrowing owl burrow surrogates. No active burrowing owl sign (i.e., feathers, whitewash, or pellets) was observed within the focused survey area. Outside the focused survey area, the study area contains small mammal burrows suitable for nesting burrowing owl use. Additionally, the study area contains grassland, open scrub, and agriculture areas suitable for foraging. The nearest mapped CNDDDB record is approximately 8.5 miles northwest of the study area. Therefore, burrowing owl has a moderate potential to occur within the study area outside of the focused survey area.

White-Tailed Kite

The white-tailed kite (*Elanus leucurus*) is a California Fully Protected Species. This nonmigratory resident species is found throughout much of California. White-tailed kites are frequently associated with agricultural areas, low elevation grasslands, open woodlands, marshes, and savannah habitats where they hover high above the ground while hunting for prey. Small mammals comprise the majority of the white-tailed kite’s diet; however, the species is also known to eat other birds, lizards, and even insects. White-tailed kites typically nest in riparian areas that are adjacent to open space areas. Nests are typically found within the upper third of trees ranging in height from 10 to 160 feet tall. Kite pairs stay together during a single breeding season and may or may not pair up again in future breeding seasons (Cornell Lab of Ornithology 2019).

White-tailed kite population numbers appear to primarily be impacted by fluctuations in the population sizes of the species’ prey base; however, conversion of natural and agricultural lands to urban or commercial property, increased competition for nest sites with other raptors and corvids, drought conditions throughout Southern California, and increased disturbances near nest sites could also be impacting population sizes of white-tailed kites (Dunk 1995).

White-tailed kite was not observed within the study area but was determined to have a high potential to occur within the study area, as it contains some riparian habitat and woodland areas that may be suitable for nesting, and grasslands, scrub land, and disturbed areas that may be suitable for foraging.

Bald Eagle

The bald eagle is a California Fully Protected Species and is state listed as endangered. Bald eagles are large raptors found throughout much of the United States and into Canada. This species is typically found near large bodies of water. This species prefers to feed on fish but is also known to prey on waterfowl and other birds, as well as a variety of mammals, reptiles and amphibians, and carrion and garbage (Buehler 2000). Bald eagles nest in large trees found in forested areas, as well as on cliff faces. They prefer to nest within 1.25 miles of a large body of water that provides ample prey and well-situated perch sites providing views of the surrounding area (Logger). Additionally, bald eagles prefer nest sites that are located away from human activity/disturbances (Buehler 2000).

The study area lacks suitable forest habitats and surface water features needed by bald eagles for nesting and wintering; however, a bald eagle was observed flying overhead during the 2022 field surveys (Figure 8). This individual is likely the known bald eagle that nests in Big Bear.

While this species may move through the study area, it is not expected to nest or winter.

Loggerhead Shrike

Loggerhead shrike (*Lanius ludovicianus*) is a USFWS Bird of Conservation Concern and a California Species of Special Concern. It is widespread throughout the United States, Mexico, and portions of Canada (Humple 2008). The species is a yearlong resident in most of the United States, including from California east to Virginia and south to Florida, and in Mexico. In California, although shrikes are widespread at the lower elevations in the state, the largest breeding populations are located in portions of the Central Valley, the Coast Ranges, and the southeastern deserts (Humple 2008).

Preferred habitats for loggerhead shrike are open areas that include scattered shrubs, trees, posts, fences, utility lines, or other structures that provide hunting perches with views of open ground, as well as nearby spiny vegetation or human-made structures (such as the tops of chain-link fences or barbed wire) that provide a location to impale prey upon for storage or manipulation (Humple 2008). Loggerhead shrikes occur most frequently in riparian areas along woodland edges, grasslands with sufficient perch and butcher sites, scrublands, and open canopied woodlands, although they can be quite common in agricultural and grazing areas, and can sometimes be found in mowed roadsides, cemeteries, and golf courses. Loggerhead shrikes occur only rarely in heavily urbanized areas. For nesting, the height of shrubs and presence of canopy cover are most important (Yosef 1996).

Loggerhead shrike has moderate potential to occur within the study area due to the presence of open habitat with scattered shrubs and trees that may provide suitable habitat for nesting and foraging.

Coastal California Gnatcatcher

Coastal California gnatcatcher is federally listed as threatened and a California Species of Special Concern. This species is a year-round resident of coastal areas in Southern California and south into Baja California where arid scrub habitat is found. Coastal California gnatcatchers typically occur below 2,500 feet amsl (65 FR 63680) and most frequently within the California sagebrush-dominated communities on mesas, gently sloping areas, and along the lower slopes of the Coast Ranges (Atwood 1990).

California gnatcatchers glean spiders and insects (including wasps, bees, and ants) from foliage of shrubs, primarily California buckwheat and coastal sagebrush (Burger et al. 1999; Atwood 1993). Nests are typically located in small shrubs or cactus 1 to 3 feet above the ground. Breeding season territories average 5.7 acres (Atwood et al. 1998).

Dudek biologists conducted a focused habitat assessment for coastal California gnatcatcher in 2022 and determined that this species is not expected to occur within the study area due to the lack of large stands of sage scrub habitat within elevation ranges typically occupied by the species. In addition, the study area is well above the elevation at which the majority of nest sites occur.

Yellow Warbler

The yellow warbler is a California Species of Special Concern. The yellow warbler is a small, brightly colored passerine that can be found across North America ranging from northern Alaska, eastward to Newfoundland, and southward to northern Baja California and Georgia (Lowther et al. 1999).

The yellow warbler occurs near rivers, streams, lakes, or wet meadows that contain riparian vegetation nearby (Lowther et al. 1999; Heath 2008). The yellow warbler usually nests in wet, deciduous thickets, especially those dominated by willows, and in disturbed and early successional habitats (Lowther et al. 1999; Strusis-Timmer 2009). While they are correlated with riparian vegetation, they have also been found in shrub fields, mixed coniferous

forests, weedy areas, brushy areas, mangroves, forest edges, and marshes (Health 2008; AOU 1998). During migration, yellow warblers occur in an even wider variety of habitat types including desert oases, riparian woodlands, oak woodlands, mixed deciduous–coniferous woodlands, shrublands, forests, suburban and urban gardens and parks, groves of exotic trees, farmyard windbreaks, and orchards (Small 1994). Yellow warblers primarily feed on insects and spiders foraged from trees, or occasionally berries.

Auditory observations of the yellow warbler were recorded in the study area during 2022 field surveys (Figure 8). The study area contains riparian and chaparral vegetation that may be suitable nesting and foraging habitat.

Least Bell's Vireo

Least Bell's vireo is both a federal and California state endangered species. The least Bell's vireo is one of four subspecies of Bell's vireo, and breeds entirely in Southern California and northern Baja California. Historically, the least Bell's vireo was common to locally abundant in lowland riparian habitats ranging from coastal Southern California through the Sacramento and San Joaquin Valleys as far north as Tehama County. Population numbers plummeted to just 300 pairs statewide by the time of its listing in 1986. However, since then the population has recovered, and least Bell's vireo is expanding again into its historic range (Kus 2002). Least Bell's vireo typically nests in dense riparian foliage, such as vegetation communities that include willows, mulefat, or cottonwood. Least Bell's vireos obtain prey by foliage gleaning, picking a wide variety of insect types from leaves and bark. Some prey types include bugs, beetles, grasshoppers, moths, and particularly caterpillars (Chapin 1925; Bent 1950).

Least Bell's vireo was determined to have a low potential to occur within the study area, as it contains riparian habitat along Yucaipa Creek and Oak Glen Creek. However, riparian vegetation in the study area is generally sparse and may only provide low quality habitat for this species. Additionally, 2022 focused least Bell's vireo surveys for the species within the focused survey area were negative.

5.3.3.3 Invertebrates

Crotch Bumble Bee

Crotch bumble bee (*Bombus crotchii*) is a state candidate for listing as threatened. This species ranges throughout much of central and Southern California, along the central and Southern California coasts, through the Central Valley, and in the surrounding foothills. However, it now appears to be absent from much of its former range, and its population appears to have declined drastically, especially in its former stronghold in the Central Valley (Xerces Society et al. 2018; CDFW 2019).

Crotch bumble bee occurs in open grassland and scrub communities supporting suitable floral resources. Data from a variety of resources most commonly associate the species with plants from the following families, in descending order based on number of observations: *Fabaceae*, *Apocynaceae*, *Asteraceae*, *Lamiaceae*, and *Boraginaceae* (Richardson et al. 2014, as cited in Xerces Society et al. 2018). Williams et al. (2014) cited the genera *Asclepias*, *Chaenactis*, *Lupinus*, *Medicago*, *Phacelia*, and *Salvia* as example food plants. The species nests primarily underground and may be reliant on small mammal burrows. Little is known about winter hibernacula, but the species is presumed to rely on microhabitats for overwintering similar to those of other bumble bees, including loose disturbed soil, leaf litter, and other debris (Xerces Society et al. 2018; CDFW 2019).

Crotch bumble bee has a high potential to occur within the study area, as the study area contains grassland and scrub communities with the preferred plant genera, and the eastern portion of the study area overlaps with CNDDDB records of the species (CDFW 2023c). Finally, a *Bombus* sp. was incidentally observed in the eastern portion of the study area nectaring upon an *Astragalus* spp.

5.3.3.4 Mammals

Dulzura Pocket Mouse

Dulzura pocket mouse (*Chaetodipus californicus femoralis*) is a California Species of Special Concern. This species occupies a rather wide variety of habitats including coastal sage scrub, chamise chaparral, oak woodlands, and open habitats. It occurs in greatest abundance where grassland and chaparral habitats occur near one another, such as is found within the study area. This species is solitary and nocturnal, spending daylight hours within their burrows, which they plug with earth to keep the temperatures low and humidity levels high (Johnson 2001).

Dulzura pocket mice typically produce a single litter of four young, on average, between April and July. The species' diet focuses primarily on seeds from annual grasses and forbs; however, insects and leafy vegetation are known to be consumed seasonally (Johnson 2001).

Dulzura pocket mouse has a moderate to occur within the study area due to the presence of coastal scrub, oak woodland, chamise chaparral, and open habitat. Additionally, the study area is within the species' preferred elevation range.

Northwestern San Diego Pocket Mouse

The northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*) is a California Species of Special Concern. This species occurrences are restricted to the central and northern Baja California Peninsula and southwestern California between sea level and 6,000 feet amsl (Brylski n.d.; Rios and Álvarez-Castañeda 2010). Northwestern San Diego pocket mice prefer sandy herbaceous areas within coastal sage scrub, chamise-redshank chaparral, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent scrub, pinyon-juniper, and annual grassland (Patton and Álvarez-Castañeda 1999).

This nocturnal species forages on seeds or forbs, grasses, and shrubs, but prefers grass seeds, which it stores within cheek pouches to transport back to the burrow. Northwestern San Diego pocket mice have also been known to feed on insects (Brylski n.d.).

Northwestern San Diego pocket mouse has a high potential to occur within the study area due to the presence of suitable coastal scrub, chaparral, desert wash, and annual grassland habitat.

San Bernardino Kangaroo Rat

San Bernardino kangaroo rat is federally listed as endangered, is a California Species of Special Concern, and is a state candidate for listing as endangered. This species occurs in southwestern North America and is typically found in Riversidean alluvial fan sage scrub, alluvial fans and floodplains, and along washes with nearby sage scrub (McKernan 1997, as cited in 63 FR 3835–3843). Soil texture is an important factor in habitat selection for San Bernardino kangaroo rats. Specifically, sandy loam substrates that allow for the digging of simple, shallow burrows are preferred (McKernan 1997, as cited in 63 FR 3835–3843).

Kangaroo rats are primarily granivores; however, they will also consume plants and insects when available (Bradley and Mauer 1971; Reichman and Price 1993). The species is primarily nocturnal, emerging from their burrows around dusk and returning to their burrows before dawn (Behrends et al. 1986).

San Bernardino kangaroo rat is not expected to occur within the study area. A focused habitat assessment for the San Bernardino kangaroo rat was conducted within the study area by permitted biologist, Phil Brylski. According to the habitat assessment, the Project site is located outside of the known geographic range of San Bernardino kangaroo rat and is not within designated critical habitat for the species. The nearest habitat occupied by San Bernardino kangaroo rat is in the Santa Ana River approximately 3.7 miles north of the Project site. The San Jacinto San Bernardino kangaroo rat population is approximately 13.6 miles south (CDFW 2023c). San Bernardino kangaroo rat occur along rivers and large creeks. They can occur along immediately adjoining areas when the terrain is flat. The Project site is not hydrologically connected to the Santa Ana and San Jacinto Rivers, and is effectively isolated from these known San Bernardino kangaroo rat populations (Brylski 2023).

Other San Bernardino kangaroo data include a 1989 record from San Timoteo Canyon approximately 7.5 miles downstream of the Project site; however, the area has since been developed. There are also historical records for San Bernardino kangaroo rat in Reche Canyon, approximately 9.5 miles west of the Project site, but this small population was extirpated between 1998 and 2009 (USFWS 2009) and the Reche Canyon locality is not hydrologically connected to Yucaipa Creek.

According to Brylski, the upland and valley grassland habitats are separated from the alluvial scrub habitats along Yucaipa Creek by steep slopes. The chaparral, woodland, riparian scrub (with the exception of the buckwheat/scalebroom habitats), and agricultural habitats are also unsuitable for San Bernardino kangaroo rat. The California buckwheat/scalebroom scrub habitat along Yucaipa Creek is potentially suitable habitat for San Bernardino kangaroo rat but occurs in several disjointed patches that are bordered upstream and downstream by mulefat scrub, which is unsuitable for San Bernardino kangaroo rat. In addition, Yucaipa Creek is a steeply incised wash, which prevents San Bernardino kangaroo rat from utilizing habitats outside the wash and hinders movement away from the creek during flooding (Brylski 2023).

Furthermore, the habitat along the Oak Glen Creek in the western part of the study area is woodland habitat, dominated by coast live oak in the eastern part of the study area and by Fremont cottonwood, mulefat, and blue elderberry in the western part. This is a small ephemeral drainage with marginal to unsuitable habitat for San Bernardino kangaroo rat (Brylski 2023).

In conclusion, a review of surrounding literature and a site visit by a permitted biologist indicated that San Bernardino kangaroo rat is not expected to occur within the study area.

Stephens' Kangaroo Rat

Stephens' kangaroo rat is federally listed as endangered and state listed as threatened. This species only occurs in Riverside County and San Diego County within open grasslands or sparse shrublands (Bleich 1977; O'Farrell 1990; USFWS 1997). Similar to the San Bernardino kangaroo rat, soil type is an important factor for Stephens' kangaroo rats when selecting habitat. This species prefers habitat that contains sandy and sandy loam soils with low clay to gravel content. These soil types are needed for burrowing and sand bathing (Randall 1993).

Stephens' kangaroo rats, like other kangaroo rats, primarily forage on seeds, but will also consume herbaceous forbs when available (Dudek 2003b). This nocturnal species emerges from burrows around dusk to forage and participate in other activities. Peak breeding season occurs during the winter and spring months for Stephens' kangaroo rats.

Stephens' kangaroo rat is not expected to occur within the study area. A focused habitat assessment for the Stephens' kangaroo rat was conducted within the study area by permitted biologist, Phil Brylski. According to the habitat assessment, the range map in the Stephens' Kangaroo Rat Rangewide Management and Monitoring Plan (Spencer et al. 2021) does not include the southern hills of Redlands (the hills north of San Timoteo Canyon) within the Stephens' kangaroo rat's range. The range map for Stephens' kangaroo rat in the latest 5-year review of Stephens' kangaroo rat (USFWS 2020) includes the Project site within the species' range at its northern limit (Brylski 2023).

There are no Stephens' kangaroo rat records for the Project site or its vicinity, nor are there records from the southern hills of Redlands. The nearest record is approximately 5.3 miles southeast of the study area in the Beaumont Valley. There are many Stephens' kangaroo rat records for the Badlands south of State Route 60 and from the Beaumont Valley. The distribution of Stephens' kangaroo rat has been well studied, and it would be unlikely but not impossible for Stephens' kangaroo rat to be discovered on the Project site.

According to Brylski, the Project site contains extensive grasslands in the valleys and plateaus, predominantly on loamy soils that are preferred by Stephens' kangaroo rat. The grasslands contained plants preferred by Stephens' kangaroo such as brome grasses and common stork's-bill. The grasslands on the Project site are managed for grazing; some had sparse cover, which are suitable for Stephens' kangaroo rat, whereas many of the grasslands were dense, which are less suitable for Stephens' kangaroo rat, at least seasonally. The scrub and woodland habitats on the Project site are unsuitable for Stephens' kangaroo rat (Brylski 2023).

No potential kangaroo rat burrows were observed. The surveys covered the grasslands across the Project site on 4 days from late December to early February, including interior parts of the grasslands and disturbed areas (bare patches, dirt roads) where Stephens' kangaroo rat would be expected to be found where grass cover is dense (Brylski 2023).

Pocket gopher burrows were observed in parts of the site. Both degraded gopher burrows and fresh mounds were common in parts of the site, but with a patchy distribution. Pocket gophers can influence Stephens' kangaroo rat use of habitats on clay soils or excessively hard soils because they are powerful fossorial animals that can excavate nearly any soil type. However, this would not be expected to be an important factor on the Project site because the grasslands are on loamy soils, which are friable and easy for Stephens' kangaroo rat to dig burrows in (Brylski 2023).

In conclusion, a review of surrounding literature and a site visit by a permitted biologist indicated that Stephens' kangaroo rat is not expected to occur within the study area.

Western Mastiff Bat

The western mastiff bat (*Eumops perotis californicus*) is a California Species of Special Concern. The western mastiff bat is widespread in the southwestern United States, the northern portion of Baja California, Mexico, and south into central mainland Mexico (Hall 1981; Wilson and Reeder 2005). In the United States, it occurs in California, the southern portion of Nevada, the southwestern half of Arizona, and the extreme southwestern portions of New Mexico and Texas (Hall 1981). Recent surveys documenting the species' range within California have

discovered occurrences of western mastiff bat virtually spanning the state, including numerous sites along the western foothills of the Sierra Nevada associated with the basaltic table formation (Pierson and Rainey 1998). The species has been documented at elevations to 2,600 meters (8,500 feet) in the Sierra Nevada, and there have been acoustic detections of western mastiff bats in the Coso, Granite, and Panamint Mountain ranges in the desert regions of California.

The western mastiff bat occurs in a wide variety of habitats, including chaparral, coastal and desert scrub, coniferous and deciduous forest, and woodland (Best et al. 1996; Krutzsch 1955; Pierson and Rainey 1998). Day roosts are established in crevices in rocky canyons and cliffs where the canyon or cliff is vertical or nearly vertical (Best et al. 1996; Krutzsch 1955), as well as in trees and tunnels (Zeiner et al. 1990b).

Foraging habitat in California includes chaparral, coastal scrub, grasslands, floodplains, oak woodland, ponderosa pine forest, dry desert wash, meadow areas, and agriculture (Pierson and Rainey 1998). Western mastiff bat is frequently observed foraging in broad, open areas (Pierson and Rainey 1998) and may travel up to 25 kilometers (15.5 miles) from roosting sites to forage (Best et al. 1996).

Western mastiff bat has a moderate potential to occur within the study area due to the presence of chaparral and coastal scrub habitat. Additionally, the northwest portion of the study area contains some highly incised washes with vertical walls that may provide roosting habitat.

San Diego Desert Woodrat

The San Diego desert woodrat (*Neotoma lepida intermedia*) is a California Species of Special Concern. This species is widespread throughout central and Southern California and the Great Basin, Mojave, and Colorado deserts (Hall 1981). Desert woodrats are found in a variety of shrub and desert habitats and are primarily associated with rock outcroppings, boulders, cacti, or areas of dense undergrowth (Bleich 1973; Bleich and Schwartz 1975; Brown et al. 1972; Cameron and Rainey 1972; Thompson 1982). Desert woodrats use various materials, such as twigs and other debris (sticks, rocks, dung), to build elaborate dens or “middens,” which are used for nesting and food storage. Middens may be used by several generations of woodrats (Cameron and Rainey 1972).

Desert woodrats are primarily herbivorous, and their diet may include leaves, seeds, berries, parts of flowers, and yucca shoots (Cameron and Rainey 1972). Home ranges of desert woodrats are relatively small and den sites are typically located along the periphery of the home range (Bleich and Schwartz 1975). The breeding season of desert woodrats probably is related to local climate conditions and available resources to support reproduction that may vary from year to year. The peak breeding season in north-coastal San Diego County, for example, appears to be from November to April, but breeding can occur year-round (Bleich 1973).

San Diego desert woodrat has a moderate potential to occur within the study area, as the study area contains suitable chaparral and coastal scrub habitat to support the species.

Los Angeles Pocket Mouse

The Los Angeles pocket mouse (*Perognathus longimembris brevinasus*) is a California Species of Special Concern. This species’ historic range has been estimated to be from Burbank and San Fernando in Los Angeles County east to the City of San Bernardino in San Bernardino County (Hall 1981). Los Angeles pocket mouse prefers lower elevation grasslands, as well as alluvial sage scrub and coastal sage scrub habitats (Brylski et al. 1993). Los Angeles pocket mouse prefers fine, sandy soils, which likely are preferred for burrowing (Jameson and Peeters 1988).

Similar to other pocket mice, the Los Angeles pocket mouse hibernates in the winter, generally from October to February, periodically emerging from hibernation to feed on seed caches stored in their burrows. Emergence from hibernation is correlated with availability of forb and grass seeds. The Los Angeles pocket mouse is a granivore; however, little is known of the foraging behavior of this species (Dudek 2003b).

Los Angeles pocket mouse has a moderate potential to occur within the study area as the study area contains suitable grassland and coastal scrub habitat for this species. In addition, the study area is primarily composed of sandy soils, which are a preferred microhabitat characteristic of the species.

American Badger

American badger (*Taxidea taxus*) is a California Species of Special Concern. American badgers prefer open scrub or grassy areas and occur throughout California (Reid 2006; USGS 2020). The American badger is a very proficient digger and uses its short, stocky front legs along with its long front claws to construct burrows. The entrance to these burrows is typically the shape of a low broad ellipse, approximately 8–12 inches in diameter with a large dirt mound in the front of the burrow entrance. American badgers feed primarily on rodents, but are known to consume invertebrates, birds, snakes, and carrion (Reid 2006).

The American badger has a high potential to occur within the study area due to the presence of suitable dry, open, treeless areas and grassland and coastal scrub habitat, along with friable soils.

5.3.3.5 Reptiles

Southern California Legless Lizard

The Southern California legless lizard (*Anniella stebbinsi*) is a California Species of Special Concern. This subspecies occurs south of the Transverse Range extending to northwestern Baja California (CDFW 2023c). Southern California legless lizards occur in sandy or loose loamy soils under sparse vegetation in a variety of habitats but prefer moist soils (CDFW 2023c).

The full species, California legless lizard, usually forages at the base of shrubs for insect larvae, small adult insects, and spiders (Stebbins 1954). Microhabitat may include surface objects such as flat boards, rocks, or leaf litter; they commonly burrow near the soil surface in loose soil (CWHR 2000). Legless lizards can be active on cool days, and the southern subspecies is probably active year-round with brief periods of inactivity in the winter (CWHR 2000). Individuals have demonstrated high site fidelity over the short term (Jennings and Hayes 1994). Live young are born in the fall, and litter sizes range from one to four (Stebbins 1954).

Southern California legless lizard has a high potential to occur within the study area. Suitable habitat includes dry washes, chaparral, scrub, and riparian habitat with areas of sparse vegetation and sandy loam soils. Additionally, the eastern half of the study area overlaps with a CNDDDB record of this species from 2018. While the exact location of this record was approximated, there are several other CNDDDB records less than 2 miles from the study area (CDFW 2023c).

California Glossy Snake

The California glossy snake (*Arizona elegans occidentalis*) is a California Species of Special Concern. California glossy snakes are common throughout Southern California, especially in desert regions, but they also occur in

chaparral, sagebrush, valley-foothill hardwood, pine-juniper, and annual grass (Zeiner et al. 1990c). This species is found from below sea level to around 7,218 feet amsl (Stebbins 2003).

California glossy snakes are primarily nocturnal, spending their days and the winter in mammal burrows, rock outcrops, and under surface objects such as flat rocks and vegetation. Eggs are laid a few centimeters below the soil surface. This species feeds on a variety of desert lizards (Cunningham 1959; Ferguson et al. 1982; Vitt and Ohmart 1977).

California glossy snake has a moderate potential to occur within the study area due to the presence of valley-foothill grasslands and chaparral vegetation, and open areas with loose sandy loam soils that may be suitable for this species.

Coastal Tiger Whiptail

Coastal tiger whiptail (*Aspidoscelis tigris stejnegeri*) is a California Species of Special Concern. It is also referred to as the San Diegan whiptail or coastal whiptail. Less is known about this subspecies than the full species western whiptail (*Aspidoscelis tigris*), so much of this discussion is based on the life history of the western whiptail, with expected similarities between the full species and subspecies. Coastal tiger whiptail is found in Southern California, mostly west of the Peninsular Ranges and south of the Transverse Ranges; north into Ventura County; and south into Baja California, Mexico (Stebbins 2003). Coastal tiger whiptail can be found in deserts and semi-arid areas with sparse vegetation and open areas (CDFW 2023c). It can also be found in woodland and riparian areas where the ground is firm soil, sandy, or rocky (CDFW 2023c).

The western whiptail is a diurnal, actively foraging lizard (Anderson 1993). Its prey includes termites, scorpions, solifugids, cockroaches, antlion larvae, and various insect eggs, larvae, and pupae (Anderson 1993). Western whiptails lay their eggs in the soil or underground (NatureServe 2023). Mean clutch size of the western whiptail varies from 2.1 to 4.0 (Garland 1993).

Coastal tiger whiptail has a high potential to occur within the study area given nearby records and the presence of suitable habitat.

Red Diamondback Rattlesnake

Red diamondback rattlesnake (*Crotalus ruber*) is a California Species of Special Concern. This species is distributed from San Diego County to the eastern slopes of the mountains and north through western Riverside County into southernmost San Bernardino County (CWHR 2023). Red diamondback rattlesnake can be found in chaparral, woodland, grassland, and desert areas, particularly in rocky areas and dense vegetation. This species needs rodent burrows, cracks in rocks, or surface cover objects (CDFW 2023c).

Red diamondback rattlesnake is active during the day early in the year but increasingly shifts activity to later in the evening as daytime temperatures increase. Eventually, it is fully nocturnal (Stebbins 1954; Klauber 1972). This species feeds on rodents, rabbits, lizards, birds, and other snakes (Stebbins 1954; Klauber 1972). Young are live-born (Stebbins 1954; Klauber 1972). Clutch sizes average 8 young and range from 5 to 13 (Stebbins 1954; Klauber 1972).

Red diamondback rattlesnake has moderate potential to occur as the study area contains suitable habitat including coastal scrub, chaparral, and oak woodland. While the study area lacks rocky areas, it does contain rodent burrows that this species may be used for cover.

Blainville’s Horned Lizard

Blainville’s horned lizard (*Phrynosoma blainvillii*) is a California Species of Special Concern. This species has a large range that covers much of central and Southern California, extending from Shasta County in the north, south to San Diego County. Blainville’s horned lizards occur in valley-foothill hardwood forests, conifer and riparian habitats, juniper-cypress, and juniper and annual grassland habitats (CWHR 2023).

This species is diurnal and feeds primarily on ants and small beetles when abundant (Pianka and Parker 1975; Stebbins 1954). The reproductive season for the Blainville’s horned lizard extends from May to June in Southern California (Pianka and Parker 1975). Females may lay clutch sizes ranging from six to 16 eggs (Tollestrup 1981). These lizards are preyed upon by leopard lizards (*Gambelia* spp.), sidewinders (*Crotalus cerastes*), striped whipsnakes (*Masticophis taeniatus*), and other snakes, loggerhead shrikes, and hawks (CWHR 2023).

Blainville’s horned lizard has a moderate potential to occur within the study area due to the presence of sandy soils with coastal scrub, chaparral, and annual grassland habitat.

Coast Patch-Nosed Snake

Coast patch-nosed snake (*Salvadora hexalepis virgultea*) is a California Species of Special Concern. This species occurs in Southern California and ranges from the Santa Ynez Mountains near Santa Barbara to the foothills of Santa Ana Mountains and continues within 50 miles of the coast south to the Mexican border (CDFW 2023c). Coast patch-nosed snakes occur in brushy or shrubby vegetation and require small mammal burrows for refuge and overwintering sites (CDFW 2023c; Zeiner et al. 1988).

The coast patch-nosed snake is diurnal and can be found throughout the day during the milder months of spring (Stebbins 2003). This subspecies is a broad generalist in its diet and an opportunistic feeder, which includes small mammals (*Dipodomys* sp.), lizards (*Aspidoscelis* sp., *Coleonyx* sp.), and the eggs of lizards and snakes (Stebbins 2003). Clutches range from four to seven eggs (Wright and Wright 1957). Goldberg (1995) found evidence suggesting that not all females breed each year.

Coast patch-nosed snake has a high potential to occur within the study area as it contains suitable coastal scrub and chaparral vegetation and small mammal burrows that may be suitable for refuge and wintering habitat.

5.3.4 Potential Aquatic Resources

The jurisdictional aquatic resources delineation identified numerous ephemeral drainages within the study area (Appendix B). The results of the jurisdictional delineation concluded there are approximately 15.37 acres of non-wetland waters potentially regulated by USACE, RWQCB, and CDFW (Figures 9-1 through 9-7, Aquatic Resources Jurisdictional Delineation). Additionally, there are 0.66 acres of isolated, non-wetland waters potentially regulated by RWQCB and CDFW. Finally, there are an additional 33.07 acres of CDFW streambed (below and above OHWM to top of bank) and associated riparian habitat occur in the study area. A further breakdown of jurisdictional aquatic features is provided in Table 7.

Table 7. Aquatic Resource Summary for the Study Area

Feature Name	Vegetation Community or Land Cover Type	Non-Wetland Waters of the United States (USACE/RWQCB/CDFW) Acreage	Non-Wetland Waters of the State (RWQCB/CDFW) (acres)	Jurisdictional Streambed (CDFW Only) (acres)	Jurisdictional Riparian (CDFW Only) (acres)
NWW-1	California buckwheat – Parish’s goldeneye scrub	0.32	0.00	1.90	0.00
	California buckwheat scrub	0.03	0.00	0.39	0.00
	Chamise chaparral	0.00	0.00	0.17	0.00
	Coast live oak woodland and forest	<0.01	0.00	0.12	0.00
	Disturbed habitat	<0.01	0.00	0.03	0.00
	Eucalyptus – tree of heaven – black locust groves	0.63	0.00	0.25	0.00
	Fremont cottonwood forest and woodland	3.19	0.00	3.09	2.86
	General agriculture	0.00	0.00	<0.01	0.00
	Mulefat thickets	2.09	0.00	4.13	4.09
	Non-native grassland	1.40	0.00	0.85	0.00
	Scale broom scrub	1.26	0.00	2.09	0.65
	Upland mustards or star-thistle fields	0.00	0.00	0.10	0.00
	Urban/Developed	<0.01	0.00	<0.01	0.00
<i>NWW-1 Subtotal</i>		8.92	0.00	13.12	7.59
NWW-2	Disturbed habitat	0.01	0.00	0.00	0.00
	Eucalyptus – tree of heaven – black locust groves	1.55	0.00	0.18	0.00
	Fremont cottonwood forest and woodland	0.84	0.00	0.45	0.31
	Mulefat thickets	0.34	0.00	0.13	1.61
	Non-native grassland	0.09	0.00	0.27	0.00
	Urban/Developed	0.02	0.00	0.00	0.00
<i>NWW-2 Subtotal</i>		2.85	0.00	1.03	1.92
NWW-3	Basket bush – river hawthorn – desert olive patches	0.01	0.00	<0.01	3.17

Table 7. Aquatic Resource Summary for the Study Area

Feature Name	Vegetation Community or Land Cover Type	Non-Wetland Waters of the United States (USACE/RWQCB/CDFW) Acreage	Non-Wetland Waters of the State (RWQCB/CDFW) (acres)	Jurisdictional Streambed (CDFW Only) (acres)	Jurisdictional Riparian (CDFW Only) (acres)
	California buckwheat scrub	0.00	0.00	0.06	0.00
	Disturbed habitat	0.01	0.00	<0.01	0.00
	Goodding’s willow – red willow riparian woodland and forest	0.30	0.00	0.00	0.60
	Mulefat thickets	3.12	0.00	1.51	3.65
	Non-Native grassland	<0.01	0.00	0.10	0.00
	<i>NWW-3 Subtotal</i>	<i>3.44</i>	<i>0.00</i>	<i>1.68</i>	<i>7.41</i>
NWW-4	Eucalyptus – tree of heaven – black locust groves	0.01	0.00	0.00	0.00
	Fremont cottonwood forest and woodland	<0.01	0.00	0.00	0.32
	Non-native grassland	0.15	0.00	0.00	0.00
	Urban/Developed	<0.01	0.00	0.00	0.00
	<i>NWW-4 Subtotal</i>	<i>0.16</i>	<i>0.00</i>	<i>0.00</i>	<i>0.32</i>
NWW-5	Coast live oak woodland and forest	0.00	0.02	0.00	0.00
	Non-native grassland	0.00	0.17	0.00	0.00
	Open Water	0.00	0.31	0.00	0.00
	Ornamental Plantings	0.00	0.07	0.00	0.00
	<i>NWW-5 Subtotal</i>	<i>0.00</i>	<i>0.57</i>	<i>0.00</i>	<i>0.00</i>
NWW-6	Disturbed habitat	0.00	0.07	0.00	0.00
	Non-native grassland	0.00	0.02	0.00	0.00
	Urban/Developed	0.00	0.00	0.00	0.00
	<i>NWW-6 Subtotal</i>	<i>0.00</i>	<i>0.09</i>	<i>0.00</i>	<i>0.00</i>
	Grand Total	15.37	0.66	15.83	17.24

Notes: USACE = U.S. Army Corps of Engineers; RWQCB = Regional Water Quality Control Board; CDFW = California Department of Fish and Wildlife. Totals may not sum due to rounding.

5.4 Wildlife Corridors and Habitat Linkages

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the migration of animals. Wildlife corridors contribute to population viability by ensuring continual exchange of genes between populations, providing access to adjacent habitat areas for foraging and mating, and providing routes for recolonization of habitat after local extirpation or ecological catastrophes (e.g., fires).

Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation. Habitat linkages provide a potential route for gene flow and long-term dispersal of plants and animals and may also serve as primary habitat for smaller animals, such as reptiles and amphibians. Habitat linkages may be continuous habitat or discrete habitat islands that function as steppingstones for dispersal.

Wildlife corridors and linkages can be classified as either regional or local. Regional corridor and linkages are those that link two or more large areas of natural open space, while local corridors and linkages allow resident wildlife to access necessary resources (e.g., food, shelter, water) in smaller areas that might be isolated due to urban development (i.e., roads, housing tracts, etc.) or some other form of fragmentation.

Regional Wildlife Movement

The study area is located at the southern boundary of San Bernadino County, and in the very southwestern corner of the City, which lies southwest of San Bernardino Mountains, south of the Crafton Hills Conservation Area, north of the San Jacinto Mountains, and west of Wildwood Canyon State Park (Figure 10A, Wildlife Corridors and Linkages).

There are several parks and open spaces within the City that provide regional wildlife movement opportunities between the San Bernardino Mountains (to the north) and San Jacinto Mountains (to the southeast). These include Wildwood Park and Wildwood Canyon State Park, which are located to the east of the study area. Both parks provide connectivity to the westernmost area of land identified by the South Coast Missing Linkages Project as part of the San Bernardino–San Jacinto Linkage, connecting the San Bernardino Mountains and the San Gorgonio Wilderness Area to the San Jacinto Mountains. The Herngt ‘Aki’ Preserve, located west of the study area, provides connectivity to the San Jacinto Mountains via conserved lands south of the preserve. These conserved lands form part of the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) Reserve and are owned and managed by the Riverside Conservation Authority (RCA 2023) (Figure 10A).

Analysis of Regional Wildlife Movement Landscape Features

California Essential Habitat Connectivity Project

The California Essential Habitat Connectivity (CEHC) Project was initiated by CDFW and the California Department of Transportation and identifies a network of Natural Landscape Blocks (i.e., relatively intact, large areas of land) and Essential Connectivity Areas (i.e., an area of land that serves to connect at least two Natural Landscape Blocks). These areas represent modeled linkages and landscape blocks that need to be maintained to support natural communities and to provide guidance in the development of infrastructure and land use.

The San Bernardino National Forest Mountains is mapped as a Natural Landscape Block and an Essential Connectivity Area under the CEHC Project. This Natural Landscape Block encompasses the San Bernardino Mountains and foothills and provides live-in and move-through habitat for a variety of special-status species

including San Bernardino kangaroo rat, bighorn sheep (*Ovis canadensis*), mountain lion (*Puma concolor*), and the metalmark butterflies (*Riodinidae*). Habitats within this landscape range from coastal sage scrub and alluvial fan to mixed conifer, oak woodlands, pinyon-juniper, and desert scrub.

The San Jacinto Mountains and associated Badlands are also identified as a Natural Landscape Block under the CEHC Project. San Jacinto Mountain is the tallest and northernmost peak of the Peninsular Ranges. This area contains coastal and desert habitats side by side, creating an ecotone and providing a high diversity of habitats and species within a relatively small area of land. Many species, ranging from large mammals such as mountain lion and mule deer to Blainville’s horned lizard and the endangered Quino checkerspot butterfly (*Euphydryas editha quino*), rely on the diversity of habitats that exist within the Natural Landscape Block (Spencer et al. 2010; Spencer et al. 2017).

The study area does not overlap nor lie adjacent to any of the Natural Landscape Blocks nor any Essential Connectivity Areas of the CEHC Project (Figure 10A).

Terrestrial Connectivity Dataset

The Terrestrial Connectivity Dataset was created by CDFW in 2019. The objective of this dataset was to compile and synthesize the best-available spatial information on connectivity and wildlife movement within the state of California in order to integrate biodiversity conservation with transportation and infrastructure planning. The dataset summarizes the information via CDFW’s Areas of Conservation Emphasis 2.5-square-mile hexagons and builds further upon the CEHC Project, and includes mapped corridors or linkages, as well as large, contiguous, natural areas. The hexagons are assigned a ranking as follows:

- **Rank 1** = Limited Connectivity Opportunity
- **Rank 2** = Large Natural Habitat Areas
- **Rank 3** = Connections with Implementation Flexibility
- **Rank 4** = Conservation Planning Linkages
- **Rank 5** = Irreplaceable and Essential Corridors

The majority of the study area for Freeway Corridor falls within lands mapped as Rank 1 (i.e., lands that have limited connectivity opportunity). The very eastern portion of the study area is mapped as Rank 3. This portion of the study area has been identified by this dataset as “providing some connectivity importance,” but this area has “not been identified as a channelized area, species corridor, or habitat linkage at this time” (CDFW 2019) (Figure 10B, Terrestrial Connectivity Dataset).

South Coast Missing Linkages Project

The South Coast Missing Linkages Project mapped several areas of land designated as the San Bernardino–San Jacinto Linkage. This linkage comprises five swaths of land that occur partially in San Bernardino County and continue south into Riverside County that would provide a connection between the San Bernardino and San Jacinto Mountains. The westernmost linkage area identified in this Project is located south and east of the City and encompasses Wildwood Canyon, Cherry Canyon, Wallace Creek, and Little San Gorgonio Creek (Dudek 2019). The study area does not overlap any mapped missing linkages (Beier et al. 2008) (Figure 10A).

Western Riverside Multiple Species Habitat Conservation Plan

The Western Riverside MSHCP is a Habitat Conservation Plan focusing on conservation of species and their associated habitats within Western Riverside County. It covers a diverse landscape, and extends across many bioregions, including the San Jacinto Foothills, San Jacinto Mountains, and the San Bernardino Mountains. The MSHCP will result in a Conservation Area of at least 500,000 acres (Dudek 2003a).

The study area is not located within the plan area for the Western Riverside MSHCP; however, it is immediately adjacent to the plan area for the MSHCP. In addition, the study area is not adjacent to any of the MSHCP's Conservation Areas or any Conserved Lands within the MSHCP, nor is it adjacent to any lands described for conservation with the MSHCP (Dudek 2003a; RCA 2023) (Figure 10A).

Mountain Lion Predicted Habitat

This dataset represents areas of suitable habitat for mountain lion based on California Wildlife Habitat Relationships (CDFW 2023e) and statewide vegetation maps. Habitats are assessed for breeding, foraging, and cover, and assigned a suitability ranking of low (less than 0.34), medium (0.34–0.66) or high (greater than 0.66). According to this dataset, the central portion of the study area provides medium and high mountain lion suitability. These medium- and high-ranked areas are connected and create a potential corridor leading through the central portion of the study area, south through vacant lands that include areas of medium- and high-ranked areas (FRAP Vegetation Mapping Coordinator 2016) (Figure 10C, Mountain Lion Predicted Habitat).

Wildlife Movement Analysis Within the Study Area

The study area is primarily composed of undeveloped, open lands, with active agricultural lands in central portions of the site. Existing conditions allow for relatively unconstrained wildlife movement within the study area, aside from I-10, which bisects the northern portion of the study area, Live Oak Canyon Road, along the western portion of the study area, and the water treatment plant/developed area in the southern portion of the study area. I-10 creates a barrier to wildlife movement. Additionally, the site contains some fencing that also may funnel or limit movement to some degree.

The study area primarily includes a heavily grazed landscape with many ridgetops that have been graded as a part of previous land uses. However, the study area also contains some intact ridges and canyons vegetated by chaparral communities. These intact habitats provide generally unrestricted wildlife movement through the landscape. The grazed portions of the study area provide more marginal habitat, but still allow for unrestricted movement.

Yucaipa Creek and Oak Glen Creek both occur within the study area and may provide for wildlife movement opportunities through the study area. Yucaipa Creek flows out of the foothills of the San Bernardino Mountains, east of the study area. This feature continues west, through the City; however, the creek has been channelized as it flows through the City and the feature lacks natural vegetation through this channelized portion, thereby reducing the suitability of the feature to provide for significant wildlife movement opportunities. The channelized portion of Yucaipa Creek stops just north of I-10 before it flows into the study area. Through the study area, Yucaipa Creek contains natural vegetation along the banks and slopes of the creek and provides wildlife movement opportunities through the central portion of the study area, under Live Oak Canyon Road where it joins Oak Glen Creek, which flows to San Timoteo Creek.

Oak Glen Creek bisects the very western portion of the study area. This feature also flows out of the San Bernardino Mountains, southwest through the City, eventually flowing under I-10 through a box culvert, and continuing southwest through the study area. It then continues southwest through undeveloped land and adjacent to the Herngt ‘Aki’ Preserve to the north, and undeveloped lands south of Live Oak Canyon Road. Similar to Yucaipa Creek, Oak Glen Creek is channelized and constrained by development in the portions of the creek that run through the City; however, within and downstream of the study area, Oak Glen Creek is relatively undeveloped until its confluence with San Timoteo Creek. Both of these features were identified in the Final EIR for the Yucaipa General Plan Update (Placeworks 2016) as “potential local wildlife linkages.” As such, it is probable that these drainages provide some connectivity to nearby open lands.

Summary

In summary, the study area currently provides relatively unconstrained wildlife movement through the undeveloped, open lands, as well as some limited or funneled movement opportunities through the two major drainages (i.e., Yucaipa Creek and Oak Glen Creek). The study area does not overlap any Natural Landscape Block nor Essential Connectivity Areas identified by the CEHC Project. The majority of the study area is mapped as land that currently provides limited connectivity opportunities per the Terrestrial Connectivity Dataset; however, the eastern portion of the study area is mapped as providing some connectivity importance. This is likely due to the presence of Yucaipa Creek, which, as previously discussed, may provide movement opportunities for wildlife to pass beneath I-10.

The study area does not overlap any areas identified by the South Coast Missing Linkages Project; however, it is located approximately 0.7 miles north of a portion of the San Bernardino–San Jacinto Linkage. Presently, the lands immediately south of the study area are undeveloped; however, these lands have been approved for development of a specific plan through the Western Riverside MSHCP Joint Project Review process. Finally, the study area does not lie adjacent to, nor provide direct connectivity to, any lands described for conservation within the Western Riverside MSHCP. However, the western portion of the study area does lie adjacent to the Herngt ‘Aki’ Preserve that provides connectivity to the San Jacinto Mountains via conserved lands south of the preserve.

With regards to mountain lions, the study area is mapped as providing suitable mountain lion habitat; however, no observations of mountain lion individuals nor mountain lion signs (i.e., scat, tracks, scratches, or cached prey) were made during the 2022–2023 survey efforts within the study area.

6 Project Impacts

This section addresses direct and indirect impacts to biological resources that would result from implementation of the Project, provides the significance determinations for proposed or potential impacts, and proposes mitigation. Cumulative impacts are addressed in the Project’s EIR.

6.1 Explanation of Findings of Significance

Impacts to special-status vegetation communities, plant and wildlife species, and jurisdictional waters, including wetlands, must be quantified and analyzed to determine whether such impacts are significant under CEQA. CEQA Guidelines Section 15064(b) states that an ironclad definition of “significant” effect is not possible, because the significance of an activity may vary with the setting. Appendix G of the CEQA Guidelines, however, does provide “examples of consequences which may be deemed to be a significant effect on the environment” (14 CCR 15064[e]). These effects include substantial effects on rare or endangered species of animal or plant or the habitat of the species. CEQA Guidelines Section 15065(a) is also helpful in defining whether a project may have a significant effect on the environment. Under that section, a proposed project may have a significant effect on the environment if the project has the potential to (1) substantially degrade the quality of the environment, (2) substantially reduce the habitat of a fish or wildlife species, (3) cause a fish or wildlife population to drop below self-sustaining levels, (4) threaten to eliminate a plant or animal community, (5) reduce the number or restrict the range of a rare or endangered plant or animal, or (6) eliminate important examples of a major period of California history or prehistory.

The following are the significance thresholds for biological resources provided in the CEQA Guidelines Appendix G Environmental Checklist, which states that a project would potentially have a significant effect if it does any of the following:

- Impact BIO-1. Has a substantial adverse effect, either directly or through habitat modifications, on any species identified as being a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.
- Impact BIO-2. Has a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS.
- Impact BIO-3. Has a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Impact BIO-4. Interferes substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impedes the use of native wildlife nursery sites.
- Impact BIO-5. Conflicts with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Impact BIO-6. Conflicts with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

The evaluation of whether an impact to a particular biological resource is significant must consider both the resource itself and the role of that resource in a regional context. Substantial impacts are those that contribute to, or result in, permanent loss of an important resource, such as a population of a special-status plant or wildlife species. Impacts may be important locally because they result in an adverse alteration of existing site conditions but considered not significant because they do not contribute substantially to the permanent loss of that resource regionally. The severity of an impact is the primary determinant of whether that impact can be mitigated to a level below significance.

6.2 Definition of Impacts

For the purposes of the impacts analysis, impacts were evaluated both at the project level and at the program level. Within the project-level analysis, impacts are separately evaluated for Pacific Oaks Commerce Center, the County Line Warehouse project, and the remaining area of planning area BP6 (Figure 11A, Definition of Project Impacts – Project Level). Within the program-level analysis, impacts are separately evaluated for the portions within the focused survey area (i.e., where focused surveys were conducted) and the portions outside the focused survey area (Figure 11B, Definition of Project Impacts – Programmatic Level). A joint EIR and Environmental Assessment will be prepared for this Project to comply with CEQA and the National Environmental Policy Act, respectively. Projects within the programmatic portions of the Project site are not planned yet. Finally, Yucaipa Valley Water District is within the boundary of the Project; however, there is not a proposed project as part of the Specific Plan. Therefore, this area is considered not a part of the Project and there are no impacts associated with Yucaipa Valley Water District.

6.2.1 Project-Level Impacts

Pacific Oaks Commerce Center

Direct impacts refer to complete loss of a biological resource. For purposes of this report, it refers to areas where vegetation clearing, grubbing, or grading replaces biological resources. Direct impacts were quantified by overlaying the proposed impact limits on the biological resources map of the study area. Direct impacts would occur from construction of warehouse buildings, including office use.

Indirect impacts are reasonably foreseeable effects caused by a project’s implementation on remaining or adjacent biological resources outside the direct disturbance zone. For purposes of this report, indirect impacts may affect areas outside the area of disturbance. Indirect impacts may be short-term and construction-related, or long-term and associated with development in proximity to biological resources.

County Line Road Warehouse Project

Direct impacts refer to complete loss of a biological resource. For purposes of this report, it refers to areas where future development may result in vegetation clearing, grubbing, or grading that replaces biological resources. Direct impacts are summarized herein, but were originally analyzed in Addendum to the Yucaipa Freeway Corridor Specific Plan EIR for the Yucaipa County Line Warehouse Project (City of Yucaipa 2022). For the purposes of this impact analysis, impacts will be analyzed as summarized in the Addendum to the Yucaipa Freeway Corridor Specific Plan EIR for the Yucaipa County Line Warehouse Project (City of Yucaipa 2022).

Indirect impacts are reasonably foreseeable effects caused by a project’s implementation on remaining or adjacent biological resources outside the direct disturbance zone. For purposes of this report, indirect impacts may affect

areas outside the area of disturbance. Indirect impacts may be short-term and construction-related, or long-term and associated with development in proximity to biological resources.

Remaining Area of Planning Area BP6

Direct impacts refer to complete loss of a biological resource. This Project was graded prior to receiving authorization from the City. For purposes of this report, direct impacts refer to areas where development has resulted in vegetation clearing, grubbing, or grading that replaces biological resources. Direct impacts are summarized herein, but were originally analyzed in the General Biological Evaluation for a Temporary Use Permit for Parcel 031-821-314 in Yucaipa, California (Kidd Biological Inc. 2022) for the remaining area of planning area BP6. For the purposes of this impact analysis, all land uses with the exception of Open Space-Conservation are considered subject to permanent impacts.

Indirect impacts are reasonably foreseeable effects caused by a project’s implementation on remaining or adjacent biological resources outside the direct disturbance zone. For purposes of this report, indirect impacts may affect areas outside the area of disturbance. Indirect impacts may be short-term and construction-related, or long-term and associated with development in proximity to biological resources.

6.2.2 Program-Level Impacts

Portions of All Programmatic Phases Within Focused Survey Area

This area generally includes portions of Phase 1 and Phases 1 and 2 excluding Pacific Oaks Commerce Center, the County Line Road Warehouse project, and the remaining area of planning area BP6.

Direct impacts refer to complete loss of a biological resource. For purposes of this report, it refers to areas where future development may result in vegetation clearing, grubbing, or grading that replaces biological resources. Direct impacts are based on land use designations and biological resources mapped within the study area. For the purposes of this programmatic impact analysis, all land uses with the exception of Open Space-Conservation are considered subject to future permanent impacts. While non-conserved open space likely would continue to provide some biological function and value, the final location and proposed activities within the open space is not yet known. Therefore, these areas are characterized as a permanent impact to represent the worst-case scenario.

Indirect impacts are reasonably foreseeable effects caused by a project’s implementation on remaining or adjacent biological resources outside the direct disturbance zone. Indirect impacts may be short-term and construction-related, or long-term and associated with development in proximity to biological resources.

Portions of All Programmatic Phases Outside Focused Survey Area

This area generally includes Phases 2 through 7, including the Wildwood Canyon Interchange Project.

Direct impacts refer to complete loss of a biological resource. For purposes of this report, it refers to areas where future development may result in vegetation clearing, grubbing, or grading that replaces biological resources. Direct impacts are based on land use designations and biological resources mapped within the study area. For the purposes of this programmatic impact analysis, all land uses with the exception of Open Space-Conservation are considered subject to future permanent impacts. While non-conserved open space likely would continue to provide some biological function and value, the final location and proposed activities within the open space is not yet known. Therefore, these areas are characterized as a permanent impact to represent the worst-case scenario.

Indirect impacts are reasonably foreseeable effects caused by a project's implementation on remaining or adjacent biological resources outside the direct disturbance zone. Indirect impacts may be short-term and construction-related, or long-term and associated with development in proximity to biological resources.

6.3 Impacts Analysis

Table 8 and Figures 11A and 11B list and show the areas where impacts are anticipated to occur based on the three ways that impacts were evaluated. Figures 12-1 through 12-7, Impacts to Biological Resources, depict Project impacts to vegetation communities and land cover types. Table 9 lists proposed Project avoidance.

Table 8. Direct Impacts to Vegetation Communities and Land Covers within the Project Site

Vegetation Community or Land Cover Type	Floristic Alliance	Association	Project-Level Impacts (acres)				Programmatic-Level Impacts (acres)			Grand Total (acres)
			Remaining Area of Planning Area BP6	Pacific Oaks Commerce Center	County Line Road Warehouse	Project-Level Impacts Total	Within Focused Survey Area - Direct	Outside Focused Survey Area - Direct	Programmatic Level Impacts Total	
Grass and Herb Dominated										
Upland mustards or star-thistle fields	<i>Brassica nigra</i> - <i>Centaurea (solstitialis, melitensis)</i>	<i>Hirschfeldia incana</i>	0.0	2.4	0.0	2.4	1.4	11.2	12.7	15.1
Non-Native Grassland	N/A	N/A	3.7	97.6	14.8	116.1	47.1	400.7	447.9	563.9
Grass and Herb Dominated Subtotal ¹			3.7	100.0	14.8	118.5	48.5	412.0	460.5	579.0
Scrub										
California buckwheat scrub	<i>Eriogonum fasciculatum</i>	<i>Eriogonum fasciculatum</i>	0.0	<0.01		<0.01	0.2	1.8	2.1	2.1
Menzies's golden bush scrub	<i>Isocoma menziesii</i>	<i>Isocoma menziesii</i> ²	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0
California sagebrush - (purple sage) scrub	<i>Artemisia californica</i> - (<i>Salvia leucophylla</i>)	<i>Artemisia californica</i> - <i>Eriogonum fasciculatum</i>	0.0	<0.01	0.0	<0.01	0.2	2.4	2.6	2.6
Brittle bush scrub	<i>Encelia farinosa</i>	<i>Encelia farinosa</i>	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4
Fourwing saltbush scrub	<i>Atriplex canescens</i>	<i>Atriplex canescens</i>	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9
Palmer's goldenbush scrub	<i>Ericameria palmeri</i>	<i>Ericameria palmeri</i> ²	<0.01	0.0	0.0	<0.01	0.0	10.5	10.5	10.5
Scrub Subtotal ¹			<0.01	<0.01	0.0	<0.01	0.5	16.9	17.4	17.4
Chaparral										
Chamise chaparral	<i>Adenostoma fasciculatum</i>	<i>Adenostoma fasciculatum</i>	0.0	64.0	0.0	64.0	17.0	6.4	23.4	87.4
		<i>Adenostoma fasciculatum</i> - <i>Diplacus aurantiacus</i>	0.0	2.7	0.0	2.7	1.1	0.0	1.1	3.8
		<i>Adenostoma fasciculatum</i> - <i>Eriogonum fasciculatum</i>	0.0	10.8	0.0	10.8	1.3	0.0	1.3	12.1
Chamise - Sage chaparral	<i>Adenostoma fasciculatum</i> - <i>Salvia</i> spp.	<i>Adenostoma fasciculatum</i> - <i>Salvia mellifera</i> - <i>Artemisia californica</i>	0.0	5.6	0.0	5.6	0.0	0.0	0.0	5.6
		<i>Adenostoma fasciculatum</i> - <i>Salvia mellifera</i> - <i>Rhus ovata</i> ²	0.0	0.0	0.0	0.0	0.8	0.0	0.8	0.8
Scrub oak chaparral	<i>Quercus berberidifolia</i>	<i>Quercus (berberidifolia, xacutidens)</i> -	0.0	0.3	0.0	0.3	<0.01	0.0	<0.01	0.3

Table 8. Direct Impacts to Vegetation Communities and Land Covers within the Project Site

Vegetation Community or Land Cover Type	Floristic Alliance	Association	Project-Level Impacts (acres)				Programmatic-Level Impacts (acres)			Grand Total (acres)
			Remaining Area of Planning Area BP6	Pacific Oaks Commerce Center	County Line Road Warehouse	Project-Level Impacts Total	Within Focused Survey Area - Direct	Outside Focused Survey Area - Direct	Programmatic Level Impacts Total	
		<i>Adenostoma fasciculatum</i>								
		<i>Quercus berberidifolia</i>	0.0	0.0	0.0	0.0	0.0	6.8	6.8	6.8
<i>Chaparral Subtotal</i> ¹				83.4	0.0	83.4	20.2	13.2	33.4	116.8
Riparian										
Fremont cottonwood forest and woodland	<i>Populus fremontii</i> - <i>Fraxinus velutina</i> - <i>Salix gooddingii</i>	<i>Populus fremontii</i> ²	0.0	0.0	0.0	0.0	0.7	0.4	1.1	1.1
		<i>Populus fremontii</i> - <i>Salix gooddingii</i> / <i>Baccharis salicifolia</i> ²	0.0	0.0	0.0	0.0	0.0	1.7	1.7	1.7
		<i>Populus fremontii</i> - <i>Sambucus nigra</i> ²	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2
Goodding's willow - red willow riparian woodland and forest	<i>Salix gooddingii</i> - <i>Salix laevigata</i>	<i>Salix gooddingii</i> ²	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.6
Basket bush - river hawthorn - desert olive patches	<i>Rhus trilobata</i> - <i>Crataegus rivularis</i> - <i>Forestiera pubescens</i>	<i>Sambucus nigra</i> ²	0.0	0.0	0.0	0.0	0.0	3.2	3.2	3.2
Mulefat thickets	<i>Baccharis salicifolia</i>	<i>Baccharis salicifolia</i>	0.0	0.0	0.0	0.0	1.6	2.1	3.7	3.7
		<i>Baccharis salicifolia</i> - <i>Sambucus nigra</i>	0.0	0.0	0.0	0.0	<0.01	0.0	<0.01	<0.01
<i>Riparian Subtotal</i> ¹			0.0	0.0	0.0	0.0	2.3	8.2	10.6	10.6
Woodland										
Coast live oak woodland and forest	<i>Quercus agrifolia</i>	<i>Quercus agrifolia</i>	0.0	1.3	0.0	1.3	0.5	5.1	5.6	6.9
		<i>Quercus agrifolia</i> / grass	0.0	0.3	0.0	0.3	9.6	24.3	34.0	34.3
Eucalyptus - tree of heaven - black locust groves	<i>Eucalyptus spp.</i> - <i>Ailanthus altissima</i> - <i>Robinia pseudoacacia</i>	N/A	0.0	0.0	0.0	0.0	0.3	0.2	0.5	0.5
		<i>Ailanthus altissima</i>	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1
		<i>Eucalyptus (globulus, camaldulensis)</i>	0.0	0.1	0.0	0.1	0.7	0.0	0.7	0.8
<i>Woodland Subtotal</i> ¹				1.7	0.0	1.7	11.1	30.8	41.9	43.6
Disturbed and Developed										
Disturbed Habitat	N/A	N/A	4.5	26.2	1.4	32.1	4.8	10.4	15.2	47.3
General Agriculture	N/A	N/A	0.0	26.6	0.0	26.6	12.0	18.0	30.0	56.7
Open Water	N/A	N/A	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.3
Ornamental Plantings	N/A	N/A	0.1	0.0	0.1	0.2	0.0	3.0	3.0	3.2
Urban/Developed	N/A	N/A	1.0	1.2	2.9	5.1	17.3	30.8	48.1	53.2
<i>Disturbed and Developed Subtotal</i> ¹			5.6	54.0	4.3	63.9	34.2	62.6	96.8	160.7

Table 8. Direct Impacts to Vegetation Communities and Land Covers within the Project Site

Vegetation Community or Land Cover Type	Floristic Alliance	Association	Project-Level Impacts (acres)				Programmatic-Level Impacts (acres)			Grand Total (acres)
			Remaining Area of Planning Area BP6	Pacific Oaks Commerce Center	County Line Road Warehouse	Project-Level Impacts Total	Within Focused Survey Area - Direct	Outside Focused Survey Area - Direct	Programmatic Level Impacts Total	
Grand Total¹			9.2	239.1	19.2	267.5	116.9	543.7	660.5	928.0

Notes: N/A = not applicable.

¹ Totals may not sum due to rounding.

² Communities listed by CDFW as sensitive (i.e., State Rank 1, 2, or 3) (CDFW 2023d).

Table 9. Proposed Avoidance of Vegetation Communities and Land Covers within the Project Site

Vegetation Community or Land Cover Type	Floristic Alliance	Association	Within Focused Survey Area (acres)	Outside Focused Survey Area (acres)	County Line Road (acres)	Grand Total (acres)
Grass and Herb Dominated						
Upland mustards or star-thistle fields	<i>Brassica nigra - Centaurea (solstitialis, melitensis)</i>	<i>Hirschfeldia incana</i>	2.6	2.3	0.0	4.9
Non-Native Grassland	N/A	N/A	10.9	54.7	0.6	66.2
<i>Grass and Herb Dominated Subtotal¹</i>			13.5	57.0	0.6	71.0
Scrub						
California buckwheat - Parish's goldeneye scrub	<i>Eriogonum fasciculatum - Viguiera parishii</i>	<i>Eriogonum fasciculatum (Wash)</i>	2.3	0.0	0.0	2.3
California buckwheat scrub	<i>Eriogonum fasciculatum</i>	<i>Eriogonum fasciculatum</i>	1.0	0.6	0.0	1.6
California sagebrush - (purple sage) scrub	<i>Artemisia californica - (Salvia leucophylla)</i>	<i>Artemisia californica - Eriogonum fasciculatum</i>	1.0	<0.01	0.0	1.0
Palmer's goldenbush scrub	<i>Ericameria palmeri</i>	<i>Ericameria palmeri²</i>	0.0	0.6	0.0	0.6
<i>Scrub Subtotal¹</i>			4.2	1.2	0.0	5.4
Chaparral						
Chamise chaparral	<i>Adenostoma fasciculatum</i>	<i>Adenostoma fasciculatum</i>	6.1	0.0	0.0	6.1
		<i>Adenostoma fasciculatum - Diplacus aurantiacus</i>	0.9	0.0	0.0	0.9
Chamise - Sage chaparral	<i>Adenostoma fasciculatum - Salvia spp.</i>	<i>Adenostoma fasciculatum - Salvia mellifera - Artemisia californica</i>	1.5	0.0	0.0	1.5
<i>Chaparral Subtotal¹</i>			8.4	0.0	0.0	8.4
Riparian						
Scale broom scrub	<i>Lepidospartum squamatum</i>	<i>Eriogonum fasciculatum - Lepidospartum squamatum alluvial fan²</i>	3.4	0.0	0.0	3.4
		<i>Lepidospartum squamatum / ephemeral annuals²</i>	0.6	0.0	0.0	0.6
Fremont cottonwood forest and woodland	<i>Populus fremontii - Fraxinus velutina - Salix gooddingii</i>	<i>Populus fremontii²</i>	1.1	2.4	0.0	3.5
		<i>Populus fremontii - Salix gooddingii / Baccharis salicifolia²</i>	0.1	3.2	0.0	3.3
		<i>Populus fremontii - Sambucus nigra²</i>	0.0	0.6	0.0	0.6

Table 9. Proposed Avoidance of Vegetation Communities and Land Covers within the Project Site

Vegetation Community or Land Cover Type	Floristic Alliance	Association	Within Focused Survey Area (acres)	Outside Focused Survey Area (acres)	County Line Road (acres)	Grand Total (acres)
Goodding's willow - red willow riparian woodland and forest	<i>Salix gooddingii</i> - <i>Salix laevigata</i>	<i>Salix gooddingii</i> ²	0.0	0.3	0.0	0.3
Mulefat thickets	<i>Baccharis salicifolia</i>	<i>Baccharis salicifolia</i>	6.2	6.3	0.0	12.5
		<i>Baccharis salicifolia</i> - <i>Sambucus nigra</i>	1.1	0.0	0.0	1.1
<i>Riparian Subtotal</i> ¹			12.5	12.8	0.0	25.3
Woodland						
Coast live oak woodland and forest	<i>Quercus agrifolia</i>	<i>Quercus agrifolia</i>	3.8	<0.01	0.0	3.8
		<i>Quercus agrifolia</i> / grass	7.5	3.0	0.0	10.5
Eucalyptus - tree of heaven - black locust groves	<i>Eucalyptus</i> spp. - <i>Ailanthus altissima</i> - <i>Robinia pseudoacacia</i>	N/A	0.6	<0.01	0.0	0.6
		<i>Ailanthus altissima</i>	0.0	2.9	0.0	2.9
		<i>Eucalyptus (globulus, camaldulensis)</i>	<0.01	0.0	0.0	<0.01
<i>Woodland Subtotal</i> ¹			11.9	5.9	0.0	17.8
Disturbed and Developed						
Disturbed Habitat	N/A	N/A	3.8	7.6	0.0	11.4
General Agriculture	N/A	N/A	15.2	0.0	0.0	15.2
Ornamental Plantings	N/A	N/A	0.0	0.0	<0.01	<0.01
Urban/Developed	N/A	N/A	0.9	0.2	0.0	1.0
<i>Disturbed and Developed Subtotal</i> ¹			19.8	7.8	<0.01	27.7
Grand Total ¹			70.4	84.6	0.6	155.7

Notes: N/A = not applicable.

¹ Totals may not sum due to rounding.

² Communities listed by CDFW as sensitive (i.e., State Rank 1, 2, or 3) (CDFW 2023d).

6.3.1 Impact BIO-1: Special-Status Species

6.3.1.1 Impacts to Special-Status Plants

Nine special-status plant species were determined to have a moderate to high potential to occur within the study area based on known species distribution, species-specific habitat preferences, and habitat conditions on the Project site: Nevin’s barberry (FE/SE/CRPR 1B.1), smooth tarplant (CRPR 1B.1), Parry’s spineflower (CRPR 1B.1), slender-horned spineflower (FE/SE/CRPR 1B.1), Santa Ana River woollystar (FE/SE/CRPR 1B.1), California satintail (CRPR 2B.1), Hall’s monardella (CRPR 1B.3), salt spring checkerbloom (CRPR 2B.2), and San Bernardino aster (CRPR 1B.2).

These species were targeted during 2022 focused surveys for special-status plants within the focused survey area, including the Pacific Oaks Commerce Center project area, in accordance with **Mitigation Measure (MM) SPE-B-5** (Surveys for Special-Status Plants). Focused surveys for special-status plants were negative. Focused surveys were not conducted outside of the focused survey area.

The study area does not occur within federally designated critical habitat for special-status plant species, and there would be no impacts to critical habitat.

Direct Impacts

Project-Level Impacts

Pacific Oaks Commerce Center

The Yucaipa Freeway Corridor Final EIR identified chaparral sand-verbena, Jaeger’s milk-vetch, Mesa horkelia, Nevin’s barberry, rayless ragwort, Robinson’s peppergrass, and slender-horned spineflower as having potential to occur within the specific plan boundary and included **MM-SPE-B-5** (Surveys for Special-Status Plants), which stated that surveys for special-status plants shall be completed during the appropriate blooming period prior to grading (City of Yucaipa 2008). Due to changed site conditions and updated information regarding special-status species’ occurrences in the vicinity since approval of the Yucaipa Freeway Corridor Final EIR, an updated habitat assessment was conducted over this portion of the study area and focused surveys were conducted for species with suitable habitat present, as discussed in Section 3.2.4.1.

Focused surveys for special-status plants conducted in 2022 as a part of the proposed Project were negative for special-status plants. As such, no special-status plants are expected to occur within the Pacific Oaks Commerce Center project area. Robinson’s peppergrass and Southern California black walnut were not included as a target species for the 2022 focused surveys because they are CRPR 4 species. Species with CRPR 4 ranking are not considered rare, but only limited in distribution or infrequent throughout a broader range in California (e.g., “watch list” species) (CNPS 2023a). Thus, given that CEQA requires findings of significance for projects that “threaten to . . . reduce the number or restrict the range of a rare or endangered plant,” Robinson’s peppergrass and Southern California black walnut will not be analyzed further. Therefore, direct impacts to special-status plant species would be **less than significant** and no avoidance or compensatory mitigation measures are required.

Remaining Area of Planning Area BP6

The general biological evaluation for the remaining area of planning area BP6 concluded that Parry's spineflower has a moderate to high potential to occur on site, in addition to Robinson's pepper-grass (Kidd Biological Inc. 2022). However, as described in the subsection above, Robinson's pepper-grass is a CRPR 4 species and as such is not considered special status in the context of this report. Direct impacts to Parry's spineflower were possible during the grading/grubbing of the site (Kidd Biological Inc. 2022). However, given the minimal impact footprint of this project and the known distribution of this species in the region, potential impacts to Parry's spineflower from project implementation are **less than significant**.

County Line Warehouse

Two special-status plant species have been documented within 3 miles of the County Line Warehouse project: slender-horned spineflower and Santa Ana River woollystar. Suitable habitat for slender-horned spineflower and Santa Ana River woollystar was determined to be absent from the County Line Warehouse project site during the site reconnaissance survey conducted on May 5, 2021 (City of Yucaipa 2022). No special-status plants have a moderate to high potential to occur within the project site (Tom Dodson & Associates 2022). Therefore, direct impacts to special-status plant species would be **less than significant** and no avoidance or compensatory mitigation measures are required.

Program-Level Impacts

Within Focused Survey Area

Focused surveys for special-status plants conducted in 2022 as a part of the proposed Project were negative for special-status plants. As such, no special-status plants are expected to occur within the focused survey area. Therefore, direct impacts to special-status plant species would be **less than significant** and no avoidance or compensatory mitigation measures are required.

Outside Focused Survey Area

Future development outside the focused survey area has the potential to result in impacts to special-status plants through clearing, trampling, or grading. Any potential impact to a federal- or state-listed plant species would be significant. Potential impacts to non-listed special-status plants from future development are potentially significant depending on the location and size of the impact. Project implementation of **MM-SPE-B-5** (Surveys for Special-Status Plants) and **MM-SPE-B-6** (Conceptual Sensitive Plant Species Mitigation Plan), which are updated in **MM-FC-BIO-1** (Focused Special-Status Plant Survey and Avoidance), would reduce potential direct impacts to a less-than-significant level through focused special-status plant surveys, avoidance and minimization measures, a salvage and relocation plan, and/or compensatory mitigation to comply with CEQA. Therefore, direct impacts to special-status plant species would be **less than significant with mitigation incorporated**.

Indirect Impacts

Project-Level Impacts

Focused surveys for special-status plants conducted in 2022 within the Pacific Oaks Commerce Center project area were negative for special-status plants, including the approximately 500-foot buffer around the development area.

As such, no special-status plants are expected to occur within, or within 500 feet of, the Pacific Oaks Commerce Center project area.

One special-status species had potential to occur within the remaining area of planning area BP6: Parry’s spineflower. No special-status species had a moderate to high potential to occur within the County Line Warehouse project site. As such, given that the remaining area of planning area BP6 has already been impacted; no special-status plants are expected to occur within Phase 1 outside of the Pacific Oaks Commerce Center project area. Therefore, indirect impacts to special-status plant species would be **less than significant** and no avoidance or compensatory mitigation measures are required.

Programmatic-Level Impacts

Within Focused Survey Area

Focused surveys for special-status plants conducted in 2022 within the focused survey area were negative for special-status plants. As such, no special-status plants are expected to occur within the focused survey area. Therefore, indirect impacts to special-status plant species would be **less than significant** and no avoidance or compensatory mitigation measures are required.

Outside Focused Survey Area

Focused surveys for special-status plants conducted in 2022 as a part of the proposed Project were not conducted outside of the focused survey area. Future development outside the focused survey area has the potential to result in indirect impacts to special-status plants, including Nevin’s barberry, smooth tarplant, Parry’s spineflower, slender-horned spineflower, Santa Ana River woollystar, California satintail, Hall’s monardella, salt spring checkerbloom, and San Bernardino aster.

Construction-Related Impacts

Special-status plant species and suitable habitat for special-status plant species may be indirectly impacted during future construction outside the focused survey area. Potential short-term or temporary indirect impacts to special-status plant species resulting from construction activities include inadvertent spillover impacts, unintentional clearing, trampling, or grading outside of the Project footprint; generation of fugitive dust; changes in hydrology resulting from construction, including sedimentation and erosion; and the release of chemical pollutants. These potential construction-related indirect impacts to special-status plant species would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level through biological monitoring, requirement of a Worker Environmental Awareness Training that will cover the special-status resources and mitigation requirements for the Project, delineation of Project boundaries, implementation of standard dust control measures, development of a Stormwater Pollution Prevention Plan (SWPPP), and requiring all vehicles and equipment be serviced in designated staging areas.

With implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources), the effect of construction-related indirect impacts to special-status plant species would be minimized to **less than significant with mitigation incorporated**.

Long-Term Impacts

Potential long-term indirect impacts that could result from development near special-status plant species or their suitable habitat include chemical releases such as oils and grease from vehicles that could degrade habitat; increased human presence that could lead to unauthorized access to potential habitat for special-status plants; increased invasive plant species that may degrade habitat; and trampling of vegetation and soil compaction by humans, which could affect soil moisture, water penetration, surface flows, and erosion. These potential long-term indirect impacts to special-status plant species would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level by requiring measures to ensure runoff is not altered from existing conditions and toxicants are not discharged, restoration of temporary impacts, preparation of landscaping plans that will emphasize native species and not include species from the California Invasive Plant Council (Cal-IPC) California Invasive Plant Inventory, and incorporation of barriers to prevent unauthorized public access to areas with potential habitat for special-status plants.

With implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources), the effect of long-term indirect impacts to special-status plant species would be minimized to **less than significant with mitigation incorporated**.

6.3.1.2 Impacts to Special-Status Wildlife

A total of two special-status wildlife species were observed during surveys and an additional 19 special-status wildlife species were determined to have a moderate or high potential (or low potential for certain listed species) to occur within the study area based on known species distribution, species-specific habitat preferences, and habitat conditions on the study area: western spadefoot, Southern California legless lizard, California glossy snake, coastal tiger whiptail, red diamondback rattlesnake, Blainville’s horned lizard, coast patch-nosed snake, white-tailed kite, golden eagle, bald eagle, burrowing owl, loggerhead shrike, yellow warbler, least Bell’s vireo, Dulzura pocket mouse, northwestern San Diego pocket mouse, San Diego desert woodrat, Los Angeles pocket mouse, western mastiff bat, American badger, and Crotch bumble bee.

Focused habitat assessments were conducted for coastal California gnatcatcher, arroyo toad, San Bernardino kangaroo rat, and Stephens’ kangaroo rat within the survey area. These species are not expected to occur and not analyzed further. Burrowing owl and least Bell’s vireo were targeted during 2022 protocol surveys within the focused survey area, which includes the Pacific Oaks Commerce Center project area. Protocol surveys for burrowing owl and least Bell’s vireo were negative. Protocol surveys were not conducted outside of the focused survey area.

The study area does not occur within federally designated critical habitat for special-status wildlife species, and there would be no impacts to critical habitat.

Direct Impacts

Project-Level Impacts

Pacific Oaks Commerce Center

Amphibians

Western Spadefoot

Western spadefoot was not detected within the Pacific Oaks Commerce Center project area during 2022 surveys. This portion of the Project site contains suitable ephemeral water features in chaparral and coastal scrub habitat. Because adults of these species are belowground during a large part of the year, they are susceptible to injury and mortality during construction activities. Any potential impact to western spadefoot could be significant absent mitigation.

Project implementation of **MM-FC-BIO-4** (Pre-Construction Pond Check) would reduce potential direct impacts to a less-than-significant level through pond checks the winter prior to construction and, if ponding is present, focused surveys for western spadefoot and relocation of western spadefoot, if present, to suitable habitat outside of the construction footprint. Project implementation of **MM-FC-BIO-5** (Wildlife Movement) would ensure that there is conserved open space that could support relocated western spadefoot, if present. Therefore, direct impacts to western spadefoot would be **less than significant with mitigation incorporated**.

Birds

Fully Protected Raptors (Bald Eagle, White-Tailed Kite, and Golden Eagle)

A bald eagle was observed flying overhead within the focused survey area during the 2022 surveys (Figure 8). Bald eagle may move through the study area but is not expected to nest or winter. White-tailed kite has a high potential to occur within the study area. Golden eagle has a moderate potential to forage within the study area, but has low potential to nest or winter. Direct impacts to bald eagle, white-tailed kite, and golden eagle from construction are generally unlikely due to their high mobility and access to adjacent habitat; however, potential impacts may occur to nesting white-tailed kite during vegetation removal. No such impacts are expected to golden eagle or bald eagle since they have a low potential to nest on site or are not expected to nest on site. White-tailed kite has a high potential to occur and has potential to nest on site. Development of the Pacific Oaks Commerce Center project has the potential to result in impacts to nesting white-tailed kite. Because white-tailed kite is a state Fully Protected Species, any actions or activities that would result in injury and/or mortality to individuals of this species, including the loss of eggs or young within an active nest, would be a violation of Section 3511 of the CFGC and a significant impact under CEQA absent mitigation.

Project implementation of **MM-SPE-B-11.4** (Nesting Raptors) and **MM-SPE-B-11.5** (White-Tailed Kite), which are updated by **MM-FC-BIO-6** (Pre-Construction Nesting Bird Survey), would minimize potential direct impacts to a less-than-significant level through avoidance of vegetation removal during the nesting season and performance of a nesting bird survey if vegetation is removed during the nesting season. Therefore, direct impacts to fully protected raptors would be **less than significant with mitigation incorporated**.

Burrowing Owl

Protocol surveys for burrowing owl conducted in accordance with **MM-SPE-B-11.6** (Western Burrowing Owl) in 2022 as a part of the proposed Project were negative within the focused survey area, which included all of the Pacific Oaks Commerce Center project area. In general, the herbaceous vegetation communities within the Project site included high cover of non-native grasses and forbs and did not support openings, clearings, or areas where burrowing owl could have direct line-of-sight. Similarly, shrub and chaparral communities within the Project site supported a high cover of non-native grasses and forbs in the understory with limited areas of bare ground or short vegetation. As such, potential for burrowing owl at the time of the protocol surveys was low. However, because potentially suitable burrows were mapped within the study area, burrowing owl could occupy up to 152.8 acres of potential habitat of this portion of the study area prior to future construction of Pacific Oaks Commerce Center. Development has the potential to result in direct impacts to burrowing owl through unintentional clearing, trampling, or grading outside of the construction zone. Any potential impact to burrowing owl would be significant absent mitigation.

Project implementation of **MM-FC-BIO-7** (Pre-Construction Burrowing Owl Surveys and Avoidance) would reduce potential direct impacts to a less-than-significant level through avoidance of vegetation removal during the breeding season, performance of a pre-construction burrowing owl survey if vegetation is removed during the breeding season, and preparation of a Burrowing Owl Protection Plan if burrowing owl is detected during the pre-construction survey. Project implementation of **MM-FC-BIO-5** (Wildlife Movement) would ensure that there is conserved open space that could support relocated burrowing owl, if present. Therefore, direct impacts to burrowing owl would be **less than significant with mitigation incorporated**.

Loggerhead Shrike

Loggerhead shrike was not detected within the Pacific Oaks Commerce Center project area during 2022 surveys. However, loggerhead shrike has a moderate potential to occur. Development of the Pacific Oaks Commerce Center project would result in the loss of 83.4 acres of potential habitat for loggerhead shrike. Phasing of the Project would allow for loggerhead shrike to disperse to vacant lands outside of the Pacific Oaks Commerce Center project area. Adults of this species are very mobile and not susceptible to direct impacts from construction-related activities. However, the proposed Project could have a direct impact on bird nests, eggs, and young during vegetation removal. This impact would be significant absent mitigation.

Project implementation of **MM-FC-BIO-6** (Pre-Construction Nesting Bird Survey) would reduce potential direct impacts to a less-than-significant level through avoidance of vegetation removal during the nesting season and performance of a nesting bird survey if vegetation is removed during the nesting season. Therefore, direct impacts to loggerhead shrike would be **less than significant with mitigation incorporated**.

Riparian Birds (Least Bell’s Vireo and Yellow Warbler)

Focused surveys for least Bell’s vireo in accordance with **MM-SPE-11.3** (Least Bell’s vireo) were negative within the focused survey area (i.e., including Pacific Oaks Commerce Center project area) in 2022. Therefore, **no impacts** to this species are expected with Project implementation.

Yellow warbler was detected several times within the focused survey area along Yucaipa Creek in 2022. Yucaipa Creek is adjacent to Pacific Oaks Commerce Center, but not within it. Development of the Pacific Oaks Commerce Center project would not result in the loss of any riparian habitat suitable for yellow warbler. Therefore, **no impacts** to this species are expected with Project implementation.

Mammals

Fossorial Small Mammals (Dulzura Pocket Mouse, Northwestern San Diego Pocket Mouse, San Diego Desert Woodrat, and Los Angeles Pocket Mouse)

No special-status, fossorial small mammals were incidentally detected within the Pacific Oaks Commerce Center project area during 2022 surveys. However, this portion of the Project site contains suitable habitat for these species and development of the Pacific Oaks Commerce Center would result in the loss of 183.4 acres of potential habitat for fossorial small mammals, including Dulzura pocket mouse, northwestern San Diego pocket mouse, San Diego desert woodrat, and Los Angeles pocket mouse. When cumulatively evaluated with the proposed Project, the potential loss of this habitat from the Pacific Oaks Commerce Center project area has potential to affect the local population dynamics of these species, if present. Adults of these species typically reside belowground during the daytime and therefore are susceptible to injury and mortality during construction activities. This impact would be significant absent mitigation.

Project implementation of **MM-FC-BIO-8** (Pre-Construction Clearance Surveys) would reduce potential direct impacts to a less-than-significant level by requiring a pre-construction survey for special-status wildlife species using appropriate methods, avoidance of these species where possible, and relocation of individuals that may be captured. Project implementation of **MM-FC-BIO-5** (Wildlife Movement) would ensure that there is conserved open space that could support relocated small mammals, if present, as well as offset impacts to potentially suitable habitat. Therefore, direct impacts to fossorial small mammals would be **less than significant with mitigation incorporated**.

Western Mastiff Bat

Western mastiff bat was not observed during 2022 surveys, but has a moderate potential to occur and there is suitable roosting habitat within the northwest portion of the study area. The proposed Project would result in the loss of 85.1 acres of potential foraging habitat (which includes roosting habitat) for western mastiff bat.

Individual adults of this species foraging on site are unlikely to be directly killed or injured during construction activities because they are highly mobile and only active at night. However, individuals could be killed or harmed if active roost sites were removed, either causing direct mortality or more likely causing abandonment during the day. Any direct impacts to individuals, including young, at roost sites as a result of construction activities would be significant.

Project implementation of **MM-FC-BIO-9** (Pre-Construction Bat Survey and Avoidance) would reduce potential direct impacts to a less-than-significant level by requiring a pre-construction survey for special-status bats using appropriate methods, avoidance of these species where possible, and maternity roost exclusion during the appropriate season. Project implementation of **MM-FC-BIO-5** (Wildlife Movement) would ensure that there is conserved open space that could support relocated small mammals, if present, as well as offset impacts to potentially suitable habitat. Therefore, direct impacts to western mastiff bat would be **less than significant with mitigation incorporated**.

American Badger

American badger was not incidentally detected within the Pacific Oaks Commerce Center project area during 2022 surveys. However, this portion of the Project site contains suitable habitat, and this species has a high potential to occur. Development of the Pacific Oaks Commerce Center project could result in the loss of up to 100.0 acres of potential habitat for American badger. When cumulatively evaluated with the proposed Project, the potential loss

of this habitat from the Pacific Oaks Commerce Center project area has potential to affect the local population dynamics of this species, if present. In addition, adults of this species typically reside belowground and therefore are susceptible to injury and mortality during construction activities. The potential impacts to dens and loss or injury to individual American badgers are considered significant absent mitigation.

Project implementation of **MM-FC-BIO-10** (Pre-Construction American Badger Survey and Avoidance) would reduce potential direct impacts to a less-than-significant level through pre-construction surveys for winter and natal badger dens and, if present, implementation of avoidance measures to minimize impacts to badgers. Project implementation of **MM-FC-BIO-5** (Wildlife Movement) would ensure that there is conserved open space that could support relocated American badger, if present, as well as offset impacts to potentially suitable habitat. Therefore, direct impacts to American badger would be **less than significant with mitigation incorporated**.

Reptiles (Southern California Legless Lizard, California Glossy Snake, Coastal Tiger Whiptail, Red Diamondback Rattlesnake, Blainville’s Horned Lizard, and Coast Patch-Nosed Snake)

No special-status lizard or snake was incidentally detected during 2022 surveys; however, the Pacific Oaks Commerce Center project area portion of the Project site contains suitable habitat and development of the Pacific Oaks Commerce Center project could result in the loss of up to 185.1 acres of potential habitat for special-status lizards and snakes. When cumulatively evaluated with the proposed Project, the potential loss of this habitat from the Pacific Oaks Commerce Center project area has potential to affect the local population dynamics of these species, if present. In addition, these species generally have low mobility to escape and therefore are susceptible to injury and mortality during construction activities. This impact would be significant absent mitigation.

Project implementation of **MM-FC-BIO-8** (Pre-Construction Clearance Surveys) would reduce potential direct impacts to a less-than-significant level by requiring a pre-construction survey for special-status wildlife species using appropriate methods, avoidance of these species where possible, and relocation of individuals that may be captured. In addition, for any non-listed special-status wildlife species occurring in construction areas, buffers would be established or, if establishing buffers is not feasible, attempts would be made to move the individuals to safety through capture and relocation or through encouraging them to leave the site. Project implementation of **MM-FC-BIO-5** (Wildlife Movement) would ensure that there is conserved open space that could support relocated special-status lizards and snakes, if present, as well as offset impacts to potentially suitable habitat. Therefore, direct impacts to special-status lizards and snakes would be **less than significant with mitigation incorporated**.

Invertebrates

Crotch Bumble Bee

No Crotch bumble bee or other *Bombus* sp. were incidentally detected during 2022 surveys; however, the Pacific Oaks Commerce Center project area portion of the Project site contains suitable floral resources for the species. Development of the Pacific Oaks Commerce Center project could result in the loss of up to 185.1 acres of potential habitat for Crotch bumble bee. When cumulatively evaluated with the proposed Project, the potential loss of this habitat from the Pacific Oaks Commerce Center project area has potential to affect the local population dynamics of these species, if present. Although the Project site supports suitable floral resources within these communities, the actual area occupied by specific resources with potential to support the species is likely a much lower acreage. In addition, microhabitats, such as small mammal burrows where the species may nest, and debris and other loose matter suitable for hibernation, likely occur on site in more limited areas. Construction activities have the potential

to crush active Crotch bumble bee nest colonies. The loss of active Crotch bumble bee nest colonies is considered significant absent mitigation.

Project implementation of **MM-FC-BIO-11** (Pre-Construction Survey for Crotch Bumble Bee) would require a pre-construction survey for Crotch bumble bee to ensure no nests for Crotch bumble bee are located within the construction area and provides avoidance measures if bees are detected during surveys. In addition, Project implementation of **MM-FC-BIO-5** (Wildlife Movement) would ensure that there is conserved open space that could support Crotch bumble bee, if present, as well as offset impacts to potentially suitable habitat. Therefore, direct impacts to Crotch bumble bee would be **less than significant with mitigation incorporated**.

County Line Warehouse and Remaining Area of Planning Area BP6

Amphibians

No amphibians have a moderate to high potential to occur within the County Line Warehouse project site or within the remaining area of planning area BP6 (Tom Dodson & Associates 2022; Kidd Biological Inc. 2022). Therefore, **no impacts** are expected to occur to special-status amphibians.

Birds

No special-status birds have potential to occur within the impact footprint for the remaining area of planning area BP6 site (Kidd Biological Inc. 2022). Burrowing owl is the only special-status bird with potential (albeit low potential) to occur at the County Line Warehouse project site (Tom Dodson & Associates 2022).

Burrowing Owl

Although the County Line Warehouse project is not likely to impact burrowing owl, there is still a low potential for the Project site to become occupied by burrowing owl between the time the survey was conducted in May 2021 and the commencement of Project-related construction activities.

Project implementation of **MM-FC-BIO-7** (Pre-Construction Burrowing Owl Surveys and Avoidance), which is based on **MM-SPE-B-11.6** (Western burrowing owl), would reduce potential direct impacts to a less-than-significant level through performance of a pre-construction burrowing owl survey if vegetation is removed during the breeding season. Therefore, direct impacts to burrowing owl would be **less than significant with mitigation incorporated**.

Mammals

Fossorial Small Mammals (Northwestern San Diego Pocket Mouse)

No special-status mammals have a moderate to high potential to occur within the County Line Warehouse project site (Tom Dodson & Associates 2022). Northwestern San Diego pocket mouse has a moderate potential to forage within the remaining area of planning area BP6 impact footprint. Adults of these species typically reside belowground during the daytime and therefore are susceptible to injury and mortality during construction activities. This impact would be significant absent mitigation.

Project implementation of **MM-FC-BIO-8** (Pre-Construction Clearance Surveys) would reduce potential direct impacts to a less-than-significant level by requiring a pre-construction survey for special-status wildlife species using appropriate

methods, avoidance of these species where possible, and relocation of individuals that may be captured. Project implementation of **MM-FC-BIO-5** (Wildlife Movement) would ensure that there is conserved open space that could support relocated small mammals, if present, as well as offset impacts to potentially suitable habitat. Therefore, direct impacts to fossorial small mammals would be **less than significant with mitigation incorporated**.

Reptiles

Lizard and Snakes (Red Diamondback Rattlesnake, Blainville’s Horned Lizard, Coast Patch-Nosed Snake)

No special-status reptiles are expected to occur within the County Line Warehouse project site (Tom Dodson & Associates 2022). Red diamondback rattlesnake, Blainville’s horned lizard, and coast patch-nosed snake have a moderate potential to occur within the remaining area of planning area BP6 impact footprint. These species generally have low mobility to escape and therefore are susceptible to injury and mortality during construction activities. This impact would be significant absent mitigation.

Project implementation of **MM-FC-BIO-8** (Pre-Construction Clearance Surveys) would reduce potential direct impacts to a less-than-significant level by requiring a pre-construction survey for special-status wildlife species using appropriate methods, avoidance of these species where possible, and relocation of individuals that may be captured. In addition, for any non-listed special-status wildlife species occurring in construction areas, buffers would be established or, if establishing buffers is not feasible, attempts would be made to move the individuals to safety through capture and relocation or through encouraging them to leave the site. Project implementation of **MM-FC-BIO-5** (Wildlife Movement) would ensure that there is conserved open space that could support relocated special-status lizards and snakes, if present, as well as offset impacts to potentially suitable habitat. Therefore, direct impacts to special-status lizards and snakes would be **less than significant with mitigation incorporated**.

Invertebrates

Crotch Bumble Bee

Crotch bumble bee has a low potential to occur within the County Line Warehouse project site due to the absence of appropriate nectar resources (Tom Dodson & Associates 2022). Crotch bumble bee has a moderate potential to occur within the remaining area of planning area BP6 impact footprint as there are suitable burrows and nectar sources. Construction activities have the potential to crush active Crotch bumble bee nest colonies. The loss of active Crotch bumble bee nest colonies is considered significant absent mitigation.

Project implementation of **MM-FC-BIO-11** (Pre-Construction Survey for Crotch Bumble Bee) would require a pre-construction survey for Crotch bumble bee to ensure no nests for Crotch bumble bee are located within the construction area and provides avoidance measures if bees are detected during surveys. In addition, Project implementation of **MM-FC-BIO-5** (Wildlife Movement) would ensure that there is conserved open space that could support Crotch bumble bee, if present, as well as offset impacts to potentially suitable habitat. Therefore, direct impacts to Crotch bumble bee would be **less than significant with mitigation incorporated**.

Programmatic-Level Impacts

Within Focused Survey Area

Amphibians

Western Spadefoot

The study area contains a marginal amount of suitable ephemeral water features in chaparral and coastal scrub habitat. Because adults of these species are belowground during a large part of the year, they are susceptible to injury and mortality during construction activities. Any potential impact to western spadefoot would be significant absent mitigation.

Project implementation of **MM-FC-BIO-4** (Pre-Construction Pond Check) would reduce potential direct impacts to a less-than-significant level through pond checks the winter prior to construction and, if ponding is present, focused surveys for western spadefoot and relocation of western spadefoot, if present, to suitable habitat outside of the construction footprint. Project implementation of **MM-FC-BIO-5** (Wildlife Movement) would ensure that there is conserved open space that could support relocated western spadefoot, if present. Therefore, direct impacts to western spadefoot would be **less than significant with mitigation incorporated**.

Birds

Fully Protected Raptors (Bald Eagle, White-Tailed Kite, and Golden Eagle)

A bald eagle was observed flying overhead within the focused survey area during the 2022 surveys. While bald eagle may move through the study area, it is not expected to nest or winter. White-tailed kite has a high potential to occur within the study area. Golden eagle has a moderate potential to forage within the study area, but has low potential to nest or winter. Direct impacts to bald eagle, white-tailed kite, and golden eagle from construction are generally unlikely due to their high mobility and access to adjacent habitat; however, potential impacts may occur to nesting white-tailed kite during vegetation removal. No such impacts are expected to golden eagle or bald eagle since they have a very low potential to nest on site or are not expected to nest on site. White-tailed kite has a high potential to occur within the study area and has potential to nest on site. Future development has the potential to result in impacts to nesting white-tailed kite. Because white-tailed kite is a state Fully Protected Species, any actions or activities that would result in injury and/or mortality to individuals of this species, including the loss of eggs or young within an active nest, would be a violation of Section 3511 of the CFGC and a significant impact under CEQA absent mitigation.

Project implementation of **MM-SPE-B-11.4** (Nesting Raptors) and **MM-SPE-B-11.5** (White-Tailed Kite), which are updated by **MM-FC-BIO-6** (Pre-Construction Nesting Bird Survey), would minimize potential direct impacts to a less-than-significant level through avoidance of vegetation removal during the nesting season and performance of a nesting bird survey if vegetation is removed during the nesting season. Therefore, direct impacts to fully protected raptors would be **less than significant with mitigation incorporated**.

Burrowing Owl

Protocol surveys for burrowing owl conducted in accordance with **MM-SPE-11.6** (Western Burrowing Owl) in 2022 as a part of the proposed Project were negative within the focused survey area. In general, the herbaceous

vegetation communities within the Project site included high cover of non-native grasses and forbs and did not support openings, clearings, or areas where burrowing owl could have direct line-of-sight. Similarly, shrub and chaparral communities within the Project site supported a high cover of non-native grasses and forbs in the understory with limited areas of bare ground or short vegetation. As such, potential for burrowing owl at the time of the protocol surveys was low. However, because potentially suitable burrows were mapped within the study area, burrowing owl could occupy up to 65.8 acres of potential habitat of this portion of the study area prior to future development within the focused survey area. Development has the potential to result in direct impacts to burrowing owl through unintentional clearing, trampling, or grading outside of the construction zone. Any potential impact to burrowing owl would be significant absent mitigation.

Project implementation of **MM-FC-BIO-7** (Pre-Construction Burrowing Owl Surveys and Avoidance) would reduce potential direct impacts to a less-than-significant level through avoidance of vegetation removal during the breeding season, performance of a pre-construction burrowing owl survey if vegetation is removed during the breeding season, and preparation of a Burrowing Owl Protection Plan if burrowing owl is detected during the pre-construction survey. Project implementation of **MM-FC-BIO-5** (Wildlife Movement) would ensure that there is conserved open space that could support relocated burrowing owl, if present. Therefore, direct impacts to burrowing owl would be **less than significant with mitigation incorporated**.

Loggerhead Shrike

Loggerhead shrike was not incidentally detected within the focused survey area; however, this species has a moderate potential to occur within the focused survey area. Future development in this area could result in the loss of up to 23.0 acres of potential habitat for loggerhead shrike. Phasing of the Project would allow for loggerhead shrike to disperse to vacant lands outside of construction zones. Adults of this species are very mobile and not susceptible to direct impacts from construction-related activities. However, the proposed Project could have a direct impact on bird nests, eggs, and young during vegetation removal. This impact would be significant absent mitigation.

Project implementation of **MM-FC-BIO-6** (Pre-Construction Nesting Bird Survey) would reduce potential direct impacts to a less-than-significant level through avoidance of vegetation removal during the nesting season and performance of a nesting bird survey if vegetation is removed during the nesting season. Therefore, direct impacts to loggerhead shrike would be **less than significant with mitigation incorporated**.

Riparian Birds (Least Bell's Vireo and Yellow Warbler)

Focused surveys for least Bell's vireo in accordance with **MM-SPE-11.3** (Least Bell's vireo) were negative within the focused survey area in 2022. Therefore, **no impacts** to this species are expected with Project implementation.

Yellow warbler was detected along Yucaipa Creek in 2022 and the study area contains some riparian and chaparral habitat that may be suitable for nesting. Future development outside the focused survey area would result in the loss of up to 2.3 acres of potential habitat for yellow warbler. Phasing of the Project would allow for yellow warbler to disperse to vacant lands outside of construction zones. Adults of this species are very mobile and not susceptible to direct impacts from construction-related activities. However, the proposed Project could have a direct impact on bird nests, eggs, and young during vegetation removal. This impact would be significant absent mitigation.

Project implementation of **MM-FC-BIO-6** (Pre-Construction Nesting Bird Survey) would reduce potential direct impacts to a less-than-significant level through avoidance of vegetation removal during the nesting season and

performance of a nesting bird survey if vegetation is removed during the nesting season. Therefore, direct impacts to yellow warbler would be **less than significant with mitigation incorporated**.

Mammals

Fossorial Small Mammals (Dulzura Pocket Mouse, Northwestern San Diego Pocket Mouse, San Diego Desert Woodrat, And Los Angeles Pocket Mouse)

Special-status, fossorial small mammals were not incidentally detected within the focused survey area; however, these species have a moderate potential to occur within of the focused survey area. Future development of this area would result in the loss of up to 69.2 acres of potential habitat for fossorial small mammals, including Dulzura pocket mouse, northwestern San Diego pocket mouse, San Diego desert woodrat, and Los Angeles pocket mouse. When cumulatively evaluated with the proposed Project, the potential loss of this habitat from future development within the focused survey area has potential to affect the local population dynamics of these species, if present. Adults of these species typically reside belowground during the daytime and therefore are susceptible to injury and mortality during construction activities. This impact would be significant absent mitigation.

Project implementation of **MM-FC-BIO-8** (Pre-Construction Clearance Surveys) would reduce potential direct impacts to a less-than-significant level by requiring a pre-construction survey for special-status wildlife species using appropriate methods, avoidance of these species where possible, and relocation of individuals that may be captured. Project implementation of **MM-FC-BIO-5** (Wildlife Movement) would ensure that there is conserved open space that could support relocated small mammals, if present, as well as offset impacts to potentially suitable habitat. Therefore, direct impacts to fossorial small mammals would be **less than significant with mitigation incorporated**.

Western Mastiff Bat

Western mastiff bat was incidentally detected within the focused survey area; however, this species has a moderate potential to occur within of the focused survey area. Future development of this area would result in the loss of up to 31.8 acres of potential foraging habitat (which includes roosting habitat) for western mastiff bat.

Individual adults of this species foraging on site are unlikely to be directly killed or injured during construction activities because they are highly mobile and only active at night. However, individuals could be killed or harmed if active roost sites were removed, either causing direct mortality or more likely causing abandonment during the day. Any direct impacts to individuals, including young, at roost sites, as a result of construction activities would also be significant.

Project implementation of **MM-FC-BIO-9** (Pre-Construction Bat Survey and Avoidance) would reduce potential direct impacts to a less-than-significant level by requiring a pre-construction survey for special-status bats using appropriate methods, avoidance of these species where possible, and maternity roost exclusion during the appropriate season. Project implementation of **MM-FC-BIO-5** (Wildlife Movement) would ensure that there is conserved open space that could support relocated small mammals, if present, as well as offset impacts to potentially suitable habitat. Therefore, direct impacts to western mastiff bat would be **less than significant with mitigation incorporated**.

American Badger

American badger was not incidentally detected within the focused survey area; however, this portion of the Project site contains suitable habitat, and this species has a high potential to occur. Future development within the focused

survey area could result in the loss of up to 49.0 acres of potential habitat for American badger. When cumulatively evaluated with the proposed Project, the potential loss of this habitat within the focused survey area has potential to affect the local population dynamics of this species, if present. In addition, adults of this species typically reside belowground and therefore are susceptible to injury and mortality during construction activities. The potential impacts to dens and loss or injury to individual American badgers are considered significant absent mitigation.

Project implementation of **MM-FC-BIO-10** (Pre-Construction American Badger Survey and Avoidance) would reduce potential direct impacts to a less-than-significant level through pre-construction surveys for winter and natal badger dens and, if present, implementation of avoidance measures to minimize impacts to badgers. Project implementation of **MM-FC-BIO-5** (Wildlife Movement) would ensure that there is conserved open space that could support relocated American badger, if present, as well as offset impacts to potentially suitable habitat. Therefore, direct impacts to American badger would be **less than significant with mitigation incorporated**.

Reptiles (Southern California Legless Lizard, California Glossy Snake, Coastal Tiger Whiptail, Red Diamondback Rattlesnake, Blainville’s Horned Lizard, and Coast Patch-Nosed Snake)

No special-status lizard or snake was incidentally detected within the focused survey area during 2022 surveys; however, this area contains suitable habitat for these species. Future development within the focused survey area could result in the loss of up to 82.7 acres of potential habitat for special-status lizards and snakes. When cumulatively evaluated with the proposed Project, the potential loss of this habitat from outside the focused survey area has potential to affect the local population dynamics of these species, if present. In addition, these species generally have low mobility to escape and therefore are susceptible to injury and mortality during construction activities. This impact would be significant absent mitigation.

Project implementation of **MM-FC-BIO-8** (Pre-Construction Clearance Surveys) would reduce potential direct impacts to a less-than-significant level by requiring a pre-construction survey for special-status wildlife species using appropriate methods, avoidance of these species where possible, and relocation of individuals that may be captured. In addition, for any non-listed special-status wildlife species occurring in construction areas, buffers would be established or, if establishing buffers is not feasible, attempts would be made to move the individuals to safety through capture and relocation or through encouraging them to leave the site. Project implementation of **MM-FC-BIO-5** (Wildlife Movement) would ensure that there is conserved open space that could support relocated special-status lizards and snakes, if present, as well as offset impacts to potentially suitable habitat. Therefore, direct impacts to special-status lizards and snakes would be **less than significant with mitigation incorporated**.

Invertebrates

Crotch Bumble Bee

No Crotch bumble bee or other *Bombus* sp. were incidentally detected during 2022 surveys; however, this species has a high potential to occur outside of the focused survey area. Future development within the focused survey area could result in the loss of up to 82.7 acres of potential habitat for Crotch bumble bee. When cumulatively evaluated with the proposed Project, the potential loss of this habitat within the focused survey area has potential to affect the local population dynamics of these species, if present. Although the Project site supports suitable floral resources within these communities, the actual area occupied by specific resources with potential to support the species is likely a much lower acreage. In addition, microhabitats, such as small mammal burrows where the species may nest, and debris and other loose matter suitable for hibernation, likely occur on site in more limited

areas. Construction activities have the potential to crush active Crotch bumble bee nest colonies. The loss of active Crotch bumble bee nest colonies is considered significant absent mitigation.

Project implementation of **MM-FC-BIO-11** (Pre-Construction Survey for Crotch Bumble Bee) would require a pre-construction survey for Crotch bumble bee to ensure no nests for Crotch bumble bee are located within the construction area and provides avoidance measures if bees are detected during surveys. In addition, Project implementation of **MM-FC-BIO-5** (Wildlife Movement) would ensure that there is conserved open space that could support relocated special-status lizards and snakes, if present, as well as offset impacts to potentially suitable habitat. Therefore, direct impacts to Crotch bumble bee would be **less than significant with mitigation incorporated**.

Outside Focused Survey Area

Amphibians

Western Spadefoot

The study area contains a marginal amount of suitable ephemeral water features in chaparral and coastal scrub habitat. Because adults of these species are belowground during a large part of the year, they are susceptible to injury and mortality during construction activities. Any potential impact to western spadefoot would be significant absent mitigation.

Project implementation of **MM-FC-BIO-4** (Pre-Construction Pond Check) would reduce potential direct impacts to a less-than-significant level through pond checks the winter prior to construction and, if ponding is present, focused surveys for western spadefoot and relocation of western spadefoot, if present, to suitable habitat outside of the construction footprint. Project implementation of **MM-FC-BIO-5** (Wildlife Movement) would ensure that there is conserved open space that could support relocated western spadefoot, if present. Therefore, direct impacts to western spadefoot would be **less than significant with mitigation incorporated**.

Birds

Fully Protected Raptors (Bald Eagle, White-Tailed Kite, and Golden Eagle)

A bald eagle was observed flying overhead within the focused survey area during the 2022 surveys. Bald eagle may move through the study area but is not expected to nest or winter. White-tailed kite has a high potential to occur within the study area. Golden eagle has a moderate potential to forage within the study area but has low potential to nest or winter. Direct impacts to bald eagle, white-tailed kite, and golden eagle from construction are generally unlikely due to their high mobility and access to adjacent habitat; however, potential impacts may occur to nesting white-tailed kite during vegetation removal. No such impacts are expected to golden eagle or bald eagle since they have a very low potential to nest on site or are not expected to nest on site. White-tailed kite has a high potential to occur within the study area and has potential to nest on site. Future development has the potential to result in impacts to nesting white-tailed kite. Because white-tailed kite is a state Fully Protected Species, any actions or activities that would result in injury and/or mortality to individuals of this species, including the loss of eggs or young within an active nest, would be a violation of Section 3511 of the CFGC and a significant impact under CEQA absent mitigation.

Project implementation of **MM-SPE-B-11.4** (Nesting Raptors) and **MM-SPE-B-11.5** (White-Tailed Kite), which are updated by **MM-FC-BIO-6** (Pre-Construction Nesting Bird Survey), would minimize potential direct impacts to a less-than-significant level through avoidance of vegetation removal during the nesting season and performance of a

nesting bird survey if vegetation is removed during the nesting season. Therefore, direct impacts to fully protected raptors would be **less than significant with mitigation incorporated**.

Burrowing Owl

Burrowing owl has a moderate potential to occur outside of the focused survey area. Outside of the focused survey area contains 457.3 acres of potential habitat for burrowing owl. Future development has the potential to result in impacts to burrowing owl through unintentional clearing, trampling, or grading outside of the construction zone. Any potential impact to a burrowing owl would be significant absent mitigation. Implementation of **MM-SPE-B-11.6** (Western burrowing owl) requires focused surveys for burrowing owl.

Project implementation of **MM-FC-BIO-12** (Burrowing Owl Protocol Survey) would reduce potential direct impacts to a less-than-significant level through a habitat assessment and focused surveys, avoidance and minimization measures, and/or compensatory mitigation. In addition, implementation of **MM-FC-BIO-7** (Pre-Construction Burrowing Owl Surveys and Avoidance) would reduce potential direct impacts to a less-than-significant level through avoidance of vegetation removal during the breeding season, performance of a pre-construction burrowing owl survey if vegetation is removed during the breeding season, and preparation of a Burrowing Owl Protection Plan if burrowing owl is detected during the pre-construction survey. Project implementation of **MM-FC-BIO-5** (Wildlife Movement) would ensure that there is conserved open space that could support relocated burrowing owl, if present. Therefore, direct impacts to burrowing owl would be **less than significant with mitigation incorporated**.

Loggerhead Shrike

Loggerhead shrike was not incidentally detected outside the focused survey area; however, this species has a moderate potential to occur outside the focused survey area. Future development in this area could result in the loss of up to 38.3 acres of potential habitat for loggerhead shrike. Phasing of the Project would allow for loggerhead shrike to disperse to vacant lands outside of construction zones. Adults of this species are very mobile and not susceptible to direct impacts from construction-related activities. However, the proposed Project could have a direct impact on bird nests, eggs, and young during vegetation removal. This impact would be significant absent mitigation.

Project implementation of **MM-FC-BIO-6** (Pre-Construction Nesting Bird Survey) would reduce potential direct impacts to a less-than-significant level through avoidance of vegetation removal during the nesting season and performance of a nesting bird survey if vegetation is removed during the nesting season. Therefore, direct impacts to loggerhead shrike would be **less than significant with mitigation incorporated**.

Riparian Birds (Least Bell’s Vireo and Yellow Warbler)

Least Bell’s vireo has a low potential to occur outside the focused survey area. Impacts to least Bell’s vireo would be significant absent mitigation. Future development outside the focused survey area contains 8.2 acres of potential habitat for least Bell’s vireo and has the potential to result in impacts to least Bell’s vireo through unintentional clearing, trampling, or grading outside of the construction zone. Any potential impact to a least Bell’s vireo would be significant absent mitigation.

Project implementation of **MM-SPE-11.3** (Least Bell’s Vireo), would require focused surveys to determine the presence or absence of this species within the proposed development Project site. In addition, Project implementation of **MM-FC-BIO-13** (Least Bell’s Vireo Protocol Survey) would reduce potential direct impacts to a less-than-significant level through a habitat assessment and focused surveys, avoidance, and minimization

measures, and/or compensatory mitigation. Therefore, direct impacts to least Bell's vireo would be **less than significant with mitigation incorporated**.

Yellow warbler was detected along Yucaipa Creek in 2022 and the study area contains some riparian and chaparral habitat that may be suitable for nesting. Future development outside the focused survey area would result in the loss of up to 8.2 acres of potential habitat for yellow warbler. Phasing of the Project would allow for yellow warbler to disperse to vacant lands outside of construction zones. Adults of this species are very mobile and not susceptible to direct impacts from construction-related activities. However, the proposed Project could have a direct impact on bird nests, eggs, and young during vegetation removal. This impact would be significant absent mitigation.

Project implementation of **MM-FC-BIO-6** (Pre-Construction Nesting Bird Survey) would reduce potential direct impacts to a less-than-significant level through avoidance of vegetation removal during the nesting season and performance of a nesting bird survey if vegetation is removed during the nesting season. Therefore, direct impacts to yellow warbler would be **less than significant with mitigation incorporated**.

Mammals

Fossorial Small Mammals (Dulzura Pocket Mouse, Northwestern San Diego Pocket Mouse, San Diego Desert Woodrat, and Los Angeles Pocket Mouse)

Special-status, fossorial small mammals were not incidentally detected outside the focused survey area; however, these species have a moderate potential to occur outside of the focused survey area. Future development of this area would result in the loss of up to 442.1 acres of potential habitat for fossorial small mammals, including Dulzura pocket mouse, northwestern San Diego pocket mouse, San Diego desert woodrat, and Los Angeles pocket mouse. When cumulatively evaluated with the proposed Project, the potential loss of this habitat from future development outside the focused survey area has potential to affect the local population dynamics of these species, if present. Adults of these species typically reside belowground during the daytime and therefore are susceptible to injury and mortality during construction activities. This impact would be significant absent mitigation.

Project implementation of **MM-FC-BIO-8** (Pre-Construction Clearance Surveys) would reduce potential direct impacts to a less-than-significant level by requiring a pre-construction survey for special-status wildlife species using appropriate methods, avoidance of these species where possible, and relocation of individuals that may be captured. Project implementation of **MM-FC-BIO-5** (Wildlife Movement) would ensure that there is conserved open space that could support relocated small mammals, if present, as well as offset impacts to potentially suitable habitat. Therefore, direct impacts to fossorial small mammals would be **less than significant with mitigation incorporated**.

Western Mastiff Bat

Western mastiff bat was incidentally detected outside the focused survey area; however, this species has a moderate potential to occur outside of the focused survey area. Future development of this area would result in the loss of up to 60.9 acres of potential foraging habitat (which includes roosting habitat) for western mastiff bat.

Individual adults of this species foraging on site are unlikely to be directly killed or injured during construction activities because they are highly mobile and only active at night. However, individuals could be killed or harmed if active roost sites were removed, either causing direct mortality or more likely causing abandonment during the day. Any direct impacts to individuals, including young, at roost sites, as a result of construction activities would also be significant.

Project implementation of **MM-FC-BIO-9** (Pre-Construction Bat Survey and Avoidance) would reduce potential direct impacts to a less-than-significant level by requiring a pre-construction survey for special-status bats using appropriate methods, avoidance of these species where possible, and maternity roost exclusion during the appropriate season. Project implementation of **MM-FC-BIO-5** (Wildlife Movement) would ensure that there is conserved open space that could support relocated small mammals, if present, as well as offset impacts to potentially suitable habitat. Therefore, direct impacts to western mastiff bat would be **less than significant with mitigation incorporated**.

American Badger

American badger was not incidentally detected outside the focused survey area; however, this portion of the Project site contains suitable habitat, and this species has a high potential to occur. Future development outside the focused survey area could result in the loss of up to 428.9 acres of potential habitat for American badger. When cumulatively evaluated with the proposed Project, the potential loss of this habitat outside the focused survey area has potential to affect the local population dynamics of this species, if present. In addition, adults of this species typically reside belowground and therefore are susceptible to injury and mortality during construction activities. The potential impacts to dens and loss or injury to individual American badgers are considered significant absent mitigation.

Project implementation of **MM-FC-BIO-10** (Pre-Construction American Badger Survey and Avoidance) would reduce potential direct impacts to a less-than-significant level through pre-construction surveys for winter and natal badger dens and, if present, implementation of avoidance measures to minimize impacts to badgers. Project implementation of **MM-FC-BIO-5** (Wildlife Movement) would ensure that there is conserved open space that could support relocated American badger, if present, as well as offset impacts to potentially suitable habitat. Therefore, direct impacts to American badger would be **less than significant with mitigation incorporated**.

Reptiles (Southern California Legless Lizard, California Glossy Snake, Coastal Tiger Whiptail, Red Diamondback Rattlesnake, Blainville’s Horned Lizard, and Coast Patch-Nosed Snake)

No special-status lizard or snake was incidentally detected outside of the focused survey area during 2022 surveys; however, this area contains suitable habitat for these species. Future development outside of the focused survey area could result in the loss of up to 481.1 acres of potential habitat for special-status lizards and snakes. When cumulatively evaluated with the proposed Project, the potential loss of this habitat from outside the focused survey area has potential to affect the local population dynamics of these species, if present. In addition, these species generally have low mobility to escape and therefore are susceptible to injury and mortality during construction activities. This impact would be significant absent mitigation.

Project implementation of **MM-FC-BIO-8** (Pre-Construction Clearance Surveys) would reduce potential direct impacts to a less-than-significant level by requiring a pre-construction survey for special-status wildlife species using appropriate methods, avoidance of these species where possible, and relocation of individuals that may be captured. In addition, for any non-listed special-status wildlife species occurring in construction areas, buffers would be established or, if establishing buffers is not feasible, attempts would be made to move the individuals to safety through capture and relocation or through encouraging them to leave the site. Project implementation of **MM-FC-BIO-5** (Wildlife Movement) would ensure that there is conserved open space that could support relocated special-status lizards and snakes, if present, as well as offset impacts to potentially suitable habitat. Therefore, direct impacts to special-status lizards and snakes would be **less than significant with mitigation incorporated**.

Invertebrates

Crotch Bumble Bee

No Crotch bumble bee or other *Bombus* sp. were incidentally detected during 2022 surveys; however, this species has a high potential to occur outside of the focused survey area. Future development outside the focused survey area could result in the loss of up to 481.1 acres of potential habitat for Crotch bumble bee. When cumulatively evaluated with the proposed Project, the potential loss of this habitat outside the focused survey area has potential to affect the local population dynamics of these species, if present. Although the Project site supports suitable floral resources within these communities, the actual area occupied by specific resources with potential to support the species is likely a much lower acreage. In addition, microhabitats, such as small mammal burrows where the species may nest, and debris and other loose matter suitable for hibernation, likely occur on site in more limited areas. Construction activities have the potential to crush active Crotch bumble bee nest colonies. The loss of active Crotch bumble bee nest colonies is considered significant absent mitigation.

Project implementation of **MM-FC-BIO-11** (Pre-Construction Survey for Crotch Bumble Bee) would require a pre-construction survey for Crotch bumble bee to ensure no nests for Crotch bumble bee are located within the construction area and provides avoidance measures if bees are detected during surveys. In addition, Project implementation of **MM-FC-BIO-5** (Wildlife Movement) would ensure that there is conserved open space that could support relocated special-status lizards and snakes, if present, as well as offset impacts to potentially suitable habitat. Therefore, direct impacts to Crotch bumble bee would be **less than significant with mitigation incorporated**.

Indirect Impacts

Project-Level Impacts

Pacific Oaks Commerce Center

Amphibians

Western Spadefoot

Western spadefoot has potential to occur within the Pacific Oaks Commerce Center project area and development has the potential to result in indirect impacts to this species.

Construction-Related: Potential short-term or temporary indirect impacts to western spadefoot resulting from construction activities include inadvertent spillover impacts, including unintentional clearing, trampling, or grading outside of the Project footprint; changes in hydrology resulting from construction, including sedimentation and erosion; the release of chemical pollutants; and adverse effects from noise and vibration. Western spadefoot is typically belowground, so impacts from generation of fugitive dust, increased human presence, and lighting during nighttime construction would be less than significant. The other potential construction-related indirect impacts to western spadefoot would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level through biological monitoring, requirement of a Worker Environmental Awareness Training that will cover the special-status resources and mitigation requirements for the Project, delineation of Project boundaries, development of a SWPPP, and requiring all vehicles and

equipment be serviced in designated staging areas. In addition, Project implementation of **MM-FC-BIO-4** (Pre-Construction Pond Check) would result in identification and relocation of any western spadefoot within areas potentially impacted by the Project, which would minimize indirect impacts from noise and vibration.

Implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) and **MM-FC-BIO-4** (Pre-Construction Pond Check) would minimize the effect of construction-related indirect impacts to western spadefoot to **less than significant with mitigation incorporated**.

Long-Term: Potential long-term indirect impacts that could result from development near western spadefoot or their suitable habitat include chemical releases such as oils and grease from vehicles that could degrade habitat; increased human presence that could lead to unauthorized access to potential habitat for western spadefoot; increased invasive plant species that may degrade habitat; and trampling of habitat and soil compaction by humans, which could affect soil moisture, water penetration, surface flows, and erosion. These potential long-term indirect impacts to western spadefoot would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level by requiring measures to ensure runoff is not altered from existing conditions and toxicants are not discharged, restoration of temporary impacts, preparation of landscaping plans that would emphasize native species and not include species from the Cal-IPC California Invasive Plant Inventory, and incorporation of barriers to prevent unauthorized public access to areas with potential habitat for western spadefoot.

Implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would minimize the effect of long-term indirect impacts to western spadefoot to **less than significant with mitigation incorporated**.

Birds

Fully Protected Raptors (White-Tailed Kite, Bald Eagle, and Golden Eagle)

Bald eagle may move through the study area but is not expected to nest or winter. Golden eagle has a moderate potential to forage within the study area, but has low potential to nest or winter. Indirect impacts to bald eagle and golden eagle from construction or long-term impacts are generally unlikely because they are not expected to nest or overwinter and due to their high mobility and access to adjacent habitat. Therefore, potential indirect impacts to bald eagle and golden eagle are **less than significant**.

White-tailed kite has potential to nest within the Pacific Oaks Commerce Center project area and because white-tailed kite is a state Fully Protected Species, any actions or activities that would result in injury and/or mortality to individuals of this species, including the loss of eggs or young within an active nest, would be a violation of Section 3511 of the CFGC and a significant impact under CEQA absent mitigation.

Construction-Related: Potential short-term or temporary indirect impacts to nesting white-tailed kite resulting from construction activities include adverse effects from noise, vibration, and increased human presence. These potential construction-related indirect impacts to white-tailed kite would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-6** (Pre-Construction Nesting Bird Survey) would reduce potential indirect impacts to a less-than-significant level through avoidance of vegetation removal during the nesting season and performance of a nesting bird survey if vegetation is removed during the nesting season. If nesting white-tailed kite

are identified, an adequate buffer would be implemented to ensure that effects from noise, vibration, and human presence are avoided.

Implementation of **MM-FC-BIO-6** (Pre-Construction Nesting Bird Survey) would minimize the effect of construction-related indirect impacts to nesting white-tailed kite to **less than significant with mitigation incorporated**.

Long-Term: White-tailed kite are relatively mobile and are expected to avoid the developed portions of the Project and instead occur within the proposed open space. For this reason, this species is not particularly susceptible to vehicle or building collisions. Therefore, long-term indirect impacts to white-tailed kite would be **less than significant**.

Burrowing Owl

Burrowing owl protocol surveys were negative within the focused survey area, which included an approximate 500-foot buffer of the Pacific Oaks Commerce Center project area. However, this transitive species may still occur during pre-construction surveys. Development of Pacific Oaks Commerce Center has the potential to result in indirect impacts to this species.

Construction-Related: Potential short-term or temporary indirect impacts to burrowing owl resulting from construction activities include the release of chemical pollutants; adverse effects from noise, vibration, and increased human presence; and nighttime lighting. These potential construction-related indirect impacts to burrowing owl would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-7** (Pre-Construction Burrowing Owl Surveys and Avoidance) would reduce potential indirect impacts to a less-than-significant level through avoidance of vegetation removal during the breeding season, performance of a pre-construction burrowing owl survey if vegetation is removed during the breeding season, and preparation of a Burrowing Owl Protection Plan if burrowing owl is detected during the pre-construction survey. If burrowing owl is identified, an adequate buffer would be implemented to ensure that effects from noise, vibration, and human presence are minimized. In addition, implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would minimize indirect impacts to burrowing owl through biological monitoring, requirement of a Worker Environmental Awareness Training that would cover the special-status resources and mitigation requirements for the Project, delineation of Project boundaries, requiring all vehicles and equipment be serviced in designated staging areas, and ensuring that construction will not be conducted at night.

Implementation of **MM-FC-BIO-7** (Pre-Construction Burrowing Owl Surveys and Avoidance) and **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would minimize the effect of construction-related indirect impacts to burrowing owl to **less than significant with mitigation incorporated**.

Long-Term: Potential long-term indirect impacts that could result from development near burrowing owl or their habitat include chemical releases such as oils and grease from vehicles that could degrade habitat, increased human presence that could lead to unauthorized access to potential habitat for burrowing owl, and increased invasive plant species that may degrade habitat. These potential long-term indirect impacts to burrowing owl would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level by requiring measures to ensure runoff is not altered from existing conditions and toxicants are not discharged, restoration of temporary impacts, preparation of landscaping

plans that would emphasize native species and not include species from the Cal-IPC California Invasive Plant Inventory, and incorporation of barriers to prevent unauthorized public access to areas with potential habitat for burrowing owl.

Implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would minimize the effect of long-term indirect impacts to burrowing owl to **less than significant with mitigation incorporated**.

Loggerhead Shrike

Loggerhead shrike has potential to nest within the Pacific Oaks Commerce Center project area and development has the potential to result in indirect impacts to this species.

Construction-Related: Potential short-term or temporary indirect impacts to loggerhead shrike resulting from construction activities include the release of chemical pollutants; adverse effects from noise, vibration, and increased human presence; and nighttime lighting. These potential construction-related indirect impacts to loggerhead shrike would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-6** (Pre-Construction Nesting Bird Survey) would reduce potential indirect impacts to a less-than-significant level through avoidance of vegetation removal during the nesting season and performance of a nesting bird survey if vegetation is removed during the nesting season. If nesting loggerhead shrike is identified, an adequate buffer would be implemented to ensure that effects from noise, vibration, and human presence are minimized. In addition, implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would minimize indirect impacts to loggerhead shrike through biological monitoring, requirement of a Worker Environmental Awareness Training that would cover the special-status resources and mitigation requirements for the Project, delineation of Project boundaries, requiring all vehicles and equipment be serviced in designated staging areas, and ensuring that construction would not be conducted at night.

Implementation of **MM-FC-BIO-6** (Pre-Construction Nesting Bird Survey) and **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would minimize the effect of construction-related indirect impacts to loggerhead shrike to **less than significant with mitigation incorporated**.

Long-Term: Loggerhead shrikes are relatively mobile and are not especially susceptible to impacts from vehicle or building collisions. Therefore, long-term indirect impacts to loggerhead shrikes would be **less than significant**.

Riparian Birds (Least Bell’s Vireo and Yellow Warbler)

Focused surveys for least Bell’s vireo in accordance with **MM-SPE-11.3** (Least Bell’s vireo) were negative within the focused survey area (i.e., the Pacific Oaks Commerce Center project area plus an approximately 500-foot buffer) in 2022. Therefore, **no indirect impacts** to this species are expected with Project implementation.

Yellow warbler was detected several times within the focused survey area along Yucaipa Creek in 2022 and the study area contains some riparian and chaparral habitat that may be suitable for nesting. Development of the Pacific Oaks Commerce Center project has the potential to result in indirect impacts to this species.

Construction-Related: Potential short-term or temporary indirect impacts to yellow warbler resulting from construction activities include the release of chemical pollutants; adverse effects from noise, vibration, and increased human presence; and nighttime lighting. These potential construction-related indirect impacts to yellow warbler would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-6** (Pre-Construction Nesting Bird Survey) would reduce potential indirect impacts to a less-than-significant level through avoidance of vegetation removal during the nesting season and performance of a nesting bird survey if vegetation is removed during the nesting season. If nesting yellow warbler is identified, an adequate buffer would be implemented to ensure that effects from noise, vibration, and human presence are minimized. In addition, implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would minimize indirect impacts to yellow warbler through biological monitoring, requirement of a Worker Environmental Awareness Training that would cover the special-status resources and mitigation requirements for the Project, delineation of Project boundaries, requiring all vehicles and equipment be serviced in designated staging areas, and ensuring that construction would not be conducted at night.

Implementation of **MM-FC-BIO-6** (Pre-Construction Nesting Bird Survey) and **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would minimize the effect of construction-related indirect impacts to yellow warbler to **less than significant with mitigation incorporated**.

Long-Term: Yellow warblers are relatively mobile and are not especially susceptible to impacts from vehicle or building collisions. Therefore, long-term indirect impacts to yellow warblers would be **less than significant**.

Mammals

Fossorial Small Mammals (Dulzura Pocket Mouse, Northwestern San Diego Pocket Mouse, San Diego Desert Woodrat, and Los Angeles Pocket Mouse)

Special-status fossorial small mammals have potential to occur within the Pacific Oaks Commerce Center project area and development has the potential to result in indirect impacts to these species.

Construction-Related: Potential short-term or temporary indirect impacts to fossorial small mammals resulting from construction activities include the release of chemical pollutants; generation of fugitive dust; adverse effects from noise, vibration, and increased human presence; and nighttime lighting. These potential construction-related indirect impacts to fossorial small mammals would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level through biological monitoring, requirement of a Worker Environmental Awareness Training that would cover the special-status resources and mitigation requirements for the Project, delineation of Project boundaries, development of a SWPPP, implementation of standard dust control measures, requiring all vehicles and equipment be serviced in designated staging areas, and ensuring that construction would not be conducted at night. In addition, Project implementation of **MM-FC-BIO-8** (Pre-Construction Clearance Surveys) would result in identification and relocation of any fossorial small mammals within areas potentially impacted by the Project, which would minimize indirect impacts from noise, vibration, and increased human presence.

Implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) and **MM-FC-BIO-8** (Pre-Construction Clearance Surveys) would minimize the effect of construction-related indirect impacts to fossorial small mammals to **less than significant with mitigation incorporated**.

Long-Term: Potential long-term indirect impacts that could result from development near fossorial small mammal species or their suitable habitat include chemical releases such as oils and grease from vehicles that could degrade habitat; increased human presence that could lead to unauthorized access to potential habitat for fossorial small mammals;

increased invasive plant species that may degrade habitat; trampling of vegetation and soil compaction by humans, which could affect soil moisture, water penetration, surface flows, and erosion; and nighttime lighting. These potential long-term indirect impacts to fossorial small mammals would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level by requiring measures to ensure runoff is not altered from existing conditions and toxicants are not discharged, restoration of temporary impacts, preparation of landscaping plans that would emphasize native species and not include species from the Cal-IPC California Invasive Plant Inventory, incorporation of barriers to prevent unauthorized public access to areas with potential habitat for fossorial small mammals, and stipulations that night-lighting would not be directed toward open space areas. In addition, **MM-FC-BIO-5** (Wildlife Movement) would further buffer effects of urbanization through conserved open space along drainage features.

Implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) and **MM-FC-BIO-5** (Wildlife Movement) would minimize the effect of long-term indirect impacts to fossorial small mammals to **less than significant with mitigation incorporated**.

Western Mastiff Bat

Western mastiff bat was not observed during 2022 surveys, but has a moderate potential to occur and there is suitable roosting habitat within the northwest portion of the study area. Project implementation has the potential to indirectly impact western mastiff bat.

Construction-Related: Potential short-term or temporary indirect impacts to western mastiff bat resulting from construction activities include the release of chemical pollutants; generation of fugitive dust; adverse effects from noise, vibration, and increased human presence; and nighttime lighting. These potential construction-related indirect impacts to western mastiff bat would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level through biological monitoring, requirement of a Worker Environmental Awareness Training that would cover the special-status resources and mitigation requirements for the Project, delineation of Project boundaries, development of a SWPPP, implementation of standard dust control measures, requiring all vehicles and equipment be serviced in designated staging areas, and ensuring that construction would not be conducted at night. In addition, Project implementation of **MM-FC-BIO-9** (Pre-Construction Bat Survey and Avoidance) would result in identification and relocation of any western mastiff bats within areas potentially impacted by the Project, which would minimize indirect impacts from noise, vibration, and increased human presence.

Implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) and **MM-FC-BIO-9** (Pre-Construction Bat Survey and Avoidance) would minimize the effect of construction-related indirect impacts to western mastiff bat to **less than significant with mitigation incorporated**.

Long-Term: Potential long-term indirect impacts that could result from development near roosting western mastiff bats include increased human presence that could lead to unauthorized access to potential habitat for western mastiff bat; increased invasive plant species that may degrade habitat; trampling of vegetation and soil compaction

by humans, which could affect soil moisture, water penetration, surface flows, and erosion; and nighttime lighting. These potential long-term indirect impacts to western mastiff bat would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level by requiring measures to ensure runoff is not altered from existing conditions and toxicants are not discharged, restoration of temporary impacts, preparation of landscaping plans that would emphasize native species and not include species from the Cal-IPC California Invasive Plant Inventory, incorporation of barriers to prevent unauthorized public access to areas with potential habitat for western mastiff bat, and stipulations that night-lighting would not be directed toward open space areas. In addition, **MM-FC-BIO-5** (Wildlife Movement) would further buffer effects of urbanization through establishment of conserved open space along Yucaipa Creek, Oak Glen Creek, and Yucaipa Creek's tributary.

Implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) and **MM-FC-BIO-5** (Wildlife Movement) would minimize the effect of long-term indirect impacts to fossorial small mammals to **less than significant with mitigation incorporated**.

American Badger

American badger has potential to occur within the Pacific Oaks Commerce Center project area and development has the potential to result in indirect impacts to this species.

Construction-Related: Potential short-term or temporary indirect impacts to American badger resulting from construction activities include the release of chemical pollutants; generation of fugitive dust; adverse effects from noise, vibration, and increased human presence; and nighttime lighting. These potential construction-related indirect impacts to American badger would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level through biological monitoring, requirement of a Worker Environmental Awareness Training that would cover the special-status resources and mitigation requirements for the Project, delineation of Project boundaries, development of a SWPPP, implementation of standard dust control measures, requiring all vehicles and equipment be serviced in designated staging areas, and ensuring that construction would not be conducted at night. In addition, Project implementation of **MM-FC-BIO-10** (Pre-Construction American Badger Survey and Avoidance) would result in identification and relocation of any American badger within areas potentially impacted by the Project, which would minimize indirect impacts from noise, vibration, and increased human presence.

Implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) and **MM-FC-BIO-10** (Pre-Construction American Badger Survey and Avoidance) would minimize the effect of construction-related indirect impacts to American badger to **less than significant with mitigation incorporated**.

Long-Term: Potential long-term indirect impacts that could result from development near American badger or their suitable habitat include chemical releases such as oils and grease from vehicles that could degrade habitat; increased human presence that could lead to unauthorized access to potential habitat for American badger; increased invasive plant species that may degrade habitat; trampling of vegetation and soil compaction by humans, which could affect soil moisture, water penetration, surface flows, and erosion; and nighttime lighting. These potential long-term indirect impacts to American badger would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level by requiring measures to ensure runoff is not altered from existing conditions and toxicants are not discharged, restoration of temporary impacts, preparation of landscaping plans that would emphasize native species and not include species from the Cal-IPC California Invasive Plant Inventory, incorporation of barriers to prevent unauthorized public access to areas with potential habitat for American badger, and stipulations that night-lighting would not be directed toward open space areas. In addition, **MM-FC-BIO-5** (Wildlife Movement) would further buffer effects of urbanization through establishment of conserved open space along Yucaipa Creek, Oak Glen Creek, and Yucaipa Creek’s tributary.

Implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) and **MM-FC-BIO-5** (Wildlife Movement) would minimize the effect of long-term indirect impacts to American badger to **less than significant with mitigation incorporated**.

Reptiles (Southern California Legless Lizard, California Glossy Snake, Coastal Tiger Whiptail, Red Diamondback Rattlesnake, Blainville’s Horned Lizard, and Coast Patch-Nosed Snake)

Special-status lizards and snakes have potential to occur within the Pacific Oaks Commerce Center project area and development has the potential to result in indirect impacts to these species.

Construction-Related: Potential short-term or temporary indirect impacts to lizards and snakes resulting from construction activities include the release of chemical pollutants; generation of fugitive dust; adverse effects from noise, vibration, and increased human presence; and nighttime lighting. These potential construction-related indirect impacts to lizards and snakes would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level through biological monitoring, requirement of a Worker Environmental Awareness Training that would cover the special-status resources and mitigation requirements for the Project, delineation of Project boundaries, development of a SWPPP, implementation of standard dust control measures, requiring all vehicles and equipment be serviced in designated staging areas, and ensuring that construction would not be conducted at night. In addition, Project implementation of **MM-FC-BIO-8** (Pre-Construction Clearance Surveys) would result in identification and relocation of any special-status lizards or snakes within areas potentially impacted by the Project, which would minimize indirect impacts from noise, vibration, and increased human presence.

Implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) and **MM-FC-BIO-8** (Pre-Construction Clearance Surveys) would minimize the effect of construction-related indirect impacts to special-status lizards and snakes to **less than significant with mitigation incorporated**.

Long-Term: Potential long-term indirect impacts that could result from development near lizards and snakes or their suitable habitat include chemical releases such as oils and grease from vehicles that could degrade habitat; increased human presence that could lead to unauthorized access to potential habitat for lizards and snakes; increased invasive plant species that may degrade habitat; trampling of vegetation and soil compaction by humans, which could affect soil moisture, water penetration, surface flows, and erosion; and nighttime lighting. These potential long-term indirect impacts to lizards and snakes would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level by requiring measures to ensure runoff is not altered from

existing conditions and toxicants are not discharged, restoration of temporary impacts, preparation of landscaping plans that would emphasize native species and not include species from the Cal-IPC California Invasive Plant Inventory, incorporation of barriers to prevent unauthorized public access to areas with potential habitat for special-status lizards and snakes, and stipulations that night-lighting would not be directed toward open space areas. In addition, **MM-FC-BIO-5** (Wildlife Movement) would further buffer effects of urbanization through establishment of conserved open space along Yucaipa Creek, Oak Glen Creek, and Yucaipa Creek’s tributary.

Implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) and **MM-FC-BIO-5** (Wildlife Movement) would minimize the effect of long-term indirect impacts to special-status lizards and snakes to **less than significant with mitigation incorporated**.

Crotch Bumble Bee

Crotch bumble bee have potential to occur within the Pacific Oaks Commerce Center project area and development has the potential to result in indirect impacts to this species.

Construction-Related: Potential short-term or temporary indirect impacts to Crotch bumble bee resulting from construction activities include the release of chemical pollutants; generation of fugitive dust; adverse effects from noise, vibration, and increased human presence; and nighttime lighting. These potential construction-related indirect impacts to Crotch bumble bee would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level through biological monitoring, requirement of a Worker Environmental Awareness Training that would cover the special-status resources and mitigation requirements for the Project, delineation of Project boundaries, development of a SWPPP, implementation of standard dust control measures, requiring all vehicles and equipment be serviced in designated staging areas, and ensuring that construction would not be conducted at night. In addition, Project implementation of **MM-FC-BIO-11** (Pre-Construction Survey for Crotch Bumble Bee) would require a pre-construction survey for Crotch bumble bee to ensure no nests for Crotch bumble bee are located within the construction area and provides avoidance measures if bees are detected during surveys, which would minimize indirect impacts from noise, vibration, and increased human presence.

Implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) and **MM-FC-BIO-11** (Pre-Construction Survey for Crotch Bumble Bee) would minimize the effect of construction-related indirect impacts to Crotch bumble bee to **less than significant with mitigation incorporated**.

Long-Term: Potential long-term indirect impacts that could result from development near Crotch bumble bee or its suitable habitat include chemical releases such as oils and grease from vehicles that could degrade habitat; increased human presence that could lead to unauthorized access to potential habitat for Crotch bumble bee; increased invasive plant species that may degrade habitat; trampling of vegetation and soil compaction by humans, which could affect soil moisture, water penetration, surface flows, and erosion; and nighttime lighting. These potential long-term indirect impacts to Crotch bumble bee would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level by requiring measures to ensure runoff is not altered from existing conditions and toxicants are not discharged, restoration of temporary impacts, preparation of landscaping plans that would emphasize native species and not include species from the Cal-IPC California Invasive Plant

Inventory, incorporation of barriers to prevent unauthorized public access to areas with potential habitat for Crotch bumble bee, and stipulations that night-lighting would not be directed toward open space areas. In addition, **MM-FC-BIO-5** (Wildlife Movement) would further buffer effects of urbanization through establishment of conserved open space along Yucaipa Creek, Oak Glen Creek, and Yucaipa Creek’s tributary.

Implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) and **MM-FC-BIO-5** (Wildlife Movement) would minimize the effect of long-term indirect impacts to Crotch bumble bee to **less than significant with mitigation incorporated**.

County Line Warehouse and Remaining Area of Planning Area BP6

Amphibians

No amphibians have a moderate to high potential to occur within the County Line Warehouse project site or within the remaining area of planning area BP6 (Tom Dodson & Associates 2022; Kidd Biological Inc. 2022). Therefore, **no indirect impacts** are expected to occur to special-status amphibians.

Birds

No special-status birds have potential to occur within the impact footprint for the remaining area of planning area BP6 (Kidd Biological Inc. 2022). Burrowing owl is the only special-status bird with potential (albeit low potential) to occur at the County Line Warehouse project site (Tom Dodson & Associates 2022).

Burrowing Owl

Although the County Line Warehouse project is not likely to impact burrowing owl, there is still a low potential for the Project site to become occupied by burrowing owl between the time the survey was conducted in May 2021 and the commencement of Project-related construction activities, and the Project has the potential to result in indirect impacts to this species.

Construction-Related: Potential short-term or temporary indirect impacts to burrowing owl resulting from construction activities include the release of chemical pollutants; adverse effects from noise, vibration, and increased human presence; and nighttime lighting. These potential construction-related indirect impacts to burrowing owl would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-7** (Pre-Construction Burrowing Owl Surveys and Avoidance) would reduce potential indirect impacts to a less-than-significant level through avoidance of vegetation removal during the breeding season, performance of a pre-construction burrowing owl survey if vegetation is removed during the breeding season, and preparation of a Burrowing Owl Protection Plan if burrowing owl is detected during the pre-construction survey. If burrowing owl is identified, an adequate buffer would be implemented to ensure that effects from noise, vibration, and human presence are minimized. In addition, implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would minimize indirect impacts to burrowing owl through biological monitoring, requirement of a Worker Environmental Awareness Training that would cover the special-status resources and mitigation requirements for the Project, delineation of Project boundaries, requiring all vehicles and equipment be serviced in designated staging areas, and ensuring that construction would not be conducted at night.

Implementation of **MM-FC-BIO-7** (Pre-Construction Burrowing Owl Surveys and Avoidance) and **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would minimize the effect of construction-related indirect impacts to burrowing owl to **less than significant with mitigation incorporated**.

Long-Term: Potential long-term indirect impacts that could result from development near burrowing owl or their habitat include chemical releases such as oils and grease from vehicles that could degrade habitat, increased human presence that could lead to unauthorized access to potential habitat for burrowing owl, and increased invasive plant species that may degrade habitat. These potential long-term indirect impacts to burrowing owl would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level by requiring measures to ensure runoff is not altered from existing conditions and toxicants are not discharged, restoration of temporary impacts, preparation of landscaping plans that would emphasize native species and not include species from the Cal-IPC California Invasive Plant Inventory, and incorporation of barriers to prevent unauthorized public access to areas with potential habitat for burrowing owl.

Implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would minimize the effect of long-term indirect impacts to burrowing owl to **less than significant with mitigation incorporated**.

Mammals

Fossorial Small Mammals (Northwestern San Diego Pocket Mouse)

No special-status mammals have a moderate to high potential to occur within the County Line Warehouse project site (Tom Dodson & Associates 2022). Northwestern San Diego pocket mouse has a moderate potential to forage within the remaining area of planning area BP6 impact footprint. Therefore, the project has the potential to result in indirect impacts to this species.

Construction-Related: Potential short-term or temporary indirect impacts to northwestern San Diego pocket mouse resulting from construction activities include the release of chemical pollutants; generation of fugitive dust; adverse effects from noise, vibration, and increased human presence; and nighttime lighting. These potential construction-related indirect impacts to northwestern San Diego pocket mouse would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level through biological monitoring, requirement of a Worker Environmental Awareness Training that would cover the special-status resources and mitigation requirements for the Project, delineation of Project boundaries, development of a SWPPP, implementation of standard dust control measures, requiring all vehicles and equipment be serviced in designated staging areas, and ensuring that construction would not be conducted at night. In addition, Project implementation of **MM-FC-BIO-8** (Pre-Construction Clearance Surveys) would result in identification and relocation of any northwestern San Diego pocket mouse within areas potentially impacted by the Project, which would minimize indirect impacts from noise, vibration, and increased human presence.

Implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) and **MM-FC-BIO-8** (Pre-Construction Clearance Surveys) would minimize the effect of construction-related indirect impacts to northwestern San Diego pocket mouse to **less than significant with mitigation incorporated**.

Long-Term: Potential long-term indirect impacts that could result from development near northwestern San Diego pocket mouse or their suitable habitat include chemical releases such as oils and grease from vehicles that could degrade habitat; increased human presence that could lead to unauthorized access to potential habitat for northwestern San Diego pocket mouse; increased invasive plant species that may degrade habitat; trampling of vegetation and soil compaction by humans, which could affect soil moisture, water penetration, surface flows, and erosion; and nighttime lighting. These potential long-term indirect impacts to northwestern San Diego pocket mouse would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level by requiring measures to ensure runoff is not altered from existing conditions and toxicants are not discharged, restoration of temporary impacts, preparation of landscaping plans that would emphasize native species and not include species from the Cal-IPC California Invasive Plant Inventory, incorporation of barriers to prevent unauthorized public access to areas with potential habitat for northwestern San Diego pocket mouse, and stipulations that night-lighting would not be directed toward open space areas. In addition, **MM-FC-BIO-5** (Wildlife Movement) would further buffer effects of urbanization through establishment of conserved open space along Yucaipa Creek, Oak Glen Creek, and Yucaipa Creek’s tributary.

Implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) and **MM-FC-BIO-5** (Wildlife Movement) would minimize the effect of long-term indirect impacts to northwestern San Diego pocket mouse to **less than significant with mitigation incorporated**.

Reptiles

Lizard and Snakes (Red Diamondback Rattlesnake, Blainville’s Horned Lizard, Coast Patch-Nosed Snake)

No special-status reptiles are expected to occur within the County Line Warehouse project site (Tom Dodson & Associates 2022). Red diamondback rattlesnake, Blainville’s horned lizard, coast patch-nosed snake have a moderate potential to occur within the remaining area of planning area BP6 impact footprint. Development has the potential to result in indirect impacts to these species.

Construction-Related: Potential short-term or temporary indirect impacts to lizards and snakes resulting from construction activities include the release of chemical pollutants; generation of fugitive dust; adverse effects from noise, vibration, and increased human presence; and nighttime lighting. These potential construction-related indirect impacts to lizards and snakes would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level through biological monitoring, requirement of a Worker Environmental Awareness Training that would cover the special-status resources and mitigation requirements for the Project, delineation of Project boundaries, development of a SWPPP, implementation of standard dust control measures, requiring all vehicles and equipment be serviced in designated staging areas, and ensuring that construction would not be conducted at night. In addition, Project implementation of **MM-FC-BIO-8** (Pre-Construction Clearance Surveys) would result in identification and relocation of any special-status lizards or snakes within areas potentially impacted by the Project, which would minimize indirect impacts from noise, vibration, and increased human presence.

Implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) and **MM-FC-BIO-8** (Pre-Construction Clearance Surveys) would minimize the effect of construction-related indirect impacts to special-status lizards and snakes to **less than significant with mitigation incorporated**.

Long-Term: Potential long-term indirect impacts that could result from development near lizards and snakes or their suitable habitat include chemical releases such as oils and grease from vehicles that could degrade habitat; increased human presence that could lead to unauthorized access to potential habitat for lizards and snakes; increased invasive plant species that may degrade habitat; trampling of vegetation and soil compaction by humans, which could affect soil moisture, water penetration, surface flows, and erosion; and nighttime lighting. These potential long-term indirect impacts to lizards and snakes would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level by requiring measures to ensure runoff is not altered from existing conditions and toxicants are not discharged, restoration of temporary impacts, preparation of landscaping plans that would emphasize native species and not include species from the Cal-IPC California Invasive Plant Inventory, incorporation of barriers to prevent unauthorized public access to areas with potential habitat for special-status lizards and snakes, and stipulations that night-lighting would not be directed toward open space areas. In addition, **MM-FC-BIO-5** (Wildlife Movement) would further buffer effects of urbanization through establishment of conserved open space along Yucaipa Creek, Oak Glen Creek, and Yucaipa Creek’s tributary.

Implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) and **MM-FC-BIO-5** (Wildlife Movement) would minimize the effect of long-term indirect impacts to special-status lizards and snakes to **less than significant with mitigation incorporated**.

Crotch Bumble Bee

Crotch bumble bee has a low potential to occur within the County Line Warehouse project site due to the absence of appropriate nectar resources (Tom Dodson & Associates 2022). Crotch bumble bee has a moderate potential to occur within the remaining area of planning area BP6 impact footprint as there are suitable burrows and nectar sources. Development has the potential to result in indirect impacts to this species.

Construction-Related: Potential short-term or temporary indirect impacts to Crotch bumble bee resulting from construction activities include the release of chemical pollutants; generation of fugitive dust; adverse effects from noise, vibration, and increased human presence; and nighttime lighting. These potential construction-related indirect impacts to Crotch bumble bee would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level through biological monitoring, requirement of a Worker Environmental Awareness Training that would cover the special-status resources and mitigation requirements for the Project, delineation of Project boundaries, development of a SWPPP, implementation of standard dust control measures, requiring all vehicles and equipment be serviced in designated staging areas, and ensuring that construction would not be conducted at night. In addition, Project implementation of **MM-FC-BIO-11** (Pre-Construction Survey for Crotch Bumble Bee) would require a pre-construction survey for Crotch bumble bee to ensure no nests for Crotch bumble bee are located within the construction area and provides avoidance measures if bees are detected during surveys, which would minimize indirect impacts from noise, vibration, and increased human presence.

Implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) and **MM-FC-BIO-11** (Pre-Construction Survey for Crotch Bumble Bee) would minimize the effect of construction-related indirect impacts to Crotch bumble bee to **less than significant with mitigation incorporated**.

Long-Term: Potential long-term indirect impacts that could result from development near Crotch bumble bee or its suitable habitat include chemical releases such as oils and grease from vehicles that could degrade habitat; increased human presence that could lead to unauthorized access to potential habitat for Crotch bumble bee; increased invasive plant species that may degrade habitat; trampling of vegetation and soil compaction by humans, which could affect soil moisture, water penetration, surface flows, and erosion; and nighttime lighting. These potential long-term indirect impacts to Crotch bumble bee would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level by requiring measures to ensure runoff is not altered from existing conditions and toxicants are not discharged, restoration of temporary impacts, preparation of landscaping plans that would emphasize native species and not include species from the Cal-IPC California Invasive Plant Inventory, incorporation of barriers to prevent unauthorized public access to areas with potential habitat for Crotch bumble bee, and stipulations that night-lighting would not be directed toward open space areas. In addition, **MM-FC-BIO-5** (Wildlife Movement) would further buffer effects of urbanization through establishment of conserved open space along Yucaipa Creek, Oak Glen Creek, and Yucaipa Creek’s tributary.

Implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) and **MM-FC-BIO-5** (Wildlife Movement) would minimize the effect of long-term indirect impacts to Crotch bumble bee to **less than significant with mitigation incorporated**.

Program-Level Impacts

Within Focused Survey Area

Amphibians

Western Spadefoot

Western spadefoot has a moderate potential to occur outside the focused survey area and future development has the potential to result in indirect impacts to this species.

Construction-Related: Potential short-term or temporary indirect impacts to western spadefoot resulting from construction activities include inadvertent spillover impacts, including unintentional clearing, trampling, or grading outside of the Project footprint; changes in hydrology resulting from construction, including sedimentation and erosion; the release of chemical pollutants; and adverse effects from noise and vibration. Western spadefoot is typically belowground, so impacts from generation of fugitive dust, increased human presence, and lighting during nighttime construction would be less than significant. The other potential construction-related indirect impacts to western spadefoot would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level through biological monitoring, requirement of a Worker Environmental Awareness Training that would cover the special-status resources and mitigation requirements for the Project, delineation of Project boundaries, development of a SWPPP, and requiring all vehicles

and equipment be serviced in designated staging areas. In addition, Project implementation of **MM-FC-BIO-4** (Pre-Construction Pond Check) would result in identification and relocation of any western spadefoot within areas potentially impacted by the Project, which would minimize indirect impacts from noise and vibration.

Implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) and **MM-FC-BIO-4** (Pre-Construction Pond Check) would minimize the effect of construction-related indirect impacts to western spadefoot to **less than significant with mitigation incorporated**.

Long-Term: Potential long-term indirect impacts that could result from development near western spadefoot or their suitable habitat include chemical releases such as oils and grease from vehicles that could degrade habitat; increased human presence that could lead to unauthorized access to potential habitat for western spadefoot; increased invasive plant species that may degrade habitat; and trampling of habitat and soil compaction by humans, which could affect soil moisture, water penetration, surface flows, and erosion. These potential long-term indirect impacts to western spadefoot would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level by requiring measures to ensure runoff is not altered from existing conditions and toxicants are not discharged, restoration of temporary impacts, preparation of landscaping plans that would emphasize native species and not include species from the Cal-IPC California Invasive Plant Inventory, and incorporation of barriers to prevent unauthorized public access to areas with potential habitat for western spadefoot.

Implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would minimize the effect of long-term indirect impacts to western spadefoot to **less than significant with mitigation incorporated**.

Birds

Fully Protected Raptors (White-Tailed Kite, Golden Eagle, Bald Eagle)

Bald eagle may move through the study area but is not expected to nest or winter. Golden eagle has a moderate potential to forage within the study area, but has low potential to nest or winter. Indirect impacts to bald eagle and golden eagle from construction or long-term impacts are generally unlikely because they are not expected to nest or overwinter and due to their high mobility and access to adjacent habitat. Therefore, potential indirect impacts to bald eagle and golden eagle are **less than significant**.

White-tailed kite has potential to nest outside the focused survey area and because white-tailed kite is a state Fully Protected Species, any actions or activities that would result in injury and/or mortality to individuals of this species, including the loss of eggs or young within an active nest, would be a violation of Section 3511 of the CFGC and a significant impact under CEQA absent mitigation.

Construction-Related: Potential short-term or temporary indirect impacts to nesting white-tailed kite resulting from construction activities include adverse effects from noise, vibration, and increased human presence. These potential construction-related indirect impacts to white-tailed kite would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-6** (Pre-Construction Nesting Bird Survey) would reduce potential indirect impacts to a less-than-significant level through avoidance of vegetation removal during the nesting season and performance of a nesting bird survey if vegetation is removed during the nesting season. If nesting white-tailed kite

are identified, an adequate buffer would be implemented to ensure that effects from noise, vibration, and human presence are avoided.

Implementation of **MM-FC-BIO-6** (Pre-Construction Nesting Bird Survey) would minimize the effect of construction-related indirect impacts to nesting white-tailed kite to **less than significant with mitigation incorporated**.

Long-Term: White-tailed kite are relatively mobile and are expected to avoid the developed portions of the Project and instead occur within the proposed open space. For this reason, this species is not particularly susceptible to vehicle or building collisions. Therefore, long-term indirect impacts to white-tailed kite would be **less than significant**.

Burrowing Owl

Protocol surveys for burrowing owl conducted in accordance with **MM-SPE-B-11.6** (Western burrowing owl) in 2022 as a part of the proposed Project were negative within the focused survey area. However, potentially suitable burrows were mapped within the study area. Therefore, future development has the potential to result in indirect impacts to this species.

Construction-Related: Potential short-term or temporary indirect impacts to burrowing owl resulting from construction activities include the release of chemical pollutants; adverse effects from noise, vibration, and increased human presence; and nighttime lighting. These potential construction-related indirect impacts to burrowing owl would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-7** (Pre-Construction Burrowing Owl Surveys and Avoidance) would reduce potential indirect impacts to a less-than-significant level through avoidance of vegetation removal during the breeding season, performance of a pre-construction burrowing owl survey if vegetation is removed during the breeding season, and preparation of a Burrowing Owl Protection Plan if burrowing owl is detected during the pre-construction survey. If burrowing owl is identified, an adequate buffer would be implemented to ensure that effects from noise, vibration, and human presence are minimized. In addition, implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would minimize indirect impacts to burrowing owl through biological monitoring, requirement of a Worker Environmental Awareness Training that would cover the special-status resources and mitigation requirements for the Project, delineation of Project boundaries, requiring all vehicles and equipment be serviced in designated staging areas, and ensuring that construction would not be conducted at night.

Implementation of **MM-FC-BIO-7** (Pre-Construction Burrowing Owl Surveys and Avoidance) and **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would minimize the effect of construction-related indirect impacts to burrowing owl to **less than significant with mitigation incorporated**.

Long-Term: Potential long-term indirect impacts that could result from development near burrowing owl or their habitat include chemical releases such as oils and grease from vehicles that could degrade habitat, increased human presence that could lead to unauthorized access to potential habitat for burrowing owl, and increased invasive plant species that may degrade habitat. These potential long-term indirect impacts to burrowing owl would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level by requiring measures to ensure runoff is not altered from existing conditions and toxicants are not discharged, restoration of temporary impacts, preparation of landscaping

plans that would emphasize native species and not include species from the Cal-IPC California Invasive Plant Inventory, and incorporation of barriers to prevent unauthorized public access to areas with potential habitat for burrowing owl.

Implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would minimize the effect of long-term indirect impacts to burrowing owl to **less than significant with mitigation incorporated**.

Loggerhead Shrike

Loggerhead shrike has potential to nest within the focused survey area, and future development has the potential to result in indirect impacts to this species.

Construction-Related: Potential short-term or temporary indirect impacts to loggerhead shrike resulting from construction activities include the release of chemical pollutants; adverse effects from noise, vibration, and increased human presence; and nighttime lighting. These potential construction-related indirect impacts to loggerhead shrike would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-6** (Pre-Construction Nesting Bird Survey) would reduce potential indirect impacts to a less-than-significant level through avoidance of vegetation removal during the nesting season and performance of a nesting bird survey if vegetation is removed during the nesting season. If nesting loggerhead shrike is identified, an adequate buffer would be implemented to ensure that effects from noise, vibration, and human presence are minimized. In addition, implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would minimize indirect impacts to loggerhead shrike through biological monitoring, requirement of a Worker Environmental Awareness Training that would cover the special-status resources and mitigation requirements for the Project, delineation of Project boundaries, requiring all vehicles and equipment be serviced in designated staging areas, and ensuring that construction would not be conducted at night.

Implementation of **MM-FC-BIO-6** (Pre-Construction Nesting Bird Survey) and **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would minimize the effect of construction-related indirect impacts to loggerhead shrike to **less than significant with mitigation incorporated**.

Long-Term: Loggerhead shrikes are relatively mobile and are not especially susceptible to impacts from vehicle or building collisions. Therefore, long-term indirect impacts to loggerhead shrikes would be **less than significant**.

Riparian Birds (Least Bell’s Vireo and Yellow Warbler)

Focused surveys for least Bell’s vireo in accordance with MM-SPE-11.3 were negative within the focused survey area in 2022. Therefore, **no impacts** to this species are expected with Project implementation. Yellow warbler was observed within the study area in 2022 and future development has the potential to result in indirect impacts to this species.

Construction-Related: Potential short-term or temporary indirect impacts to yellow warbler resulting from construction activities include the release of chemical pollutants; adverse effects from noise, vibration, and increased human presence; and nighttime lighting. These potential construction-related indirect impacts to yellow warbler would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-6** (Pre-Construction Nesting Bird Survey) would reduce potential indirect impacts to least Bell’s vireo and yellow warbler to a less-than-significant level through avoidance of vegetation removal during the nesting season and performance of a nesting bird survey if vegetation is removed during the nesting season. If nesting yellow warbler is identified, an adequate buffer would be implemented to ensure that effects from noise, vibration, and human presence are minimized. In addition, implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would minimize indirect impacts to yellow warbler through biological monitoring, requirement of a Worker Environmental Awareness Training that would cover the special-status resources and mitigation requirements for the Project, delineation of Project boundaries, requiring all vehicles and equipment be serviced in designated staging areas, and ensuring that construction would not be conducted at night.

Implementation of **MM-FC-BIO-6** (Pre-Construction Nesting Bird Survey) and **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would minimize the effect of construction-related indirect impacts to yellow warbler to **less than significant with mitigation incorporated**.

Long-Term: Yellow warblers are relatively mobile and are not especially susceptible to impacts from vehicle or building collisions. Therefore, long-term indirect impacts to yellow warblers would be **less than significant**.

Mammals

Fossorial Small Mammals (Dulzura Pocket Mouse, Northwestern San Diego Pocket Mouse, San Diego Desert Woodrat, and Los Angeles Pocket Mouse)

Special-status fossorial small mammals have potential to occur within the focused survey area and future development has the potential to result in indirect impacts to these species.

Construction-Related: Potential short-term or temporary indirect impacts to fossorial small mammals resulting from construction activities include the release of chemical pollutants; generation of fugitive dust; adverse effects from noise, vibration, and increased human presence; and nighttime lighting. These potential construction-related indirect impacts to fossorial small mammals would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level through biological monitoring, requirement of a Worker Environmental Awareness Training that would cover the special-status resources and mitigation requirements for the Project, delineation of Project boundaries, development of a SWPPP, implementation of standard dust control measures, requiring all vehicles and equipment be serviced in designated staging areas, and ensuring that construction would not be conducted at night. In addition, Project implementation of **MM-FC-BIO-8** (Pre-Construction Clearance Surveys) would result in identification and relocation of any fossorial small mammals within areas potentially impacted by the Project, which would minimize indirect impacts from noise, vibration, and increased human presence.

Implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) and **MM-FC-BIO-8** (Pre-Construction Clearance Surveys) would minimize the effect of construction-related indirect impacts to fossorial small mammals to **less than significant with mitigation incorporated**.

Long-Term: Potential long-term indirect impacts that could result from development near fossorial small mammal species or their suitable habitat include chemical releases such as oils and grease from vehicles that could degrade

habitat; increased human presence that could lead to unauthorized access to potential habitat for fossorial small mammals; increased invasive plant species that may degrade habitat; trampling of vegetation and soil compaction by humans, which could affect soil moisture, water penetration, surface flows, and erosion; and nighttime lighting. These potential long-term indirect impacts to fossorial small mammals would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level by requiring measures to ensure runoff is not altered from existing conditions and toxicants are not discharged, restoration of temporary impacts, preparation of landscaping plans that would emphasize native species and not include species from the Cal-IPC California Invasive Plant Inventory, incorporation of barriers to prevent unauthorized public access to areas with potential habitat for fossorial small mammals, and stipulations that night-lighting would not be directed toward open space areas. In addition, **MM-FC-BIO-5** (Wildlife Movement) would further buffer effects of urbanization through establishment of conserved open space along Yucaipa Creek, Oak Glen Creek, and Yucaipa Creek’s tributary.

Implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) and **MM-FC-BIO-5** (Wildlife Movement) would minimize the effect of long-term indirect impacts to fossorial small mammals to **less than significant with mitigation incorporated**.

Western Mastiff Bat

Western mastiff bat was not observed during 2022 surveys, but has a moderate potential to occur and there is suitable roosting habitat within the northwest portion of the study area. Future development has the potential to indirectly impact western mastiff bat.

Construction-Related: Potential short-term or temporary indirect impacts to western mastiff bat resulting from construction activities include the release of chemical pollutants; generation of fugitive dust; adverse effects from noise, vibration, and increased human presence; and nighttime lighting. These potential construction-related indirect impacts to western mastiff bat would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level through biological monitoring, requirement of a Worker Environmental Awareness Training that would cover the special-status resources and mitigation requirements for the Project, delineation of Project boundaries, development of a SWPPP, implementation of standard dust control measures, requiring all vehicles and equipment be serviced in designated staging areas, and ensuring that construction would not be conducted at night. In addition, Project implementation of **MM-FC-BIO-9** (Pre-Construction Bat Survey and Avoidance) would result in identification and relocation of any western mastiff bats within areas potentially impacted by the Project, which would minimize indirect impacts from noise, vibration, and increased human presence.

Implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) and **MM-FC-BIO-9** (Pre-Construction Bat Survey and Avoidance) would minimize the effect of construction-related indirect impacts to western mastiff bat to **less than significant with mitigation incorporated**.

Long-Term: Potential long-term indirect impacts that could result from development near roosting western mastiff bats include increased human presence that could lead to unauthorized access to potential habitat for western mastiff bat; increased invasive plant species that may degrade habitat; trampling of vegetation and soil compaction

by humans, which could affect soil moisture, water penetration, surface flows, and erosion; and nighttime lighting. These potential long-term indirect impacts to western mastiff bat would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level by requiring measures to ensure runoff is not altered from existing conditions and toxicants are not discharged, restoration of temporary impacts, preparation of landscaping plans that would emphasize native species and not include species from the Cal-IPC California Invasive Plant Inventory, incorporation of barriers to prevent unauthorized public access to areas with potential habitat for western mastiff bat, and stipulations that night-lighting would not be directed toward open space areas. In addition, **MM-FC-BIO-5** (Wildlife Movement) would further buffer effects of urbanization through establishment of conserved open space along Yucaipa Creek, Oak Glen Creek, and Yucaipa Creek's tributary.

Implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) and **MM-FC-BIO-5** (Wildlife Movement) would minimize the effect of long-term indirect impacts to fossorial small mammals to **less than significant with mitigation incorporated**.

American Badger

American badger has high potential to occur within the focused survey area and future development has the potential to result in indirect impacts to this species.

Construction-Related: Potential short-term or temporary indirect impacts to American badger resulting from construction activities include the release of chemical pollutants; generation of fugitive dust; adverse effects from noise, vibration, and increased human presence; and nighttime lighting. These potential construction-related indirect impacts to American badger would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level through biological monitoring, requirement of a Worker Environmental Awareness Training that would cover the special-status resources and mitigation requirements for the Project, delineation of Project boundaries, development of a SWPPP, implementation of standard dust control measures, requiring all vehicles and equipment be serviced in designated staging areas, and ensuring that construction would not be conducted at night. In addition, Project implementation of **MM-FC-BIO-10** (Pre-Construction American Badger Survey and Avoidance) would result in identification and relocation of any American badger within areas potentially impacted by the Project, which would minimize indirect impacts from noise, vibration, and increased human presence.

Implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) and **MM-FC-BIO-10** (Pre-Construction American Badger Survey and Avoidance) would minimize the effect of construction-related indirect impacts to American badger to **less than significant with mitigation incorporated**.

Long-Term: Potential long-term indirect impacts that could result from development near American badger or their suitable habitat include chemical releases such as oils and grease from vehicles that could degrade habitat; increased human presence that could lead to unauthorized access to potential habitat for American badger; increased invasive plant species that may degrade habitat; trampling of vegetation and soil compaction by humans, which could affect soil moisture, water penetration, surface flows, and erosion; and nighttime lighting. These potential long-term indirect impacts to American badger would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level by requiring measures to ensure runoff is not altered from existing conditions and toxicants are not discharged, restoration of temporary impacts, preparation of landscaping plans that would emphasize native species and not include species from the Cal-IPC California Invasive Plant Inventory, incorporation of barriers to prevent unauthorized public access to areas with potential habitat for American badger, and stipulations that night-lighting would not be directed toward open space areas. In addition, **MM-FC-BIO-5** (Wildlife Movement) would further buffer effects of urbanization through establishment of conserved open space along Yucaipa Creek, Oak Glen Creek, and Yucaipa Creek’s tributary.

Implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) and **MM-FC-BIO-5** (Wildlife Movement) would minimize the effect of long-term indirect impacts to American badger to **less than significant with mitigation incorporated**.

Reptiles (Southern California Legless Lizard, California Glossy Snake, Coastal Tiger Whiptail, Red Diamondback Rattlesnake, Blainville’s Horned Lizard, and Coast Patch-Nosed Snake)

Special-status lizards and snakes have potential to occur within the focused survey area and future development has the potential to result in indirect impacts to these species.

Construction-Related: Potential short-term or temporary indirect impacts to lizards and snakes resulting from construction activities include the release of chemical pollutants; generation of fugitive dust; adverse effects from noise, vibration, and increased human presence; and nighttime lighting. These potential construction-related indirect impacts to lizards and snakes would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level through biological monitoring, requirement of a Worker Environmental Awareness Training that would cover the special-status resources and mitigation requirements for the Project, delineation of Project boundaries, development of a SWPPP, implementation of standard dust control measures, requiring all vehicles and equipment be serviced in designated staging areas, and ensuring that construction would not be conducted at night. In addition, Project implementation of **MM-FC-BIO-8** (Pre-Construction Clearance Surveys) would result in identification and relocation of any special-status lizards or snakes within areas potentially impacted by the Project, which would minimize indirect impacts from noise, vibration, and increased human presence.

Implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) and **MM-FC-BIO-8** (Pre-Construction Clearance Surveys) would minimize the effect of construction-related indirect impacts to special-status lizards and snakes to **less than significant with mitigation incorporated**.

Long-Term: Potential long-term indirect impacts that could result from development near lizards and snakes or their suitable habitat include chemical releases such as oils and grease from vehicles that could degrade habitat; increased human presence that could lead to unauthorized access to potential habitat for lizards and snakes; increased invasive plant species that may degrade habitat; trampling of vegetation and soil compaction by humans, which could affect soil moisture, water penetration, surface flows, and erosion; and nighttime lighting. These potential long-term indirect impacts to lizards and snakes would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level by requiring measures to ensure runoff is not altered from

existing conditions and toxicants are not discharged, restoration of temporary impacts, preparation of landscaping plans that would emphasize native species and not include species from the Cal-IPC California Invasive Plant Inventory, incorporation of barriers to prevent unauthorized public access to areas with potential habitat for special-status lizards and snakes, and stipulations that night-lighting would not be directed toward open space areas. In addition, **MM-FC-BIO-5** (Wildlife Movement) would further buffer effects of urbanization through establishment of conserved open space along Yucaipa Creek, Oak Glen Creek, and Yucaipa Creek’s tributary.

Implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) and **MM-FC-BIO-5** (Wildlife Movement) would minimize the effect of long-term indirect impacts to special-status lizards and snakes to **less than significant with mitigation incorporated**.

Invertebrates

Crotch Bumble Bee

Crotch bumble bee have potential to occur within the focused survey area and future development has the potential to result in indirect impacts to this species.

Construction-Related: Potential short-term or temporary indirect impacts to Crotch bumble bee resulting from construction activities include the release of chemical pollutants; generation of fugitive dust; adverse effects from noise, vibration, and increased human presence; and nighttime lighting. These potential construction-related indirect impacts to Crotch bumble bee would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level through biological monitoring, requirement of a Worker Environmental Awareness Training that would cover the special-status resources and mitigation requirements for the Project, delineation of Project boundaries, development of a SWPPP, implementation of standard dust control measures, requiring all vehicles and equipment be serviced in designated staging areas, and ensuring that construction would not be conducted at night. In addition, Project implementation of **MM-FC-BIO-11** (Pre-Construction Survey for Crotch Bumble Bee) would require a pre-construction survey for Crotch bumble bee to ensure no nests for Crotch bumble bee are located within the construction area and provides avoidance measures if bees are detected during surveys, which would minimize indirect impacts from noise, vibration, and increased human presence.

Implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) and **MM-FC-BIO-11** (Pre-Construction Survey for Crotch Bumble Bee) would minimize the effect of construction-related indirect impacts to Crotch bumble bee to **less than significant with mitigation incorporated**.

Long-Term: Potential long-term indirect impacts that could result from development near Crotch bumble bee or its suitable habitat include chemical releases such as oils and grease from vehicles that could degrade habitat; increased human presence that could lead to unauthorized access to potential habitat for Crotch bumble bee; increased invasive plant species that may degrade habitat; trampling of vegetation and soil compaction by humans, which could affect soil moisture, water penetration, surface flows, and erosion; and nighttime lighting. These potential long-term indirect impacts to Crotch bumble bee would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level by requiring measures to ensure runoff is not altered from

existing conditions and toxicants are not discharged, restoration of temporary impacts, preparation of landscaping plans that would emphasize native species and not include species from the Cal-IPC California Invasive Plant Inventory, incorporation of barriers to prevent unauthorized public access to areas with potential habitat for Crotch bumble bee, and stipulations that night-lighting would not be directed toward open space areas. In addition, **MM-FC-BIO-5** (Wildlife Movement) would further buffer effects of urbanization through establishment of conserved open space along Yucaipa Creek, Oak Glen Creek, and Yucaipa Creek’s tributary.

Implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) and **MM-FC-BIO-5** (Wildlife Movement) would minimize the effect of long-term indirect impacts to Crotch bumble bee to **less than significant with mitigation incorporated**.

Outside Focused Survey Area

Amphibians

Western Spadefoot

Western spadefoot has a moderate potential to occur outside the focused survey area and future development has the potential to result in indirect impacts to this species.

Construction-Related: Potential short-term or temporary indirect impacts to western spadefoot resulting from construction activities include inadvertent spillover impacts, including unintentional clearing, trampling, or grading outside of the Project footprint; changes in hydrology resulting from construction, including sedimentation and erosion; the release of chemical pollutants; and adverse effects from noise and vibration. Western spadefoot is typically belowground, so impacts from generation of fugitive dust, increased human presence, and lighting during nighttime construction would be less than significant. The other potential construction-related indirect impacts to western spadefoot would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level through biological monitoring, requirement of a Worker Environmental Awareness Training that would cover the special-status resources and mitigation requirements for the Project, delineation of Project boundaries, development of a SWPPP, and requiring all vehicles and equipment be serviced in designated staging areas. In addition, Project implementation of **MM-FC-BIO-4** (Pre-Construction Pond Check) would result in identification and relocation of any western spadefoot within areas potentially impacted by the Project, which would minimize indirect impacts from noise and vibration.

Implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) and **MM-FC-BIO-4** (Pre-Construction Pond Check) would minimize the effect of construction-related indirect impacts to western spadefoot to **less than significant with mitigation incorporated**.

Long-Term: Potential long-term indirect impacts that could result from development near western spadefoot or their suitable habitat include chemical releases such as oils and grease from vehicles that could degrade habitat; increased human presence that could lead to unauthorized access to potential habitat for western spadefoot; increased invasive plant species that may degrade habitat; and trampling of habitat and soil compaction by humans, which could affect soil moisture, water penetration, surface flows, and erosion. These potential long-term indirect impacts to western spadefoot would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level by requiring measures to ensure runoff is not altered from existing conditions and toxicants are not discharged, restoration of temporary impacts, preparation of landscaping plans that would emphasize native species and not include species from the Cal-IPC California Invasive Plant Inventory, and incorporation of barriers to prevent unauthorized public access to areas with potential habitat for western spadefoot.

Implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would minimize the effect of long-term indirect impacts to western spadefoot to **less than significant with mitigation incorporated**.

Birds

Fully Protected Raptors (White-Tailed Kite, Golden Eagle, Bald Eagle)

Bald eagle may move through the study area but is not expected to nest or winter. Golden eagle has a moderate potential to forage within the study area, but has low potential to nest or winter. Indirect impacts to bald eagle and golden eagle from construction or long-term impacts are generally unlikely because they are not expected to nest or overwinter and due to their high mobility and access to adjacent habitat. Therefore, potential indirect impacts to bald eagle and golden eagle are **less than significant**.

White-tailed kite has potential to nest outside the focused survey area and because white-tailed kite is a state Fully Protected Species, any actions or activities that would result in injury and/or mortality to individuals of this species, including the loss of eggs or young within an active nest, would be a violation of Section 3511 of the CFGC and a significant impact under CEQA absent mitigation.

Construction-Related: Potential short-term or temporary indirect impacts to nesting white-tailed kite resulting from construction activities include adverse effects from noise, vibration, and increased human presence. These potential construction-related indirect impacts to white-tailed kite would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-6** (Pre-Construction Nesting Bird Survey) would reduce potential indirect impacts to a less-than-significant level through avoidance of vegetation removal during the nesting season and performance of a nesting bird survey if vegetation is removed during the nesting season. If nesting white-tailed kite are identified, an adequate buffer would be implemented to ensure that effects from noise, vibration, and human presence are avoided.

Implementation of **MM-FC-BIO-6** (Pre-Construction Nesting Bird Survey) would minimize the effect of construction-related indirect impacts to nesting white-tailed kite to **less than significant with mitigation incorporated**.

Long-Term: White-tailed kite are relatively mobile and are expected to avoid the developed portions of the Project and instead occur within the proposed open space. For this reason, this species is not particularly susceptible to vehicle or building collisions. Therefore, long-term indirect impacts to white-tailed kite would be **less than significant**.

Burrowing Owl

Protocol surveys for burrowing owl were not conducted in 2022 outside the focused survey area; however this species has a moderate potential to occur. Therefore, future development has the potential to result in indirect impacts to this species.

Construction-Related: Potential short-term or temporary indirect impacts to burrowing owl resulting from construction activities include the release of chemical pollutants; adverse effects from noise, vibration, and increased human presence; and nighttime lighting. These potential construction-related indirect impacts to burrowing owl would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-7** (Pre-Construction Burrowing Owl Surveys and Avoidance) would reduce potential indirect impacts to a less-than-significant level through avoidance of vegetation removal during the breeding season, performance of a pre-construction burrowing owl survey if vegetation is removed during the breeding season, and preparation of a Burrowing Owl Protection Plan if burrowing owl is detected during the pre-construction survey. If burrowing owl is identified, an adequate buffer would be implemented to ensure that effects from noise, vibration, and human presence are minimized. In addition, implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would minimize indirect impacts to burrowing owl through biological monitoring, requirement of a Worker Environmental Awareness Training that would cover the special-status resources and mitigation requirements for the Project, delineation of Project boundaries, requiring all vehicles and equipment be serviced in designated staging areas, and ensuring that construction would not be conducted at night.

Implementation of **MM-FC-BIO-7** (Pre-Construction Burrowing Owl Surveys and Avoidance) and **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would minimize the effect of construction-related indirect impacts to burrowing owl to **less than significant with mitigation incorporated**.

Long-Term: Potential long-term indirect impacts that could result from development near burrowing owl or their habitat include chemical releases such as oils and grease from vehicles that could degrade habitat, increased human presence that could lead to unauthorized access to potential habitat for burrowing owl, and increased invasive plant species that may degrade habitat. These potential long-term indirect impacts to burrowing owl would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level by requiring measures to ensure runoff is not altered from existing conditions and toxicants are not discharged, restoration of temporary impacts, preparation of landscaping plans that would emphasize native species and not include species from the Cal-IPC California Invasive Plant Inventory, and incorporation of barriers to prevent unauthorized public access to areas with potential habitat for burrowing owl.

Implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would minimize the effect of long-term indirect impacts to burrowing owl to **less than significant with mitigation incorporated**.

Loggerhead Shrike

Loggerhead shrike has potential to nest outside the focused survey area, and future development has the potential to result in indirect impacts to this species.

Construction-Related: Potential short-term or temporary indirect impacts to loggerhead shrike resulting from construction activities include the release of chemical pollutants; adverse effects from noise, vibration, and increased human presence; and nighttime lighting. These potential construction-related indirect impacts to loggerhead shrike would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-6** (Pre-Construction Nesting Bird Survey) would reduce potential indirect impacts to a less-than-significant level through avoidance of vegetation removal during the nesting season and performance of a nesting bird survey if vegetation is removed during the nesting season. If nesting loggerhead shrike is identified, an adequate buffer would be implemented to ensure that effects from noise, vibration, and human presence are minimized. In addition, implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would minimize indirect impacts to loggerhead shrike through biological monitoring, requirement of a Worker Environmental Awareness Training that would cover the special-status resources and mitigation requirements for the Project, delineation of Project boundaries, requiring all vehicles and equipment be serviced in designated staging areas, and ensuring that construction would not be conducted at night.

Implementation of **MM-FC-BIO-6** (Pre-Construction Nesting Bird Survey) and **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would minimize the effect of construction-related indirect impacts to loggerhead shrike to **less than significant with mitigation incorporated**.

Long-Term: Loggerhead shrikes are relatively mobile and are not especially susceptible to impacts from vehicle or building collisions. Therefore, long-term indirect impacts to loggerhead shrikes would be **less than significant**.

Riparian Birds (Least Bell’s Vireo and Yellow Warbler)

Focused surveys for least Bell’s vireo were not conducted outside the focused survey area in 2022; however, least Bell’s vireo has a low potential to occur within the study area and future development has the potential to result in indirect impacts to this species. Yellow warbler was observed within the study area in 2022 and future development has the potential to result in indirect impacts to this species.

Construction-Related: Potential short-term or temporary indirect impacts to least Bell’s vireo and yellow warbler resulting from construction activities include the release of chemical pollutants; adverse effects from noise, vibration, and increased human presence; and nighttime lighting. These potential construction-related indirect impacts to least Bell’s vireo and yellow warbler would be potentially significant absent mitigation.

Project implementation of focused surveys for least Bell’s vireo under **MM-FC-BIO-13** (Least Bell’s Vireo Protocol Survey) would reduce potential indirect impacts to a less-than-significant level by ensuring that least Bell’s vireo are absent from construction areas. Also, **MM-FC-BIO-6** (Pre-Construction Nesting Bird Survey) would reduce potential indirect impacts to least Bell’s vireo and yellow warbler to a less-than-significant level through avoidance of vegetation removal during the nesting season and performance of a nesting bird survey if vegetation is removed during the nesting season. If nesting least Bell’s vireo or yellow warbler is identified, an adequate buffer would be implemented to ensure that effects from noise, vibration, and human presence are minimized. In addition, implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would minimize indirect impacts to yellow warbler through biological monitoring, requirement of a Worker Environmental Awareness Training that would cover the special-status resources and mitigation requirements for the Project, delineation of Project boundaries, requiring all vehicles and equipment be serviced in designated staging areas, and ensuring that construction would not be conducted at night.

Implementation of **MM-FC-BIO-13** (Least Bell’s Vireo Protocol Survey), **MM-FC-BIO-6** (Pre-Construction Nesting Bird Survey), and **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would minimize the effect of construction-related indirect impacts to yellow warbler to **less than significant with mitigation incorporated**.

Long-Term: Yellow warblers are relatively mobile and are not especially susceptible to impacts from vehicle or building collisions. Therefore, long-term indirect impacts to yellow warblers would be **less than significant**.

Potential long-term indirect impacts that could result from development near least Bell's vireo or their suitable habitat include chemical releases such as oils and grease from vehicles that could degrade habitat; increased human presence that could lead to unauthorized access to potential habitat for least Bell's vireo; increased invasive plant species that may degrade habitat; and trampling of habitat and soil compaction by humans, which could affect soil moisture, water penetration, surface flows, and erosion. These potential long-term indirect impacts to least Bell's vireo would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level by requiring measures to ensure runoff is not altered from existing conditions and toxicants are not discharged, restoration of temporary impacts, preparation of landscaping plans that would emphasize native species and not include species from the Cal-IPC California Invasive Plant Inventory, and incorporation of barriers to prevent unauthorized public access to areas with potential habitat for least Bell's vireo.

Implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would minimize the effect of long-term indirect impacts to least Bell's vireo to **less than significant with mitigation incorporated**.

Mammals

Fossorial Small Mammals (Dulzura Pocket Mouse, Northwestern San Diego Pocket Mouse, San Diego Desert Woodrat, and Los Angeles Pocket Mouse)

Special-status fossorial small mammals have potential to occur outside the focused survey area and future development has the potential to result in indirect impacts to these species.

Construction-Related: Potential short-term or temporary indirect impacts to fossorial small mammals resulting from construction activities include the release of chemical pollutants; generation of fugitive dust; adverse effects from noise, vibration, and increased human presence; and nighttime lighting. These potential construction-related indirect impacts to fossorial small mammals would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level through biological monitoring, requirement of a Worker Environmental Awareness Training that would cover the special-status resources and mitigation requirements for the Project, delineation of Project boundaries, development of a SWPPP, implementation of standard dust control measures, requiring all vehicles and equipment be serviced in designated staging areas, and ensuring that construction would not be conducted at night. In addition, Project implementation of **MM-FC-BIO-8** (Pre-Construction Clearance Surveys) would result in identification and relocation of any fossorial small mammals within areas potentially impacted by the Project, which would minimize indirect impacts from noise, vibration, and increased human presence.

Implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) and **MM-FC-BIO-8** (Pre-Construction Clearance Surveys) would minimize the effect of construction-related indirect impacts to fossorial small mammals to **less than significant with mitigation incorporated**.

Long-Term: Potential long-term indirect impacts that could result from development near fossorial small mammal species or their suitable habitat include chemical releases such as oils and grease from vehicles that could degrade habitat; increased human presence that could lead to unauthorized access to potential habitat for fossorial small mammals; increased invasive plant species that may degrade habitat; trampling of vegetation and soil compaction by humans, which could affect soil moisture, water penetration, surface flows, and erosion; and nighttime lighting. These potential long-term indirect impacts to fossorial small mammals would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level by requiring measures to ensure runoff is not altered from existing conditions and toxicants are not discharged, restoration of temporary impacts, preparation of landscaping plans that would emphasize native species and not include species from the Cal-IPC California Invasive Plant Inventory, incorporation of barriers to prevent unauthorized public access to areas with potential habitat for fossorial small mammals, and stipulations that night-lighting would not be directed toward open space areas. In addition, **MM-FC-BIO-5** (Wildlife Movement) would further buffer effects of urbanization through establishment of conserved open space along Yucaipa Creek, Oak Glen Creek, and Yucaipa Creek’s tributary.

Implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) and **MM-FC-BIO-5** (Wildlife Movement) would minimize the effect of long-term indirect impacts to fossorial small mammals to **less than significant with mitigation incorporated**.

Western Mastiff Bat

Western mastiff bat was not observed during 2022 surveys, but has a moderate potential to occur and there is suitable roosting habitat within the northwest portion of the study area. Future development has the potential to indirectly impact western mastiff bat.

Construction-Related: Potential short-term or temporary indirect impacts to western mastiff bat resulting from construction activities include the release of chemical pollutants; generation of fugitive dust; adverse effects from noise, vibration, and increased human presence; and nighttime lighting. These potential construction-related indirect impacts to western mastiff bat would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level through biological monitoring, requirement of a Worker Environmental Awareness Training that would cover the special-status resources and mitigation requirements for the Project, delineation of Project boundaries, development of a SWPPP, implementation of standard dust control measures, requiring all vehicles and equipment be serviced in designated staging areas, and ensuring that construction would not be conducted at night. In addition, Project implementation of **MM-FC-BIO-9** (Pre-Construction Bat Survey and Avoidance) would result in identification and relocation of any western mastiff bats within areas potentially impacted by the Project, which would minimize indirect impacts from noise, vibration, and increased human presence.

Implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) and **MM-FC-BIO-9** (Pre-Construction Bat Survey and Avoidance) would minimize the effect of construction-related indirect impacts to western mastiff bat to **less than significant with mitigation incorporated**.

Long-Term: Potential long-term indirect impacts that could result from development near roosting western mastiff bats include increased human presence that could lead to unauthorized access to potential habitat for western mastiff bat; increased invasive plant species that may degrade habitat; trampling of vegetation and soil compaction by humans, which could affect soil moisture, water penetration, surface flows, and erosion; and nighttime lighting. These potential long-term indirect impacts to western mastiff bat would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level by requiring measures to ensure runoff is not altered from existing conditions and toxicants are not discharged, restoration of temporary impacts, preparation of landscaping plans that would emphasize native species and not include species from the Cal-IPC California Invasive Plant Inventory, incorporation of barriers to prevent unauthorized public access to areas with potential habitat for western mastiff bat, and stipulations that night-lighting would not be directed toward open space areas. In addition, **MM-FC-BIO-5** (Wildlife Movement) would further buffer effects of urbanization through establishment of conserved open space along Yucaipa Creek, Oak Glen Creek, and Yucaipa Creek’s tributary.

Implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) and **MM-FC-BIO-5** (Wildlife Movement) would minimize the effect of long-term indirect impacts to fossorial small mammals to **less than significant with mitigation incorporated**.

American Badger

American badger has high potential to occur outside the focused survey area and future development has the potential to result in indirect impacts to this species.

Construction-Related: Potential short-term or temporary indirect impacts to American badger resulting from construction activities include the release of chemical pollutants; generation of fugitive dust; adverse effects from noise, vibration, and increased human presence; and nighttime lighting. These potential construction-related indirect impacts to American badger would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level through biological monitoring, requirement of a Worker Environmental Awareness Training that would cover the special-status resources and mitigation requirements for the Project, delineation of Project boundaries, development of a SWPPP, implementation of standard dust control measures, requiring all vehicles and equipment be serviced in designated staging areas, and ensuring that construction would not be conducted at night. In addition, Project implementation of **MM-FC-BIO-10** (Pre-Construction American Badger Survey and Avoidance) would result in identification and relocation of any American badger within areas potentially impacted by the Project, which would minimize indirect impacts from noise, vibration, and increased human presence.

Implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) and **MM-FC-BIO-10** (Pre-Construction American Badger Survey and Avoidance) would minimize the effect of construction-related indirect impacts to American badger to **less than significant with mitigation incorporated**.

Long-Term: Potential long-term indirect impacts that could result from development near American badger or their suitable habitat include chemical releases such as oils and grease from vehicles that could degrade habitat; increased human presence that could lead to unauthorized access to potential habitat for American badger;

increased invasive plant species that may degrade habitat; trampling of vegetation and soil compaction by humans, which could affect soil moisture, water penetration, surface flows, and erosion; and nighttime lighting. These potential long-term indirect impacts to American badger would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level by requiring measures to ensure runoff is not altered from existing conditions and toxicants are not discharged, restoration of temporary impacts, preparation of landscaping plans that would emphasize native species and not include species from the Cal-IPC California Invasive Plant Inventory, incorporation of barriers to prevent unauthorized public access to areas with potential habitat for American badger, and stipulations that night-lighting would not be directed toward open space areas. In addition, **MM-FC-BIO-5** (Wildlife Movement) would further buffer effects of urbanization through establishment of conserved open space along Yucaipa Creek, Oak Glen Creek, and Yucaipa Creek’s tributary.

Implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) and **MM-FC-BIO-5** (Wildlife Movement) would minimize the effect of long-term indirect impacts to American badger to **less than significant with mitigation incorporated**.

Reptiles (Southern California Legless Lizard, California Glossy Snake, Coastal Tiger Whiptail, Red Diamondback Rattlesnake, Blainville’s Horned Lizard, and Coast Patch-Nosed Snake)

Special-status lizards and snakes have potential to occur outside the focused survey area and future development has the potential to result in indirect impacts to these species.

Construction-Related: Potential short-term or temporary indirect impacts to lizards and snakes resulting from construction activities include the release of chemical pollutants; generation of fugitive dust; adverse effects from noise, vibration, and increased human presence; and nighttime lighting. These potential construction-related indirect impacts to lizards and snakes would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level through biological monitoring, requirement of a Worker Environmental Awareness Training that would cover the special-status resources and mitigation requirements for the Project, delineation of Project boundaries, development of a SWPPP, implementation of standard dust control measures, requiring all vehicles and equipment be serviced in designated staging areas, and ensuring that construction would not be conducted at night. In addition, Project implementation of **MM-FC-BIO-8** (Pre-Construction Clearance Surveys) would result in identification and relocation of any special-status lizards or snakes within areas potentially impacted by the Project, which would minimize indirect impacts from noise, vibration, and increased human presence.

Implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) and **MM-FC-BIO-8** (Pre-Construction Clearance Surveys) would minimize the effect of construction-related indirect impacts to special-status lizards and snakes to **less than significant with mitigation incorporated**.

Long-Term: Potential long-term indirect impacts that could result from development near lizards and snakes or their suitable habitat include chemical releases such as oils and grease from vehicles that could degrade habitat; increased human presence that could lead to unauthorized access to potential habitat for lizards and snakes; increased invasive plant species that may degrade habitat; trampling of vegetation and soil compaction by humans,

which could affect soil moisture, water penetration, surface flows, and erosion; and nighttime lighting. These potential long-term indirect impacts to lizards and snakes would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level by requiring measures to ensure runoff is not altered from existing conditions and toxicants are not discharged, restoration of temporary impacts, preparation of landscaping plans that would emphasize native species and not include species from the Cal-IPC California Invasive Plant Inventory, incorporation of barriers to prevent unauthorized public access to areas with potential habitat for special-status lizards and snakes, and stipulations that night-lighting would not be directed toward open space areas. In addition, **MM-FC-BIO-5** (Wildlife Movement) would further buffer effects of urbanization through establishment of conserved open space along Yucaipa Creek, Oak Glen Creek, and Yucaipa Creek’s tributary.

Implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) and **MM-FC-BIO-5** (Wildlife Movement) would minimize the effect of long-term indirect impacts to special-status lizards and snakes to **less than significant with mitigation incorporated**.

Invertebrates

Crotch Bumble Bee

Crotch bumble bee have potential to occur outside the focused survey area and future development has the potential to result in indirect impacts to this species.

Construction-Related: Potential short-term or temporary indirect impacts to Crotch bumble bee resulting from construction activities include the release of chemical pollutants; generation of fugitive dust; adverse effects from noise, vibration, and increased human presence; and nighttime lighting. These potential construction-related indirect impacts to Crotch bumble bee would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level through biological monitoring, requirement of a Worker Environmental Awareness Training that would cover the special-status resources and mitigation requirements for the Project, delineation of Project boundaries, development of a SWPPP, implementation of standard dust control measures, requiring all vehicles and equipment be serviced in designated staging areas, and ensuring that construction would not be conducted at night. In addition, Project implementation of **MM-FC-BIO-11** (Pre-Construction Survey for Crotch Bumble Bee) would require a pre-construction survey for Crotch bumble bee to ensure no nests for Crotch bumble bee are located within the construction area and provides avoidance measures if bees are detected during surveys, which would minimize indirect impacts from noise, vibration, and increased human presence.

Implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) and **MM-FC-BIO-11** (Pre-Construction Survey for Crotch Bumble Bee) would minimize the effect of construction-related indirect impacts to Crotch bumble bee to **less than significant with mitigation incorporated**.

Long-Term: Potential long-term indirect impacts that could result from development near Crotch bumble bee or its suitable habitat include chemical releases such as oils and grease from vehicles that could degrade habitat; increased human presence that could lead to unauthorized access to potential habitat for Crotch bumble bee; increased invasive plant species that may degrade habitat; trampling of vegetation and soil compaction by humans,

which could affect soil moisture, water penetration, surface flows, and erosion; and nighttime lighting. These potential long-term indirect impacts to Crotch bumble bee would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level by requiring measures to ensure runoff is not altered from existing conditions and toxicants are not discharged, restoration of temporary impacts, preparation of landscaping plans that would emphasize native species and not include species from the Cal-IPC California Invasive Plant Inventory, incorporation of barriers to prevent unauthorized public access to areas with potential habitat for Crotch bumble bee, and stipulations that night-lighting would not be directed toward open space areas. In addition, **MM-FC-BIO-5** (Wildlife Movement) would further buffer effects of urbanization through establishment of conserved open space along Yucaipa Creek, Oak Glen Creek, and Yucaipa Creek’s tributary.

Implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) and **MM-FC-BIO-5** (Wildlife Movement) would minimize the effect of long-term indirect impacts to Crotch bumble bee to **less than significant with mitigation incorporated**.

6.3.2 Impact BIO-2: Sensitive Vegetation Communities

6.3.2.1 Direct Impacts

As described in Section 5.1, a total of 35 vegetation communities or land cover types were mapped within the study area. Of these, 10 communities are considered sensitive vegetation communities by CDFW (CDFW 2023d) and sensitive under CEQA: Menzies’s golden bush scrub, Palmer’s goldenbush scrub, the *Adenostoma fasciculatum* – *Salvia mellifera* – *Rhus ovata* association within the chamise-sage chaparral alliance, scale broom scrub, Fremont cottonwood forest and woodland, the *Salix gooddingii* association within the Goodding’s willow - red willow riparian woodland and forest alliance, and the *Sambucus nigra* association within the Basket bush - river hawthorn - desert olive patches alliance. There is a total of 19.1 acres of sensitive vegetation communities, all of which are included in the programmatic components of the Project: 17.5 acres outside the focused survey area and 1.5 acres within the focused survey area, as listed in Table 10. Pacific Oaks Commerce Center project area, County Line Road Warehouse, and remaining area of planning area BP6 would not include any impacts to sensitive vegetation communities. Impacts to these 10 vegetation communities would be significant absent mitigation. In addition, the proposed Project would result in impacts to riparian and streambed vegetation communities. An impacts analysis for riparian and streambed resources is included under Section 6.3.3, Impact BIO-3: State or Federally Protected Wetlands, of this document—Section 6.3.2, Impact BIO-2: Sensitive Vegetation Communities, only discusses sensitive vegetation communities under CDFW.

Table 10. Direct Impacts to Sensitive Vegetation Communities within the Project Site

Vegetation Community or Land Cover Type	Floristic Alliance	Association	Program-Level Components (Acreage ¹)		
			Within Focused Survey Area	Outside Focused Survey Area	Grand Total
Scrub					
Menzie's golden bush scrub	<i>Isocoma menziesii</i>	<i>Isocoma menziesii</i>	0.0	1.0	1.0
Palmer's goldenbush scrub	<i>Ericameria palmeri</i>	<i>Ericameria palmeri</i>	0.0	10.5	10.5
<i>Scrub Subtotal</i>			0.0	11.5	11.5
Chaparral					
Chamise - Sage chaparral	<i>Adenostoma fasciculatum</i> - <i>Salvia</i> spp.	<i>Adenostoma fasciculatum</i> - <i>Salvia mellifera</i> - <i>Rhus ovata</i>	0.8	0.0	0.8
Riparian					
Scale broom scrub	<i>Lepidospartum squamatum</i>	<i>Eriogonum fasciculatum</i> - <i>Lepidospartum squamatum</i> alluvial fan	0.0	0.0	0.0
		<i>Lepidospartum squamatum</i> / ephemeral annuals	0.0	0.0	0.0
Fremont cottonwood forest and woodland	<i>Populus fremontii</i> - <i>Fraxinus velutina</i> - <i>Salix gooddingii</i>	<i>Populus fremontii</i>	0.7	0.4	1.1
		<i>Populus fremontii</i> - <i>Salix gooddingii</i> / <i>Baccharis salicifolia</i>	0.0	1.7	1.7
		<i>Populus fremontii</i> - <i>Sambucus nigra</i>	0.0	0.2	0.2
Goodding's willow - red willow riparian woodland and forest	<i>Salix gooddingii</i> - <i>Salix laevigata</i>	<i>Salix gooddingii</i>	0.0	0.6	0.6
Basket bush - river hawthorn - desert olive patches	<i>Rhus trilobata</i> - <i>Crataegus rivularis</i> - <i>Forestiera pubescens</i>	<i>Sambucus nigra</i>	0.0	3.2	3.2

Table 10. Direct Impacts to Sensitive Vegetation Communities within the Project Site

Vegetation Community or Land Cover Type	Floristic Alliance	Association	Program-Level Components (Acreage ¹)		
			Within Focused Survey Area	Outside Focused Survey Area	Grand Total
		<i>Riparian Subtotal</i>	0.7	6.1	6.8
		Grand Total¹	1.5	17.5	19.1

Note:

¹ Totals may not sum due to rounding.

Project-Level Impacts

Pacific Oaks Commerce Center project area, County Line Road Warehouse, and the remaining area of planning area BP6 would not include any impacts to sensitive vegetation communities. The focused survey area would include 0.8 acres of impacts to sensitive chaparral vegetation communities and 0.7 acres of impacts to sensitive riparian vegetation communities; however, these impacts are outside of the Pacific Oaks Commerce Center and are included in the program-level impact discussion below. Therefore, there would be **no impacts** to sensitive vegetation communities.

Program-Level Impacts

Future development of the Project could result in impacts of up to 19.1 acres of sensitive vegetation communities, comprising 6.8 acres of riparian communities, 0.8 acres of chaparral, and 11.5 acres of scrub. The 0.8 acres of *Adenostoma fasciculatum-Salvia mellifera-Rhus ovata* comprise one individual patch that is disconnected from other *Adenostoma fasciculatum-Salvia mellifera-Rhus ovata* in the region. Impacts to this community are not expected to result in adverse effects to the community regionally. As such, future potential impacts to the *Adenostoma fasciculatum-Salvia mellifera-Rhus ovata* association would be **less than significant**. Impacts to the riparian and scrub communities would be significant absent mitigation.

For impacts to sensitive riparian vegetation communities (Fremont cottonwood forest and woodland, Goodding’s willow – red willow riparian woodland and forest, and Basket bush – river hawthorn – desert olive patches), Project implementation of **MM-SPE-B-2** (Permits for Impacts to Jurisdictional Resources) and **MM-SPE-BIO-3** (Conceptual Streambed Restoration Plan and Restoration), which are updated by **MM-FC-BIO-14** (Aquatic Resource Avoidance, Permitting, and Protection), would reduce potential direct impacts to a **less-than-significant** level through the requirement to avoid impacts, or, if impacts cannot be avoided, to provide compensatory mitigation and obtain permits from each of the regulatory agencies prior to ground-disturbing activities.

For impacts to sensitive upland communities (Menzies’s golden bush scrub and Palmer’s goldenbush scrub), Project implementation of **MM-SPE-BIO-4** (Conceptual Upland Mitigation Plan), which is updated by **MM-FC-BIO-15** (Sensitive Upland Vegetation Avoidance and Mitigation), would reduce potential impacts to a less-than-significant level through the requirement to avoid impacts or, if impacts cannot be avoided, provide compensatory mitigation.

Therefore, direct impacts to sensitive vegetation communities would be **less than significant with mitigation incorporated**.

6.3.2.2 Indirect Impacts

Future development of the Project site has the potential to result in indirect impacts to sensitive vegetation communities.

Construction-Related

Sensitive vegetation communities may be indirectly impacted during future construction of the proposed Project. Potential short-term or temporary indirect impacts to sensitive vegetation communities resulting from construction activities include inadvertent spillover impacts; unintentional clearing, trampling, or grading outside of the Project footprint; generation of fugitive dust; changes in hydrology resulting from construction, including sedimentation and erosion; the release of chemical pollutants; and the adverse effect of invasive plant species. These potential construction-related, indirect impacts to sensitive vegetation would be potentially significant absent mitigation.

Implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would minimize the effect of construction-related indirect impacts to sensitive vegetation to **less than significant with mitigation incorporated**.

Long-Term

Potential long-term, indirect impacts that could result from development near sensitive vegetation communities include chemical releases such as oils and grease from vehicles that could degrade habitat; increased invasive plant species that may degrade habitat; and trampling of vegetation and soil compaction by humans, which could affect soil moisture, water penetration, surface flows, and erosion. These potential long-term indirect impacts to sensitive vegetation would be potentially significant absent mitigation.

Implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would minimize the effect of long-term indirect impacts to special-status vegetation communities to **less than significant with mitigation incorporated**.

6.3.3 Impact BIO-3: State or Federally Protected Wetlands

An updated aquatic resources delineation was conducted throughout the study area in 2022 in compliance with **MM-SPE-B-1** (Wetland Delineation). The study area does not contain state or federally protected wetlands. The study area supports 15.37 acres of non-wetland waters potentially regulated by USACE (Figures 13-1 through 13-7, Impacts to Aquatic Resources Delineation). Additionally, 16.03 acres of non-wetland waters (below OHWM) fall under RWQCB jurisdiction, and 49.10 acres of CDFW streambed (below and above OHWM, to top of bank) and associated riparian habitat occur in the study area. However, the ultimate decisions on the amount and location of jurisdictional resources are made by the resource agencies (i.e., USACE, CDFW, and RWQCB).

6.3.3.1 Direct Impacts

Project-Level Impacts

Pacific Oaks Commerce Center Project Area

Pacific Oaks Commerce Center does not contain any jurisdictional aquatic resources. Therefore, **no impacts** to this resource are expected with Project implementation.

County Line Warehouse Project

One drainage (NWW-05 in this document) was identified within the County Line Warehouse project and it is stated in the EIR Addendum that the Project will be designed to avoid the drainage (City of Yucaipa 2022). Therefore, **no impacts** to this resource are expected with Project implementation.

Remaining Area of Planning Area BP6

Table 11 lists the identified impacts to aquatic resources within the remaining area of planning area BP6; however, the ultimate decisions about the amount and location of jurisdictional resources would be made by the resource agencies (i.e., USACE, RWQCB, and CDFW). Impacts to aquatic resources from development of the remaining area of planning area BP6 would be significant absent mitigation.

Project implementation of **MM-SPE-B-2** (Permits for Impacts to Jurisdictional Resources) and **MM-SPE-BIO-3** (Conceptual Streambed Restoration Plan and Restoration), which are updated by **MM-FC-BIO-14** (Aquatic Resource Avoidance, Permitting, and Protection), would reduce potential direct impacts to a less-than-significant level through the requirement to provide compensatory mitigation and obtain permits from each of the regulatory agencies prior to ground-disturbing activities. Therefore, direct impacts to aquatic resources would be **less than significant with mitigation incorporated**.

Table 11. Impacts to Aquatic Resources Within the Remaining Area of Planning Area BP6

Feature Name	Vegetation Community or Land Cover Type (acres)	Non-Wetland Waters of the State (RWQCB/CDFW) (acres)
NWW-5	0.07	0.07
	0.02	0.02
	<i>NWW-5 Subtotal</i>	<i>0.09</i>
NWW-6	0.07	0.07
	0.02	0.02
	0.00	0.00
	<i>NWW-6 Subtotal</i>	<i>0.09</i>
	Grand Total¹	0.18

Notes: RWQCB = Regional Water Quality Control Board; CDFW = California Department of Fish and Wildlife; NWW = non-wetland water.
¹ Totals may not sum due to rounding.

Program-Level Impacts

An aquatic resources delineation conducted in 2022 within the programmatic portions of the Project (i.e., the areas outside of Pacific Oaks Commerce Center, County Line Warehouse, and the remaining area of planning area BP6) identified impacts to aquatic resources, as listed in Table 12; however, the ultimate decisions on the amount and location of jurisdictional resources is made by the resource agencies (i.e., USACE, RWQCB, and CDFW). Impacts to aquatic resources from future development would be significant absent mitigation.

Project implementation of **MM-FC-BIO-14** (Aquatic Resource Avoidance, Permitting, and Protection) would reduce potential direct impacts to a less-than-significant level through full avoidance of aquatic resources. If full avoidance by future development is not feasible, then compensatory mitigation will be provided, and permits will be required

from each of the regulatory agencies prior to ground-disturbing activities. Therefore, direct impacts to aquatic resources would be **less than significant with mitigation incorporated**.

Table 12. Program-Level Impacts to Aquatic Resources

Feature Name	Vegetation Community or Land Cover Type	Non-Wetland Waters of the United States (USACE/RWQCB/CDFW) Acreage	Non-Wetland Waters of the State (RWQCB/CDFW) (acres)	Jurisdictional Streambed (CDFW Only) (acres)	Jurisdictional Riparian (CDFW Only) (acres)
NWW-01	Eucalyptus - tree of heaven - black locust groves	0.35	0.00	0.20	0.00
	Fremont cottonwood forest and woodland	0.97	0.00	0.87	0.74
	Mulefat thickets	0.12	0.00	0.41	1.06
	Non-native grassland	0.01	0.00	0.07	0.00
	Upland mustards or star-thistle fields	0.00	0.00	0.03	0.00
	Urban/Developed	<0.01	0.00	<0.01	0.00
<i>NWW-01 Subtotal</i>		<i>1.44</i>	<i>0.00</i>	<i>1.57</i>	<i>1.80</i>
NWW-02	Eucalyptus - tree of heaven - black locust groves	0.26	0.00		0.00
	Fremont cottonwood forest and woodland	0.08	0.00	0.17	0.00
	Mulefat thickets	0.04	0.00	0.05	0.03
	Non-native grassland	0.00	0.00	0.01	0.00
	Urban/Developed	<0.01	0.00	0.00	0.00
<i>NWW-02 Subtotal</i>		<i>0.39</i>	<i>0.00</i>	<i>0.23</i>	<i>0.03</i>
NWW-03	Basket bush - river hawthorn - desert olive patches	0.01	0.00	<0.01	3.17
	Goodding's willow - red willow riparian woodland and forest	0.00	0.00	0.00	0.57
	Mulefat thickets	0.88	0.00	0.07	1.07
	Non-native grassland	<0.01	0.00	0.00	0.00
<i>NWW-03 Subtotal</i>		<i>0.89</i>		<i>0.07</i>	<i>4.82</i>
NWW-04	Eucalyptus - tree of heaven - black locust groves	0.01	0.00	0.00	0.00
	Fremont cottonwood forest and woodland	0.00	0.00	0.00	0.24
	Non-native grassland	0.15	0.00	0.00	0.00
	Urban/Developed	<0.01	0.00	0.00	0.00

Table 12. Program-Level Impacts to Aquatic Resources

Feature Name	Vegetation Community or Land Cover Type	Non-Wetland Waters of the United States (USACE/RWQCB/CDFW) Acreage	Non-Wetland Waters of the State (RWQCB/CDFW) (acres)	Jurisdictional Streambed (CDFW Only) (acres)	Jurisdictional Riparian (CDFW Only) (acres)
<i>NWW-04 Subtotal</i>		0.16	0.00	0.00	0.24
NWW-05	Coast live oak woodland and forest	0.00	0.02	0.00	0.00
	Non-native grassland	0.00	0.04	0.00	0.00
	Open water	0.00	0.31	0.00	0.00
	Ornamental plantings	0.00	0.05	0.00	0.00
<i>NWW-05 Subtotal</i>		0.00	0.41	0.00	0.00
Grand Total¹		2.88	0.41	1.88	6.89

Notes: USACE = U.S. Army Corps of Engineers; RWQCB = Regional Water Quality Control Board; CDFW = California Department of Fish and Wildlife; NWW = non-wetland water.

¹ Totals may not sum due to rounding.

6.3.3.2 Indirect Impacts

Development of the project-level and program-level components of the Project has the potential to result in indirect impacts to aquatic resources.

Construction-Related

Jurisdictional waters of the United States/state may be indirectly impacted during construction. Potential short-term or temporary indirect impacts to jurisdictional waters resulting from construction activities include the generation of fugitive dust; changes in hydrology resulting from construction, including sedimentation and erosion; the release of chemical pollutants; and unintentional clearing, trampling, or grading outside of the proposed construction zone. Construction-related indirect impacts to jurisdictional waters would be potentially significant.

MM-FC-BIO-2 (Construction-Related Indirect Impacts to Biological Resources) would minimize construction-related indirect impacts through biological monitoring, requirement of a Worker Environmental Awareness Training that would cover the special-status resources and mitigation requirements for the Project, delineation of Project boundaries, implementation of standard dust control measures, development of a SWPPP, and requiring all vehicles and equipment be serviced in designated staging areas. Therefore, construction-related indirect impacts to aquatic resources would be **less than significant with mitigation incorporated**.

Long-Term

Potential long-term indirect impacts that could result from development near waters of the United States/state communities include pollutants that could degrade water quality and habitat; increased invasive plant species that may degrade habitat; and trampling of vegetation and soil compaction by humans, which could affect soil moisture, water penetration, surface flows, and erosion. Long-term indirect impacts to jurisdictional waters would be potentially significant.

MM-FC-BIO-3 (Long-Term Indirect Impacts to Biological Resources) would minimize long-term indirect impacts by requiring measures to ensure runoff is not altered from existing conditions and toxicants are not discharged, restoration of temporary impacts, preparation of landscaping plans that would emphasize native species and not include species from the Cal-IPC California Invasive Plant Inventory, and incorporation of barriers to prevent unauthorized public access to areas with state and federally protected waterways. Therefore, long-term indirect impacts to aquatic resources would be **less than significant with mitigation incorporated**.

6.3.4 Impact BIO-4: Wildlife Corridors and Habitat Linkages

This threshold is not separated by Project phase because wildlife corridors and habitat linkages operate on a larger scale so these Project components need to be evaluated together.

6.3.4.1 Direct Impacts

The study area does not contain nursery sites, such as bat colony roosting sites or colonial bird nesting areas. The study area is not located within an area identified as a wildlife corridor or linkage; however, the Final EIR for the Yucaipa General Plan Update identified Yucaipa Creek and Oak Glen Creek as potential local wildlife linkages (Placeworks 2016). Furthermore, the Project contains undeveloped land that allows for unrestricted move-through habitat, as well as three large drainages that likely convey wildlife through the study area. The remaining two drainages are shallow and isolated, likely not conveying wildlife, but may contribute to move-through, foraging habitat.

Development of Pacific Oaks Commerce Center fully avoids Yucaipa Creek, but will encroach into its associated uplands, which may constrain wildlife use in the area. The remaining area of planning area BP6 and the County Line Road Warehouse project are located along I-10 and confined to the southeastern corner of the study area, adjacent to existing development. Development of these projects is not expected to impact regional wildlife movement.

The Project proposes conservation of approximately 155 acres of open space (approximately 13% of the Project site), primarily located along the three most prominent drainage features within the Project site: Yucaipa Creek (NWW-01), Oak Glen Creek (NWW-02), and Yucaipa Creek’s tributary (NWW-03). The conserved open space allows for the partial to full avoidance of all three drainages with proposed upland conservation on either side of the features, creating corridors that range from approximately 92 to 1,100 feet across. The Project would also support approximately 336 acres (approximately 27% of the Project site) of non-conserved open space. The non-conserved open space would be located along both Yucaipa Creek and Oak Glen Creek and interspersed throughout the proposed development areas. This land is intended to provide a buffer and transition zone between different land uses, and may support some agricultural activities. While agricultural activities have the potential to constrain movement, this land use is expected to continue to facilitate some wildlife movement through the Project site.

The final placement of future development of the programmatic portions of the Project site is not currently known; however, future projects will undergo their own CEQA review and must demonstrate that they will not significantly impact wildlife corridors and linkages. Given that future development plans are currently conceptual, specific impacts to wildlife corridors and habitat linkages are not known and therefore potentially significant. Project implementation of **MM-FC-BIO-5** (Wildlife Movement) would minimize impacts to wildlife corridors and habitat linkages through further avoidance of Yucaipa Creek and its tributary, as well the inclusion of measures that would encourage wildlife-passable fence designs, shielded night lighting, and minimal landscaping. In addition, implementation of **MM-SPE-B-13** (Fuel Management Zone) would ensure that access and management activities of fuel modification areas are clearly outlined.

Future road improvements to Live Oak Canyon Road and future development of the Wildwood Canyon Road Interchange project have potential to impact local wildlife movement along Yucaipa Creek. Impacts to movement along Yucaipa Creek would be potentially significant absent mitigation. Project implementation of **MM-FC-BIO-16** (Culvert Undercrossing) would minimize potential impacts to this corridor through creation of an undercrossing that would facilitate wildlife movement beneath the roadways.

Implementation of **MM-FC-BIO-5** (Wildlife Movement) and **MM-FC-BIO-16** (Culvert Undercrossing), would minimize the effect of direct impacts to wildlife corridors and habitat linkages to **less than significant with mitigation incorporated**.

6.3.4.2 Indirect Impacts

Development of the Project has the potential to result in indirect impacts to wildlife movement.

Construction-Related

Potential short-term or temporary indirect impacts to wildlife movement resulting from construction activities include the adverse effects from noise, vibration, and increased human presence, as well as nighttime lighting. These potential construction-related indirect impacts to wildlife movement would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level through biological monitoring, requirement of a Worker Environmental Awareness Training that would cover the special-status resources and mitigation requirements for the Project, delineation of Project boundaries, and ensuring that construction would not be conducted at night. In addition, the Project would be constructed in five phases over 20 years and therefore construction would not be expected to significantly disrupt wildlife movement due to ambient noise conditions and the ability for wildlife to continue to move around the construction area.

Implementation of **MM-FC-BIO-2** (Construction-Related Indirect Impacts to Biological Resources) would minimize the effect of construction-related indirect impacts to wildlife corridors and habitat linkages to **less than significant with mitigation incorporated**.

Long-Term

Potential long-term indirect impacts to wildlife movement include chemical releases such as oils and grease from vehicles that could degrade habitat; increased human presence; increased invasive plant species that may degrade habitat; trampling of vegetation and soil compaction by humans, which could affect soil moisture, water penetration, surface flows, and erosion; and nighttime lighting. These potential long-term indirect impacts to would be potentially significant absent mitigation.

Project implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level by requiring measures to ensure runoff is not altered from existing conditions and toxicants are not discharged, restoration of temporary impacts, preparation of landscaping plans that would emphasize native species and not include species from the Cal-IPC California Invasive Plant Inventory, incorporation of barriers to prevent unauthorized public access to avoided open space, and stipulations that night-lighting would not be directed toward open space areas.

Implementation of **MM-FC-BIO-3** (Long-Term Indirect Impacts to Biological Resources) would minimize the effect of long-term indirect impacts to wildlife movement to **less than significant with mitigation incorporated**.

6.3.5 Impact BIO-5: Local Policies and Ordinances

City of Yucaipa Development Code

The City’s Municipal Development Code, Division 9, Plant Protection and Management, includes ordinances related to the removal of trees, including oak trees, as well as the removal of plants within 200 feet of a streambank. The Project site, including Pacific Oaks Commerce Center, contains trees, including oak trees, and streambanks. Implementation of **MM-SPE-B-7** (Oak Tree Survey), **MM-SPE-B-8** (Oak Tree Permit), **MM-SPE-B-9** (Oak Tree Design Guidelines), **MM-SPE-B-10** (Oak Tree Mitigation), and **MM-FC-BIO-17** (Tree Removal Permit) would require an oak tree survey, ensure that a plot plan is provided to the City, ensure compliance with design guidelines as set forth in the Oak Tree Conservation Ordinance, ensure all tree removal and removal of plants within 200 feet of a streambank is preceded by receipt of a permit from the City, and provide mitigation for impacts to oak trees.

With implementation of these measures, the proposed Project would not be in conflict with the City Development Code and impacts would be **less than significant with mitigation incorporated**.

6.3.6 Impact BIO-6: Habitat Conservation Plans

The Project does not overlap any habitat conservation plans. Therefore, there would be **no impact** to habitat conservation plans.

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7 Project Mitigation

7.1 Yucaipa Freeway Corridor Specific Plan EIR Mitigation Measures

The following mitigation measures are included within the Yucaipa Freeway Corridor Specific Plan EIR (City of Yucaipa 2008). These measures will be incorporated into the Mitigation Monitoring and Reporting Program for the Project. Measures noted in ~~strikeout~~ have been superseded with measures listed in Section 7.2.

~~MM-SPE-B-1 (Wetland Delineation): A wetland delineation will determine if the proposed development project will potentially impact wetlands or waters of the United States and California. If it does the applicant will prepare a formal wetland delineation to more accurately identify, evaluate, and map the extent of the streambed jurisdictional areas, the proposed project will modify under the jurisdiction of USACE, CDFG, and RWQCB. The delineation will be used to determine impacts and will be verified by the regulatory agencies. If a formal wetland delineation resulting from mitigation measure B-1 identifies impacts to wetlands or waters of the United States and California mitigation measures B-2, B-3, and B-4 will apply.~~

~~MM-SPE-B-2 (Permits for impacts to Jurisdictional Resources): Prior to grading permit the applicant will obtain a Section 404 permit authorization from USACE, a 1602 Streambed Alteration Agreement from CDFG, and a 401 State Water Quality Certification from RWQCB. Approved impacts to USACE, CDFG, and RWQCB jurisdictional areas would require mitigation through habitat creation, enhancement, and/or preservation to achieve a no net loss of jurisdictional resources, as determined by a qualified restoration specialist in consultation with the regulatory agencies.~~

~~Mitigation ratios and the specific location of mitigation lands will be determined in consultation with the appropriate regulatory agencies in accordance with the requirements of the federal Clean Water Act, federal wetland policies, and the California Fish and Game Code. The remaining undeveloped land within the Specific Plan site (excluding areas impacted from roads, development, and fuel modification) is planned as designated open space and may qualify as mitigation for impacts to jurisdictional areas.~~

~~MM-SPE-BIO-3 (Conceptual Streambed Restoration Plan and Restoration): The applicant shall mitigate for temporary and permanent impacts to USACE jurisdictional wetlands and waters of the U.S., RWQCB jurisdictional waters, and CDFG jurisdictional areas by restoring habitats (i.e., southern willow scrub, scoured drainage, and mulefat scrub) upon acceptance of these temporary and permanent impacts by the resource agencies. Remaining undeveloped land within the proposed development project site (excluding areas impacted from roads, development, and fuel modification) designated as open space in the Specific Plan may qualify as mitigation for impacts to jurisdictional areas.~~

~~The applicant shall prepare and submit a Conceptual Streambed Restoration Plan (CSRP) to the City of Yucaipa for approval and to the regulatory agencies for review and concurrence. Habitat shall be mitigated on site or within the same watershed, if feasible. The goal of the CSRP will be to recreate the functions and values of the habitat being affected. These mitigation requirements will~~

be outlined in the CSRP prepared for this project, with monitoring requirements and specific criteria to measure the success of the restoration. Guidelines for the CSRP shall include:

- ~~The mitigation site(s) shall have been evaluated and selected on the basis of their suitability for use as riparian mitigation areas.~~
- ~~The mitigation shall provide procedures to prepare soils in the mitigation area, provide detailed seeding/planting mixtures, provide seeding/planting methods, appropriate irrigation and other procedures that will be used for successful revegetation.~~
- ~~Impacts to jurisdictional waters and wetlands shall be avoided to the extent feasible in the design phase of the project.~~
- ~~Specific mitigation ratios and performance criteria shall be stated in the CSRP.~~
- ~~Maintenance and monitoring requirements shall be established, including quarterly and annual monitoring reports to USACE and CDFG.~~

~~The content of the CSRP will address the responsibilities and qualifications of the personnel to implement and supervise the plan, incorporate pertinent site selection criteria, provide for the site preparation and planting implementation program, provide a schedule for implementation, maintenance and monitoring, detail maintenance plan and guidelines, detail the monitoring plan and address long term preservation.~~

~~MM-SPE-BIO-4 (Conceptual Upland Mitigation Plan): The applicant shall prepare and submit a Conceptual Upland Mitigation Plan (CUMP) to the City of Yucaipa for approval and to CDFG for review and concurrence. The applicant shall be responsible for funding and implementing the CUMP. The goal of the CUMP will be to compensate for the impacts to sensitive upland vegetation communities (oak woodland and savannah oak woodland) through off site acquisition of habitat, on site preservation, enhancement, creation, and/or dedication of habitat, payment of fees into a mitigation bank or other appropriate measures to address the functions and values being impacted. The remaining undeveloped land within the proposed development project site (excluding areas impacted from roads, development, and fuel modification) designated as open space may qualify as mitigation for impacts to sensitive vegetation communities.~~

~~The content of the CUMP will address the responsibilities and qualifications of the personnel to implement and supervise the plan, incorporate pertinent site selection criteria, provide for the site preparation and planting implementation program if appropriate, provide a schedule for implementation, maintenance and monitoring, detail maintenance plan and guidelines, detail the monitoring plan and address long term preservation.~~

~~MM-SPE-B-5 (Surveys for Special-Status Plants): Prior to grading the applicant will conduct focused surveys for the following species that are classified as CNPS List 1B or 2 during the appropriate blooming period as indicated in Table 3: chaparral sand verbena, Jager's milk vetch, Mesa horkelia, Nevin's barberry, rayless ragwort, Robinson's peppergrass, and slender-horned spineflower. These species have potential to occur within the Specific Plan site based on observations during the biological reconnaissance survey, historical occurrence data, and the presence of suitable habitat and soils in the vicinity of the survey area.~~

~~MM-SPE-B-6 (Conceptual Sensitive Plant Species Mitigation Plan): If CNPS List 1B or 2 species are discovered during focused surveys, the applicant will develop a conceptual sensitive plant species mitigation plan. This mitigation plan will be prepared by a qualified restoration biologist and provide at a minimum the following information (1) design modifications or minimization measures that are consistent with the project's purpose; (2) appropriate protection measures for any adjoining conserved land within the Specific Plan site; (3) an evaluation of salvage, transplantation, restoration, enhancement, or other appropriate mitigation techniques to determine the most appropriate mitigation measures to offset impacts; and (4) monitoring and adaptive management measures for the mitigated plant species. The mitigation site shall be monitored and maintained by a qualified biologist for five years or until the plants have become fully established and can survive without supplemental irrigation.~~

MM-SPE-B-7 (Oak Tree Survey): Prior to grading the applicant will conduct an oak tree survey to identify oak trees to be encroached upon, removed and/or relocated, and those within 100 feet of the project site or construction area. Oak trees will be identified, located, and tagged during the survey.

An oak tree report may be required depending on the scope and the nature of the project impact on the surrounding trees, as determined during the pre-application conference. In general, the requirements for an oak tree report may be waived in situations involving the removal of dead or hazardous trees and/or potential impacts to less than four trees. In situations requiring the submission of an oak tree report, the document shall be certified by the oak tree consultant to be true and correct and must be acceptable to the Community Development Director (Yucaipa Development Code Section 89.0501). The oak tree report will include information on the oak trees proposed for impacts, including location, diameter of trunk, diameter of canopy, height, and the health and condition of the subject oak trees. In addition, a site plan map must be submitted during the application process. The site plan map is required to show proposed grading and construction areas, oak tree locations, the exact location of the dripline of an oak tree.

MM-SPE-B-8 (Oak Tree Permit): Prior to the removal of, or the encroachment into, the “protected zone” of oak trees, the applicant will first obtain an oak tree permit as stated in Section 89.0515(b)(1) of the Yucaipa Development Code. Specifically, the protected zone for oak trees is defined as the area within a circumference measured five feet outside of the dripline of the tree and extending inwards to the trunk of the tree, with the condition that the protected zone must always be at least 15 feet from the trunk of an oak tree (Yucaipa Development Code Section 89.0501). The applicant will obtain oak tree permits to allow encroachments within the dripline as needed. Requests for encroachments that do not exceed 50 percent of the dripline would qualify for administrative processing, whereas, requests for encroachments that exceeds 50 percent of the dripline would require Yucaipa Planning Commission review. (The guidelines of the Oak Tree Conservation Ordinance explain the processing steps involved in obtaining an oak tree permit, the information necessary to apply for an oak tree permit, the standard conditions for an oak tree permit, oak tree survey and reporting requirements, oak tree removal requirements, oak tree planting and replacement requirements, and the enforcement of the Oak Tree Conservation Ordinance).

MM-SPE-B-9 (Oak Tree Design Guidelines): During final design the applicant will provide design guidelines as set forth in the Oak Tree Conservation Ordinance. Section 89.0501 of the Yucaipa Development Code provides design guidelines and evaluation criteria for projects that will impact or potentially impact

oak trees. City of Yucaipa enforces the conservation of all healthy oak trees unless reasonable and conforming use of the property justifies removal, cutting, pruning and/or encroachment into the protected zone of an oak tree. To the extent possible, given the constraints of the property, the project must (1) preserve or minimize impacts to existing healthy oak trees; (2) eliminate or minimize encroachment of new construction in areas of oak trees; (3) minimize the percentage of encroachment from construction on oak trees; (4) avoid locating parking facilities and pedestrian walkways in close proximity to hazardous oak trees for safety reasons, unless it can be demonstrated that major surgery and a nutrient feeding program will restore the tree to a safe and vigorous condition, or the trees are located in minimal access areas such as drainages or steep slopes.

MM-SPE-B-10 (Oak Tree Mitigation): The applicant will mitigate oak tree impacts through relocation and/or replacement through habitat creation, restoration, and enhancement efforts. Requests for relocations can be processed administratively only when the diameter of the tree does not exceed six inches when measured at a point 4.5 feet above the natural grade of the tree. Requests for relocation of trees with larger diameters must be processed and reviewed by the Yucaipa Planning Commission and the City Council. Any replacement trees from a nursery must be either coast live oak or valley oak (*Quercus lobata*). Other oak tree varieties must be approved in advance by the Community Development Department. All relocated or replaced trees shall be monitored and maintained by a qualified biologist for five years or until the plants have become fully established and can survive without supplemental irrigation.

~~MM-SPE-B-11 (Wildlife Focused Surveys): Prior to construction, a qualified biologist will determine if the following species that are classified as federally listed, state listed, state species of special concern, and/or fully protected species have the potential to be present and be impacted by the proposed development project. If a species could be impacted, a qualified biologist will conduct focused surveys for the species: arroyo toad, coastal California gnatcatcher, least Bell's vireo, white tailed kite, western burrowing owl, Stephens' kangaroo rat, and San Bernardino Merriam's kangaroo rat. These species have the potential to occur within the Specific Plan site based on observations during the biological reconnaissance survey, historical occurrence data, and the presence of suitable habitat in the vicinity of the Specific Plan site.~~

~~The following sections provide a description of survey guidelines to be followed. If any of the species are determined to be present the applicant will coordinate with the United States Fish and Wildlife Service and the California Department of Fish and Game.~~

~~MM-SPE-B-11.1 (Arroyo Toad): Focused surveys will be conducted by a qualified biologist according to USFWS survey protocol (USFWS 1999b). A minimum of six surveys will be conducted during the breeding season (i.e., between March 15 and July 1), with at least one survey occurring in April, May, and June. Each survey is composed of a daytime and nighttime component, which must be conducted within the same 24-hour period.~~

~~MM-SPE-B-11.2 (Coastal California gnatcatcher): Focused surveys for coastal California gnatcatcher will be conducted by a permitted biologist to determine the presence or absence of this species within the proposed development project site. Focused surveys will be conducted according to USFWS survey guidelines (USFWS 1997b), which requires six surveys at least seven days apart during the breeding season (i.e., March 15 through June 30) or nine surveys at least fourteen days apart~~

during the non-breeding season (i.e., June 30 through March 15). Surveys will be conducted by walking meandering transects throughout and adjacent to areas of suitable coastal California gnatcatcher habitat and playing a vocalization tape to elicit a response from the birds.

~~MM-SPE-B-11.3 (Least Bell's vireo): Focused surveys for this species will be conducted to determine the presence or absence of this species within the proposed development project site. Focused surveys for the species should be conducted according to USFWS survey guidelines (USFWS 2001), which requires eight surveys at least 10 days apart between April 1 and July 31. Surveys should be conducted by walking meandering transects throughout and adjacent to areas of suitable least Bell's vireo habitat.~~

~~MM-SPE-B-11.4 (Nesting raptors): To avoid potential impacts to nesting raptors, trees will be removed between September 1 and January 31, outside of the breeding season of local raptor species. If tree removal must be conducted during or within a few weeks of the breeding season (i.e., February 1 to August 30), a raptor nest survey should be conducted by a qualified biologist no longer than a week prior to any tree removal to determine if any raptor nests are present. If an active raptor nest is discovered, a buffer of 500 feet will be established around the tree until the young are independent of the nest site. No construction activity may occur within this buffer area until a biologist determines that the fledglings are independent of the nest.~~

~~MM-SPE-B-11.5 (White-tailed kite): To avoid potential impacts to this raptor, trees will be removed between September 1 and January 31, outside of the breeding season of this species. If tree removal must be conducted during or within a few weeks of the breeding season (i.e., February 1 to August 30), a nest survey will be conducted by a qualified biologist no longer than one week prior to any tree removal to determine if any nests are present. If an active nest is discovered, a buffer of 500 feet will be established around the tree until the young are independent of the nest site. No construction activity may occur within this buffer area until a biologist determines that the fledglings are independent of the nest.~~

~~MM-SPE-B-11.6 (Western burrowing owl): Focused surveys for this species will be conducted to determine the presence or absence of this species within the proposed development project site. Focused surveys will follow the guidelines set forth in the *Burrowing Owl Survey Protocol and Mitigation Guidelines* (California Burrowing Owl Consortium 1993). The methodology consists of three phases: Phase 1 (habitat assessment); Phase 2 (burrow survey); and Phase 3 (burrowing owl survey). The initial habitat assessment will be conducted within all suitable habitats within the proposed development project site and a 500 foot buffer surrounding the Specific Plan site. The burrow surveys will be conducted by walking pedestrian survey transects through the proposed development project site, and all burrows and burrow complexes should be mapped. The focused protocol level surveys for burrowing owl will be conducted during the peak of the burrowing owl breeding season of April 14 to July 15. These focused protocol level surveys consist of four separate site visits to examine each mapped rodent burrow or burrow complex for burrowing owl sign (i.e., feathers, cast pellets, excrement, prey remains, eggshell fragments, etc.) and to observe each burrow at a fixed distance to assess the burrow for activity. These surveys will be conducted one hour before sunrise to two hours after sunrise and/or two hours before sunset to one hour after sunset. If no owls are observed or detected during these surveys, protocol level surveys would be required for winter resident owls between December 1 and January 31.~~

~~MM-SPE-B-11.7 (Stephens' kangaroo rat): Focused surveys will be conducted to determine the presence or absence of this species within the proposed development project site. Focused surveys for this species must be conducted by a permitted biologist. These surveys consist of a focused habitat assessment for the species as well as trapping surveys. The trapping should be conducted over five consecutive nights between September 15 and February 15. Additional surveys may be necessary if more than one survey (i.e., more than 5 consecutive nights of trapping) are required to adequately determine presence/absence of these species and their distribution.~~

~~MM-SPE-B-11.8 (San Bernardino Merriam's kangaroo rat): Focused surveys will be conducted to determine the presence or absence of this species on the proposed development project site. The focused protocol-level surveys can be conducted simultaneously with the surveys for Stephens' kangaroo rat as they follow the same protocol, which consists of a habitat assessment and five consecutive nighttime trapping surveys. Additional surveys may be necessary if more than one survey (i.e., more than 5 consecutive nights of trapping) are required to adequately determine presence/absence of these species and their distribution.~~

~~MM-SPE-B-12 (NPDES BMPs): To reduce the potential for the indirect impacts from urban runoff, the project Applicant shall implement the Best Management Practices (BMPs) required by the National Pollutant Discharge Elimination System (NPDES, Environmental Protection Agency), administered by the RWQCB.~~

MM-SPE-B-13 (Fuel Management Zone): A plan for the management of the fuel management zone shall be developed and submitted to the City of Yucaipa for review and approval prior to issuance of a grading permit. The management plan shall include access points, signage for trails and restricted uses, and appropriate fencing.

~~MM-SPE-B-14 (Stake Work Limits): The applicant will ensure that the work limits will be staked, fenced, and/or marked with materials clearly visible to construction personnel to prevent encroachment upon sensitive vegetation communities; no construction access, parking, or storage of equipment or materials will be permitted outside of these marked areas; access roads and work areas shall be periodically sprayed with water to reduce the potential for dust accumulation on the leaves of adjacent sensitive vegetation communities not proposed for impacts; and erosion and sediment control BMPs (i.e. such as silt fence, straw wattles, sand bags, etc) should be implemented and installed during construction to comply with all measures proposed in the Storm Water Pollution Prevention Plan (SWPPP).~~

7.2 Freeway Corridor Specific Plan Mitigation Measures

The following mitigation measures are applicable to the proposed Project. To aid in mitigation implementation, Figure 14 depicts the proposed planning areas in relation to the Focused Survey area.

MM-FC-BIO-1 Focused Special-Status Plant Survey and Avoidance. Outside the focused survey area, a focused special-status plant survey shall be conducted prior to ground-disturbing activities. The survey shall be conducted for Nevin's barberry, smooth tarplant, Parry's spineflower, slender-horned spineflower, Santa Ana River woollystar, California satintail, Hall's monardella, salt spring checkerbloom, and San Bernardino aster, or as otherwise required by an updated habitat assessment conducted by a

qualified biologist. Surveys shall occur at the appropriate time of year to capture the characteristics necessary to identify the taxon. Surveys shall be conducted consistent with California Native Plant Society, U.S. Fish and Wildlife Service, and California Department of Fish and Wildlife protocols and by a qualified botanist knowledgeable of the local flora. The results of the survey shall be summarized in a report and would be valid for a maximum of 2 years. If no special-status plants are found during the survey, no further mitigation would be required.

If special-status plants are observed, the full extent of the occurrence of a special-status plant species within the survey area shall be recorded using GPS. The location of each special-status plant occurrence shall be mapped and number of individuals for each occurrence documented. The outer extent of each occurrence shall be flagged for avoidance (to the extent feasible).

For direct impacts to special-status plant species, one or a combination of the following strategies shall be implemented:

- **Avoidance and Minimization.** Impacts to special-status plant occurrences shall be avoided to the greatest extent possible and minimized where avoidance is not feasible. Where Project impacts to special-status plant species cannot be avoided, mitigation is required and is discussed further below.
- **Salvage.** If impacts to special-status plants cannot be avoided and it is feasible to effectively salvage the plants, a qualified ecologist shall develop a restoration and mitigation plan based on the life history of the species impacted, as necessary, to mitigate Project impacts. The plan shall include, at minimum, (a) collection/salvage measures for plants and/or seed banks to retain intact soil conditions and maximize success likelihood; (b) details regarding storage of plants and/or seed banks; (c) location of the proposed recipient site and detailed site preparation and plant introduction techniques details for top soil storage, as applicable; (d) time of year that the salvage and replanting or seeding shall occur and the methodology of the replanting; (e) a description of the irrigation, if used; (f) success criteria; and (g) a detailed monitoring program, commensurate with the plan’s goals.

MM-FC-BIO-2 Construction-Related Indirect Impacts to Biological Resources. Prior to issuance of a construction permit within 500 feet of proposed open space (conserved and non-conserved), suitable habitat for special-status species with potential to occur in the Project site, aquatic resources, or sensitive vegetation communities, construction plans and conditions of approval shall include the following to address indirect impacts:

- **Biological Monitoring.** A qualified Project biologist approved by the City of Yucaipa shall monitor ground-disturbing and vegetation-clearing activities for the duration of the Project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat, species of concern, and other sensitive biological resources outside the Project footprint. Once ground-disturbing and vegetation-clearing activities are complete, the Project biologist shall conduct weekly checks in order to inspect construction, staking, or flagging (see below) and ensure that all applicable requirements from the mitigation measures are being upheld.
- **Worker Environmental Awareness Training.** Prior to grading, a pre-construction meeting shall be required that includes a training session for Project personnel by a qualified biologist. The

training shall include (1) a description of the species of concern and its habitats; (2) the general provisions of the applicable regulations pertaining to biological resources, including the Endangered Species Act and the Clean Water Act; (3) the need to adhere to the provisions of the Endangered Species Act, the Clean Water Act, and other applicable regulations; (4) the penalties associated with violating the provisions of the Endangered Species Act, Clean Water Act, and other applicable regulations; (5) the general measures that are being implemented to conserve the species of concern as they relate to the Project; and (6) the access routes to and Project site boundaries within which the Project activities must be accomplished. Additionally, the training shall include the measures and mitigation requirements for the applicable resources. Copies of the mitigation measures and any required permits from the resource agencies will be made available to construction personnel and be made available in alternate languages, if necessary.

- **Delineation of Property Boundaries.** Before beginning activities that would cause impacts, the contractor shall, in consultation with the biological monitor, clearly delineate the boundaries with fencing, stakes, or flags, consistent with the grading plan, within which the impacts will take place. All impacts outside the fenced, staked, or flagged areas shall be avoided, and all fencing, stakes, and flags shall be maintained until the completion of impacts in that area. In addition, any avoided environmental resources will be clearly delineated.
- **Standard Dust Control Measures.** Standard dust control measures as per the South Coast Air Quality Management District shall be implemented to reduce impacts on nearby plants and wildlife. Measures include controlling speed to 15 mph or less on unpaved roads, replacing ground cover in disturbed areas as quickly as possible, frequently watering active work sites, installing shaker plates, and suspending excavation and grading operations during periods of high winds.
- **Stormwater Pollution Prevention Plan.** Prior to issuance of a grading permit for construction, the applicant shall submit a Stormwater Pollution Prevention Plan (SWPPP) to the City of Yucaipa that specifies best management practices to prevent all construction pollutants from contacting stormwater, with the intent of keeping sedimentation or any other pollutants from moving off site and into receiving waters. The requirements of the SWPPP shall be incorporated into design specifications and construction contracts. Best management practices categories employed on site would include erosion control, sediment control, and non-stormwater (good housekeeping). Best management practices recommended for the construction phase shall include, but not be limited to, the following:
 - Limiting grading to the minimum area necessary for construction, operation, and decommissioning of the Project
 - Limiting vegetation disturbance/removal to the maximum extent practicable
 - Implementing fiber rolls and sandbags around drainage areas and the site perimeter
 - Stockpiling and disposing of demolition debris, concrete, and soil properly
 - Installing a stabilized construction entrance/exit and stabilizing disturbed areas
 - Proper protections for fueling and maintenance of equipment and vehicles
 - Managing waste, aggressively controlling litter, and implementing sediment controls
 - Soil stabilization in disturbed areas by revegetation

The following water quality measures will be included in the SWPPP:

- Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks.
- Projects shall be designed to avoid the placement of equipment and personnel within the stream channel or on sand and gravel bars, banks, and adjacent upland habitats used by target species of concern, as feasible. Projects that cannot be conducted without placing equipment or personnel in sensitive habitats shall be timed to avoid the breeding season of riparian species.
- When stream flows must be diverted, the diversions shall be conducted using sandbags or other methods requiring minimal instream impacts. Silt fencing or other sediment trapping materials shall be installed at the downstream end of construction activity to minimize the transport of sediments off site. Settling ponds where sediment is collected shall be cleaned out in a manner that prevents the sediment from reentering the stream. Care shall be exercised when removing silt fences, as feasible, to prevent debris or sediment from returning to the stream.
 - Water pollution and erosion control plans shall be developed and implemented in accordance with the Regional Water Quality Control Board.
- **Minimize Spills of Hazardous Materials.** All vehicles and equipment shall be maintained in proper condition to minimize the potential for fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials. Hazardous spills shall be immediately cleaned up, the contaminated soil shall be immediately cleaned up, and the contaminated soil shall be properly handled or disposed of at a licensed facility. Servicing of construction equipment shall take place only at a designated staging area.
- **Invasive Weeds.** To reduce the spread of invasive plant species, landscape plants shall not be on the most recent version of the California Invasive Plant Council's California Invasive Plant Inventory (<http://www.cal-ipc.org/ip/inventory/index.php>).
- **Night Work.** All construction activities will be conducted during the daytime and lights will not be kept on overnight in the construction area, as practicable. If night-lighting is required during construction activities, all exterior lighting along undeveloped land shall be fully shielded and directed downward in a manner that will prevent light spillage or glare into the adjacent open space.

MM-FC-BIO-3 Long-Term Indirect Impacts to Biological Resources. Prior to issuance of a construction permit within 500 feet of proposed open space (conserved and non-conserved), suitable habitat for special-status species with potential to occur in the Project site, aquatic resources, or sensitive vegetation communities, construction plans and conditions of approval shall include the following to address indirect impacts to special-status species:

- **Runoff:** Future development within 500 feet of proposed open space (conserved and non-conserved), suitable habitat for special-status species with potential to occur in the Project site, aquatic resources, or sensitive vegetation communities shall incorporate measures, including measures required through the National Pollutant Discharge Elimination System requirements, to ensure that the quantity and quality of runoff discharged is not altered in an adverse way when compared with existing conditions. In particular, measures shall be put in

place to avoid discharge of untreated surface runoff from developed and paved areas into proposed open space or suitable habitat for special-status species. Stormwater systems shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials, or other elements that might degrade or harm biological resources or ecosystem processes. This can be accomplished using a variety of methods including natural detention basins, grass swales, or mechanical trapping devices. Regular maintenance shall occur to ensure effective operations of runoff control systems.

- **Toxicants:** Land uses that use chemicals or generate bioproducts such as manure, fertilizer, or vineyard waste that are potentially toxic or may adversely affect plant species, wildlife species, habitat, or water quality shall incorporate measures to ensure that application of such chemicals does not result in discharges. Measures such as those employed to address drainage issues shall be implemented.
- **Lighting:** Night lighting shall be directed away from proposed open space and/or suitable habitat for special-status species to protect species from direct night lighting. Shielding shall be incorporated in Project designs to ensure ambient lighting is not increased. Any trails that intersect proposed open space will not include night lighting.
- **Noise:** Proposed noise-generating land uses affecting suitable habitat for special-status species shall incorporate setbacks, berms, or walls to minimize the effects of noise on resources pursuant to applicable rules, regulations, and guidelines related to land use noise standards. For planning purposes, wildlife should not be subject to noise that would exceed residential noise standards.
- **Invasive Species:** When approving landscape plans for future development, emphasis will be placed on using native species that occur in the region. Invasive, non-native plant species listed on the most recent California Invasive Plant Council inventory (<https://www.cal-ipc.org/plants/inventory/>) with a rating of moderate or high shall not be included in landscaping.
- **Barriers:** Future development shall incorporate barriers, where appropriate in individual project designs, to minimize unauthorized public access, domestic animal predation, illegal trespass, or dumping in proposed open space and/or suitable habitat for special-status wildlife. Such barriers may include native landscaping, rocks/boulders, fencing, walls, signage, and/or other appropriate mechanisms. Any proposed trails through open space will have gates that close at nighttime, as well as signage and appropriate barriers to keep people and domestic animals on the trail.
- **Restoration of Temporary Impacts:** Prior to issuance of a grading or construction permit within the Project, grading and construction plans shall include the following note regarding any temporary impacts to uplands:
 - Site construction areas subjected to temporary ground disturbance in undeveloped areas shall be subjected to revegetation with an application of a native seed mix, if necessary, prior to or during seasonal rains to promote passive restoration of the area to pre-Project conditions (except that no invasive plant species will be restored). An area subjected to “temporary” disturbance means any area that is disturbed but will not be subjected to further disturbance as part of the Project. If any grading occurred in areas intended to remain undeveloped, the site will be recontoured to natural grade. This measure does not apply to situations in urban/developed areas that are temporarily impacted and will be returned to an urban/developed land use. Prior to seeding temporary ground disturbance

areas, the Project biologist will review the seeding palette to ensure that no seeding of invasive plant species, as identified in the most recent version of the California Invasive Plant Inventory for the region, will occur.

MM-FC-BIO-4 Pre-Construction Pond Check. A pre-construction pond check shall occur within the construction area prior to the rainy season before start of construction activities. If no potential habitat for western spadefoot is found during the survey, no further mitigation would be required.

If potential habitat for western spadefoot is identified, construction fencing appropriate for amphibian exclusion will be installed around the construction area. A pre-construction pond check and focused survey for western spadefoot will be conducted the winter prior to grading activities within the construction area. The pond check will occur within 24 hours of the winter season’s first three rain events and prioritize ponded features that hold water for 45 days or greater. Ideally, these rain events would produce a minimum of 0.2 inches during a 24-hour period.

If western spadefoot are detected during surveys within the fenced construction footprint, then biologists shall collect western spadefoot adults from areas within 300 feet of known occupied pools. Adults shall be relocated outside of the construction footprint to portions of the conserved open space (see **MM-FC-BIO-5, Wildlife Movement**) that have suitable breeding habitat and few or no western spadefoot individuals. Relocation of western spadefoot will follow the latest amphibian handling guidelines provided by the U.S. Geological Survey.

MM-FC-BIO-5 Wildlife Movement. Future development of the Project outside of the Pacific Oaks Commerce Center, remaining area of planning area BP6, and County Line Road Warehouse will prioritize the configuration of open space such that Yucaipa Creek (NWW-01), Oak Glen Creek (NWW-02), and Yucaipa Creek’s tributary (NWW-03) are able to support move-through streambed and upland habitat for wildlife. Approximately 155 acres will be placed under long-term protection (i.e., with a conservation easement or other protective mechanism), with configuration generally consistent with the Land Use Plan (Figure 2A in the 2023 Freeway Corridor Specific Plan Biological Resources Technical Report).

The following conditions will be implemented among the land use categories outlined in Figure 2A:

- **AG:** The existing Live Oak Canyon Farm will not change from existing condition as a part of the Specific Plan. Existing condition includes full avoidance of Yucaipa Creek by farm operations. Live Oak Canyon Farm will continue to avoid Yucaipa Creek.
- **C 6:** Commercial development associated with C 6 will avoid Yucaipa Creek’s tributary (NWW-03) and be clustered so as to buffer the existing drainage sufficient to allow for wildlife movement.
- **PA 11:** Residential development associated with PA 11 will avoid Yucaipa Creek’s tributary (NWW-03) and be clustered so as to buffer the existing drainage sufficient to allow for wildlife movement.
- **BP 4:** Business park development associated with BP 4 will avoid Yucaipa Creek (NWW-01) and be clustered so as to buffer the existing drainage sufficient to allow for wildlife movement.

Throughout the conserved open space, the following measures will be implemented:

- Lighting will be directed toward development and shielded away from the open space.
- Trails will not be in use from dusk to dawn, pets must be on leashes, and the trails will only be used for hiking.
- Trails may be temporarily closed to control unauthorized access.

Future development must be consistent with the City of Yucaipa General Plan Environmental Impact Report, which includes the following design standards for habitat connectivity:

- Adhere to low density zoning standards
- Encourage clustering of development
- Avoid known sensitive biological resources
- Provide shielded lighting adjacent to sensitive habitat areas
- Encourage development plans that maximize wildlife movement
- Provide buffers between development and wetland/riparian areas
- Protect wetland/riparian areas through regulatory agency permitting process
- Encourage wildlife-passable fence designs (e.g., 3-strand barbless wire fence) on property boundaries
- Encourage preservation of native habitat on the undeveloped remainder of developed parcels
- Minimize road/driveway development to help prevent loss of habitat due to roadkill and habitat loss
- Use native, drought-resistant plant species in landscape design
- Encourage participation in local/regional recreational trail design effort

MM-FC-BIO-6 **Pre-Construction Nesting Bird Survey.** Construction activities shall avoid the migratory bird nesting season (typically January 1 through September 30) to reduce any potential significant impact to birds that may be nesting within the construction area. If construction activities must occur during the migratory bird nesting season, an avian nesting survey of the Project site and within 500 feet of all impact areas must be conducted to determine the presence/absence of fully protected species (including white-tailed kite), protected migratory birds, and active nests. The avian nesting survey shall be performed by a qualified wildlife biologist within 72 hours prior to the start of construction in accordance with the Migratory Bird Treaty Act and California Fish and Game Code Sections 3503, 3503.5, and 3513. If an active bird nest is found, the nest shall be flagged and mapped on the construction plans along with an appropriate buffer established around the nest, which will be determined by the biologist based on the species' sensitivity to disturbance (typically 300 feet for passerines and 500 feet for raptors and special-status species). The nest area shall be avoided until the nest is vacated and the juveniles have fledged. The nest area shall be demarcated in the field with flagging and stakes or construction fencing. On-site construction monitoring shall also be conducted when an active nest buffer is in place. No Project activities may encroach into established buffers without the consent of a monitoring biologist. The buffer shall remain in place until it is determined the nestlings have fledged and the nest is no longer considered active.

MM-FC-BIO-7 **Pre-Construction Burrowing Owl Surveys and Avoidance.** One pre-construction burrowing owl survey shall be completed no more than 14 days before initiation of site preparation or grading activities and a second survey shall be completed within 24 hours of the start of site preparation or grading activities. If ground-disturbing activities are delayed or suspended for more than 30 days after the pre-construction surveys, the Project site shall be resurveyed. Surveys for burrowing owl shall be conducted in accordance with protocols established in the Staff Report on Burrowing Owl Mitigation (prepared by the California Department of Fish and Game [now California Department of Fish and Wildlife; CDFW]) in 2012 or current version.

- If burrowing owls are detected, a burrowing owl relocation plan shall be prepared and implemented in consultation with the City of Yucaipa. The relocation plan shall discuss the avoidance of disturbance to burrows during the nesting season for burrowing owls (February 1 through August 31), as well as appropriate buffers to be established around occupied burrows as determined by a qualified biologist. No Project activities shall be allowed to encroach into established buffers without the consent of a monitoring biologist. The buffer shall remain in place until it is determined that occupied burrows have been vacated or the nesting season has completed.
- Outside of the nesting season, passive owl relocation techniques approved by CDFW shall be implemented. Owls shall be excluded from burrows in the immediate Project area and within a buffer zone if there is a threat to the surface or subterranean burrow structure by installing one-way doors in burrow entrances. These doors will be placed at least 48 hours prior to ground-disturbing activities. The Project area shall be monitored daily for 1 week to confirm owl departure from burrows prior to any ground-disturbing activities. Compensatory mitigation for permanent loss of owl habitat will be provided following the guidance in the CDFW 2012 Staff Report on Burrowing Owl Mitigation or current version.
- Where possible, burrows will be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe shall be inserted into the tunnels during excavation to maintain an escape route for any wildlife inside the burrow.

MM-FC-BIO-8 **Pre-Construction Clearance Surveys.** Pre-construction clearance surveys for special-status wildlife shall be conducted by a qualified Project biologist within 14 days of the initiation of ground disturbance or vegetation clearing within and adjacent to construction areas. Surveys shall be appropriate for detecting potentially occurring species, such as Dulzura pocket mouse, northwestern San Diego pocket mouse, Stephens' kangaroo rat, San Diego desert woodrat, Los Angeles pocket mouse, Southern California legless lizard, California glossy snake, coastal tiger whiptail, red diamondback rattlesnake, Blainville's horned lizard, and coast patch-nosed snake. Surveys need not be conducted in all areas simultaneously, as long as they are conducted within 14 days of the initiation of ground disturbance or vegetation clearing in each area individually. If special-status species are detected, appropriate buffers shall be established, as necessary and as appropriate for the species, unless it is not feasible to avoid the species. If possible, non-listed special-status wildlife species may be captured and relocated to suitable habitat nearby where they are safe from construction activities. Surveys and relocation of these species may only be conducted by the qualified Project biologist.

- If non-listed special-status reptiles or small mammals are detected, they will be moved out of harm's way.

- The Project biologist shall remain available at all times after initiation of ground disturbance or vegetation clearing, in case special-status wildlife species enter the construction area. If non-listed special-status species are detected in the construction area after initiation of ground disturbance or vegetation clearing, the qualified Project biologist shall take measures to move the species, or encourage it to move, to a safe place away from construction activities.

MM-FC-BIO-9 **Pre-Construction Bat Survey and Avoidance.** The Project contains potentially suitable roosting and/or foraging habitat to support western mastiff bat. Potential impacts to bats by the Project may occur through direct removal of occupied roosts or indirectly through the removal of suitable foraging habitat. To determine if bats are currently roosting or foraging on the Project site, and to determine the level of impact that may occur by the Project, the following measures will occur.

- **Pre-Construction Survey.** A pre-construction clearance survey for bats will be conducted at a minimum of 1 month prior to the start of construction to determine if any bats are currently roosting within buildings on the Project site. The pre-construction survey will consist of a daytime roost assessment by a qualified bat biologist to determine if any bats or sign of active roosting is present. An emergence survey at dusk will be conducted after the roost assessment is completed to observe if any bats are emerging from suitable roost locations on the Project site. Additionally, active and passive acoustic monitoring will occur concurrently with the emergence survey to determine if any bats are echolocating within the Project site, identify the echolocating species, and determine the relatively level of bat activity on site. Passive acoustic detectors will be deployed for a minimum of three nights. Once retrieved, bat echolocation calls will be analyzed off site using Sonobat software and manual vetting to identify calls to the species level. If no bats are observed during the pre-construction survey, the Project may commence without potential impacts to bats. However, if bats are observed roosting within the Project site, additional measures will be required as described below.
 - **Maternity Roosting Season Avoidance.** All Project-related activities, including bat roost exclusion, shall occur outside the general bat maternity roosting season of March through August. Roost exclusion must only occur during the time when bats are most active (early spring or fall) to increase the potential to exclude all bats from buildings and minimize the potential for a significant impact to occur by avoiding the maternity roosting season.
 - **Replacement Roost Installation.** One month prior to the exclusion of bats from the buildings, the applicant will procure and install 1–2 bat boxes from a reputable vendor, such as Bat Conservation and Management, to allow bats sufficient time to acclimate to a new potential roost location. The bat boxes shall be installed within close proximity to the buildings and in an area that is within close proximity to suitable foraging habitat. Additionally, the bat boxes will be oriented to the south or southwest, and the area chosen for the bat boxes must receive sufficient sunlight (at least 6 hours) to allow the bat boxes to reach an optimum internal temperature (approximately 90 °F) to mimic the existing bat roost. The bat boxes will be suitable to house crevice-roosting bat species, including Mexican free-tailed bat, and large enough to contain a minimum of 50 bats (e.g., Four Chamber Premium Bat House). The bat boxes shall be installed on a 20-foot pole in an area that will be preserved by the Project.
 - **Roost Exclusion.** Approximately 1 month after bat boxes have been installed, exclusion of the existing roost within the buildings will occur. The primary exit points for roosting bats

will be identified, and all secondary ingress/egress locations on the buildings will be covered with a suitable material (e.g., tarp or wood planks) to prevent bats from leaving from other locations. The primary exit point will remain uncovered to allow exclusion devices to be installed. Exclusion devices will consist of plastic sheeting or a screen (with mesh one-sixth of an inch or smaller), installed at the top and allowing bats to leave but not return. The exclusion devices will be installed at night to increase the potential that bats have already left the roost and are less likely to return. Exclusion devices will be left in place for a 1-week period to ensure any remaining bats in the buildings are excluded. A passive acoustic monitoring detector will also be deployed during the exclusion period to verify excluded species and monitor if bat activity has decreased during the exclusion period. Periodic monitoring during the exclusion period should also be conducted to observe if any bats are still emerging from the buildings, and an active monitoring survey conducted on the final night of exclusion to ensure no bats are emerging from the buildings and determine exclusion has been successful. Any continued presence of roosting bats will require an adjustment to the exclusion devices and schedule.

MM-FC-BIO-10 Pre-Construction American Badger Survey and Avoidance. Impacts to American badger individuals and wintering and natal dens shall be avoided and minimized during construction activities through the following measures.

- **Pre-Construction Surveys (Wintering).** During the colder months (generally between November 1 and February 15, when daily temperatures do not exceed 45 °F), pre-construction surveys shall be conducted by the Project biologist in suitable habitat no earlier than 14 days prior to construction activities to determine whether American badger winter dens are present within the construction zone or within 100 feet of the construction zone boundary.
- **Avoidance Measures (Wintering).** If an American badger winter den is occupied within the construction zone or within 100 feet of the construction zone, then the den location shall be clearly marked with fencing or flagging in a manner that does not isolate the badger from intact adjacent habitat or prevent the badger from accessing the den, to avoid inadvertent impacts on the den. If it is not practicable to avoid the wintering den during construction activities, an attempt will be made to trap or flush the individual and relocate it to suitable open space habitat. Additionally, badgers can be relocated by slowly excavating the burrow, either by hand or mechanized equipment under the direct supervision of the Project biologist, removing no more than 4 inches at a time. After necessary trapping, flushing, or burrow excavation is completed, construction may proceed and the vacated winter den may be collapsed. If trapping is required, trapping will be limited to November 16 through the last day of February in accordance with Section 461, Title 14 of the California Code of Regulations (14 CCR 461). A written report documenting the badger removal shall be provided to the California Department of Fish and Wildlife within 30 days of relocation.
- **Pre-Construction Surveys (Natal Dens).** During the late winter and summer (generally from March 15 through July 31), when American badgers may use natal dens for birthing and pup rearing, pre-construction surveys shall be conducted by the Project biologist no earlier than 14 days prior to ground-disturbing construction activities to determine whether American badger natal dens are present within the Project construction zone or within 200 feet of the construction zone.

- Avoidance Measures (Natal Dens).** If natal dens are detected during construction, construction activities shall be halted within 200 feet of the natal den. This buffer may be reduced based on the location of the den or type of construction activity, based on the direction of the Project biologist. Construction activities shall not preclude the ability of the documented badgers to disperse to on-site open space or off-site habitat when the natal den is vacated (i.e., habitat suitable for dispersal must be maintained until dispersal occurs). Construction will be postponed or halted in these areas until it is determined by the Project biologist that the young are no longer dependent on the natal den. To avoid inadvertent impacts during construction and to ensure that construction activities are at least 200 feet from active natal dens, any active natal dens within the survey area shall be clearly marked with fencing or flagging in a manner that will not inhibit normal behavioral activities (e.g., foraging and dispersing from the site) by the mother and pups.

MM-FC-BIO-11 Pre-Construction Survey for Crotch Bumble Bee. While Crotch bumble bee is a candidate for listing under the California Endangered Species Act, a pre-construction survey for Crotch bumble bee shall be conducted within the construction footprint prior to the start of ground-disturbing construction activities occurring during the Crotch bumble bee nesting period (February 1 through October 31). A pre-construction survey shall be conducted prior to each phase of Project implementation. The survey shall ensure that no nests for Crotch bumble bee are located within the construction area. The pre-construction survey shall include (1) a habitat assessment and (2) focused surveys, both of which shall be based on recommendations described in the Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species, released by the California Department of Fish and Wildlife (CDFW) on June 6, 2023, or the most current version at the time of construction.

The habitat assessment shall, at a minimum, include historical and current species occurrences; document potential habitat onsite including foraging, nesting, and/or overwintering resources; and identify which plant species are present. For the purposes of this mitigation measure, nest resources are defined as abandoned small mammal burrows, bunch grasses with a duff layer, thatch, hollow trees, brush piles, and human-made structures that may support bumble bee colonies, such as rock walls, rubble, and furniture. The habitat assessment shall be repeated prior to February 1 in each year ground-disturbing activities occur to determine if nesting resources are present within the impact area. If nesting resources are present in the impact area, focused surveys shall be conducted.

The focused survey shall be performed by a biologist with expertise in surveying for bumble bees and include at least three survey passes that are not on sequential days or in the same week, preferably spaced 2 to 4 weeks apart. The timing of these surveys shall coincide with the Colony Active Period (April 1 through August 31 for Crotch bumble bee). Surveys may occur between 1 hour after sunrise and 2 hours before sunset. Surveys shall not be conducted during wet conditions (e.g., foggy, raining, or drizzling) and surveyors shall wait at least 1 hour following rain. Optimal surveys are conducted when there are sunny to partly sunny skies and a temperature greater than 60°F. Surveys may be conducted earlier if other bees or butterflies are flying. Surveys shall not be conducted when it is windy (i.e., sustained winds greater than 8 mph). Within non-developed habitats, the biologist shall look for nest resources suitable for bumble bee use. Ensuring that all nest resources receive 100% visual coverage, the biologist shall watch the nest resources for up

to 5 minutes, looking for exiting or entering worker bumble bees. Worker bees should arrive and exit an active nest site with frequency such that their presence would be apparent after 5 minutes of observation. If a bumble bee worker is detected, then a representative shall be identified to species. Biologists should be able to view several burrows at one time to sufficiently determine if bees are entering/exiting them, depending on their proximity to one another. It is up to the discretion of the biologist regarding the actual survey viewshed limits from the chosen vantage point to determine which would provide 100% visual coverage; this could include a 30- to 50-foot-wide area. If a nest is suspected, the surveyor can block the entrance of the possible nest with a sterile vial or jar until nest activity is confirmed (no longer than 30 minutes).

Identification shall include trained biologists netting/capturing the representative bumble bee in appropriate insect nets, per the protocol in U.S. National Protocol Framework for the Inventory and Monitoring of Bees. The bee shall be placed in a clear container for observation and photographic documentation, if able. The bee shall be photographed using a macro lens from various angles to ensure recordation of key identifying characteristics. If bumble bee-identifying characteristics cannot be adequately captured in the container due to movement, the container shall be placed in a cooler with ice until the bumble bee becomes inactive (generally within 15 minutes). Once inert, the bumble bee shall be removed from the container and placed on a white sheet of paper or card for examination and photographic documentation. The bumble bee shall be released into the same area from which it was captured upon completion of identification. Based on implementation of this method on a variety of other bumble bee species, they become active shortly after removal from the cold environment, so photography must be performed quickly.

If Crotch bumble bee nests are not detected, no further mitigation would be required. The mere presence of foraging Crotch bumble bees would not require implementation of additional minimization measures because they can forage up to 10 kilometers from their nests. If nest resources occupied by Crotch bumble bee are detected within the construction area, no construction activities shall occur within 100 feet of the nest, or as determined by a qualified biologist through evaluation of topographic features or distribution of floral resources. The nest resources shall be avoided for the duration of the Crotch bumble bee nesting period (February 1 through October 31). Outside of the nesting season, it is assumed that no live individuals would be present within the nest, as the daughter queens (gynes) usually leave by September, and all other individuals (original queen, workers, males) die. The gyne is highly mobile and can independently disperse to outside of the construction footprint to surrounding open space areas that support suitable hibernacula resources.

A written survey report shall be submitted to the City of Yucaipa and CDFW within 30 days of the pre-construction survey. The report shall include survey methods, weather conditions, and survey results, including a list of insect species observed and a figure showing the locations of any Crotch bumble bee nest sites or individuals observed. The survey report shall include the qualifications/resumes of the surveyor(s) and approved biologist(s) for identification of photo vouchers and a detailed habitat assessment. If Crotch bumble bee nests are observed, the survey report shall also include recommendations for avoidance, and the location information shall be submitted to the California Natural Diversity Database at the time of, or prior to, submittal of the survey report.

If the above measures are followed, it is assumed that the Project shall not need to obtain authorization from CDFW through the CESA Incidental Take Permit process. If the nest resources cannot be avoided, as outlined in this measure, the Project applicant shall consult with CDFW regarding the need to obtain an Incidental Take Permit. Any measures determined to be necessary through the Incidental Take Permit process to offset impacts to Crotch bumble bee may supersede measures provided in this CEQA document and shall be incorporated into the habitat mitigation and monitoring plan.

In the event an Incidental Take Permit is needed, mitigation for direct impacts to Crotch bumble bee shall be fulfilled through compensatory mitigation at a minimum 1:1 nesting habitat replacement of equal or better functions and values to those impacted by the Project, or as otherwise determined through the Incidental Take Permit process. Mitigation shall be accomplished either through off-site conservation or through a CDFW-approved mitigation bank. If mitigation is not purchased through a mitigation bank, and lands are conserved separately, a cost estimate shall be prepared to estimate the initial start-up costs and ongoing annual costs of management activities for the management of the conservation easement area(s) in perpetuity. The funding source shall be in the form of an endowment to help the qualified natural lands management entity that is ultimately selected to hold the conservation easement(s). The endowment amount shall be established following the completion of a Project-specific Property Analysis Record to calculate the costs of in-perpetuity land management. The Property Analysis Record shall take into account all management activities required in the Incidental Take Permit to fulfill the requirements of the conservation easement(s), which are currently in review and development.

MM-FC-BIO-12 Burrowing Owl Protocol Survey. A protocol burrowing owl survey shall be conducted by a qualified biologist outside the focused survey area prior to ground-disturbing activities. Surveys shall be conducted in accordance with the California Department of Fish and Game [now California Department of Fish and Wildlife] 2012 Staff Report on Burrowing Owl Mitigation or current version. The results of the survey shall be summarized in a report and would be valid for a maximum of 2 years. If no burrowing owl are found during the survey, no further mitigation would be required; however, the Project must comply with **MM-FC-BIO-7**, Pre-construction Burrowing Owl Surveys and Avoidance.

If burrowing owl are detected, the full extent of the occurrence of occupied burrowing owl habitat within the survey area shall be recorded using GPS. The outer extent of each occurrence shall be flagged for avoidance (to the extent feasible).

For direct impacts to burrowing owl, impacts to burrowing owl shall be avoided to the greatest extent possible and minimized where avoidance is not feasible. Where Project impacts to burrowing owl cannot be avoided, a burrowing owl protection plan will be prepared and implemented, as summarized in **MM-FC-BIO-7**.

MM-FC-BIO-13 Least Bell's Vireo Protocol Survey. A focused habitat assessment shall be conducted for future development outside of the focused survey area. If suitable habitat is present, protocol least Bell's vireo survey shall be conducted by a qualified biologist within suitable riparian habitat prior to ground-disturbing activities. Surveys shall be conducted in accordance with the U.S. Fish and Wildlife Service (USFWS) 2001 Least Bell's Vireo Survey Guidelines, or current version. The results

of the survey shall be summarized in a report and would be valid for a maximum of 2 years. If no least Bell's vireo are found during the survey, no further mitigation would be required.

If least Bell's vireo are detected, the Project shall receive authorization from USFWS through the federal Endangered Species Act Incidental Take Permit process, including the preparation of a Biological Assessment, for take of least Bell's vireo. Any measures determined to be necessary through the Incidental Take Permit process to offset impacts to least Bell's vireo may supersede measures provided in this California Environmental Quality Act document and shall be incorporated into the habitat mitigation and monitoring plan.

Mitigation for direct impacts to least Bell's vireo will be fulfilled through compensatory mitigation at a 2:1 habitat replacement of equal or better functions and values to those impacted by the Project, or as otherwise determined through the Incidental Take Permit process. Mitigation will be accomplished either through off-site conservation or through a USFWS-approved mitigation bank. If mitigation is not purchased through a mitigation bank and lands are conserved separately, a cost estimate will be prepared to estimate the initial start-up costs and ongoing annual costs of management activities for the management of the conservation easement area(s) in perpetuity. The funding source will be in the form of an endowment to help the qualified natural lands management entity that is ultimately selected to hold the conservation easement(s). The endowment amount will be established following the completion of a Project-specific Property Analysis Record to calculate the costs of in-perpetuity land management. The Property Analysis Record will take into account all management activities required in the Incidental Take Permit to fulfill the requirements of the conservation easement(s), which are currently in review and development.

MM-FC-BIO-14 Aquatic Resource Avoidance, Permitting, and Protection. The Specific Plan area supports aquatic resources that are considered jurisdictional under the U.S. Army Corps of Engineers (USACE), the Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Wildlife (CDFW). If aquatic resources are fully avoided, no further mitigation would be required; however, the Project must comply with **MM-FC-BIO-2**, Construction-Related Indirect Impacts to Biological Resources, and **MM-FC-BIO-3**, Long-Term Indirect Impacts to Biological Resources.

If full avoidance is not possible, prior to construction activity, the applicant shall coordinate with USACE and the Santa Ana RWQCB (Region 8) to ensure conformance with the requirements of Section 404 and Section 401 of the Clean Water Act and the Porter–Cologne Water Quality Control Act. Prior to activity within CDFW-jurisdictional streambed or associated riparian habitat, the applicant shall coordinate with CDFW (Inland Deserts Region 6) relative to conformance to the Lake and Streambed Alteration permit requirements.

Future development shall mitigate to ensure no-net-loss of waters at a minimum of 1:1 with establishment or re-establishment credits for impacts on aquatic resources as a part of an overall strategy to ensure no net loss, or at a higher ratio if establishment or re-establishment credits are not available. Mitigation shall be completed through use of a mitigation bank or other applicant-sponsored mitigation. Final mitigation ratios and credits shall be determined in consultation with USACE, RWQCB, and/or CDFW based on agency evaluation of current resource functions and values and through each agency's respective permitting process.

Should applicant-sponsored mitigation be implemented, a habitat mitigation and monitoring plan shall be prepared in accordance with resource agency guidelines and approved by the agencies in accordance with the proposed program permits. The habitat mitigation and monitoring plan will include but is not limited to a conceptual planting plan including planting zones, grading, and irrigation, as applicable; a conceptual planting plant palette; a long-term maintenance and monitoring plan; annual reporting requirements; and proposed success criteria. Any off-site applicant-sponsored mitigation shall be conserved and managed in perpetuity.

MM-FC-BIO-15 Sensitive Upland Vegetation Avoidance and Mitigation. The Specific Plan area supports sensitive vegetation communities, including Menzies’s golden bush scrub and Palmer’s goldenbush scrub. Future development should avoid these communities. If sensitive upland vegetation communities are fully avoided, no further mitigation will be required.

If full avoidance is not possible, prior to construction activities, the applicant shall mitigate for direct impacts to sensitive vegetation communities at a 1:1 ratio through either a mitigation bank or applicant-responsible mitigation. If applicant-responsible mitigation is performed, a mitigation plan must be prepared. The mitigation plan shall include the following elements: (1) the mitigation type (e.g., preservation, creation); (2) location of mitigation; (3) evaluation of how the functions and values of the impacted vegetation communities will be mitigated; (4) an implementation plan; (5) maintenance requirements; (6) monitoring requirements; (7) reporting requirements; (8) contingency measures; (9) long-term management; and (10) funding assurances

MM-FC-BIO-16 Culvert Undercrossing. A wildlife undercrossing shall be constructed where proposed improvements to Live Oak Canyon Road and the future Wildwood Canyon Road interchange cross over Yucaipa Creek. The undercrossing will be designed sufficient to convey large, medium, and smaller-sized wildlife. The wildlife undercrossing shall utilize existing or manufactured topography. The crossing shall be designed to provide a greater or equal to 0.6 openness ratio (calculated as width times height divided by length in meters) with direct line of sight at both ends. The crossing shall have a raised floor and/or side platform to allow dry passage for wildlife when water is flowing. The design should consider the use of berms to protect the undercrossing from light and noise.

MM-FC-BIO-17 Tree Removal Permit. Prior to the issuance of grading permits, it will be the responsibility of the Project applicant to obtain the necessary permits for removal of trees, including oak trees, as well as the removal of plants within 200 feet of a streambank. The Project applicant will provide the appropriate plot plan or other documentation required by the City of Yucaipa.

7.3 Pacific Oaks Commerce Center Mitigation Measures

The following Mitigation Measures would be implemented:

- MM-FC-BIO-2 (Construction-Related Indirect Impacts to Biological Resources)
- MM-FC-BIO-3 (Long-Term Indirect Impacts to Biological Resources)
- MM-FC-BIO-4 (Pre-Construction Pond Check)
- MM-FC-BIO-6 (Pre-Construction Nesting Bird Survey)
- MM-FC-BIO-7 (Pre-Construction Burrowing Owl Surveys and Avoidance)

- MM-FC-BIO-8 (Pre-Construction Clearance Surveys)
- MM-FC-BIO-9 (Pre-Construction Bat Survey and Avoidance)
- MM-FC-BIO-10 (Pre-Construction American Badger Survey and Avoidance)
- MM-FC-BIO-11 (Pre-Construction Survey for Crotch Bumble Bee)
- MM-FC-BIO-17 (Tree Removal Permit)
- MM-SPE-B-7 (Oak Tree Survey)
- MM-SPE-B-8 (Oak Tree Permit)
- MM-SPE-B-9 (Oak Tree Design Guidelines)
- MM-SPE-B-10 (Oak Tree Mitigation)

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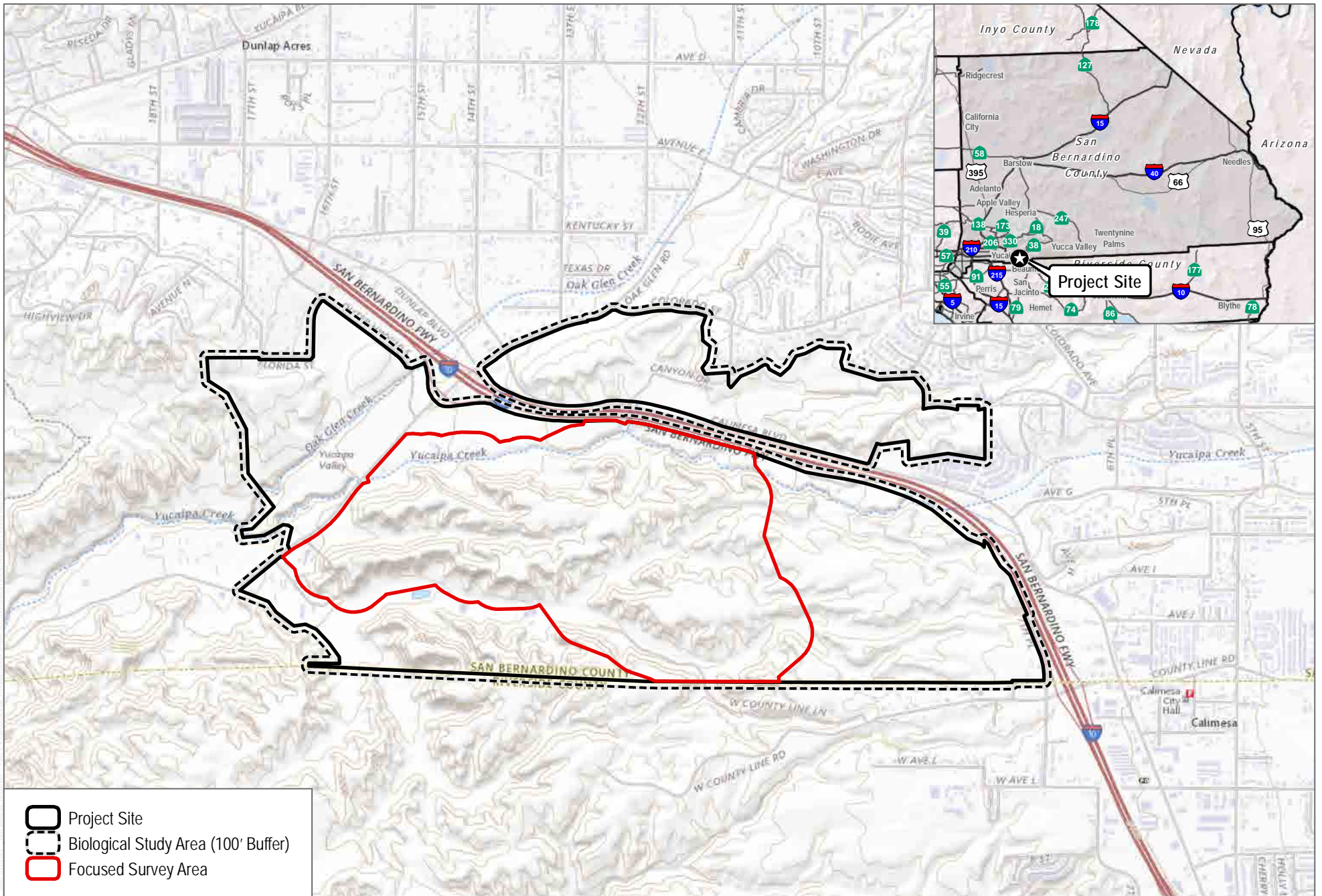
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Appendix A

Figures

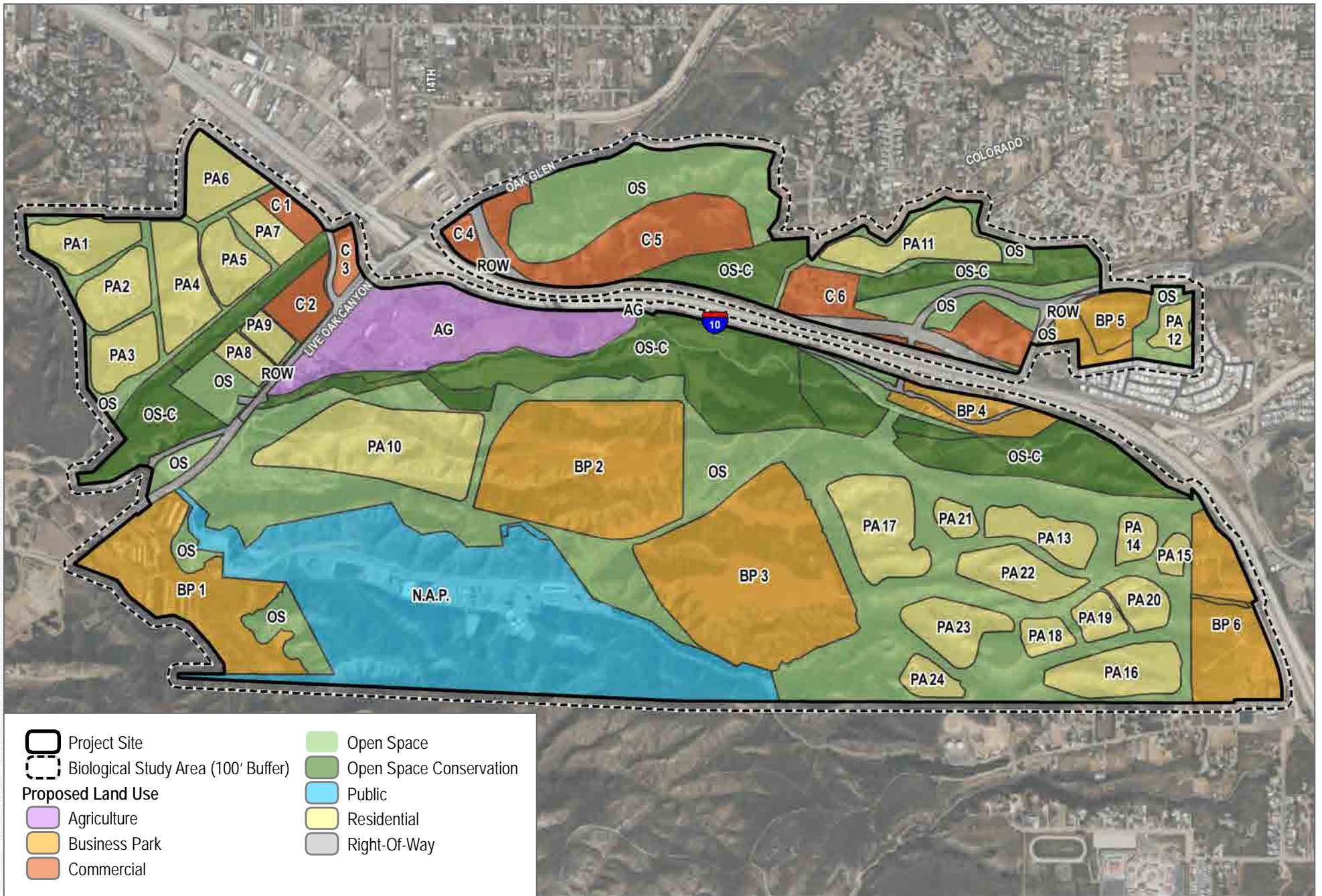


-  Project Site
-  Biological Study Area (100' Buffer)
-  Focused Survey Area

SOURCE: USGS Topo Maps 2013



FIGURE 1
 Vicinity Map
 Freeway Corridor Specific Plan Biological Resources Technical Report



SOURCE: USGS Topo Maps 2013



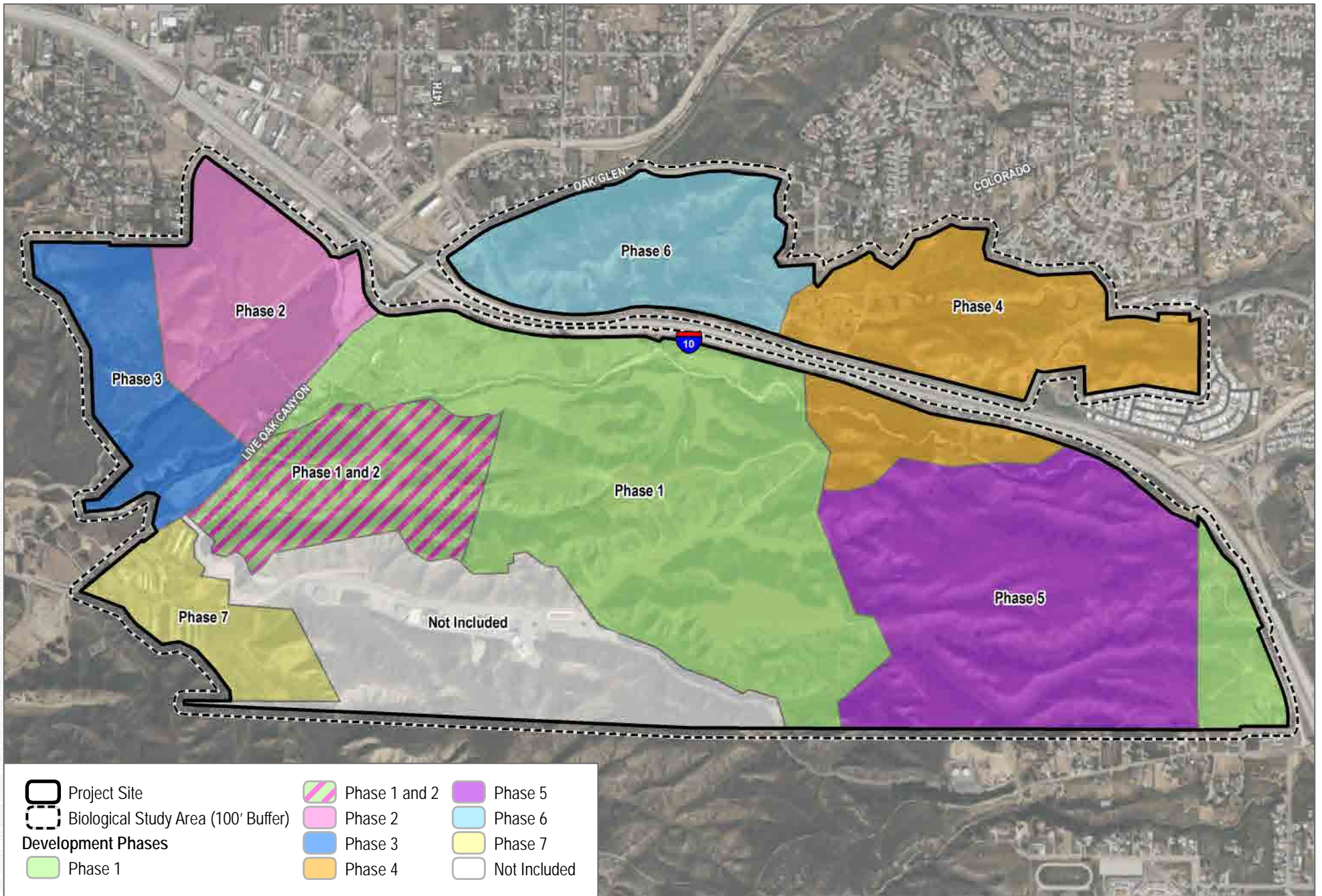
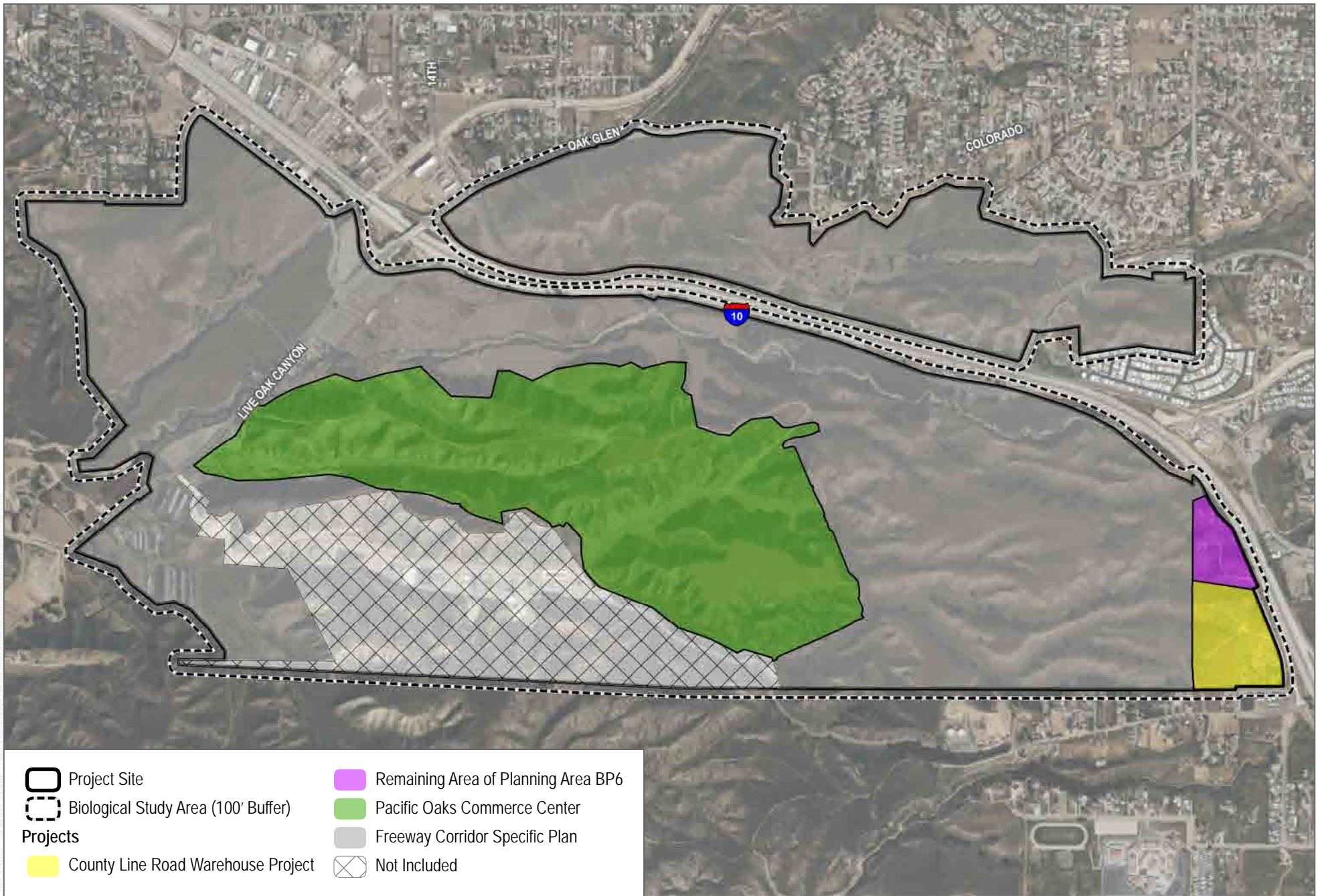


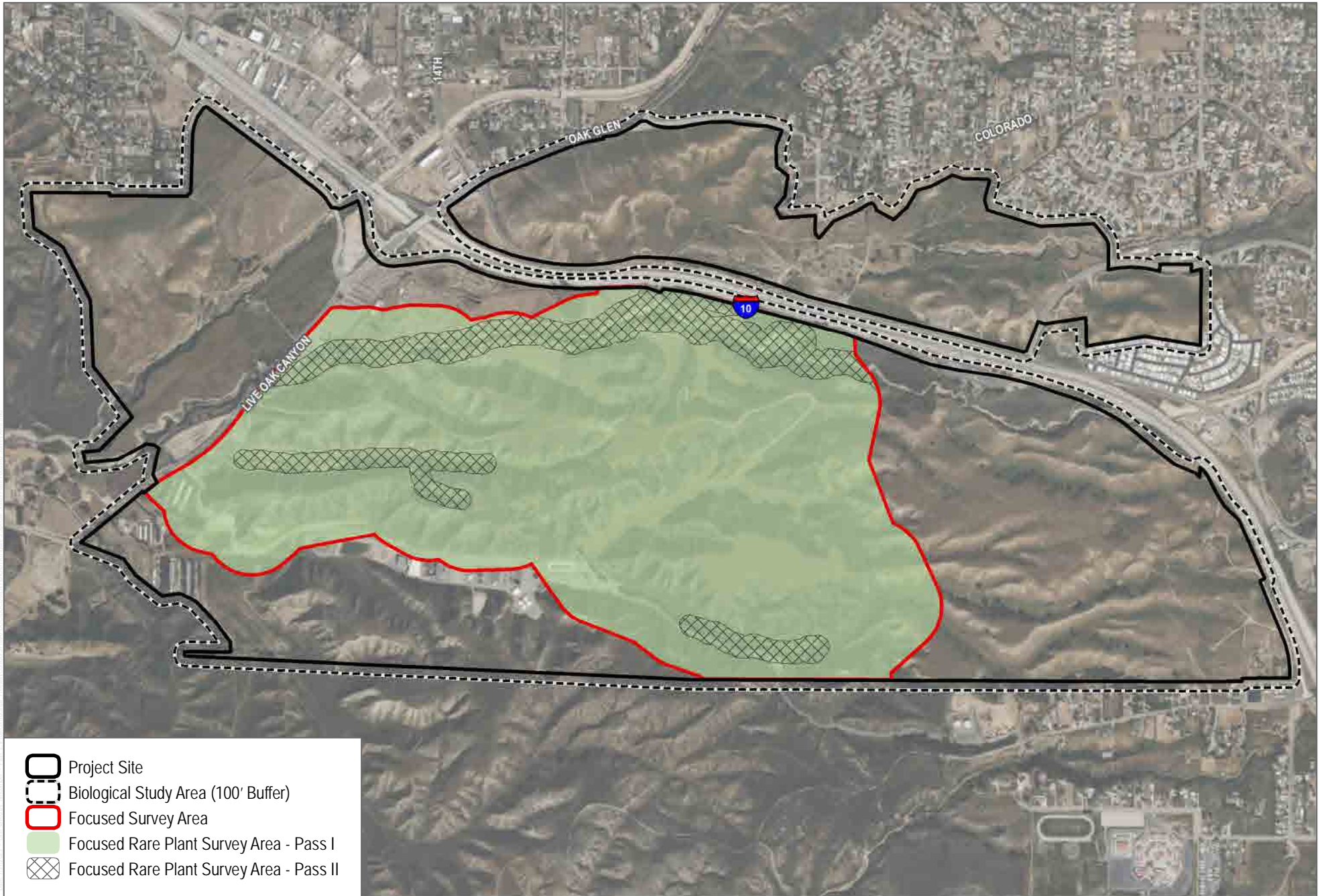
FIGURE 2B
Phasing Plan



SOURCE: USGS Topo Maps 2013



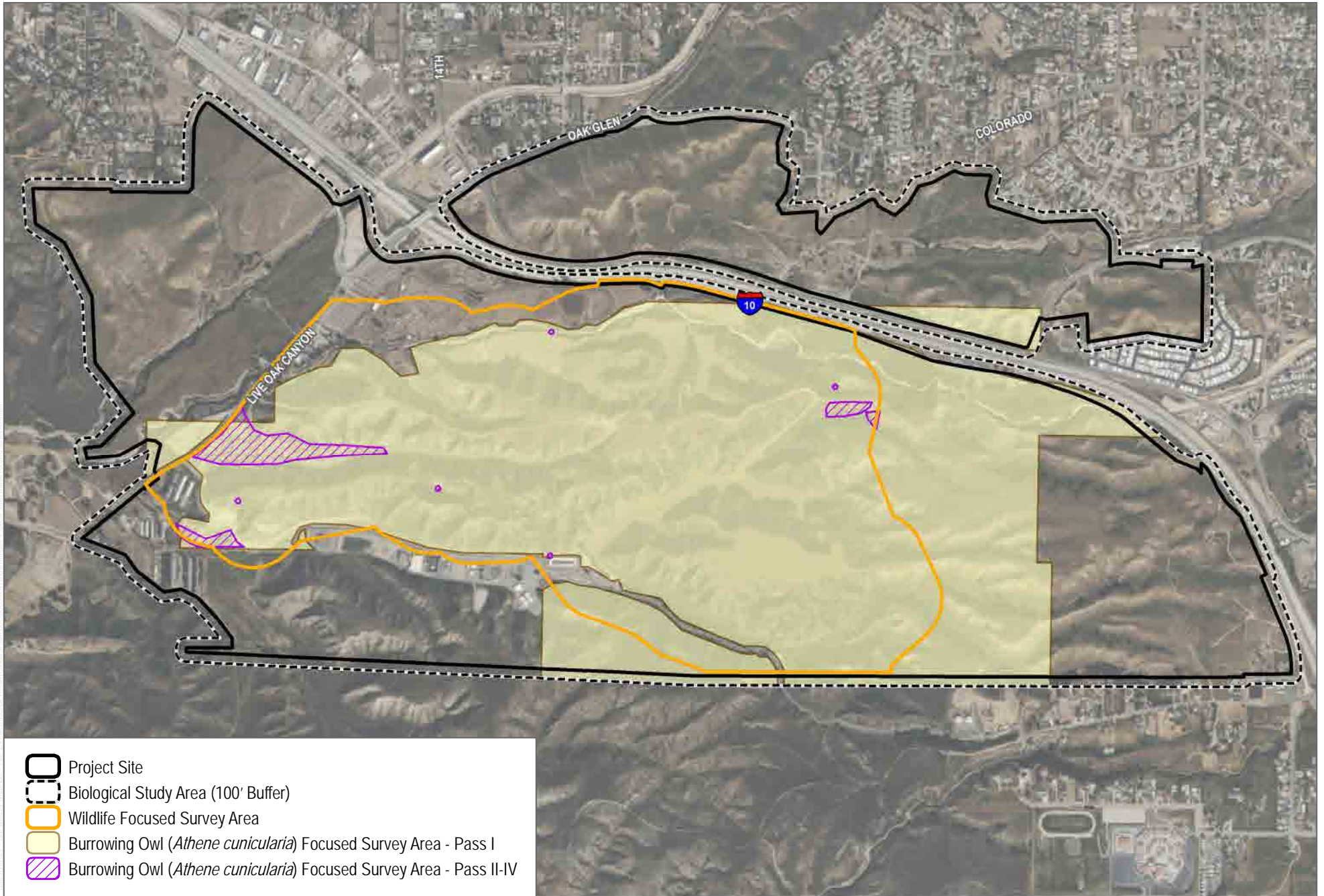
FIGURE 2C
Projects



SOURCE: USGS Topo Maps 2013

FIGURE 3

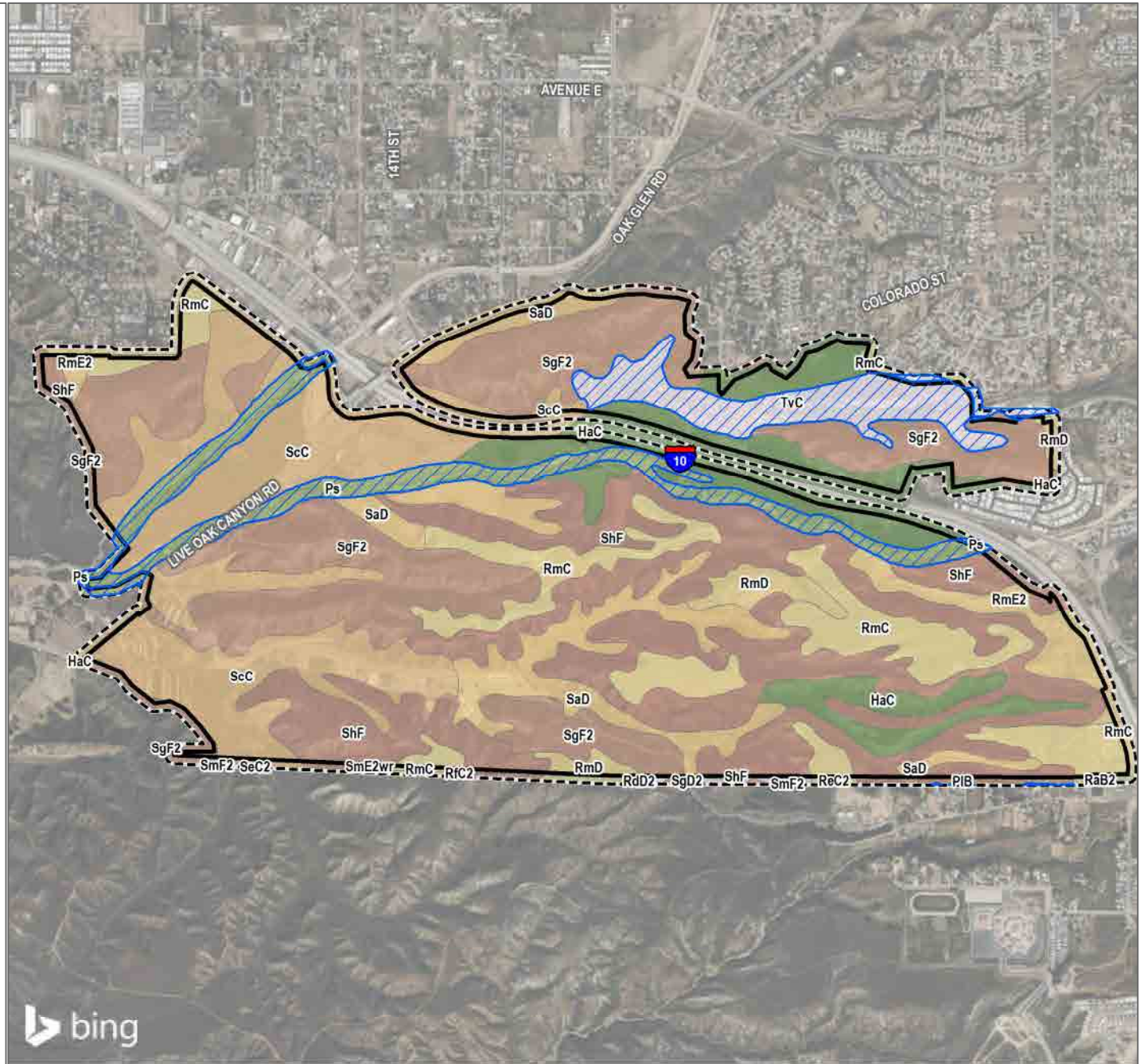
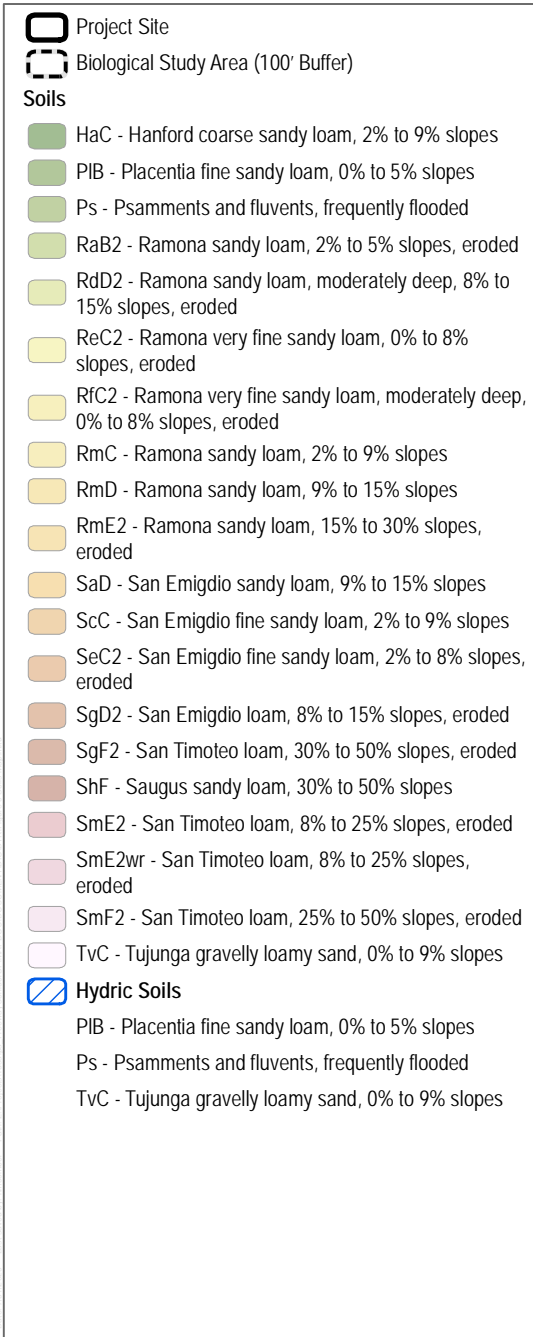
Special-Status Plant Focused Survey Area
Freeway Corridor Specific Plan Biological Resources Technical Report



SOURCE: USGS Topo Maps 2013

FIGURE 4

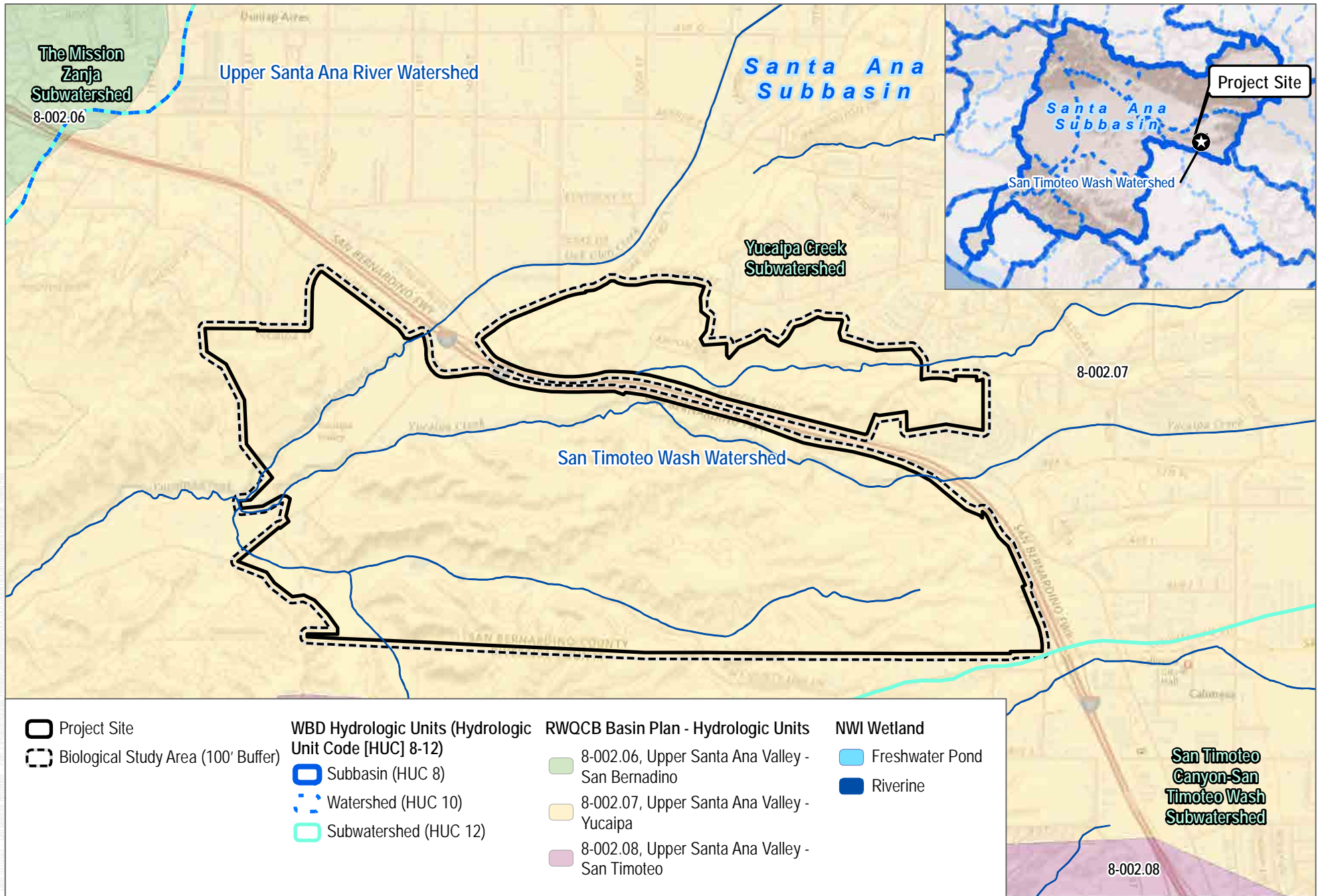
Special-Status Wildlife Focused Survey Area
Freeway Corridor Specific Plan Biological Resources Technical Report



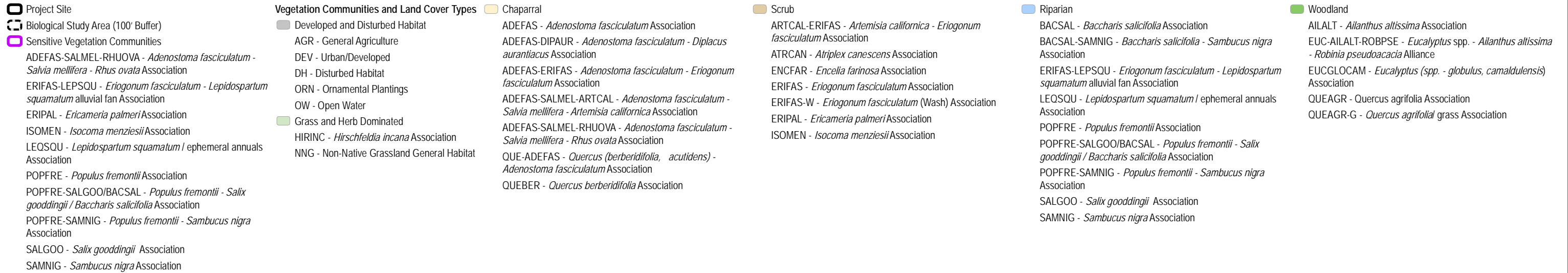
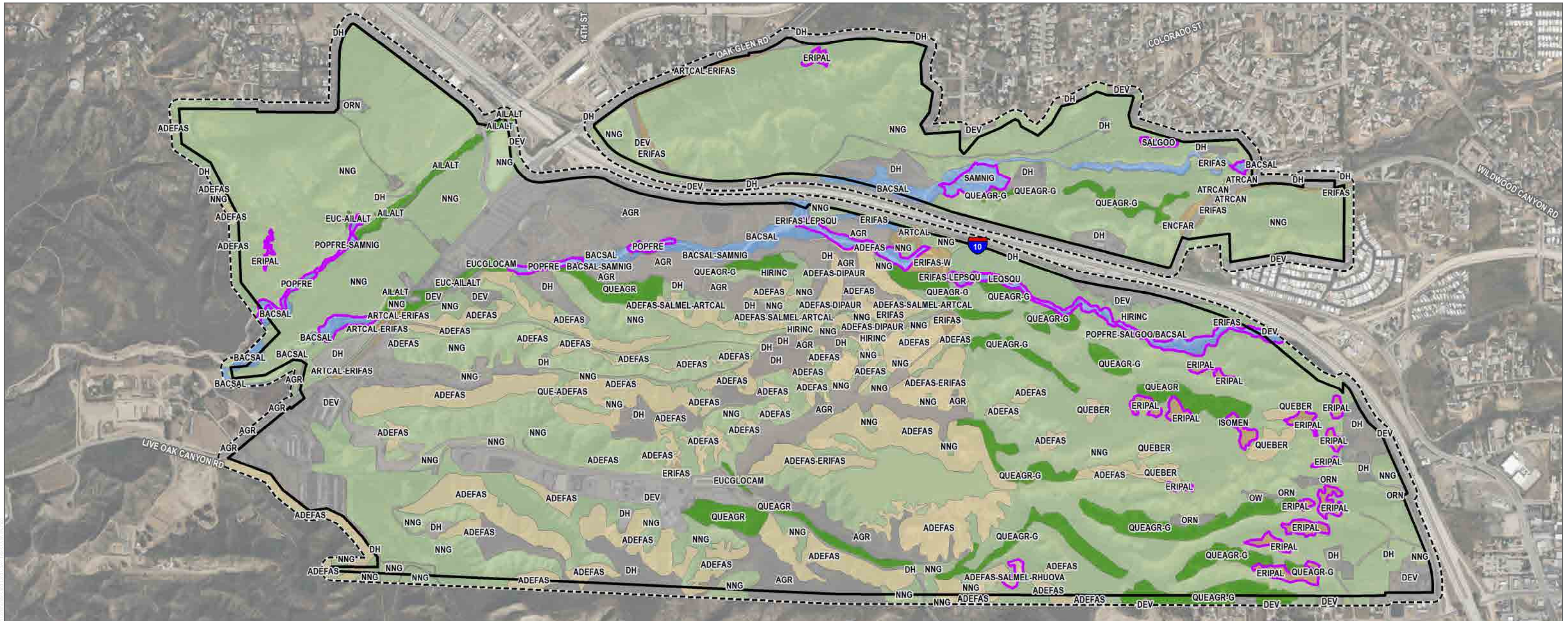
SOURCE: Bing Maps (accessed 2023); USDA SSURGO 2023



FIGURE 5
Soils Map
Freeway Corridor Specific Plan Biological Resources Technical Report



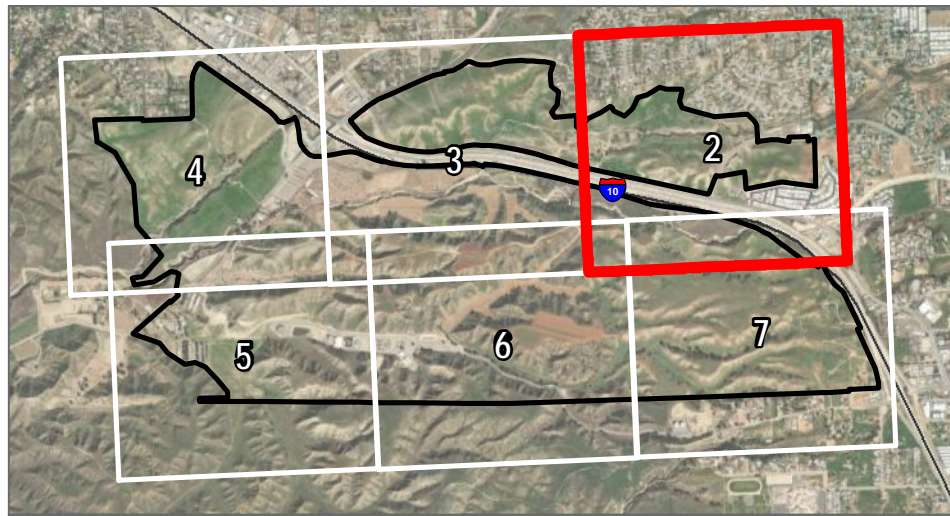
SOURCE: USGS Topo Maps 2013; USGS 2023; NWI 2023; RWQCB 2023



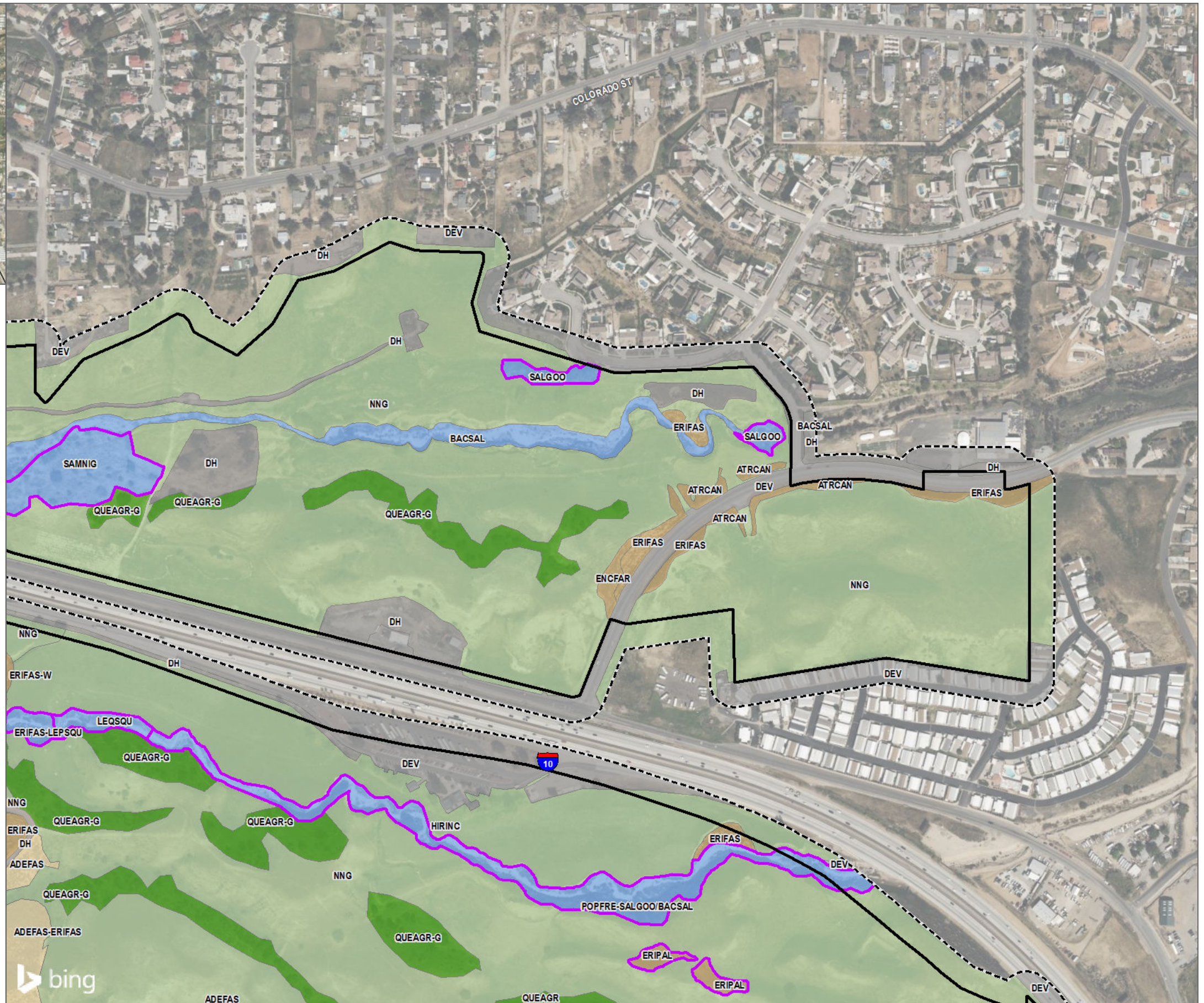
SOURCE: Bing Maps (accessed 2023); San Bernadino County 2023



FIGURE 7-1
Vegetation Communities and Land Cover Types
Freeway Corridor Specific Plan Biological Resources Technical Report



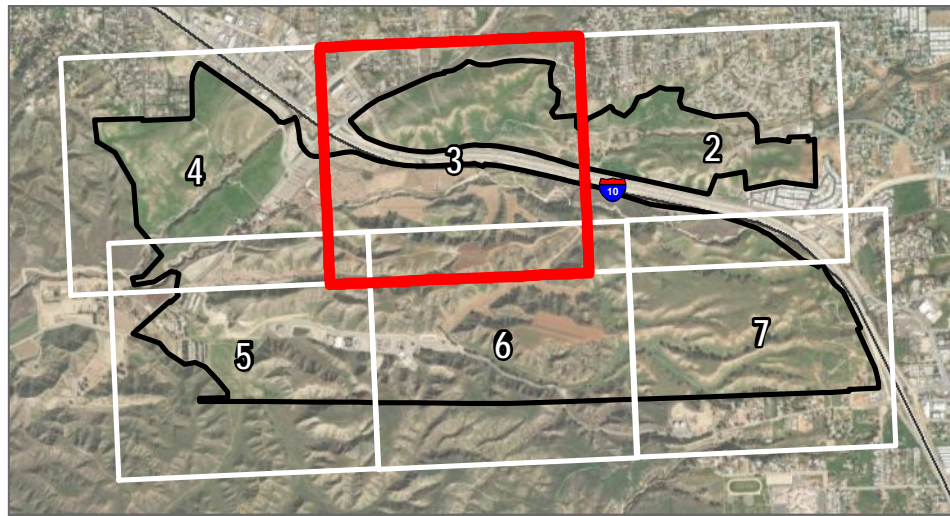
- Project Site
- Biological Study Area (100' Buffer)
- Sensitive Vegetation Communities
- ERIFAS-LEPSQU - *Eriogonum fasciculatum* - *Lepidospartum squamatum* alluvial fan Association
- ERIPAL - *Ericameria palmeri* Association
- LEQSQU - *Lepidospartum squamatum* / ephemeral annuals Association
- POPFRE-SALGOO/BACSAL - *Populus fremontii* - *Salix gooddingii* / *Baccharis salicifolia* Association
- SALGOO - *Salix gooddingii* Association
- SAMNIG - *Sambucus nigra* Association
- Vegetation Communities and Land Cover Types**
- Developed and Disturbed Habitat
- DEV - Urban/Developed
- DH - Disturbed Habitat
- Grass and Herb Dominated
- HIRINC - *Hirschfeldia incana* Association
- NNG - Non-Native Grassland General Habitat
- Chaparral
- ADEFAS - *Adenostoma fasciculatum* Association
- ADEFAS-ERIFAS - *Adenostoma fasciculatum* - *Eriogonum fasciculatum* Association
- Scrub
- ATRCAN - *Atriplex canescens* Association
- ENCFAR - *Encelia farinosa* Association
- ERIFAS - *Eriogonum fasciculatum* Association
- ERIFAS-W - *Eriogonum fasciculatum* (Wash) Association
- ERIPAL - *Ericameria palmeri* Association
- Riparian
- BACSAL - *Baccharis salicifolia* Association
- ERIFAS-LEPSQU - *Eriogonum fasciculatum* - *Lepidospartum squamatum* alluvial fan Association
- LEQSQU - *Lepidospartum squamatum* / ephemeral annuals Association
- POPFRE-SALGOO/BACSAL - *Populus fremontii* - *Salix gooddingii* / *Baccharis salicifolia* Association
- SALGOO - *Salix gooddingii* Association
- SAMNIG - *Sambucus nigra* Association
- Woodland
- QUEAGR - *Quercus agrifolia* Association
- QUEAGR-G - *Quercus agrifolia* grass Association



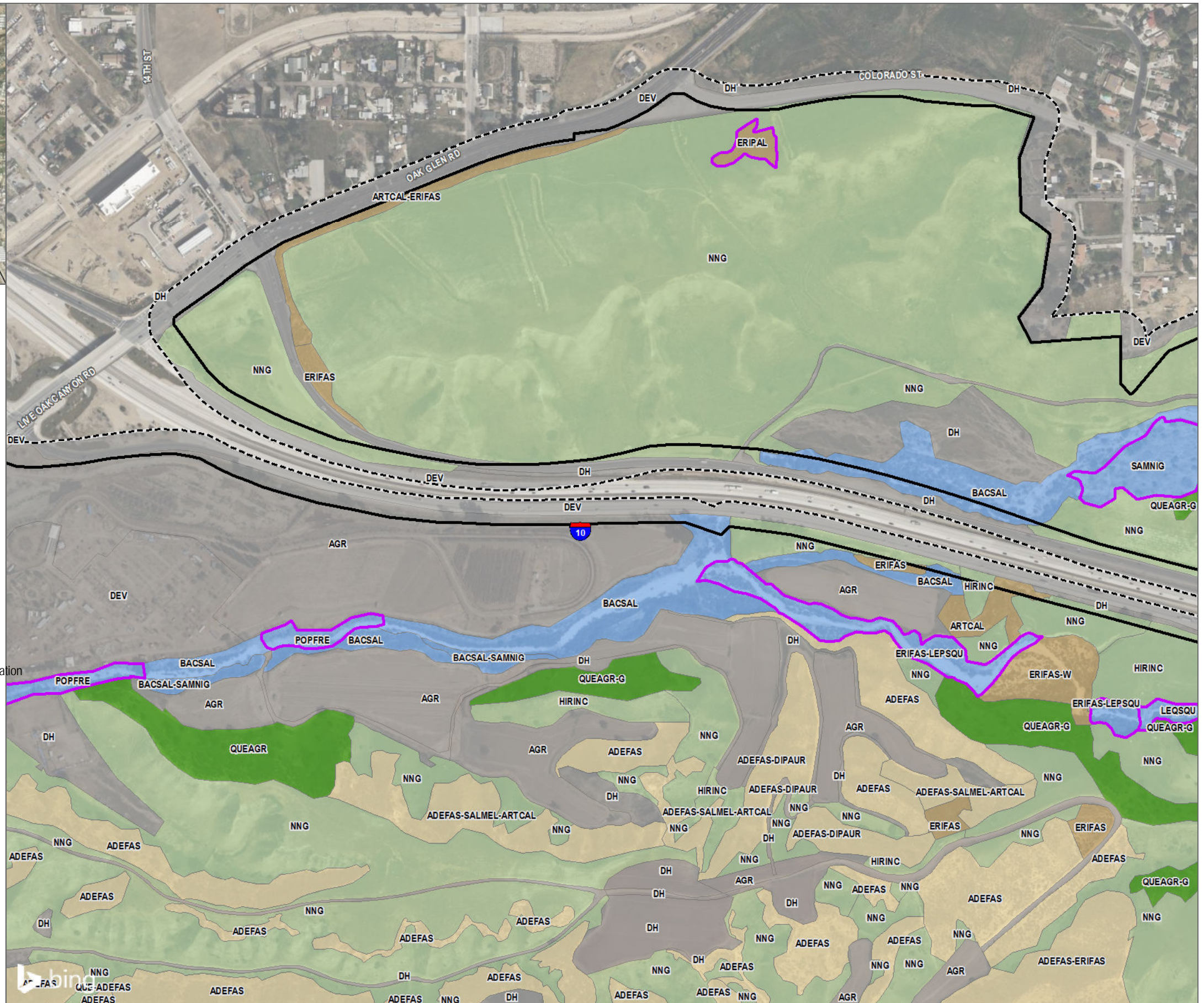
SOURCE: Bing Maps (accessed 2023); San Bernadino County 2023



FIGURE 7-2
Vegetation Communities and Land Cover Types
Freeway Corridor Specific Plan Biological Resources Technical Report



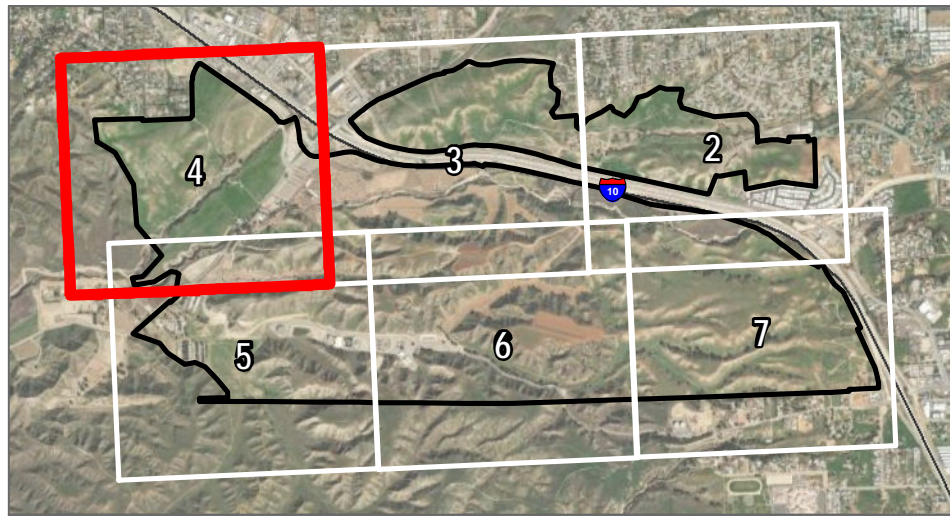
- Project Site
- Biological Study Area (100' Buffer)
- Sensitive Vegetation Communities
- ERIFAS-LEPSQU - *Eriogonum fasciculatum* - *Lepidospartum squamatum* alluvial fan Association
- ERIPAL - *Ericameria palmeri* Association
- LEQSQU - *Lepidospartum squamatum* / ephemeral annuals Association
- POPFRE - *Populus fremontii* Association
- SAMNIG - *Sambucus nigra* Association
- Vegetation Communities and Land Cover Types**
- Developed and Disturbed Habitat
- AGR - General Agriculture
- DEV - Urban/Developed
- DH - Disturbed Habitat
- Grass and Herb Dominated
- HIRINC - *Hirschfeldia incana* Association
- NNG - Non-Native Grassland General Habitat
- Chaparral
- ADEFAS - *Adenostoma fasciculatum* Association
- ADEFAS-DIPAUR - *Adenostoma fasciculatum* - *Diplacus aurantiacus* Association
- ADEFAS-ERIFAS - *Adenostoma fasciculatum* - *Eriogonum fasciculatum* Association
- ADEFAS-SALMEL-ARTCAL - *Adenostoma fasciculatum* - *Salvia mellifera* - *Artemisia californica* Association
- QUE-ADEFAS - *Quercus (berberidifolia, acutidens)* - *Adenostoma fasciculatum* Association
- Scrub
- ARTCAL-ERIFAS - *Artemisia californica* - *Eriogonum fasciculatum* Association
- ERIFAS - *Eriogonum fasciculatum* Association
- ERIFAS-W - *Eriogonum fasciculatum* (Wash) Association
- ERIPAL - *Ericameria palmeri* Association
- Riparian
- BACSAL - *Baccharis salicifolia* Association
- BACSAL-SAMNIG - *Baccharis salicifolia* - *Sambucus nigra* Association
- ERIFAS-LEPSQU - *Eriogonum fasciculatum* - *Lepidospartum squamatum* alluvial fan Association
- LEQSQU - *Lepidospartum squamatum* / ephemeral annuals Association
- POPFRE - *Populus fremontii* Association
- SAMNIG - *Sambucus nigra* Association
- Woodland
- QUEAGR - *Quercus agrifolia* Association
- QUEAGR-G - *Quercus agrifolia* grass Association



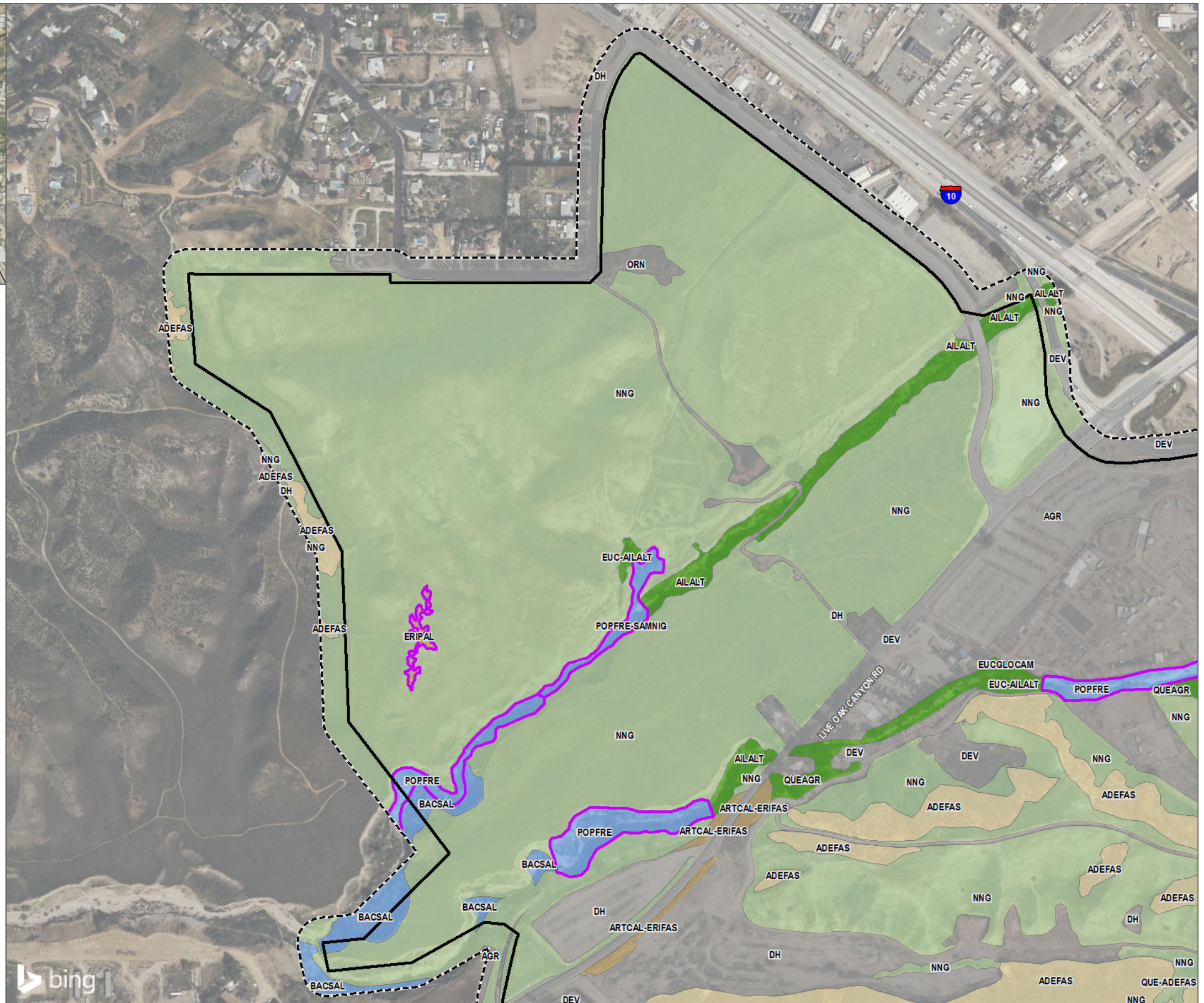
SOURCE: Bing Maps (accessed 2023); San Bernadino County 2023



FIGURE 7-3
Vegetation Communities and Land Cover Types
Freeway Corridor Specific Plan Biological Resources Technical Report



- Project Site
- Biological Study Area (100' Buffer)
- Sensitive Vegetation Communities
- ERIPAL - *Ericameria palmeri* Association
- POPFRE - *Populus fremontii* Association
- POPFRE-SAMNIG - *Populus fremontii* - *Sambucus nigra* Association
- Vegetation Communities and Land Cover Types**
- Developed and Disturbed Habitat
- AGR - General Agriculture
- DEV - Urban/Developed
- DH - Disturbed Habitat
- ORN - Ornamental Plantings
- Grass and Herb Dominated
- NNG - Non-Native Grassland General Habitat
- Chaparral
- ADEFAS - *Adenostoma fasciculatum* Association
- QUE-ADEFAS - *Quercus (berberidifolia, acutidens)* - *Adenostoma fasciculatum* Association
- Scrub
- ARTCAL-ERIFAS - *Artemisia californica* - *Eriogonum fasciculatum* Association
- ERIPAL - *Ericameria palmeri* Association
- Riparian
- BACSAL - *Baccharis salicifolia* Association
- POPFRE - *Populus fremontii* Association
- POPFRE-SAMNIG - *Populus fremontii* - *Sambucus nigra* Association
- Woodland
- AILALT - *Ailanthus altissima* Association
- EUC-AILALT-ROBPSE - *Eucalyptus* spp. - *Ailanthus altissima* - *Robinia pseudoacacia* Alliance
- EUCGLOCAM - *Eucalyptus (spp. - globulus, camaldulensis)* Association
- QUEAGR - *Quercus agrifolia* Association



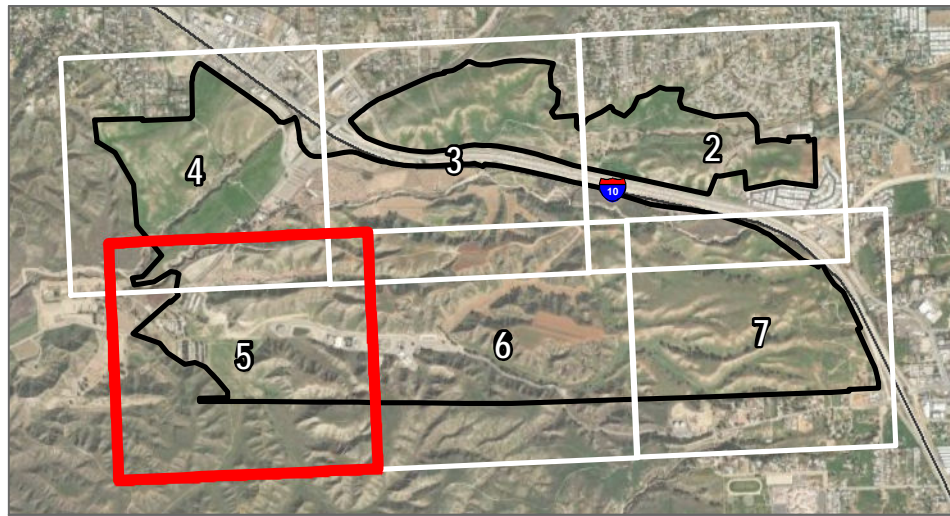
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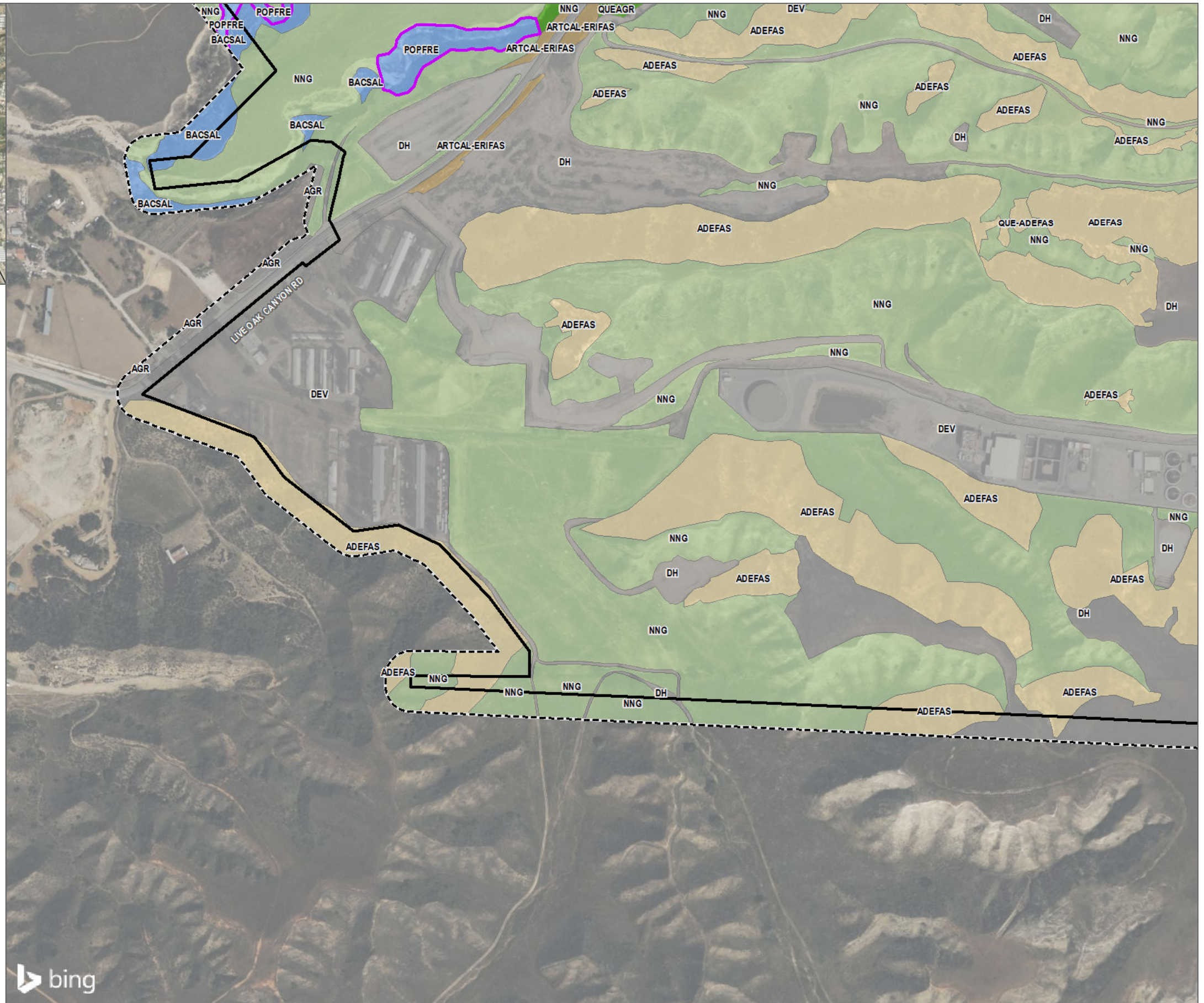
FIGURE 7-4

Vegetation Communities and Land Cover Types

Freeway Corridor Specific Plan Biological Resources Technical Report



- Project Site
- Biological Study Area (100' Buffer)
- Sensitive Vegetation Communities
 - POPFRE - *Populus fremontii* Association
- Vegetation Communities and Land Cover Types**
- Developed and Disturbed Habitat
 - AGR - General Agriculture
 - DEV - Urban/Developed
 - DH - Disturbed Habitat
- Grass and Herb Dominated
 - NNG - Non-Native Grassland General Habitat
- Chaparral
 - ADEFAS - *Adenostoma fasciculatum* Association
 - QUE-ADEFAS - *Quercus (berberidifolia, acutidens) - Adenostoma fasciculatum* Association
- Scrub
 - ARTCAL-ERIFAS - *Artemisia californica - Eriogonum fasciculatum* Association
- Riparian
 - BACSAL - *Baccharis salicifolia* Association
 - POPFRE - *Populus fremontii* Association
- Woodland
 - AILALT - *Ailanthus altissima* Association
 - QUEAGR - *Quercus agrifolia* Association

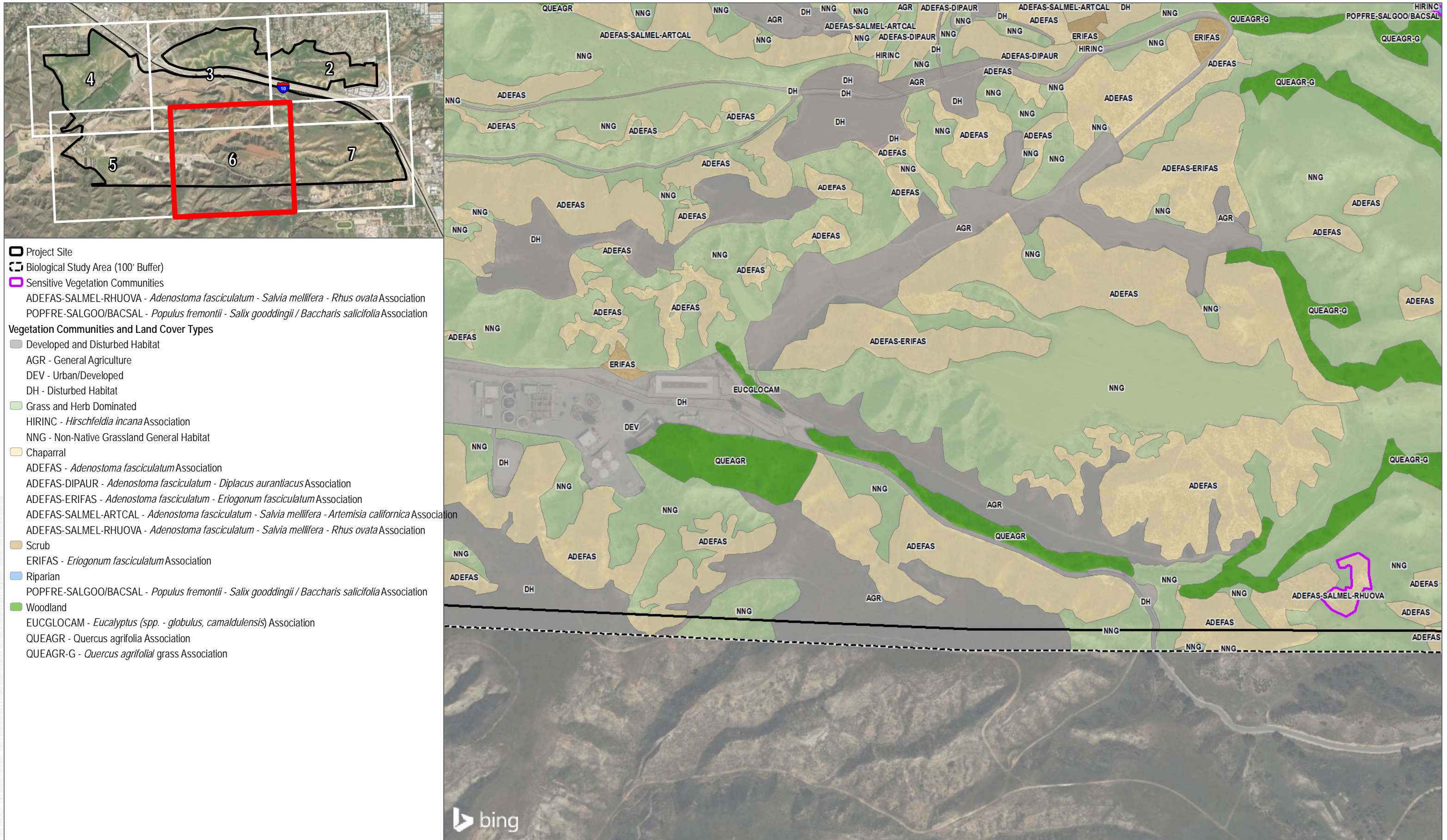


SOURCE: Bing Maps (accessed 2023); San Bernadino County 2023



FIGURE 7-5

Vegetation Communities and Land Cover Types
Freeway Corridor Specific Plan Biological Resources Technical Report



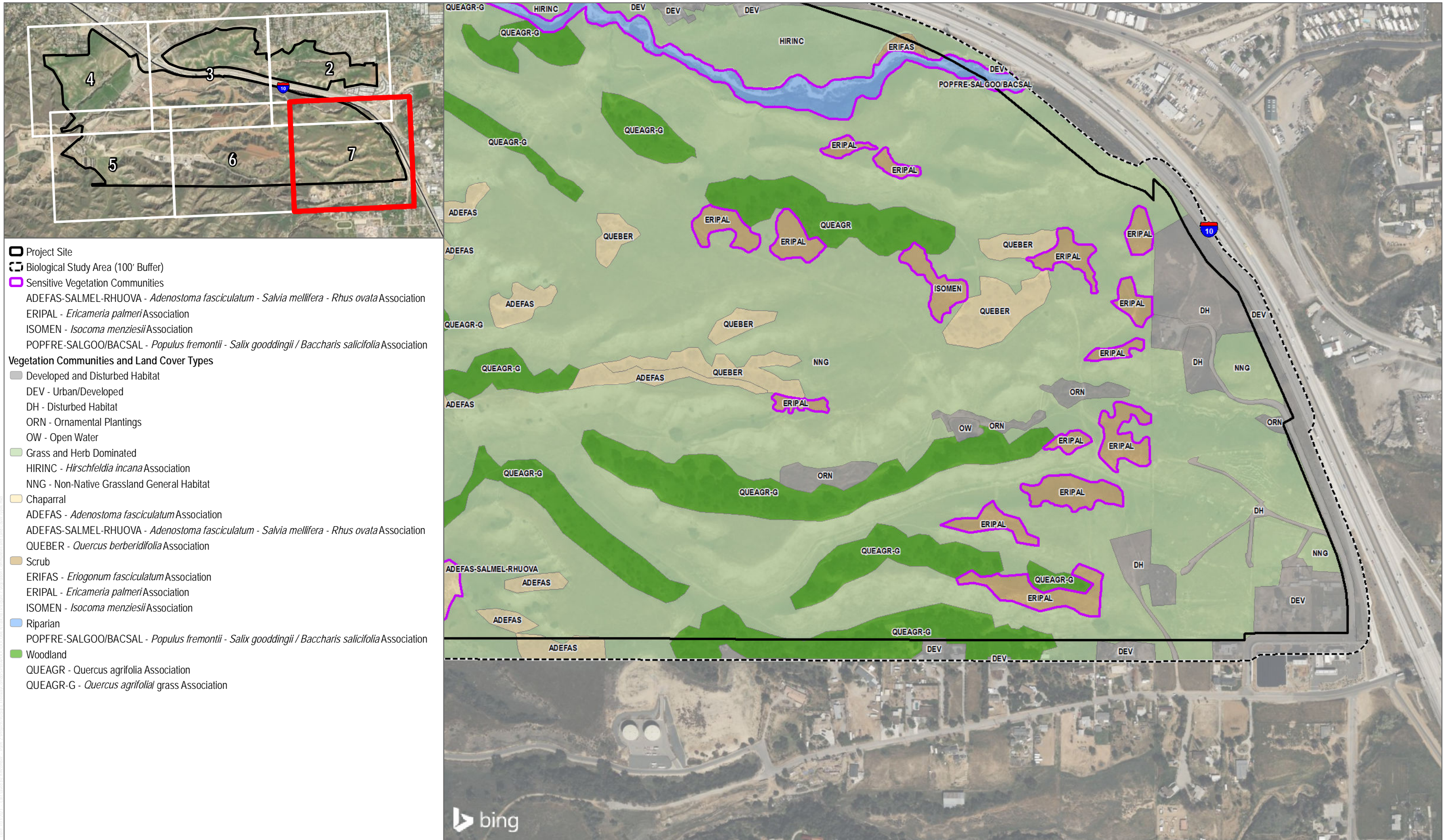
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FIGURE 7-6

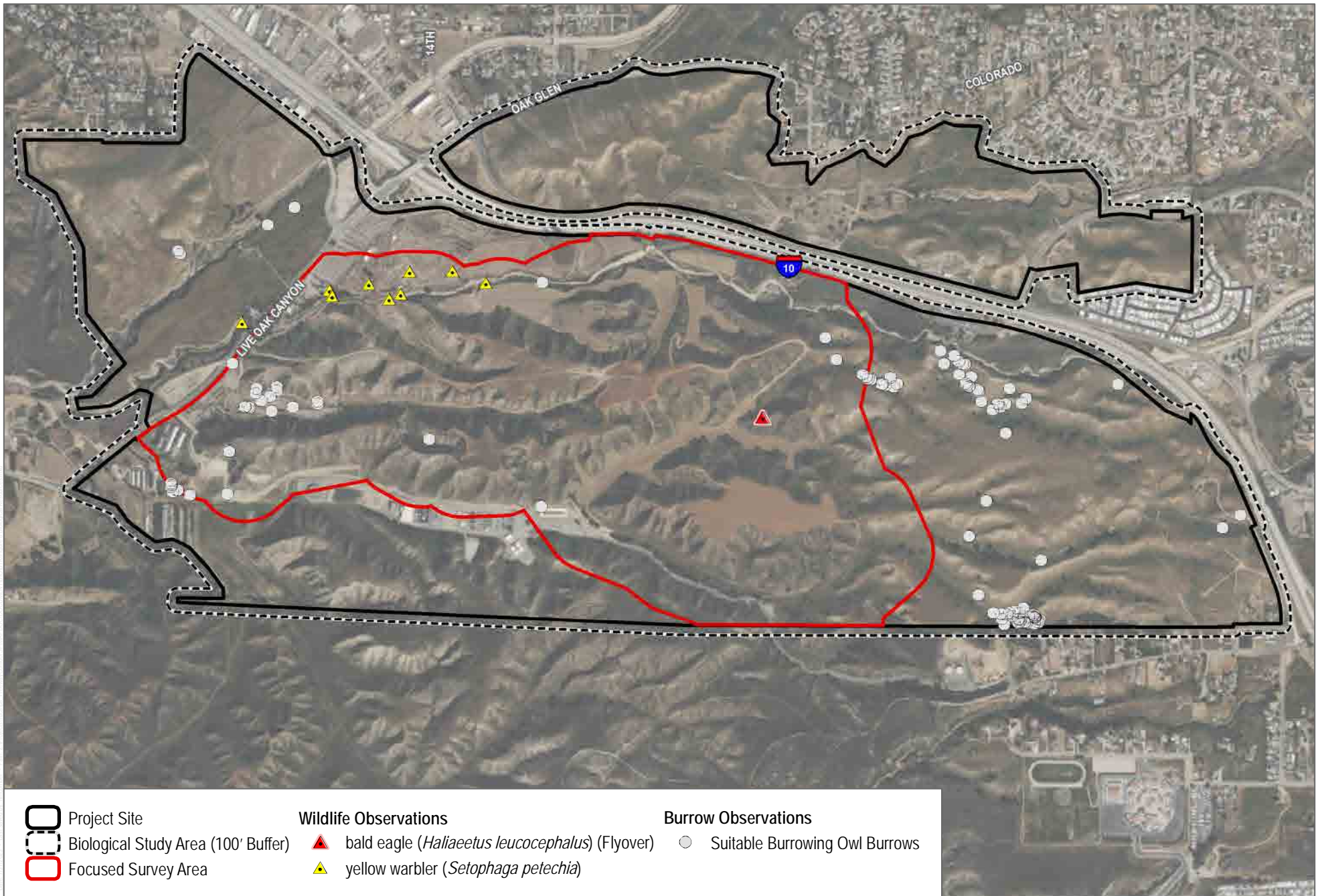
Vegetation Communities and Land Cover Types

Freeway Corridor Specific Plan Biological Resources Technical Report



SOURCE: Bing Maps (accessed 2023); San Bernadino County 2023

FIGURE 7-7
Vegetation Communities and Land Cover Types
Freeway Corridor Specific Plan Biological Resources Technical Report

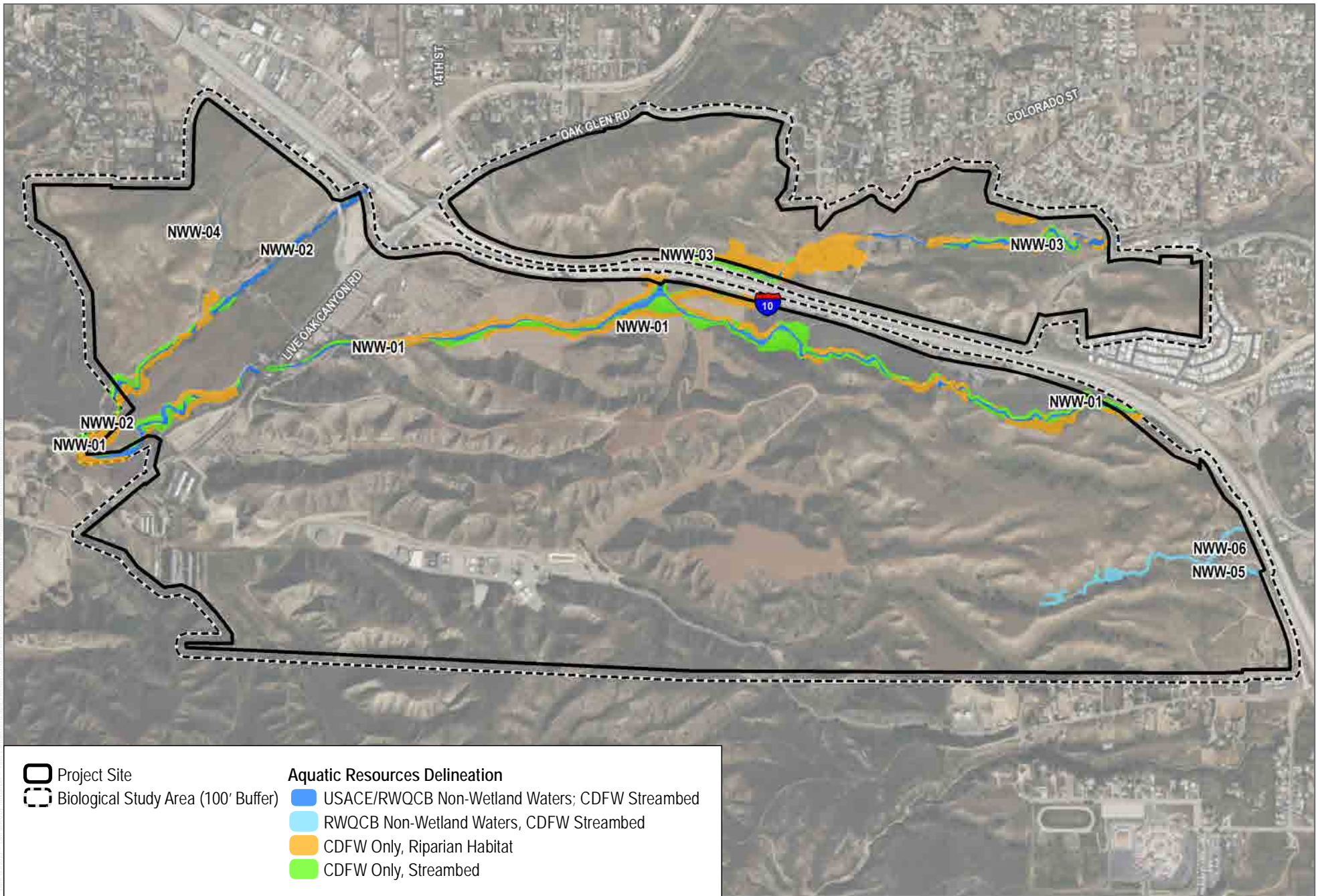


SOURCE: USGS Topo Maps 2013

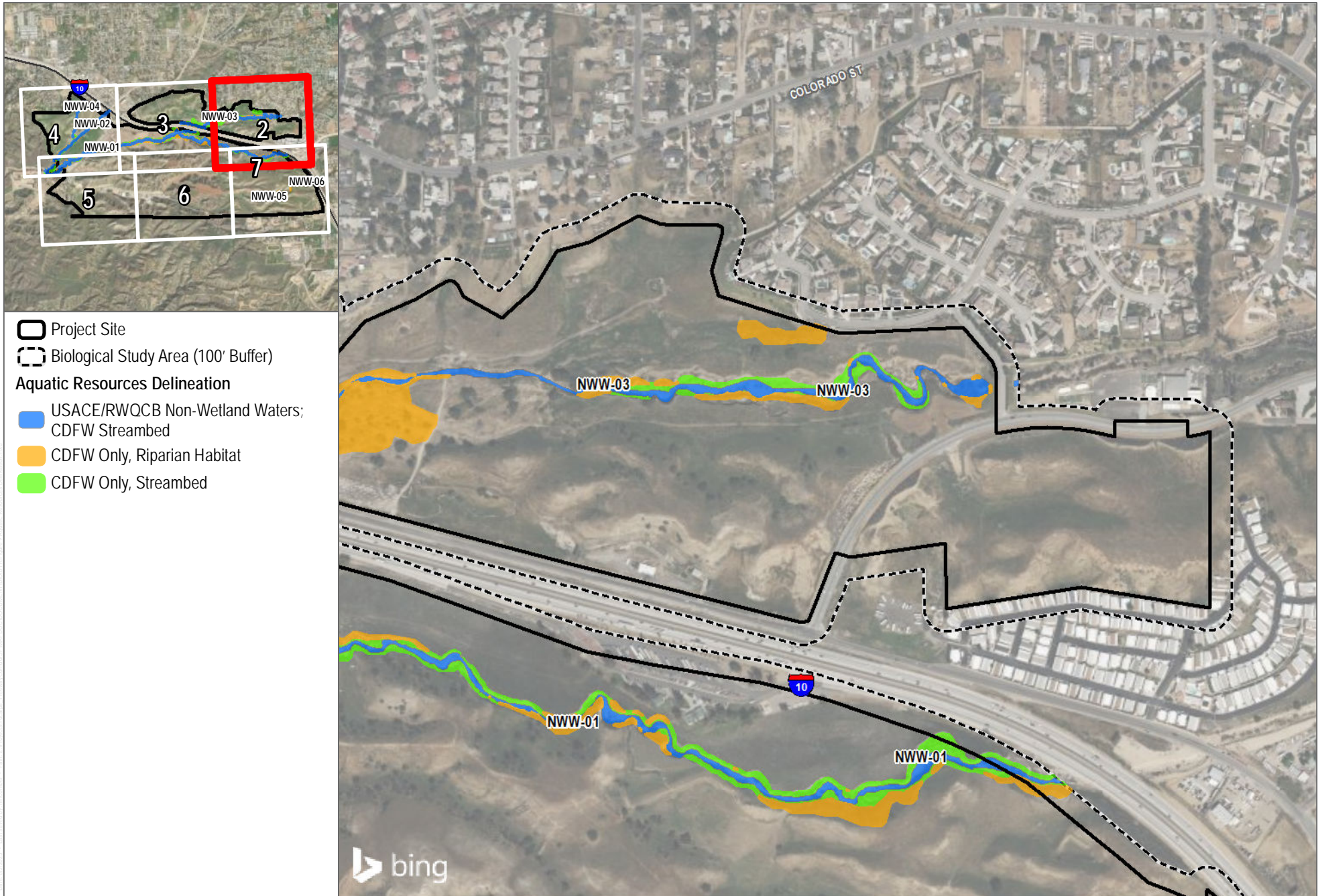


FIGURE 8

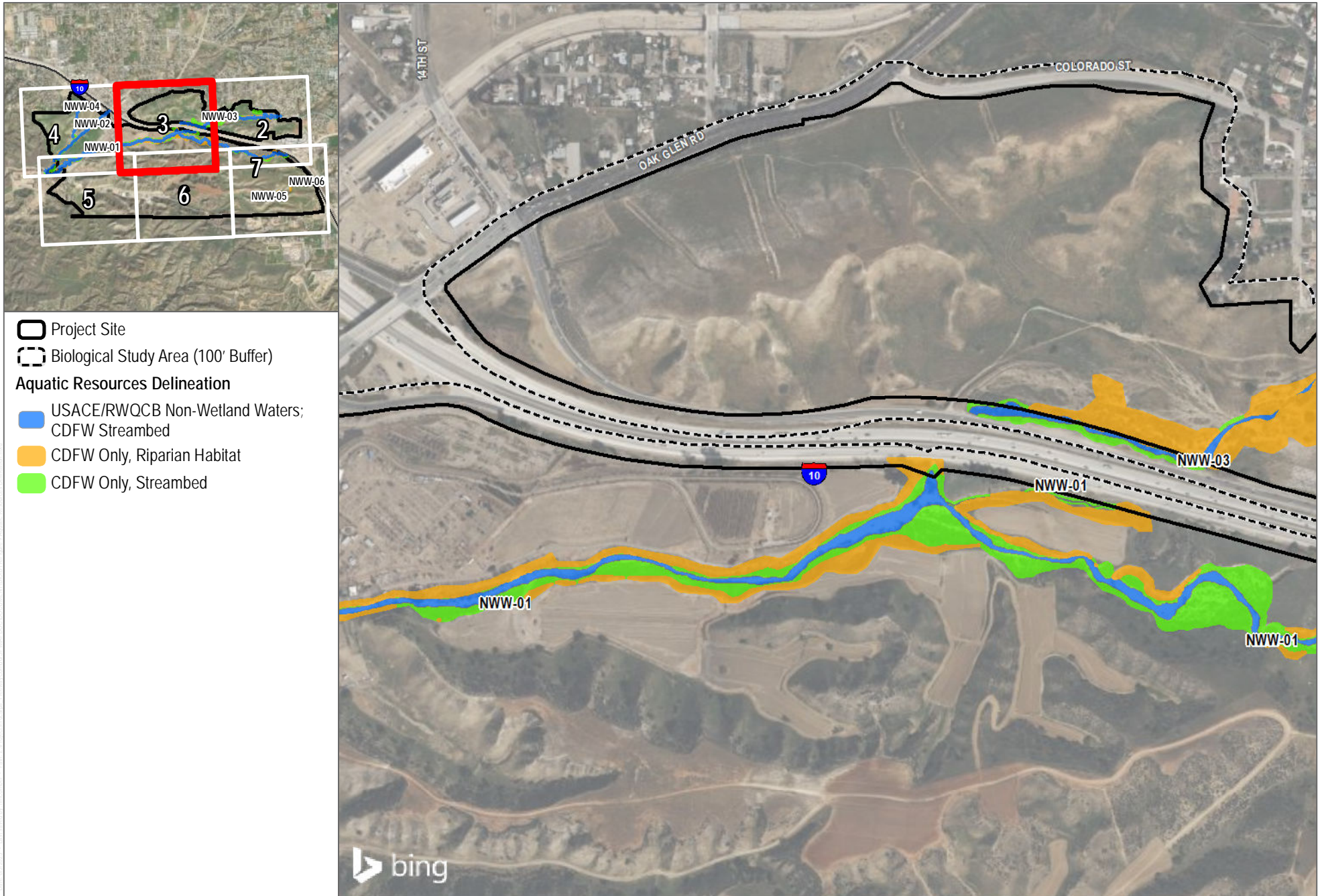
Biological Resources



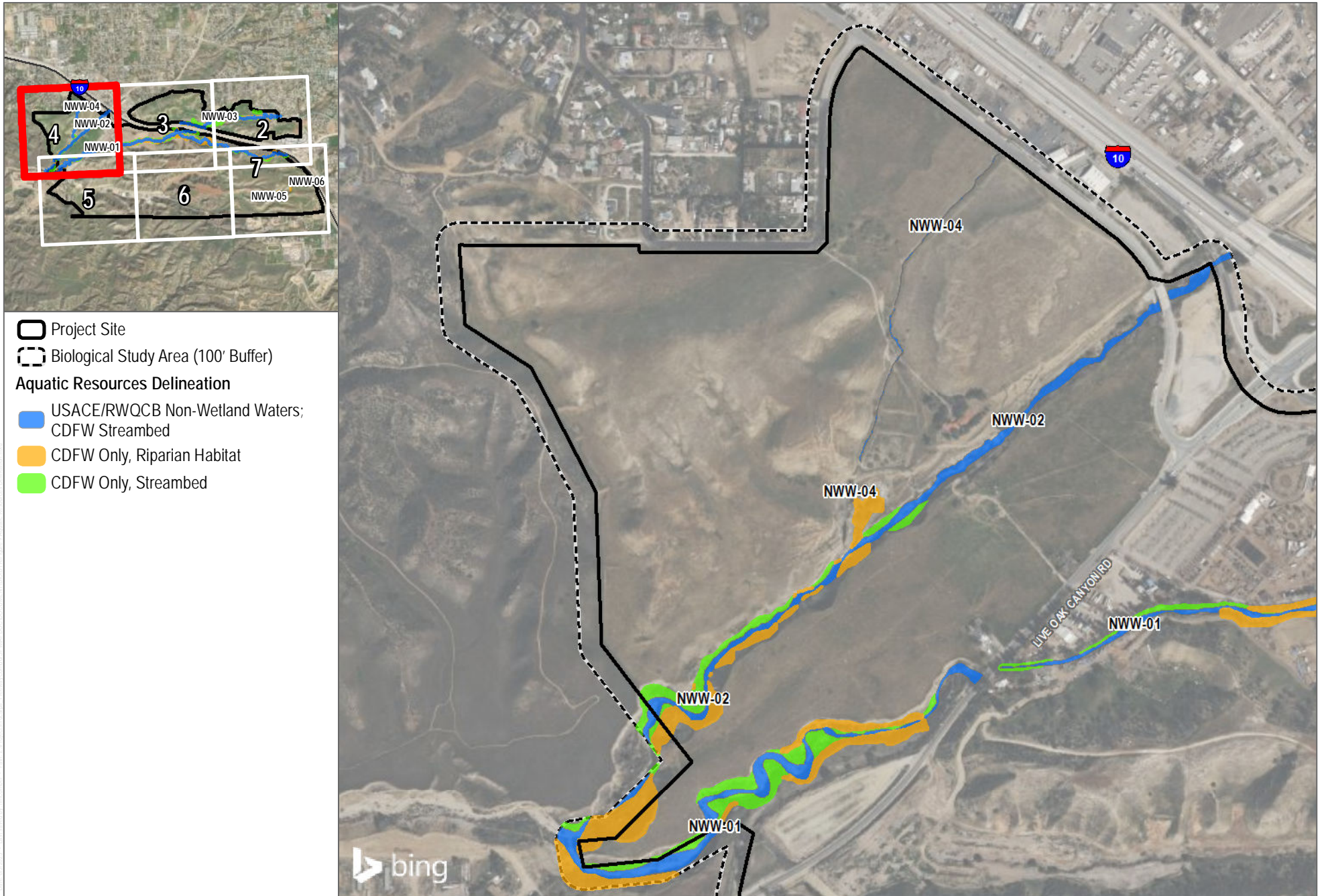
SOURCE: Bing Maps (accessed 2023); San Bernardino County 2023



SOURCE: Bing Maps (accessed 2023); San Bernadino County 2023

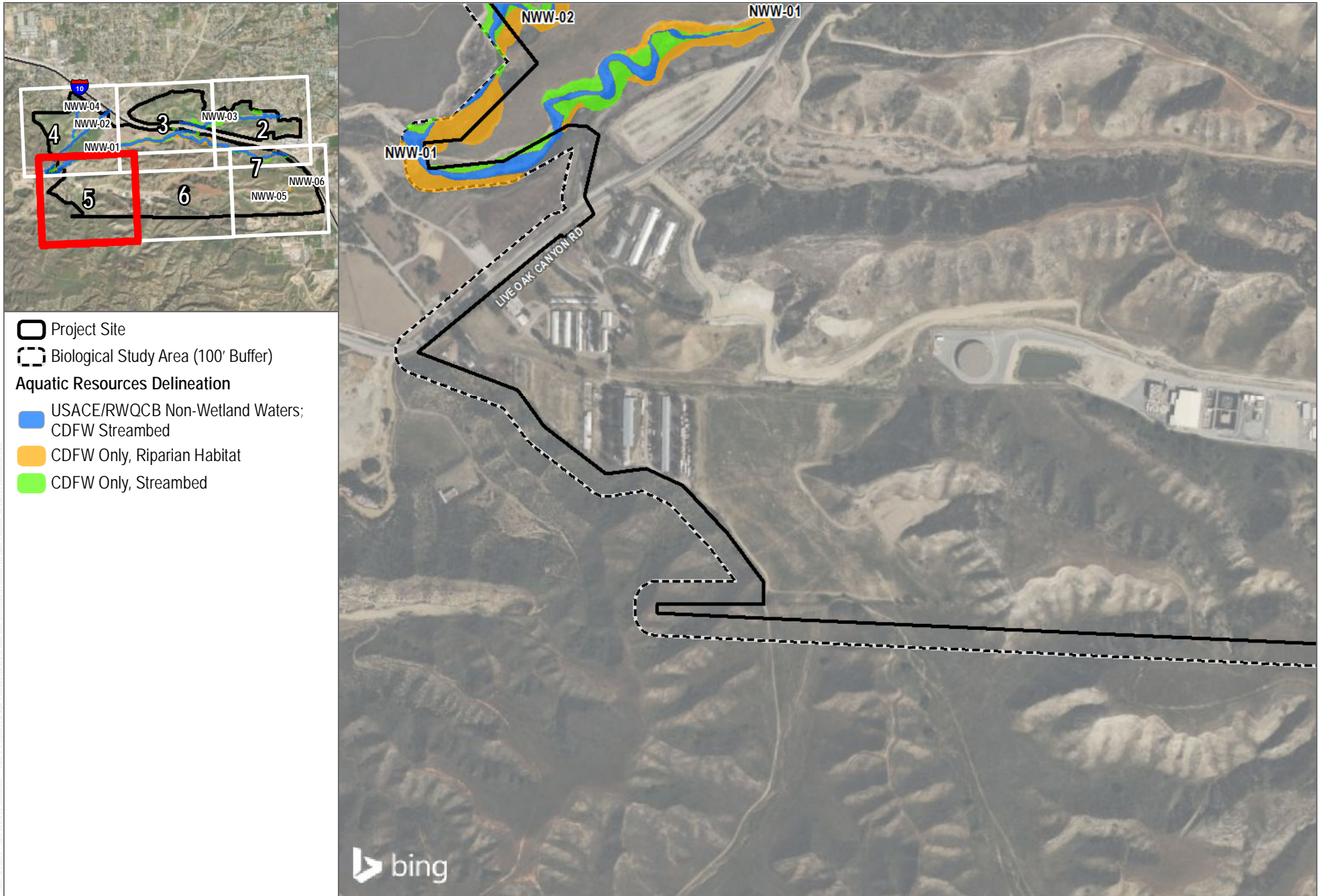


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SOURCE: Bing Maps (accessed 2023); San Bernardino County 2023

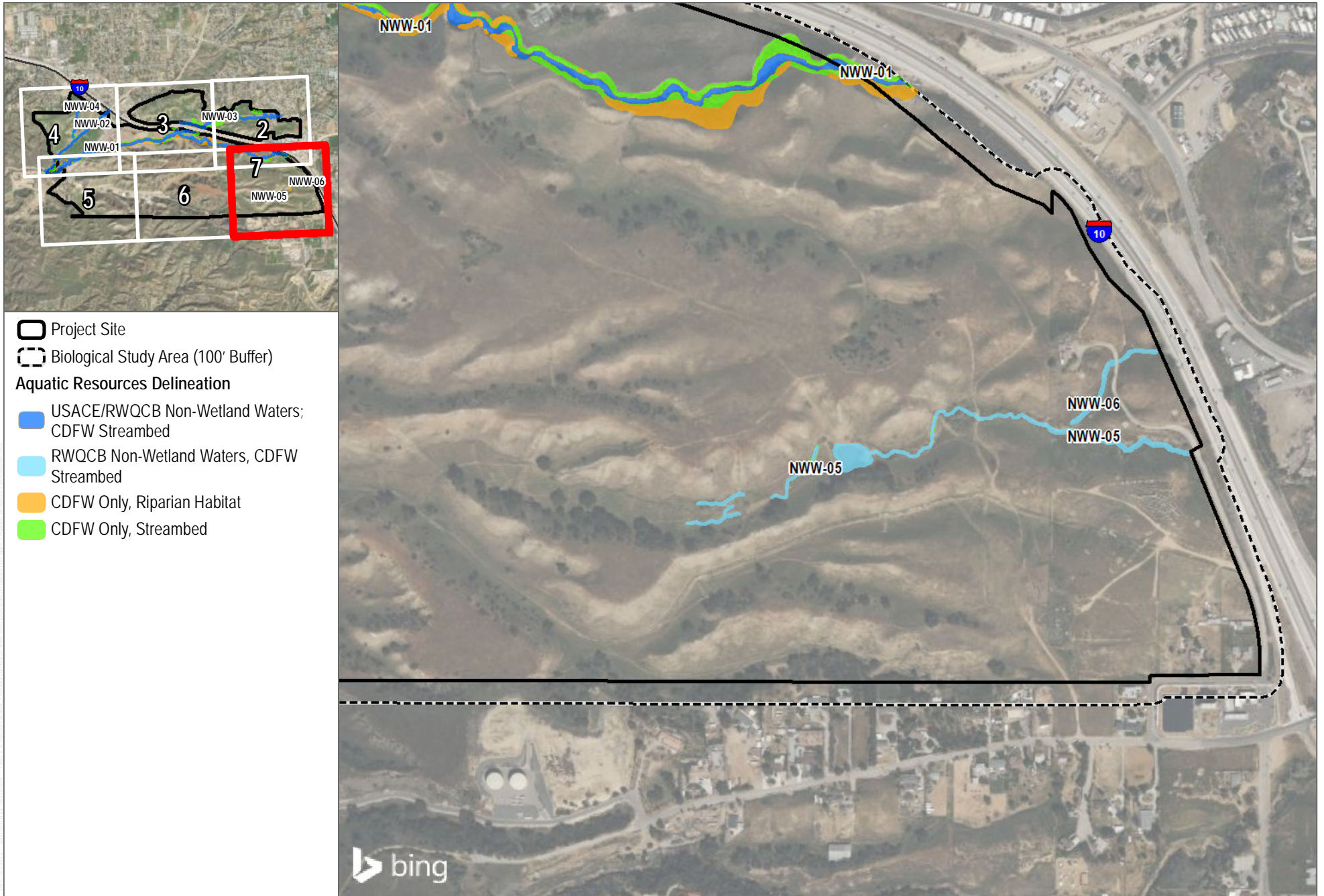
FIGURE 9-4
Aquatic Resources Jurisdictional Delineation
 Freeway Corridor Specific Plan Biological Resources Technical Report



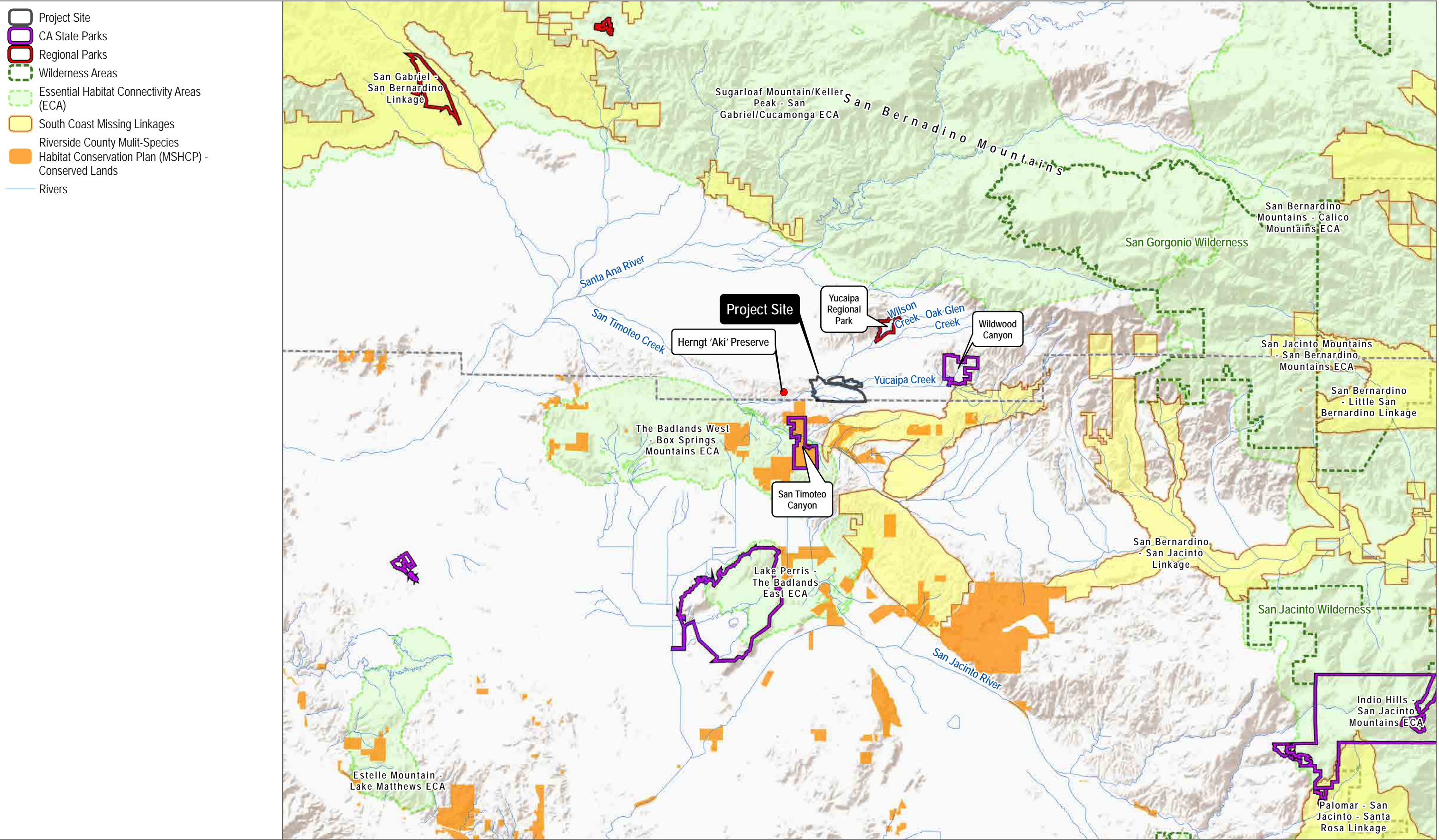
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SOURCE: Bing Maps (accessed 2023); San Bernardino County 2023









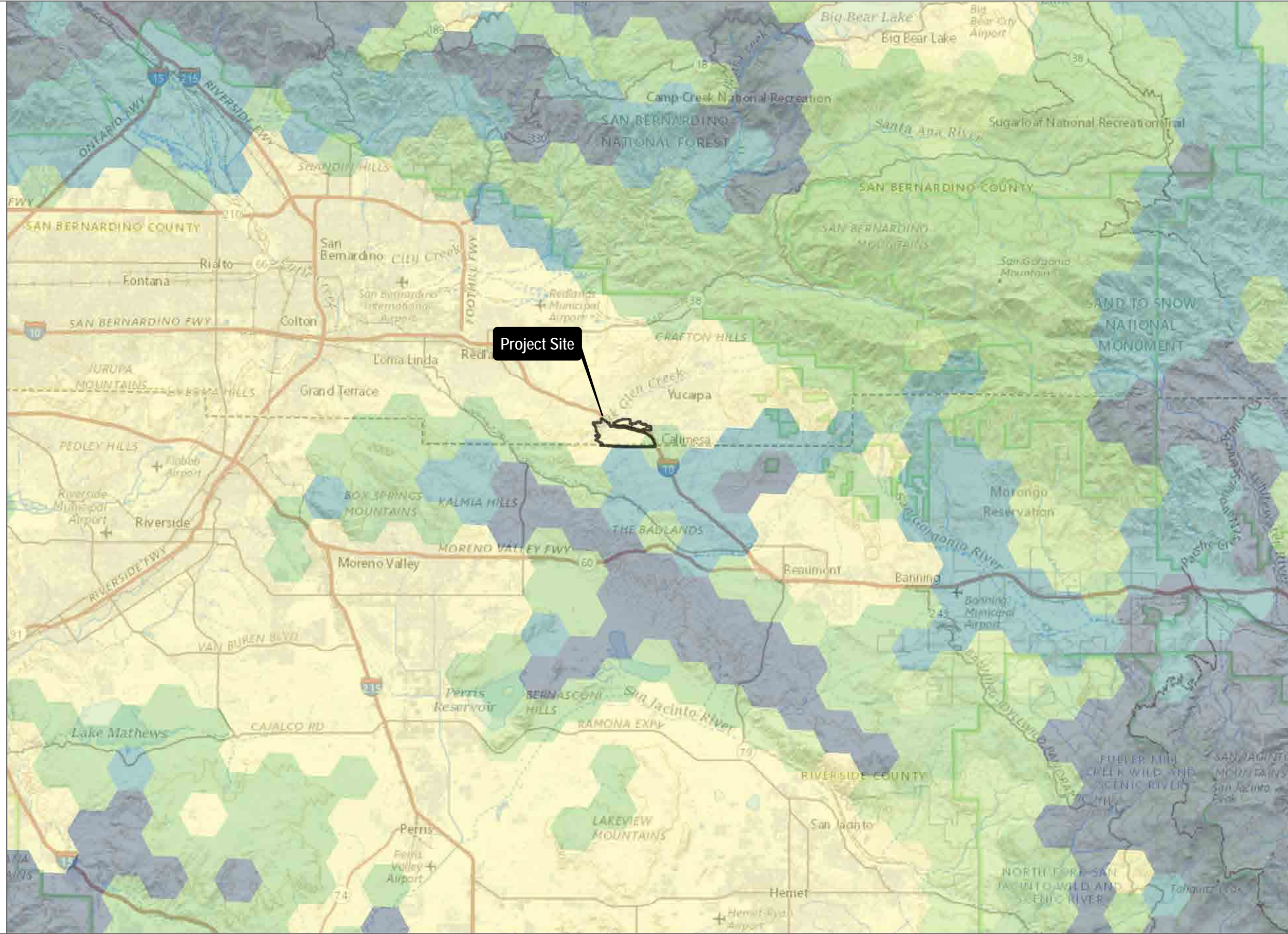
SOURCE: Bing Maps (accessed 2023); San Bernadino County 2023



SOURCE: USGS Topo Maps 2013; CDFW 2023; Riverside County 2023; CA State Geoportal 2023

FIGURE 10A

-  Project Site
- Terrestrial Connectivity - ACE [ds2734]**
- Connectivity Rank*
-  1 - Limited Connectivity Opportunity
-  2 - Large Natural Habitat
-  3 - Connections with Implementation Flexibility
-  4 - Conservation Planning Linkages
-  5 - Irreplaceable and Essential Corridors








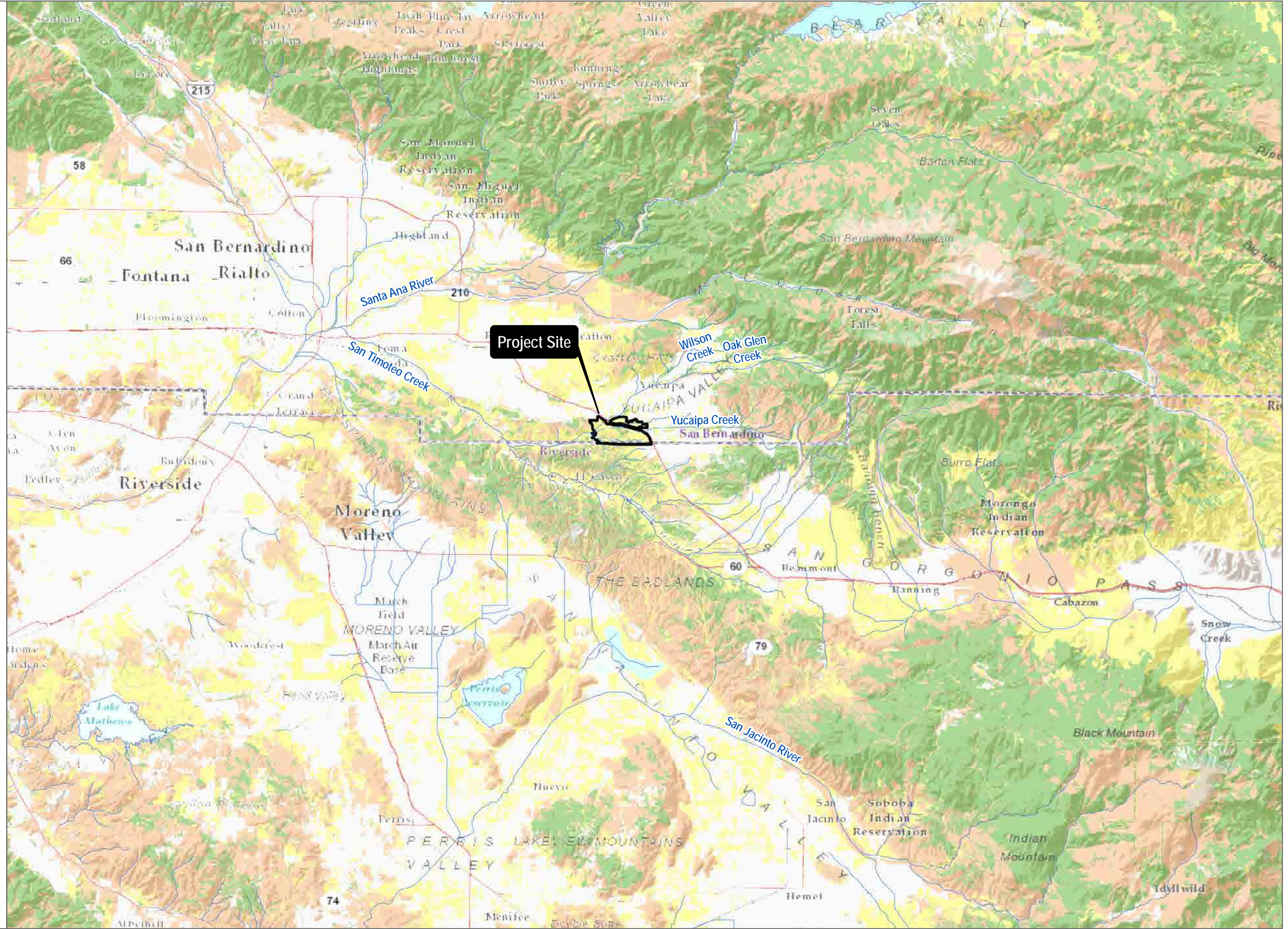
SOURCE: CDFW 2023



FIGURE 10B

Terrestrial Connectivity Dataset

-  Project Site
-  Rivers
- Mountain Lion Predicted Habitat - CWHR M165**
-  Low
-  Medium
-  High

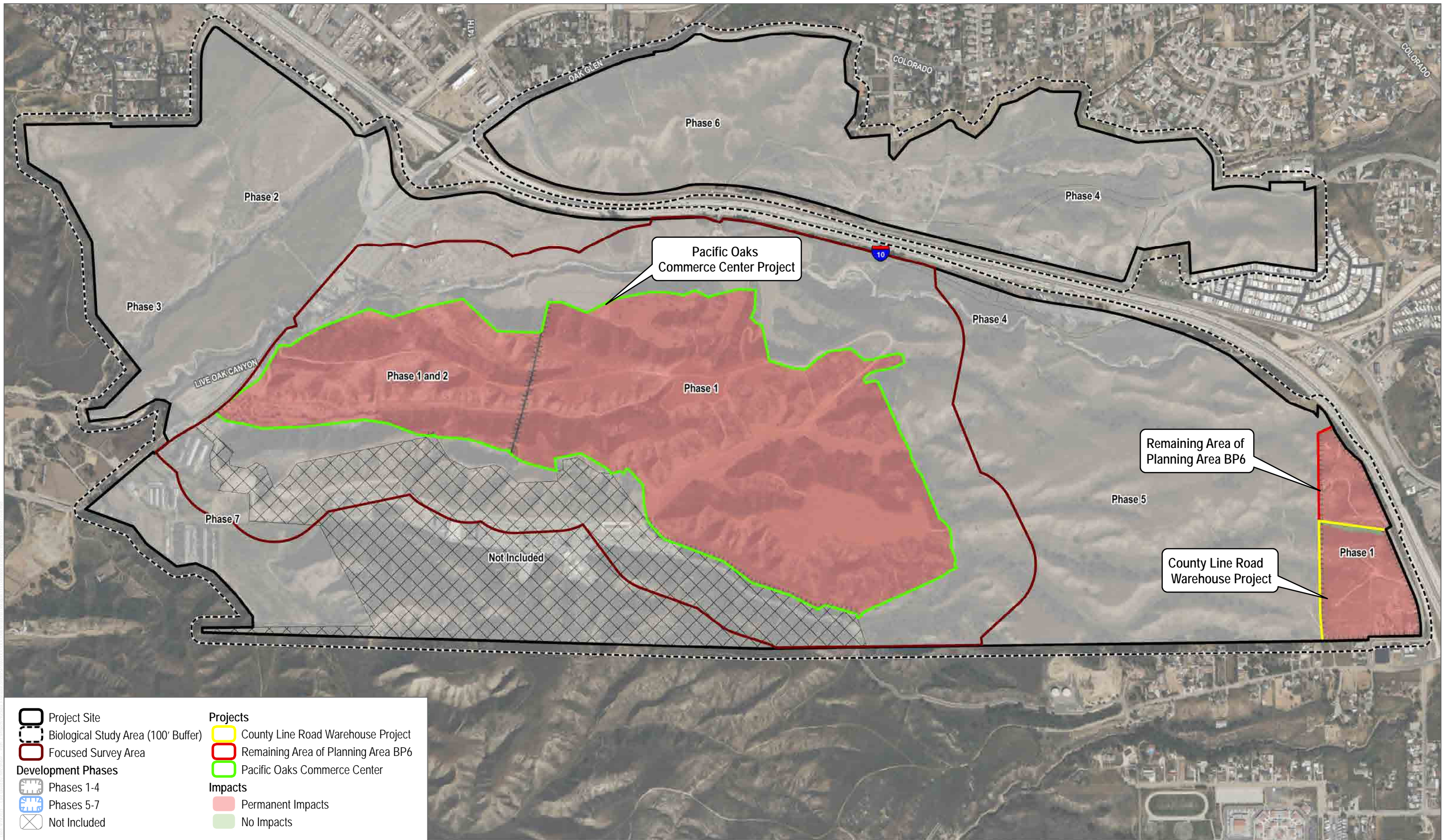


SOURCE: CWHR 2023



FIGURE 10C

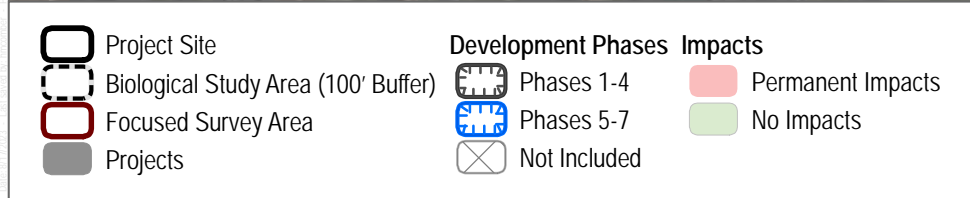
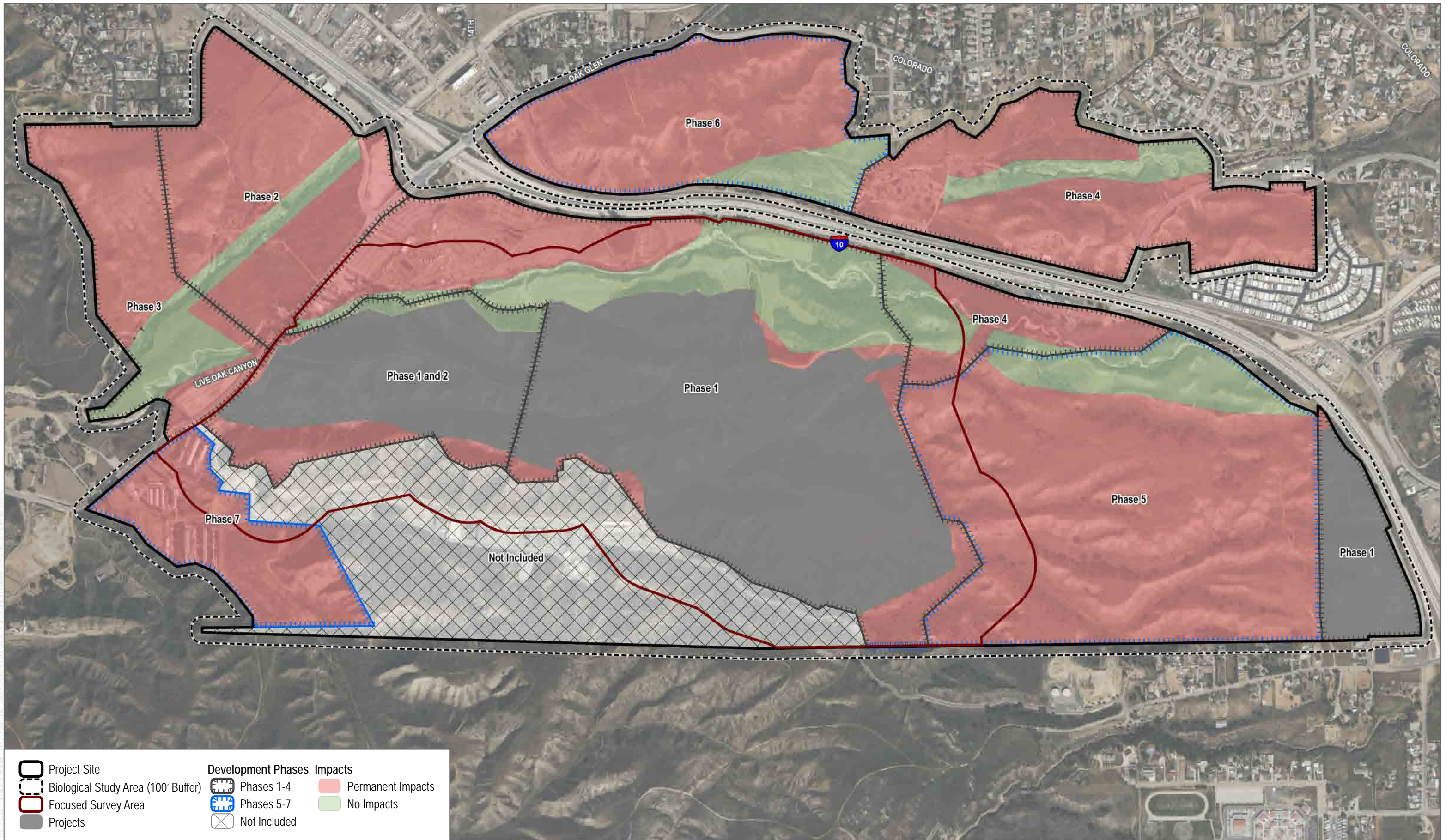
Mountain Lion Predicted Habitat



SOURCE: Placeworks 2023; Bing Maps; San Bernadino County 2023



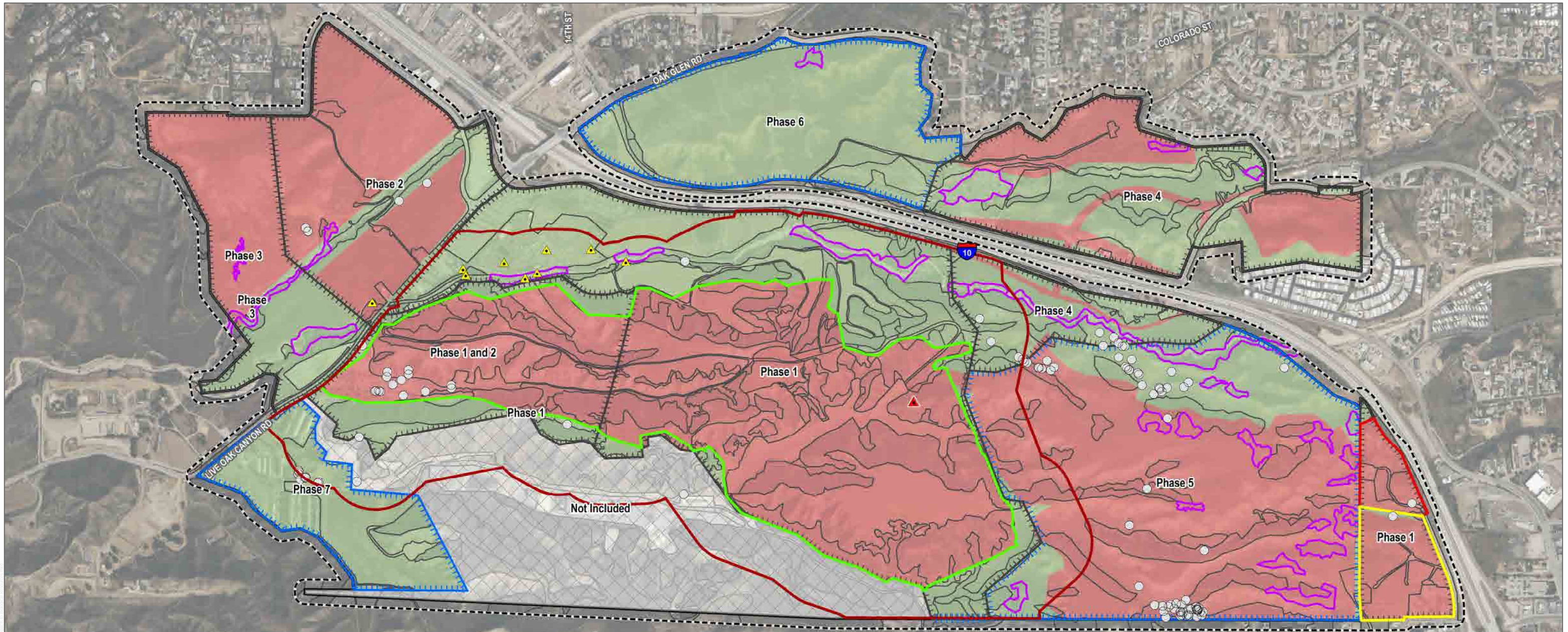
FIGURE 11A
 Definition of Project Impacts - Project Level
 Freeway Corridor Specific Plan Biological Resources Technical Report



SOURCE: Placeworks 2023; Bing Maps; San Bernardino County 2023



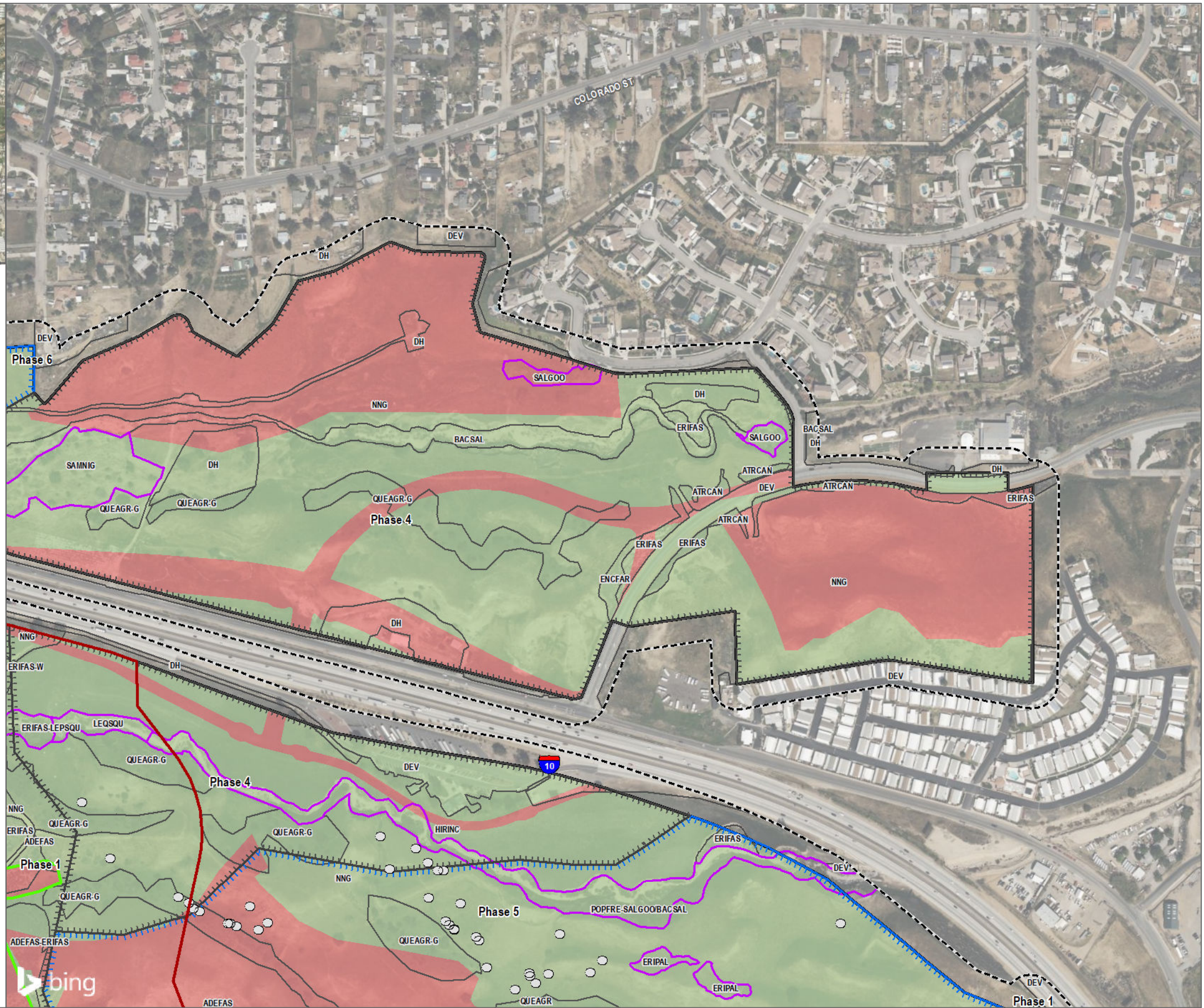
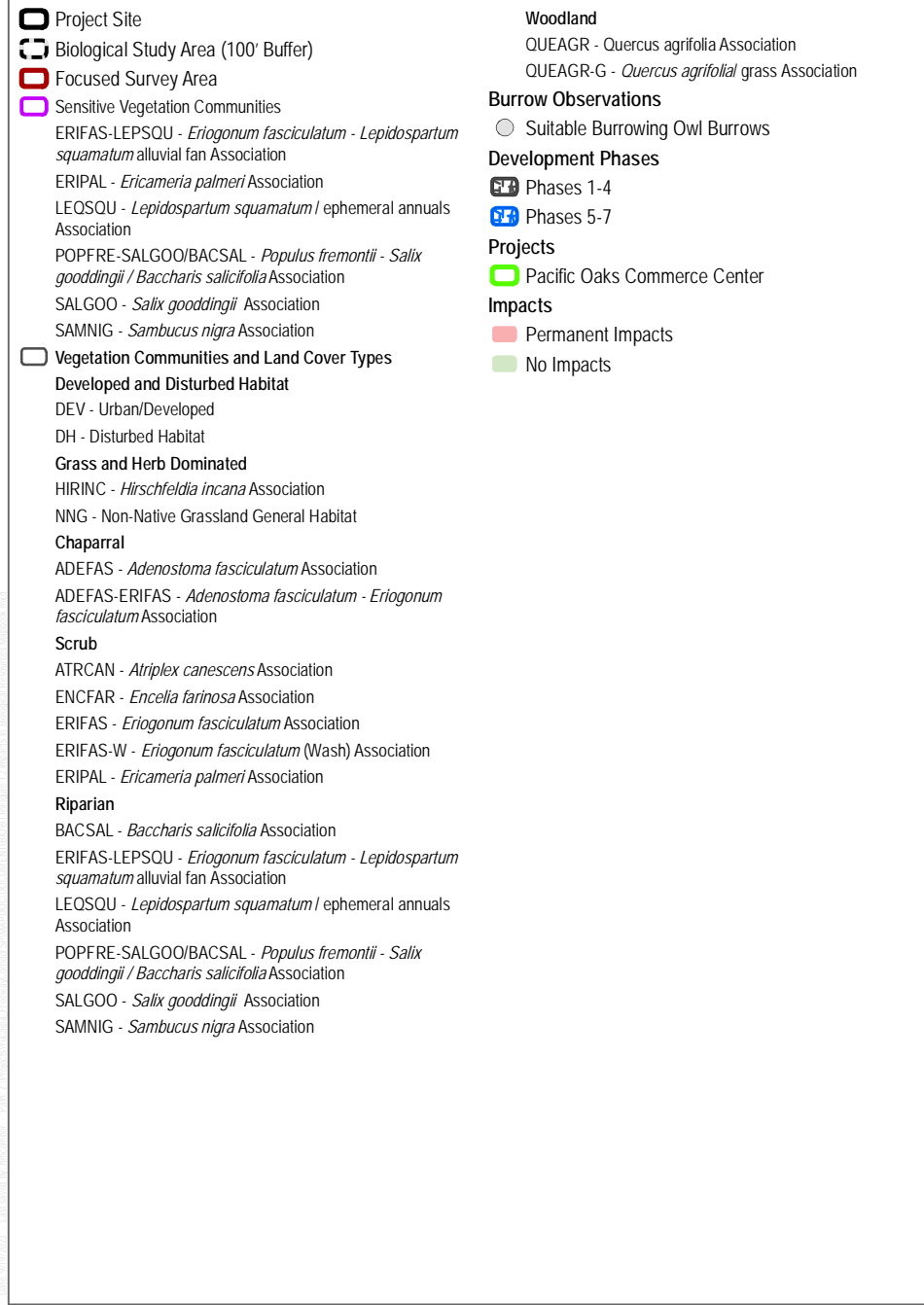
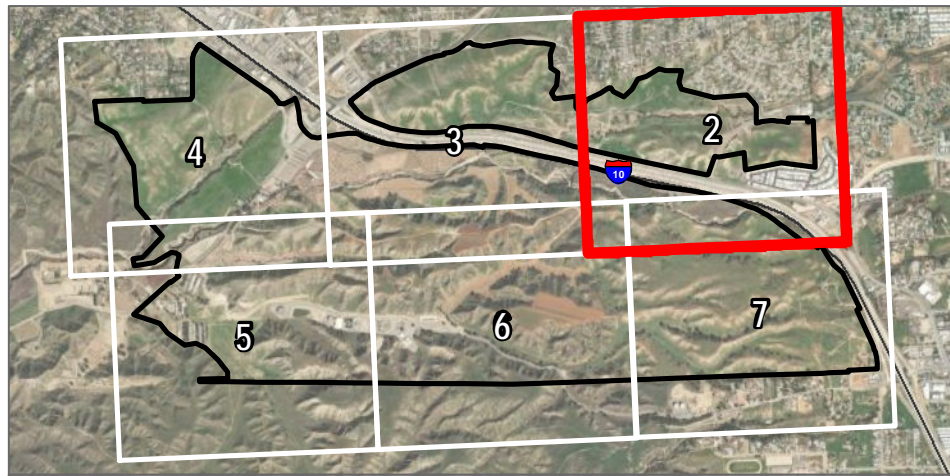
FIGURE 11B
 Definition of Project Impacts - Programmatic Level
 Freeway Corridor Specific Plan Biological Resources Technical Report



<ul style="list-style-type: none"> Project Site Biological Study Area (100' Buffer) Focused Survey Area Sensitive Vegetation Communities ADEFAS-SALMEL-RHUOVA - <i>Adenostoma fasciculatum</i> - <i>Salvia mellifera</i> - <i>Rhus ovata</i> Association ERIFAS-LEPSQU - <i>Eriogonum fasciculatum</i> - <i>Lepidospartum squamatum</i> alluvial fan Association ERIPAL - <i>Ericameria palmeri</i> Association ISOMEN - <i>Isocoma menziesii</i> Association LEQSQU - <i>Lepidospartum squamatum</i> / ephemeral annuals Association POPFRE - <i>Populus fremontii</i> Association POPFRE-SALGOO/BACSAL - <i>Populus fremontii</i> - <i>Salix gooddingii</i> / <i>Baccharis salicifolia</i> Association POPFRE-SAMNIG - <i>Populus fremontii</i> - <i>Sambucus nigra</i> Association SALGOO - <i>Salix gooddingii</i> Association SAMNIG - <i>Sambucus nigra</i> Association 	<ul style="list-style-type: none"> Vegetation Communities and Land Cover Types Developed and Disturbed Habitat AGR - General Agriculture DEV - Urban/Developed DH - Disturbed Habitat ORN - Ornamental Plantings OW - Open Water Grass and Herb Dominated HIRINC - <i>Hirschfeldia incana</i> Association NING - Non-Native Grassland General Habitat Chaparral ADEFAS - <i>Adenostoma fasciculatum</i> Association 	<ul style="list-style-type: none"> ADEFAS-DIPAUR - <i>Adenostoma fasciculatum</i> - <i>Diplacus aurantiacus</i> Association ADEFAS-ERIFAS - <i>Adenostoma fasciculatum</i> - <i>Eriogonum fasciculatum</i> Association ADEFAS-SALMEL-ARTCAL - <i>Adenostoma fasciculatum</i> - <i>Salvia mellifera</i> - <i>Artemisia californica</i> Association ADEFAS-SALMEL-RHUOVA - <i>Adenostoma fasciculatum</i> - <i>Salvia mellifera</i> - <i>Rhus ovata</i> Association QUE-ADEFAS - <i>Quercus (berberidifolia, acutidens)</i> - <i>Adenostoma fasciculatum</i> Association QUEBER - <i>Quercus berberidifolia</i> Association Scrub ARTCAL-ERIFAS - <i>Artemisia californica</i> - <i>Eriogonum fasciculatum</i> Association ATRCAN - <i>Atriplex canescens</i> Association ENCFAR - <i>Encelia farinosa</i> Association ERIFAS - <i>Eriogonum fasciculatum</i> Association ERIFAS-W - <i>Eriogonum fasciculatum</i> (Wash) Association ERIPAL - <i>Ericameria palmeri</i> Association ISOMEN - <i>Isocoma menziesii</i> Association Riparian BACSAL - <i>Baccharis salicifolia</i> Association 	<ul style="list-style-type: none"> BACSAL-SAMNIG - <i>Baccharis salicifolia</i> - <i>Sambucus nigra</i> Association ERIFAS-LEPSQU - <i>Eriogonum fasciculatum</i> - <i>Lepidospartum squamatum</i> alluvial fan Association LEQSQU - <i>Lepidospartum squamatum</i> / ephemeral annuals Association POPFRE - <i>Populus fremontii</i> Association POPFRE-SALGOO/BACSAL - <i>Populus fremontii</i> - <i>Salix gooddingii</i> / <i>Baccharis salicifolia</i> Association POPFRE-SAMNIG - <i>Populus fremontii</i> - <i>Sambucus nigra</i> Association SALGOO - <i>Salix gooddingii</i> Association SAMNIG - <i>Sambucus nigra</i> Association Woodland AILALT - <i>Ailanthus altissima</i> Association EUC-AILALT-ROBPSE - <i>Eucalyptus</i> spp. - <i>Ailanthus altissima</i> - <i>Robinia pseudoacacia</i> Alliance EUCGLOCAM - <i>Eucalyptus</i> (spp. - <i>globulus, camaldulensis</i>) Association QUEAGR - <i>Quercus agrifolia</i> Association QUEAGR-G - <i>Quercus agrifolia</i> grass Association 	<ul style="list-style-type: none"> Wildlife Observations bald eagle (<i>Haliaeetus leucocephalus</i>) (Flyover) yellow warbler (<i>Setophaga petechia</i>) Burrow Observations Suitable Burrowing Owl Burrow Development Phases Phases 1-4 Phases 5-7 Not Included Projects County Line Road Warehouse Project Remaining Area of Planning Area BP6 Pacific Oaks Commerce Center 	<ul style="list-style-type: none"> Impacts Permanent Impacts No Impacts Not Included
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SOURCE: Bing Maps (accessed 2023); San Bernardino County 2023





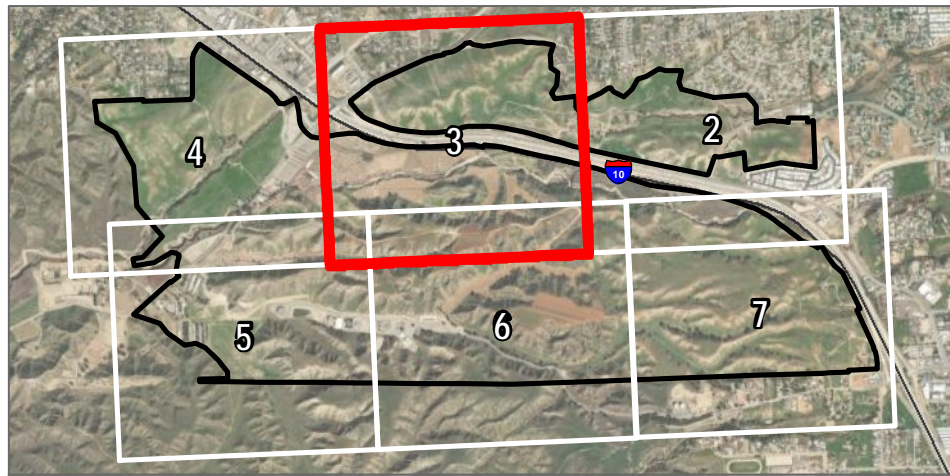
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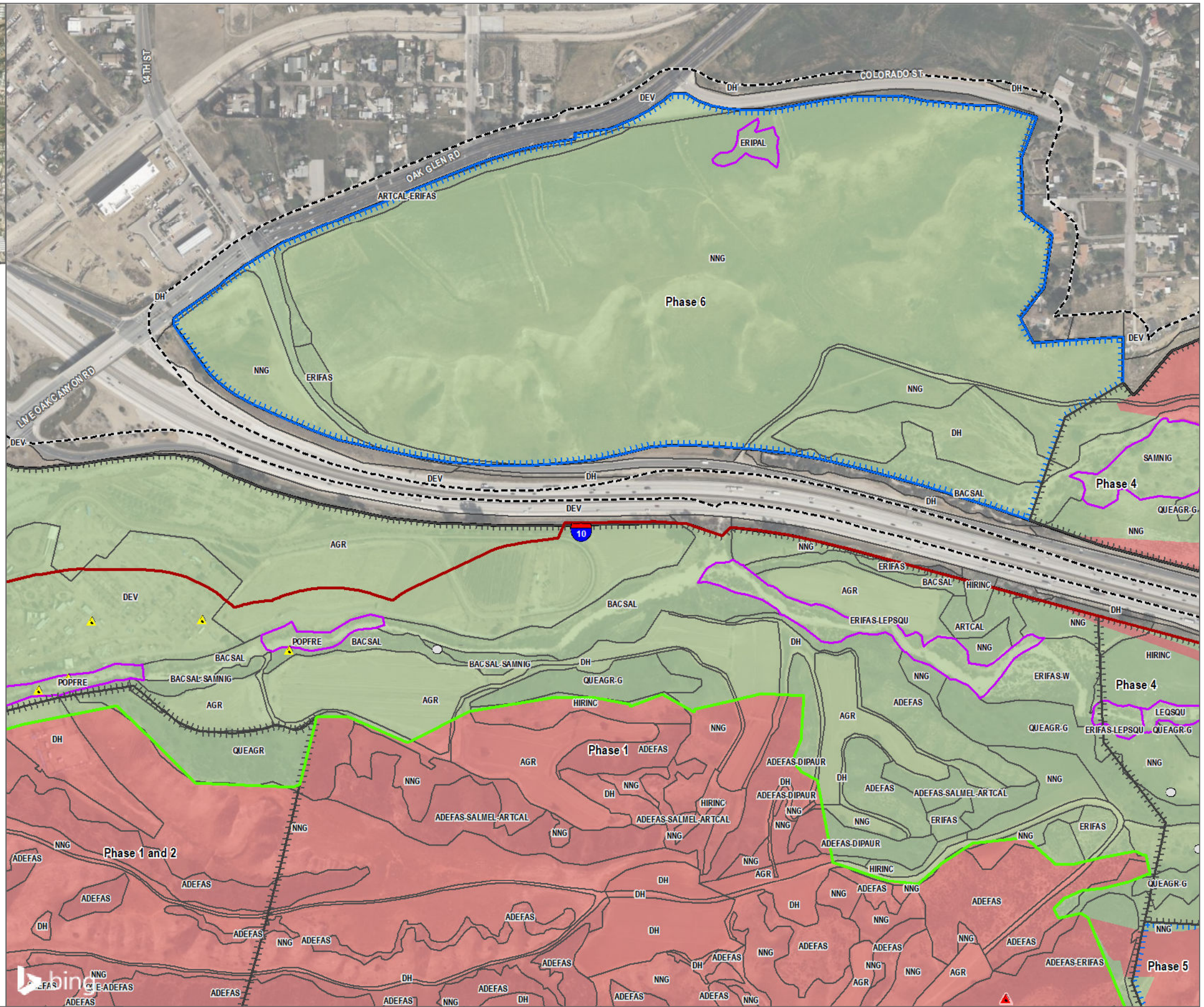
FIGURE 12-2

Impacts to Biological Resources

City of Yucaipa Freeway Corridor Specific Plan Project Biological Resources Technical Report



- Project Site
- Biological Study Area (100' Buffer)
- Focused Survey Area
- Sensitive Vegetation Communities
- ERIFAS-LEPSQU - *Eriogonum fasciculatum* - *Lepidospartum squamatum* alluvial fan Association
- ERIPAL - *Ericameria palmeri* Association
- LEQSQU - *Lepidospartum squamatum* / ephemeral annuals Association
- POPFRE - *Populus fremontii* Association
- SAMNIG - *Sambucus nigra* Association
- Vegetation Communities and Land Cover Types
- Developed and Disturbed Habitat**
- AGR - General Agriculture
- DEV - Urban/Developed
- DH - Disturbed Habitat
- Grass and Herb Dominated**
- HIRINC - *Hirschfeldia incana* Association
- NNG - Non-Native Grassland General Habitat
- Chaparral**
- ADEFAS - *Adenostoma fasciculatum* Association
- ADEFAS-DIPAUR - *Adenostoma fasciculatum* - *Diplacus aurantiacus* Association
- ADEFAS-ERIFAS - *Adenostoma fasciculatum* - *Eriogonum fasciculatum* Association
- ADEFAS-SALMEL-ARTCAL - *Adenostoma fasciculatum* - *Salvia mellifera* - *Artemisia californica* Association
- QUE-ADEFAS - *Quercus (berberidifolia, acutidens)* - *Adenostoma fasciculatum* Association
- Scrub**
- ARTCAL-ERIFAS - *Artemisia californica* - *Eriogonum fasciculatum* Association
- ERIFAS - *Eriogonum fasciculatum* Association
- ERIFAS-W - *Eriogonum fasciculatum* (Wash) Association
- ERIPAL - *Ericameria palmeri* Association
- Riparian**
- BACSAL - *Baccharis salicifolia* Association
- BACSAL-SAMNIG - *Baccharis salicifolia* - *Sambucus nigra* Association
- ERIFAS-LEPSQU - *Eriogonum fasciculatum* - *Lepidospartum squamatum* alluvial fan Association
- LEQSQU - *Lepidospartum squamatum* / ephemeral annuals Association
- POPFRE - *Populus fremontii* Association
- SAMNIG - *Sambucus nigra* Association
- Woodland**
- QUEAGR - *Quercus agrifolia* Association
- QUEAGR-G - *Quercus agrifolia* grass Association
- Wildlife Observations**
- ▲ bald eagle (*Haliaeetus leucocephalus*)
- ▲ yellow warbler (*Setophaga petechia*)
- Burrow Observations**
- Suitable Burrowing Owl Burrows
- Development Phases**
- 1-4 Phases 1-4
- 5-7 Phases 5-7
- Projects**
- Pacific Oaks Commerce Center
- Impacts**
- Permanent Impacts
- No Impacts



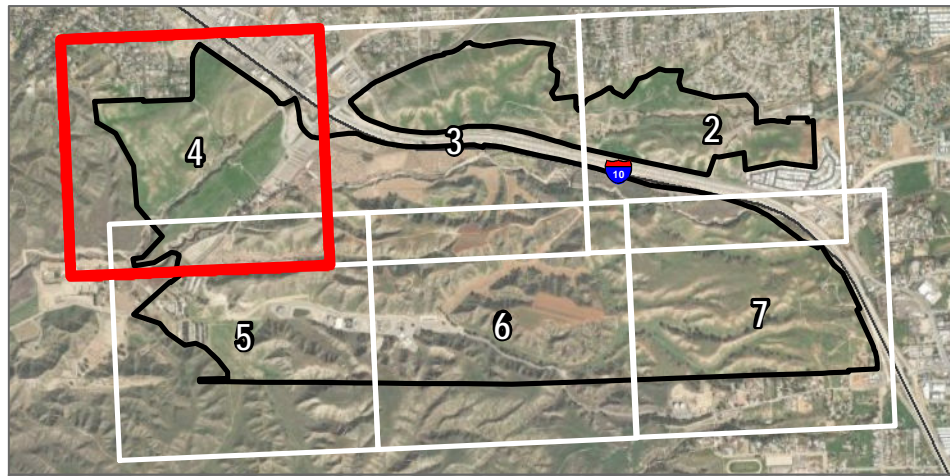
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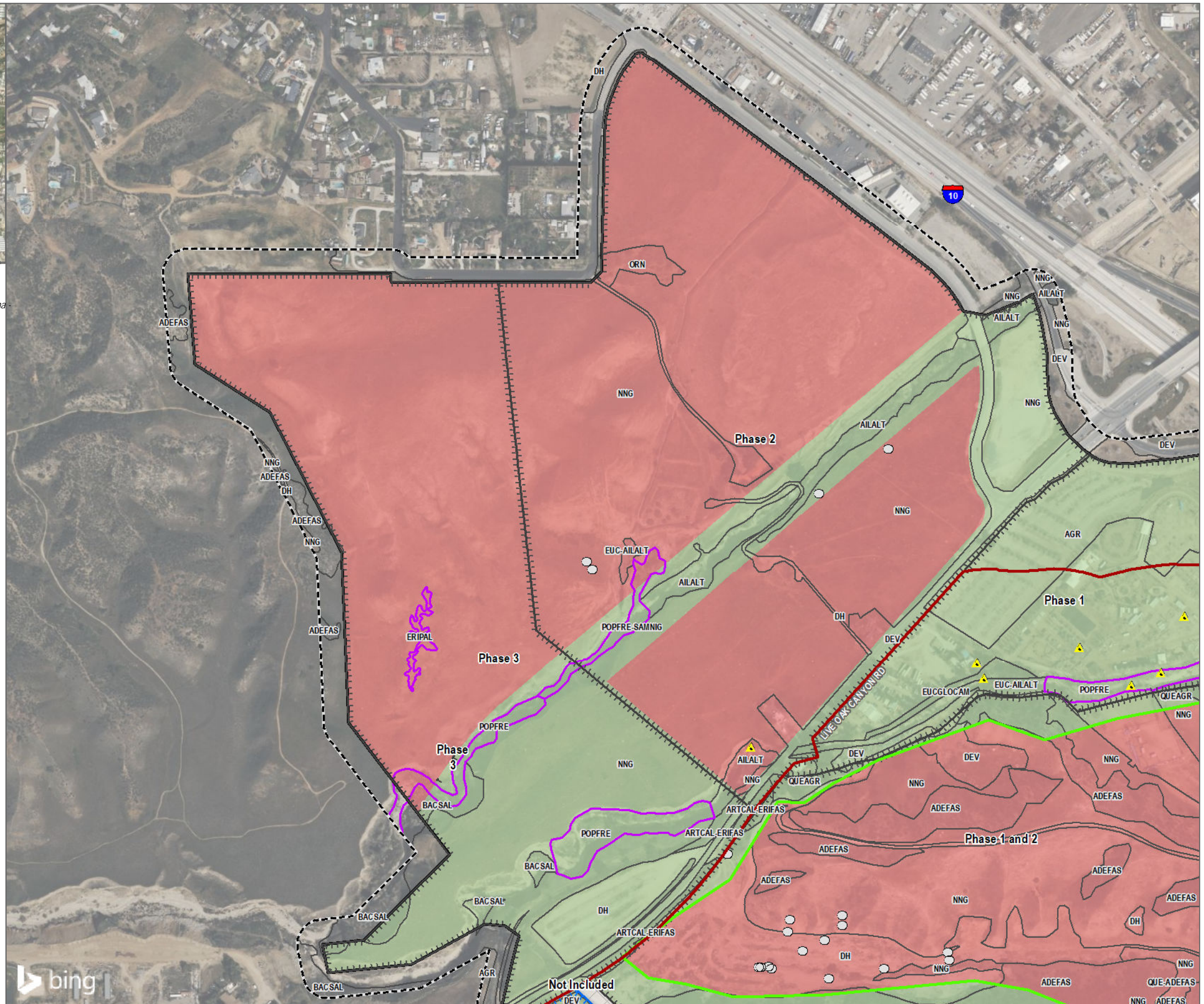
FIGURE 12-3

Impacts to Biological Resources

City of Yucaipa Freeway Corridor Specific Plan Project Biological Resources Technical Report



- Project Site
- Biological Study Area (100' Buffer)
- Focused Survey Area
- Sensitive Vegetation Communities
- ERIPAL - *Ericameria palmeri* Association
- POPFRE - *Populus fremontii* Association
- POPFRE-SAMNIG - *Populus fremontii* - *Sambucus nigra* Association
- Vegetation Communities and Land Cover Types
- Developed and Disturbed Habitat**
- AGR - General Agriculture
- DEV - Urban/Developed
- DH - Disturbed Habitat
- ORN - Ornamental Plantings
- Grass and Herb Dominated**
- NNG - Non-Native Grassland General Habitat
- Chaparral**
- ADEFAS - *Adenostoma fasciculatum* Association
- QUE-ADEFAS - *Quercus (berberidifolia, acutidens)* - *Adenostoma fasciculatum* Association
- Scrub**
- ARTCAL-ERIFAS - *Artemisia californica* - *Eriogonum fasciculatum* Association
- ERIPAL - *Ericameria palmeri* Association
- Riparian**
- BAC.SAL - *Baccharis salicifolia* Association
- POPFRE - *Populus fremontii* Association
- POPFRE-SAMNIG - *Populus fremontii* - *Sambucus nigra* Association
- Woodland**
- AIALT - *Ailanthus altissima* Association
- EUC-AIALT-ROBPSE - *Eucalyptus* spp. - *Ailanthus altissima* - *Robinia pseudoacacia* Alliance
- EUCGLOCAM - *Eucalyptus (spp. - globulus, camaldulensis)* Association
- QUEAGR - *Quercus agrifolia* Association
- Wildlife Observations**
- ▲ yellow warbler (*Setophaga petechia*)
- Burrow Observations**
- Suitable Burrowing Owl Burrows
- Development Phases**
- 1-4 Phases 1-4
- 5-7 Phases 5-7
- Not Included
- Projects**
- Pacific Oaks Commerce Center
- Impacts**
- Permanent Impacts
- No Impacts
- Not Included



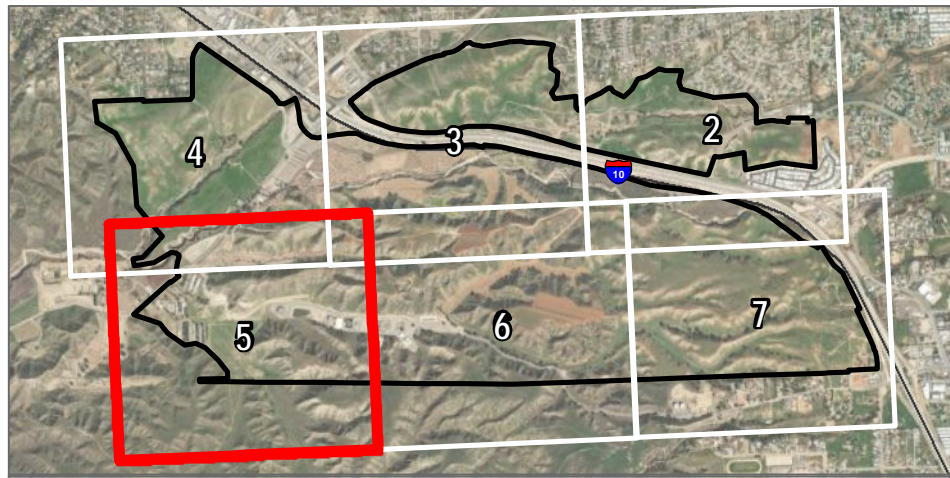
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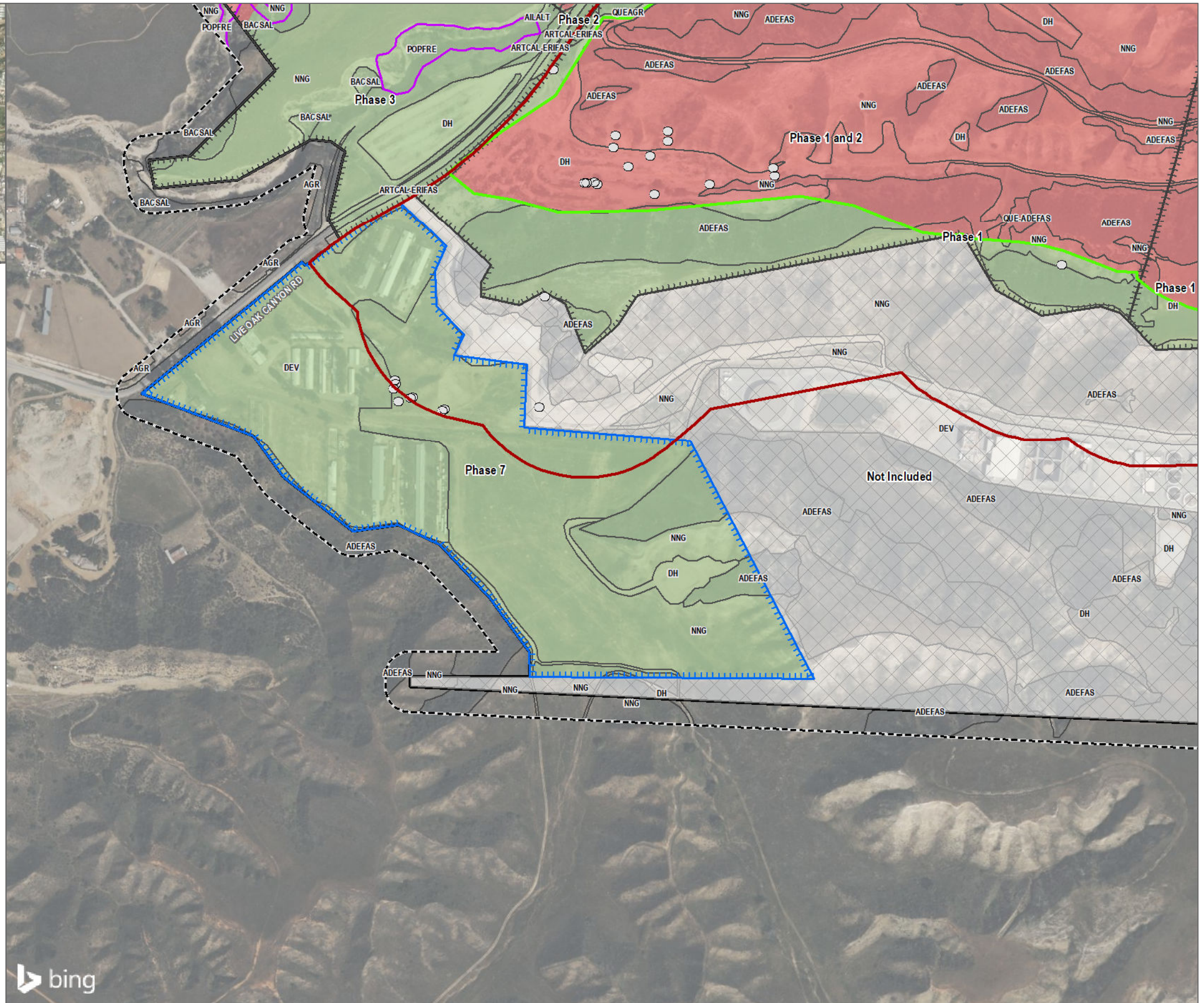
FIGURE 12-4

Impacts to Biological Resources

City of Yucaipa Freeway Corridor Specific Plan Project Biological Resources Technical Report



- Project Site
- Biological Study Area (100' Buffer)
- Focused Survey Area
- Sensitive Vegetation Communities
- POPFRE - *Populus fremontii* Association
- Vegetation Communities and Land Cover Types
- Developed and Disturbed Habitat**
- AGR - General Agriculture
- DEV - Urban/Developed
- DH - Disturbed Habitat
- Grass and Herb Dominated**
- NNG - Non-Native Grassland General Habitat
- Chaparral**
- ADEFAS - *Adenostoma fasciculatum* Association
- QUE-ADEFAS - *Quercus (berberidifolia, acutidens) - Adenostoma fasciculatum* Association
- Scrub**
- ARTCAL-ERIFAS - *Artemisia californica - Eriogonum fasciculatum* Association
- Riparian**
- BACSAL - *Baccharis salicifolia* Association
- POPFRE - *Populus fremontii* Association
- Woodland**
- AILALT - *Ailanthus altissima* Association
- QUEAGR - *Quercus agrifolia* Association
- Burrow Observations**
- Suitable Burrowing Owl Burrows
- Development Phases**
- Phases 1-4
- Phases 5-7
- Not Included
- Projects**
- Pacific Oaks Commerce Center
- Impacts**
- Permanent Impacts
- No Impacts
- Not Included



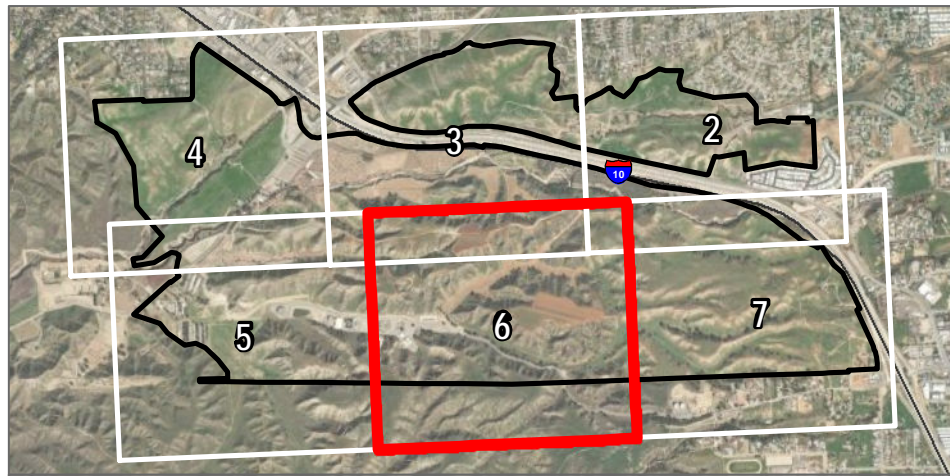
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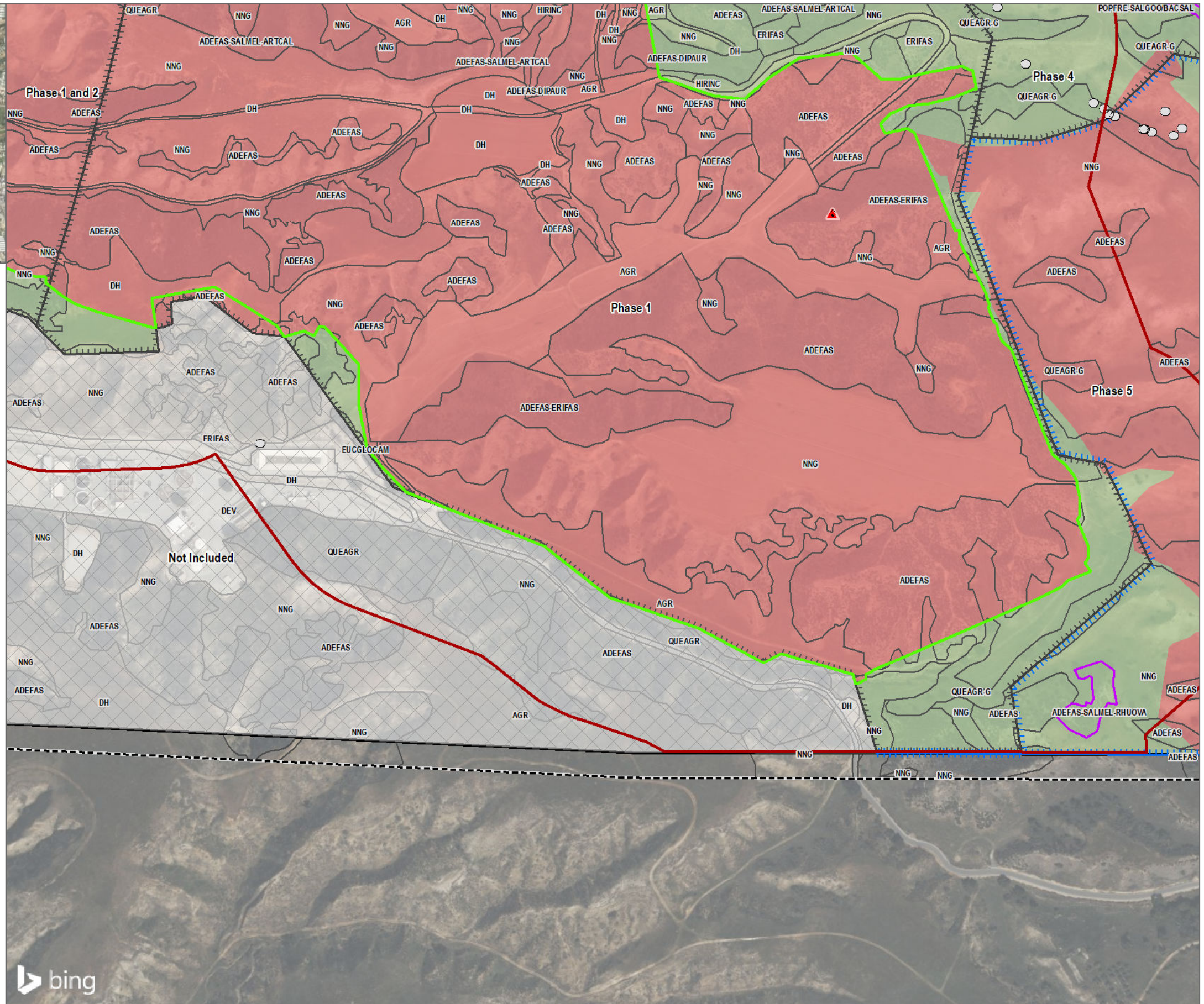
FIGURE 12-5

Impacts to Biological Resources

City of Yucaipa Freeway Corridor Specific Plan Project Biological Resources Technical Report

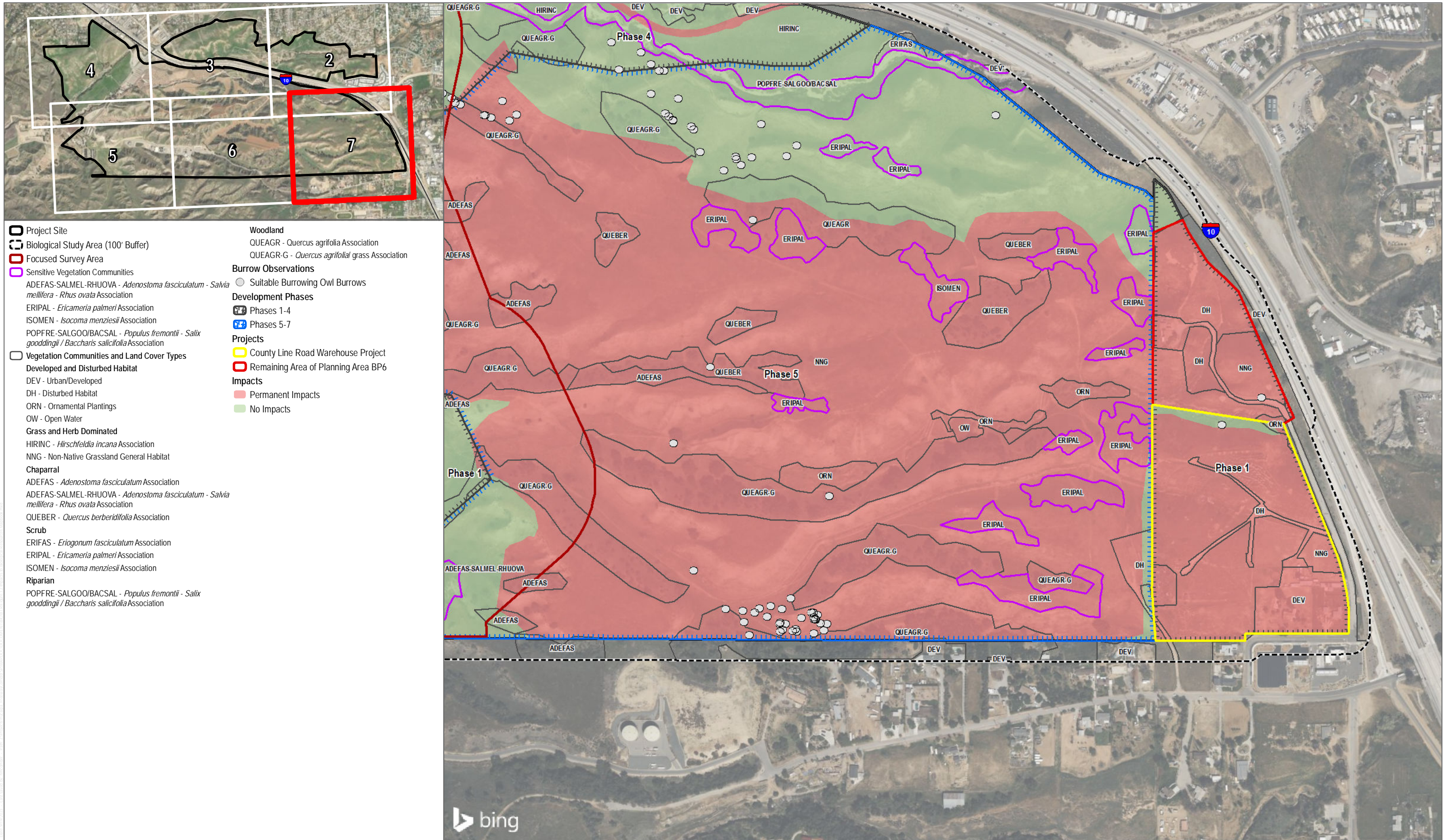


- Project Site
- Biological Study Area (100' Buffer)
- Focused Survey Area
- Sensitive Vegetation Communities
- Vegetation Communities and Land Cover Types
- Developed and Disturbed Habitat**
- AGR - General Agriculture
- DEV - Urban/Developed
- DH - Disturbed Habitat
- Grass and Herb Dominated**
- HIRINC - *Hirschfeldia incana* Association
- NNG - Non-Native Grassland General Habitat
- Chaparral**
- ADEFAS - *Adenostoma fasciculatum* Association
- ADEFAS-DIPAUR - *Adenostoma fasciculatum* - *Diplacus aurantiacus* Association
- ADEFAS-ERIFAS - *Adenostoma fasciculatum* - *Eriogonum fasciculatum* Association
- ADEFAS-SALMEL-ARTCAL - *Adenostoma fasciculatum* - *Salvia mellifera* - *Artemisia californica* Association
- ADEFAS-SALMEL-RHUOVA - *Adenostoma fasciculatum* - *Salvia mellifera* - *Rhus ovata* Association
- Scrub**
- ERIFAS - *Eriogonum fasciculatum* Association
- Riparian**
- POPFRE-SALGOO/BACSAL - *Populus fremontii* - *Salix gooddingii* / *Baccharis salicifolia* Association
- Woodland**
- EUCGLOCAM - *Eucalyptus* (spp. - *globulus*, *camaldulensis*) Association
- QUEAGR - *Quercus agrifolia* Association
- QUEAGR-G - *Quercus agrifolia* grass Association
- Wildlife Observations**
- bald eagle (*Haliaeetus leucocephalus*)
- Burrow Observations**
- Suitable Burrowing Owl Burrows
- Development Phases**
- Phases 1-4
- Phases 5-7
- Not Included
- Projects**
- Pacific Oaks Commerce Center
- Impacts**
- Permanent Impacts
- No Impacts
- Not Included



SOURCE: Bing Maps (accessed 2023); San Bernardino County 2023



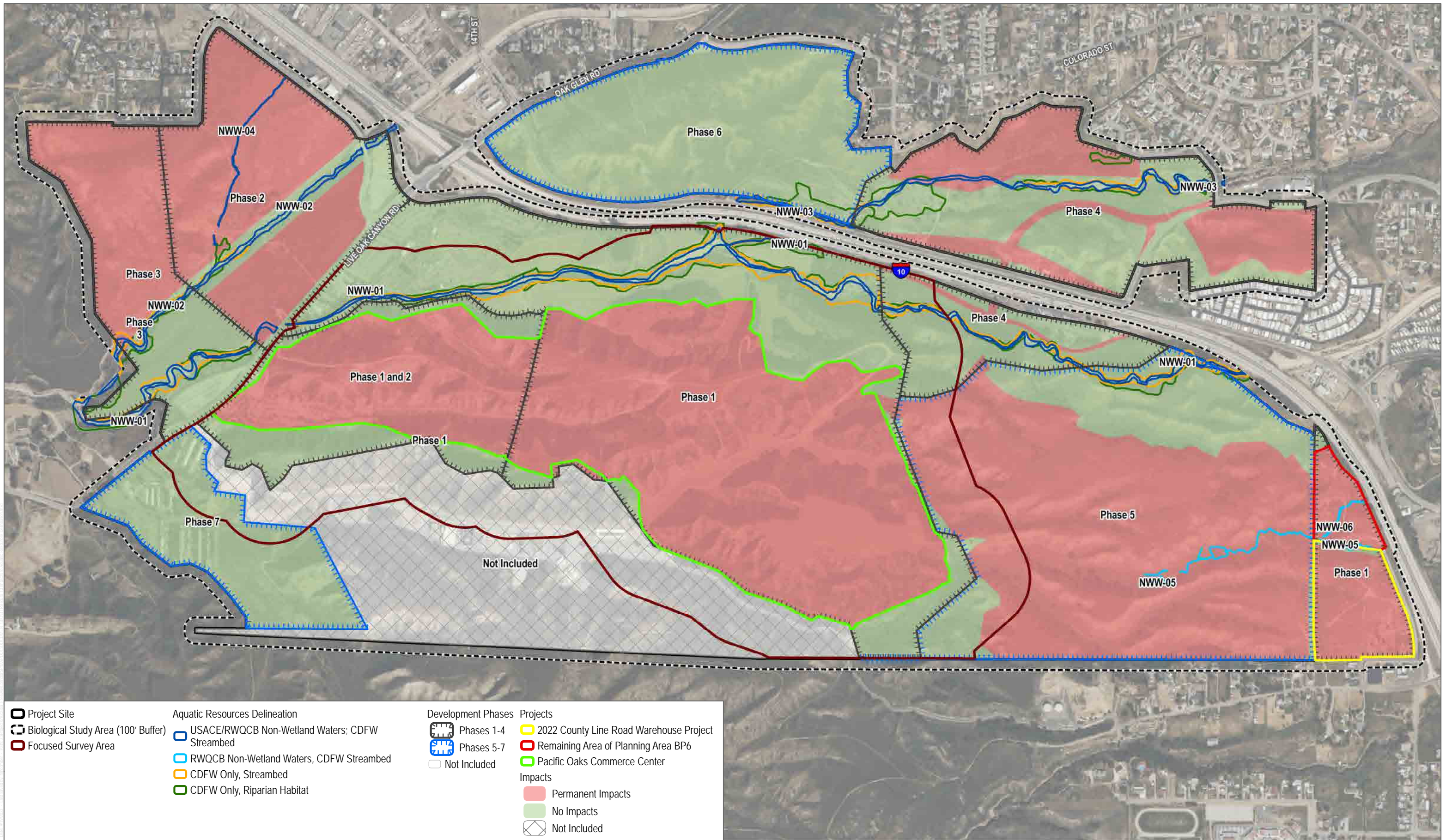


SOURCE: Bing Maps (accessed 2023); San Bernadino County 2023



FIGURE 12-7

Impacts to Biological Resources

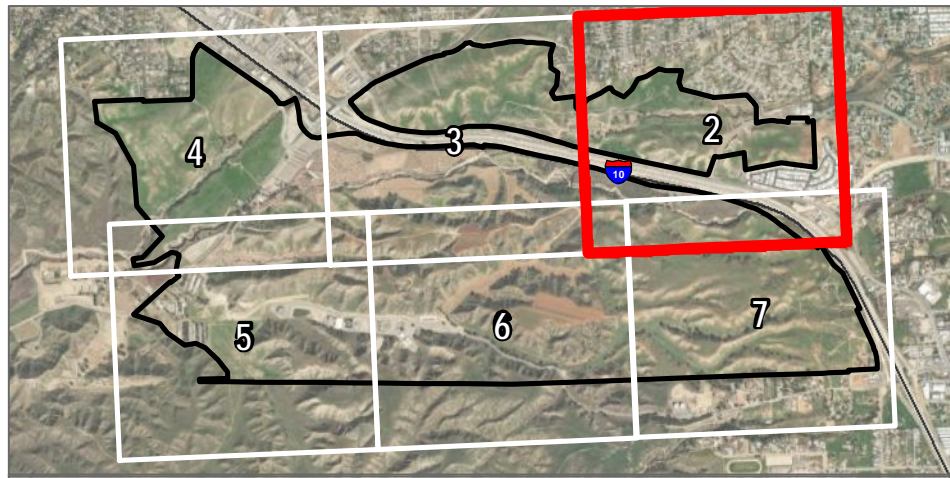


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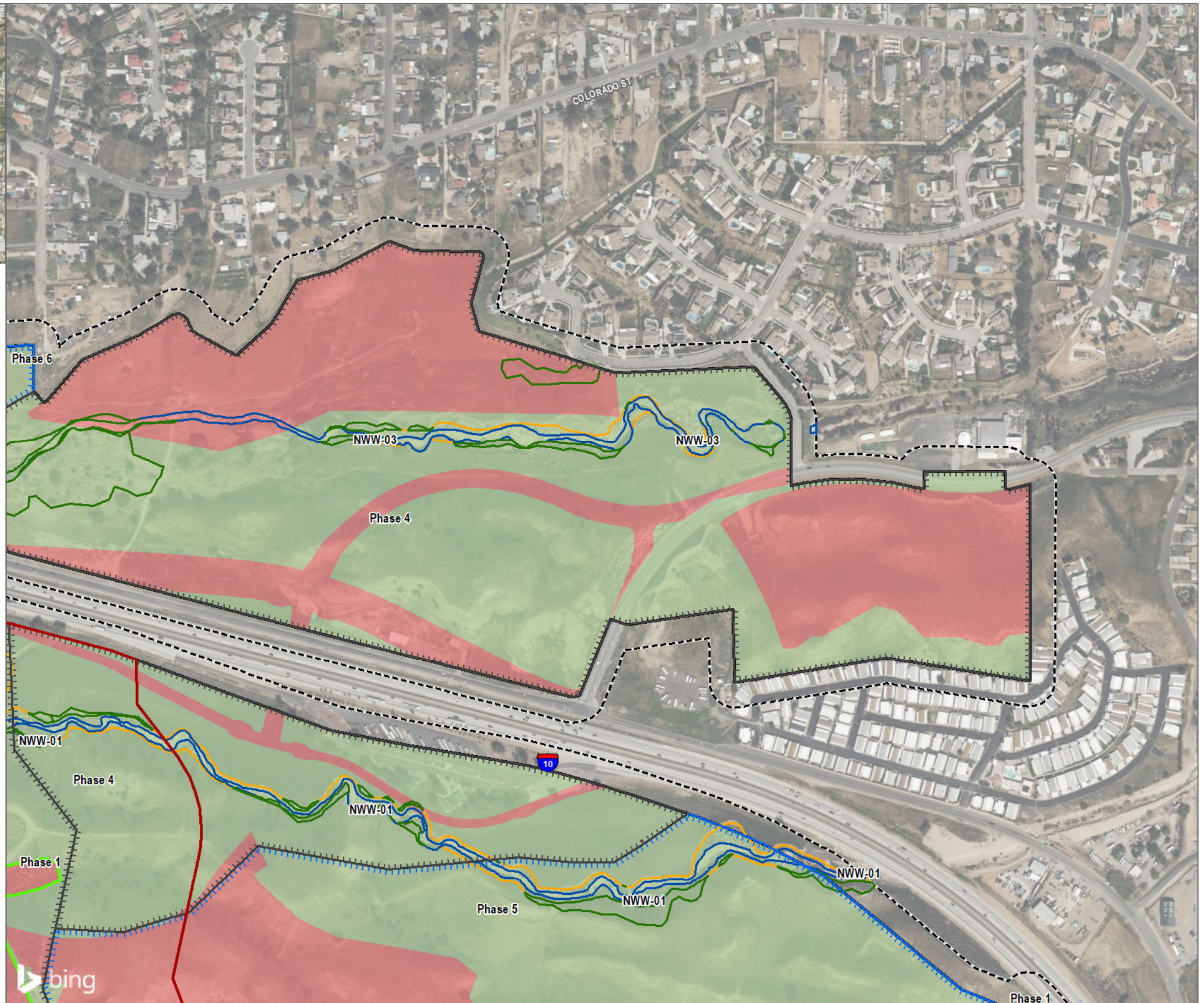


FIGURE 13

Impacts to Aquatic Resources Delineation



- Project Site
- Biological Study Area (100' Buffer)
- Focused Survey Area
- Aquatic Resources Delineation**
- USACE/RWQCB Non-Wetland Waters: CDFW Streambed
- CDFW Only, Streambed
- CDFW Only, Riparian Habitat
- Development Phases**
- Phases 1-4
- Phases 5-7
- Projects**
- Pacific Oaks Commerce Center
- Impacts**
- Permanent Impacts
- No Impacts



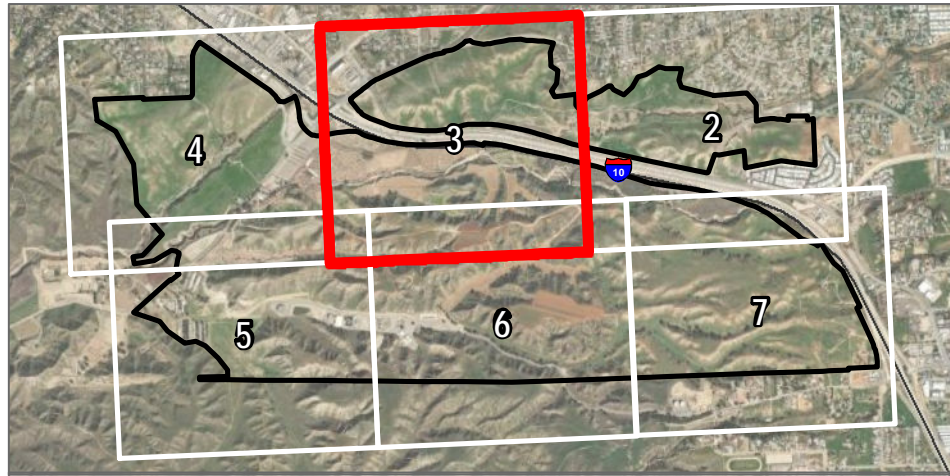
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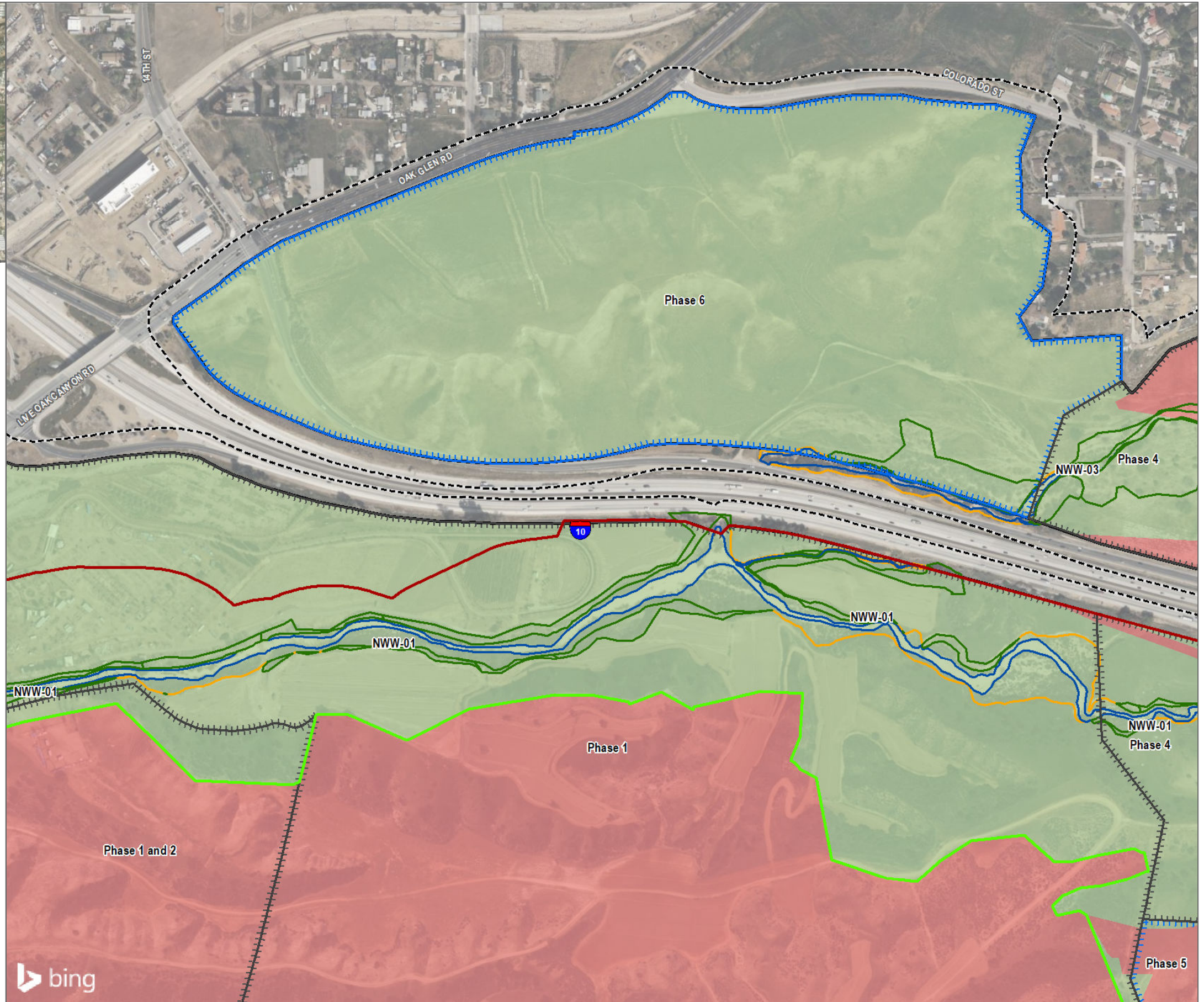
FIGURE 13-2

Impacts to Aquatic Resources Delineation Results

City of Yucaipa Freeway Corridor Specific Plan Project Biological Resources Technical Report



- Project Site
- Biological Study Area (100' Buffer)
- Focused Survey Area
- Aquatic Resources Delineation**
- USACE/RWQCB Non-Wetland Waters: CDFW Streambed
- CDFW Only, Streambed
- CDFW Only, Riparian Habitat
- Development Phases**
- Phases 1-4
- Phases 5-7
- Pacific Oaks Commerce Center
- Impacts**
- Permanent Impacts
- No Impacts



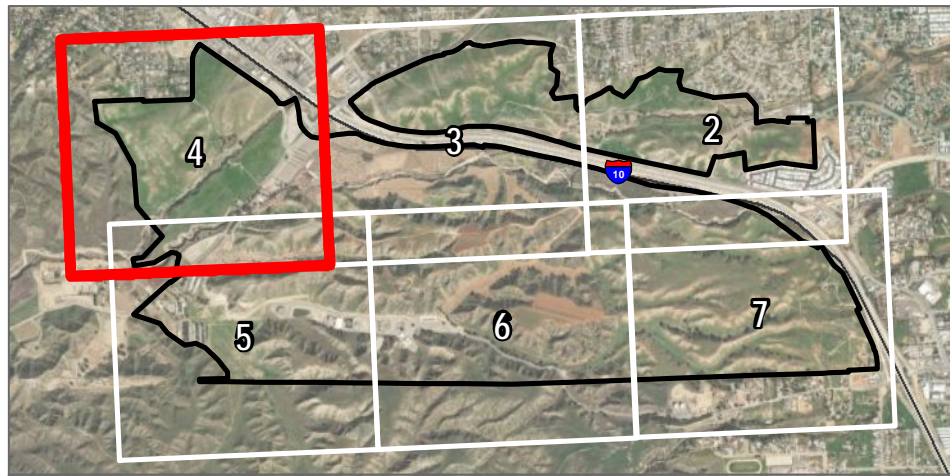
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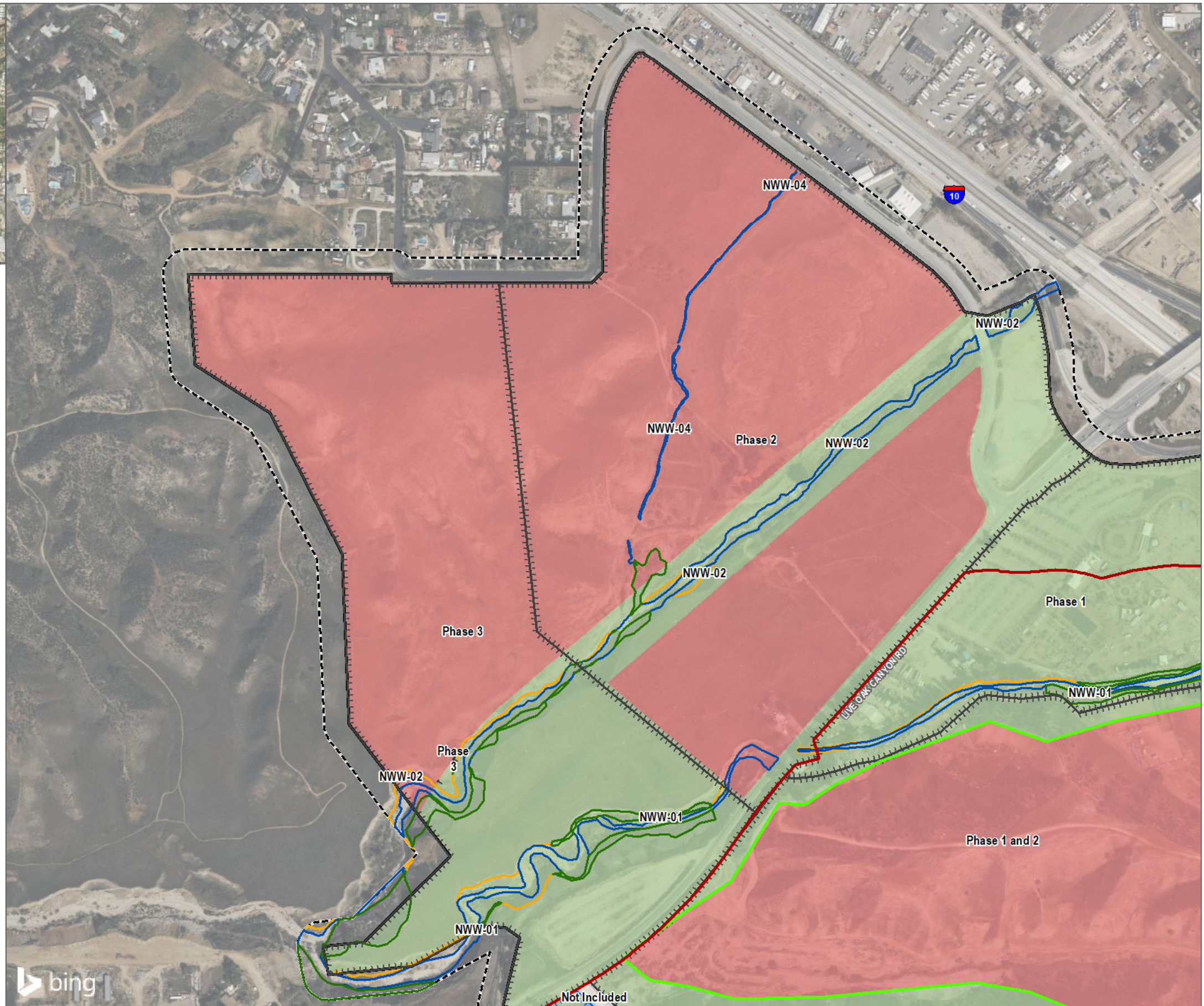
FIGURE 13-3

Impacts to Aquatic Resources Delineation Results

City of Yucaipa Freeway Corridor Specific Plan Project Biological Resources Technical Report



- Project Site
- Biological Study Area (100' Buffer)
- Focused Survey Area
- Aquatic Resources Delineation**
- USACE/RWQCB Non-Wetland Waters: CDFW Streambed
- CDFW Only, Streambed
- CDFW Only, Riparian Habitat
- Development Phases**
- Phases 1-4
- Phases 5-7
- Not Included
- Pacific Oaks Commerce Center
- Impacts**
- Permanent Impacts
- No Impacts
- Not Included



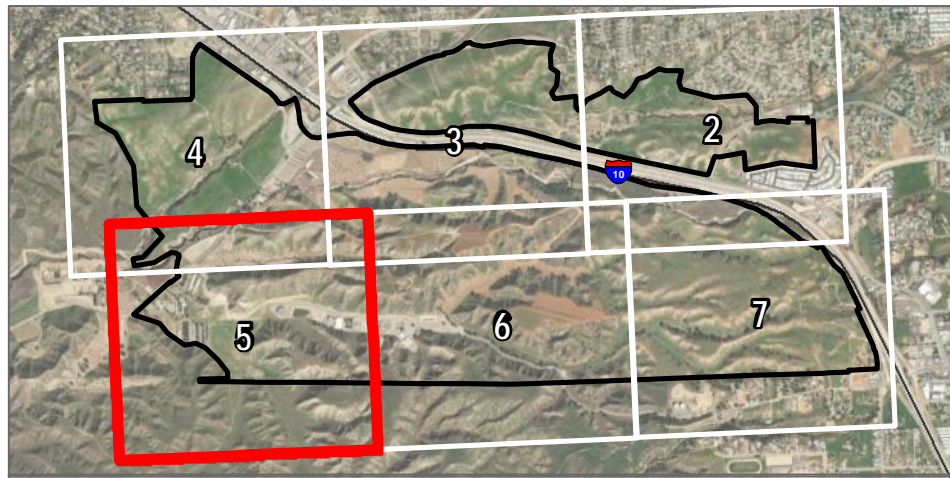
SOURCE: Bing Maps (accessed 2023); San Bernadino County 2023



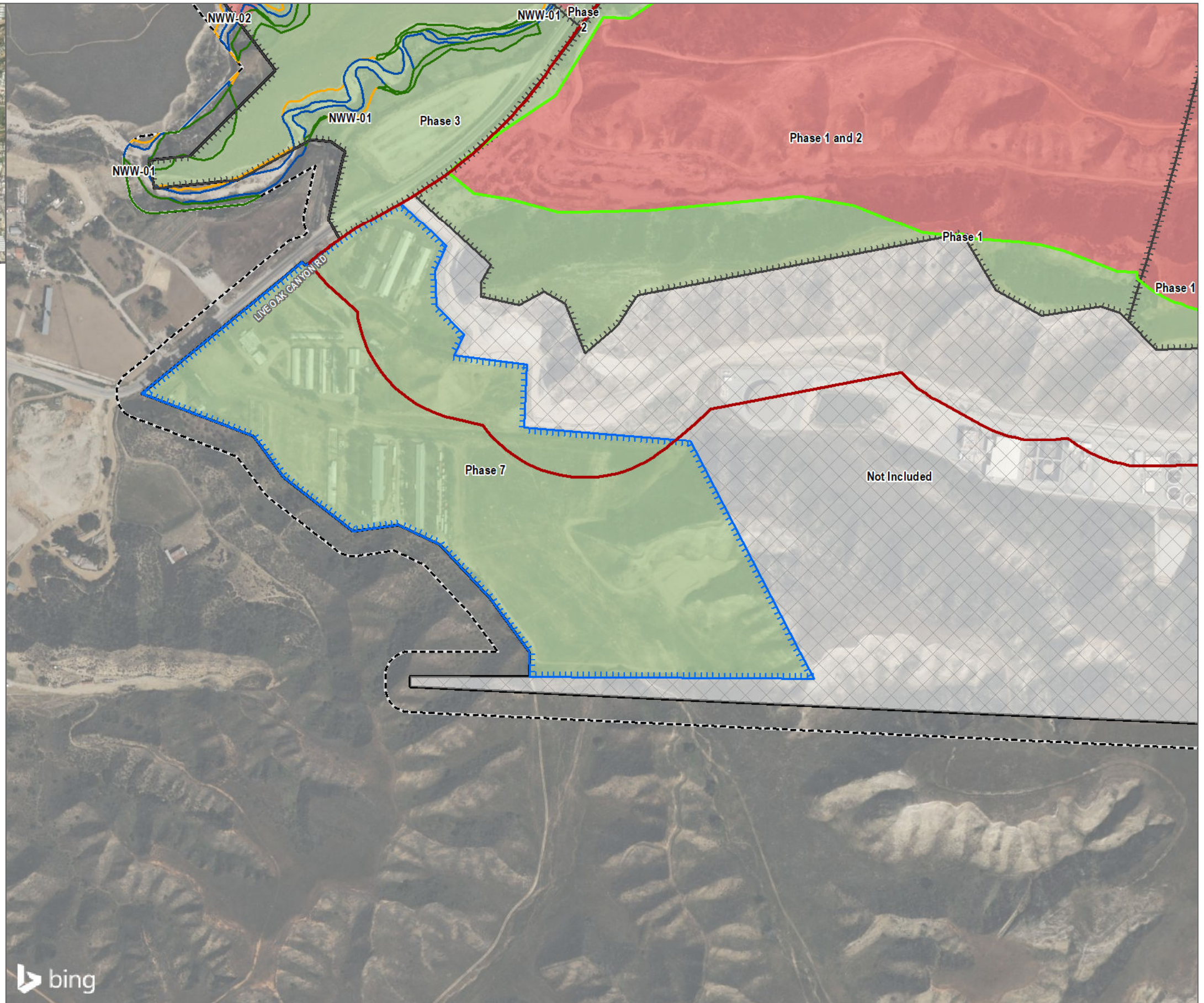
FIGURE 13-4

Impacts to Aquatic Resources Delineation Results

City of Yucaipa Freeway Corridor Specific Plan Project Biological Resources Technical Report



- Project Site
- Biological Study Area (100' Buffer)
- Focused Survey Area
- Aquatic Resources Delineation**
- USACE/RWQCB Non-Wetland Waters: CDFW Streambed
- CDFW Only, Streambed
- CDFW Only, Riparian Habitat
- Development Phases**
- Phases 1-4
- Phases 5-7
- Not Included
- Projects**
- Pacific Oaks Commerce Center
- Impacts**
- Permanent Impacts
- No Impacts
- Not Included



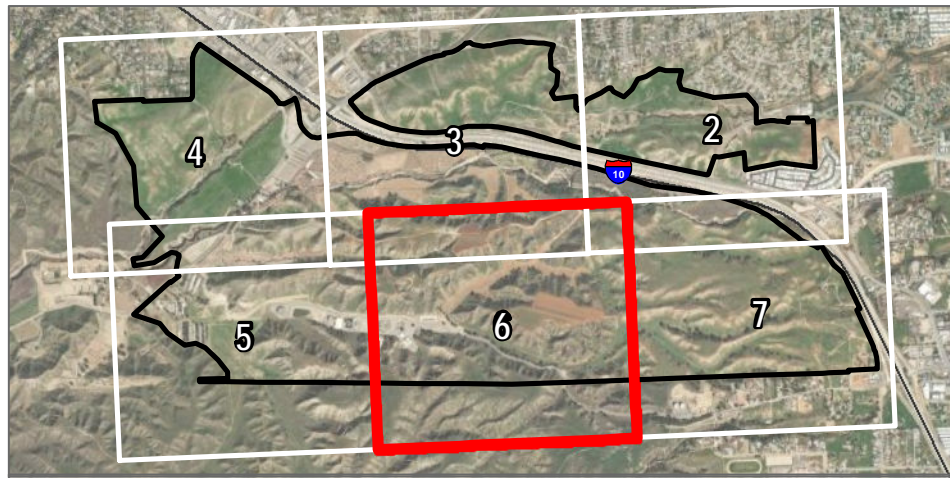
SOURCE: Bing Maps (accessed 2023); San Bernardino County 2023



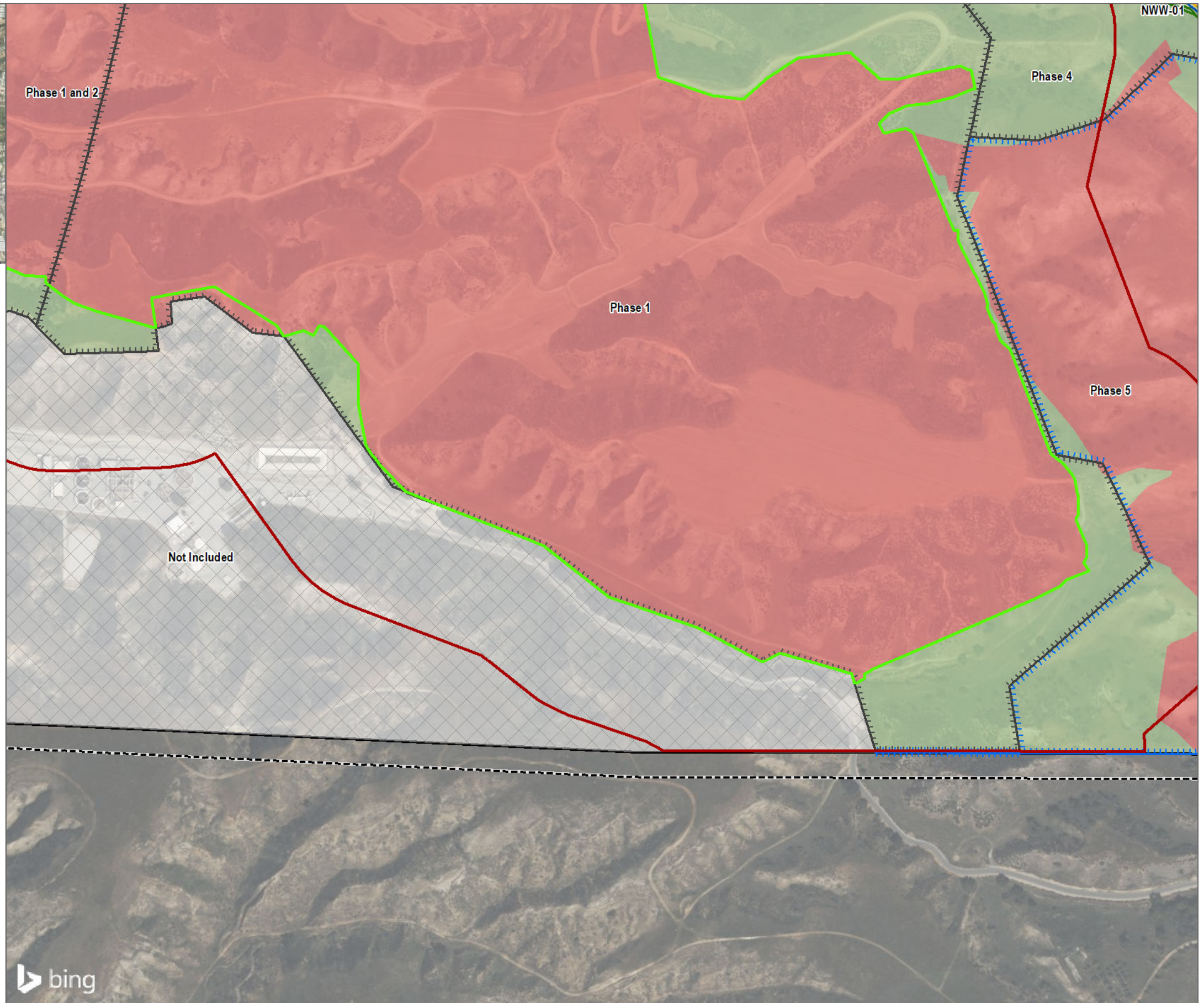
FIGURE 13-5

Impacts to Aquatic Resources Delineation Results

City of Yucaipa Freeway Corridor Specific Plan Project Biological Resources Technical Report



- Project Site
- Biological Study Area (100' Buffer)
- Focused Survey Area
- Aquatic Resources Delineation**
- USACE/RWQCB Non-Wetland Waters: CDFW Streambed
- CDFW Only, Streambed
- CDFW Only, Riparian Habitat
- Development Phases**
- Phases 1-4
- Phases 5-7
- Not Included
- Projects**
- Pacific Oaks Commerce Center
- Impacts**
- Permanent Impacts
- No Impacts
- Not Included



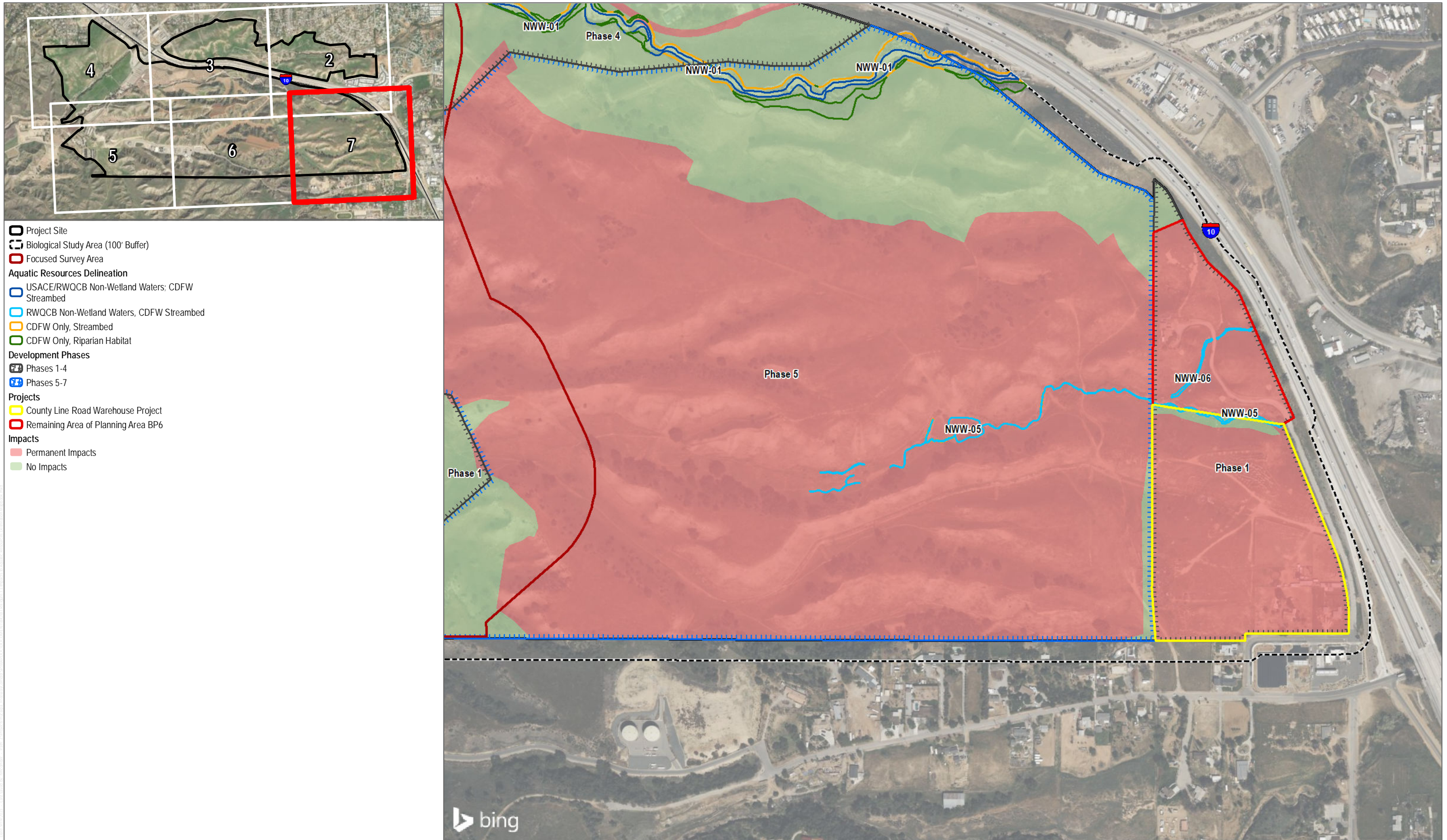
SOURCE: Bing Maps (accessed 2023); San Bernardino County 2023



FIGURE 13-6

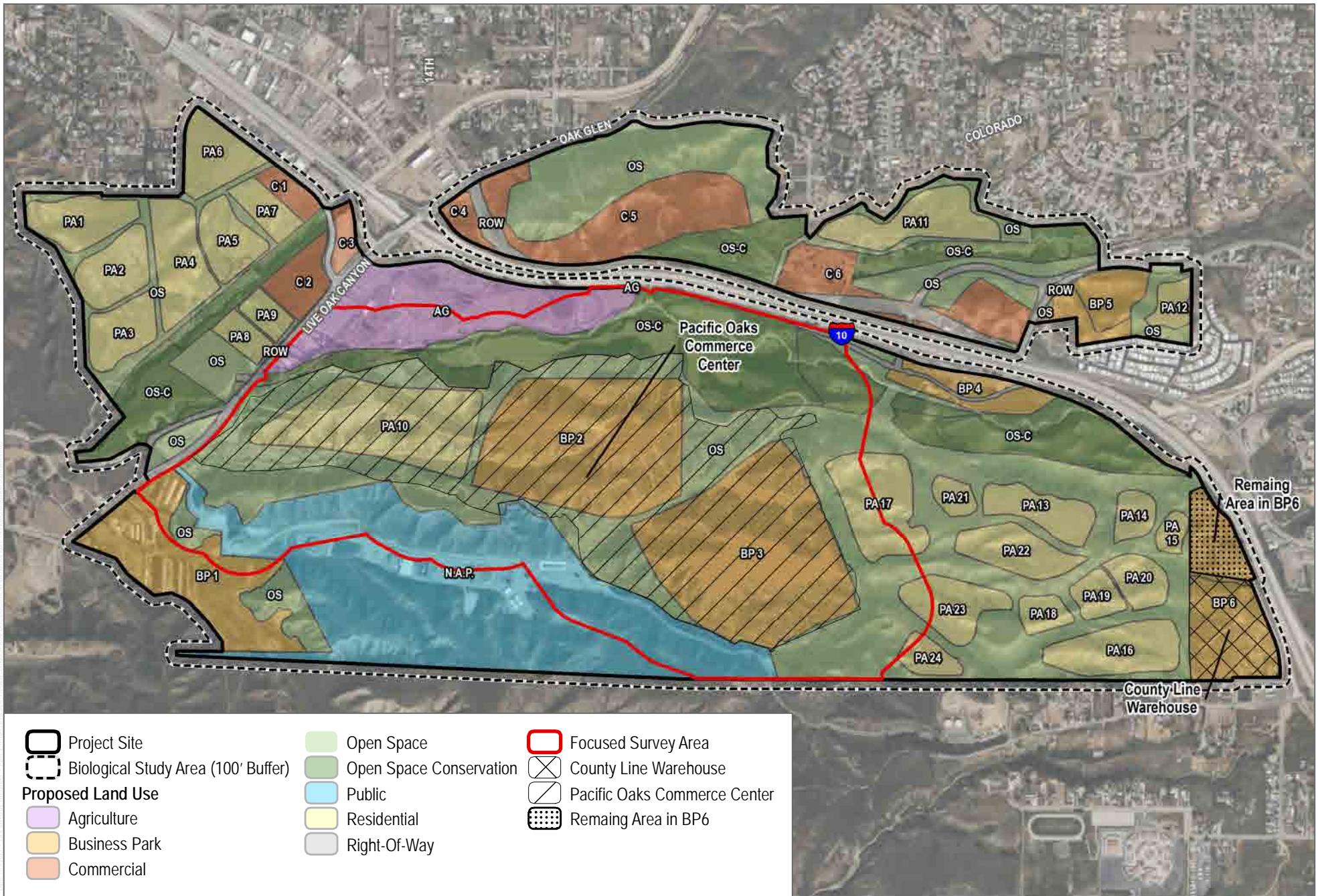
Impacts to Aquatic Resources Delineation Results

City of Yucaipa Freeway Corridor Specific Plan Project Biological Resources Technical Report



SOURCE: Bing Maps (accessed 2023); San Bernadino County 2023





SOURCE: USGS Topo Maps 2013



E-229

FIGURE 14
Project Mitigation Boundaries
 Freeway Corridor Specific Plan Project

Appendix B

Aquatic Resources Delineation Report

Aquatic Resources Delineation Report

Freeway Corridor Specific

Plan Project

AUGUST 2023

Prepared for:

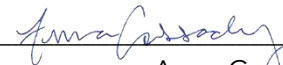
CITY OF YUCAIPA

34272 Yucaipa Boulevard
Yucaipa, California 92399
Contact: Benjamin Matlock

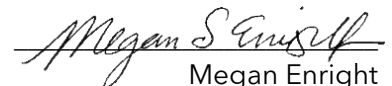
Prepared by:

DUDEK

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Anna Cassady
Biologist



Megan Enright
Principal

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APPENDICES

- A Request for a Jurisdictional Determination
- B Antecedent Precipitation Tool Output
- C Data Forms
- D Review Area Photos

Acronyms and Abbreviations

Acronym/Abbreviation	Definition
APT	Antecedent Precipitation Tool
ARC	antecedent runoff condition
ARDR	Aquatic Resources Delineation Report
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
City	City of Yucaipa
I	Interstate
NWI	National Wetlands Inventory
NWW	Non-Wetland Water
OHWM	ordinary high-water mark
PDSI	Palmer Drought Severity Index
Project	Freeway Corridor Specific Plan Project
RWQCB	Regional Water Quality Control Board
USACE	U.S. Army Corps of Engineers
WSP	wetland sample point

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1 Introduction

This Aquatic Resources Delineation Report (ARDR) was prepared in accordance with the Minimum Standards for Acceptance of Aquatic Resources Delineation Reports (USACE 2017). This report and supporting appendices provide the 20 items listed in the Minimum Standards for Acceptance of Aquatic Resources Delineation Reports. This report presents the results of the jurisdictional aquatic resource delineation conducted by Dudek for the proposed Freeway Corridor Specific Plan Project (Project) located in the City of Yucaipa (City), San Bernardino County, California. The delineation was conducted to identify and map existing aquatic resources potentially subject to the regulatory jurisdiction of the U.S. Army Corps of Engineers (USACE) pursuant to Section 404 of the Clean Water Act (33 USC 1344), waters of the state potentially subject to the regulatory jurisdiction of the Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the Clean Water Act and the Porter-Cologne Water Quality Control Act, and stream and riparian habitats potentially subject to the jurisdiction of the California Department of Fish and Wildlife (CDFW) pursuant to Section 1602 of the California Fish and Game Code (collectively defined as jurisdictional aquatic resources).

1.1 Disclaimer Statement

This report presents Dudek's best effort to quantify the extent of aquatic resources potentially regulated by USACE, RWQCB, and CDFW (i.e., regulatory agencies) within the identified review areas using the current regulations, written policies, and guidance from these regulatory agencies. The potential jurisdictional boundaries described in this report are subject to verification by the regulatory agencies. Only the regulatory agencies can make a final determination on whether the features present are subject to USACE, RWQCB, and/or CDFW regulation. This ARDR serves as a request for the USACE to complete a Preliminary Jurisdictional Determination. Appendix A provides the required forms associated with the Preliminary Jurisdictional Determination request.¹

1.2 Contact Information

Contact information for the Project applicant and agent are provided in Table 1.² Access to the review area is not restricted, but if a site visit is requested, the Project applicant or agent will accompany regulatory staff to the review area.³ The City is the Project applicant and landowner.

¹ Minimum Standards Item 1 (Request for Jurisdictional Determination)

² Minimum Standards Item 2 (Contact Information)

³ Minimum Standards Item 3 (Site Access Statement)

Table 1. Contact Information

Project Applicant	City of Yucaipa	Agent	Dudek
Contact Name	Benjamin Matlock	Contact Name	Anna Cassady
Address	34272 Yucaipa Boulevard Yucaipa, California 92399	Address	605 Third Street Encinitas, California 92024
Phone	909.797.2489 Ext. 261	Phone	951.300.1088
Email	bmatlock@yucaipa.org	Email	acassady@dudek.com

2 Review Area Description and Landscape Setting⁴

The approximately 1,367.8-acre review area for the proposed Project is located within the City of Yucaipa in San Bernardino County. The review area consists of 49 property parcels and a 100-foot survey buffer (Table 2; Figure 1, Vicinity Map)⁵. The approximate center of the review area is at latitude 34.011, longitude -117.0878. Directions to the review area are as follows: from the intersection of Interstate (I)-10 and I-215 in San Bernardino, drive east on I-10 for approximately 11 miles before taking exit 83 toward Yucaipa Boulevard. Drive southeast on Outer Highway 10 South for approximately 1 mile before arriving at the review area’s northwestern boundary.⁶ The eastern edge of the review area is approximately 2.8 miles farther southeast, near I-10 exit 87 toward County Line Road.

Topography in the review area is variable, composed of hills and depressions with some areas of level ground, predominantly in the northwestern portion of the review area. While agricultural areas and dirt roads are ubiquitous throughout the review area, the eastern and central northern portions of the review area are subject to the highest disturbance as a result of the I-10 and Live Oak Canyon Road intersection and the Live Oak Canyon Farm’s agricultural operations. Additionally, a nearly linear section in the southern portion of the review area has been paved and contains various structures. The review area’s surface elevation ranges between approximately 1,950 and 2,380 feet above mean sea level, with the lowest point located in the southwest portion of the review area and the highest point in the southeast portion of the review area. Yucaipa Creek follows this pattern and flows from east to west across the review area south of I-10. The review area is located in Sections 3, 4, 8, 9, 10, and 11, Township 2 South, Range 2 West, within the Yucaipa 7.5-minute U.S. Geological Survey topographic quadrangle map.

Table 2. Project Site Assessor’s Parcel Numbers

Accessor’s Parcel Numbers						
030116305	030120108	030120128	030120141	030122101	031811108	031821306
030116307	030120112	030120133	030120142	030122109	031811109	031821307
030118104	030120113	030120135	030121102	030122110	031811110	031821308
030119114	030120120	030120136	030121108	031807107	031811114	031821309
030119115	030120123	030120138	030121110	031807112	031811115	031821310
030119121	030120126	030120139	030121111	031811101	031821303	031821311
030120103	030120127	030120140	030121112	031811102	031821305	031821314

2.1 Soils⁷

Soil types within the review area are shown in Table 3 and on Figure 2, Soils Map. The hydric soils are indicated by shading (USDA 2023a, 2023b).

⁴ Minimum Standards Item 10 (Description of Existing Field Conditions)

⁵ Minimum Standard Item 14 (Site Location Map)

⁶ Minimum Standards Item 4 (Directions)

⁷ Minimum Standards Item 13 (Soil Descriptions)

Table 3. Soils within the Review Area

Mapping Unit Symbol	Soil Name	Hydric Rating	Acreage
HaC	Hanford Coarse Sandy Loam, 2 to 9 Percent Slopes	Not Hydric	130.62
PIB	Placentia Fine Sandy Loam, 0 to 5 Percent Slopes	Hydric	0.62
Ps	Psamments and Fluvents, Frequently Flooded	Hydric	71.15
RmE2	Ramona Sandy Loam, 15 to 30 Percent Slopes, Eroded	Not Hydric	31.83
RaB2	Ramona Sandy Loam, 2 to 5 Percent Slopes, Eroded	Not Hydric	1.41
RmC	Ramona Sandy Loam, 2 to 9 Percent Slopes	Not Hydric	132.12
RmD	Ramona Sandy Loam, 9 to 15 Percent Slopes	Not Hydric	21.51
RdD2	Ramona Sandy Loam, Moderately Deep, 8 to 15 Percent Slopes, Eroded	Not Hydric	2.03
ReC2	Ramona Very Fine Sandy Loam, 0 to 8 Percent Slopes, Eroded	Not Hydric	1.27
RfC2	Ramona Very Fine Sandy Loam, Moderately Deep, 0 to 8 Percent Slopes, Eroded	Not Hydric	0.97
SeC2	San Emigdio Fine Sandy Loam, 2 to 8 Percent Slopes, Eroded	Not Hydric	0.40
ScC	San Emigdio Fine Sandy Loam, 2 to 9 Percent Slopes	Not Hydric	221.22
SgD2	San Emigdio Loam, 8 to 15 Percent Slopes, Eroded	Not Hydric	1.42
SaD	San Emigdio Sandy Loam, 9 to 15 Percent Slopes	Not Hydric	95.82
SmF2	San Timoteo Loam, 25 to 50 Percent Slopes, Eroded	Not Hydric	3.29
SgF2	San Timoteo Loam, 30 to 50 Percent Slopes, Eroded	Not Hydric	287.60
SmE2/SmE2wr	San Timoteo Loam, 8 to 25 Percent Slopes, Eroded	Not Hydric	0.71
ShF	Saugus Sandy Loam, 30 to 50 Percent Slopes	Not Hydric	306.20
TvC	Tujunga Gravelly Loamy Sand, 0 to 9 Percent Slopes	Hydric	57.61
Total			1,367.8

Note: Shaded rows denote hydric soils.

2.2 Vegetation

A total of 35 vegetation communities were mapped in the review area within the following eight land cover types: grass and herb dominated, chaparral, scrub, riparian, woodland, unvegetated, disturbed and developed, and open water. The acreages of the mapped vegetation alliances/associations and other land covers in the review area are presented in Table 4. Additionally, a description of the riparian vegetation communities mapped within the review area is included further below.

Table 4. Vegetation Communities and Land Cover Types within the Review Area

Vegetation Community or Land Cover Type	Alliance	Association	Total Acreage ¹
Grass and Herb Dominated			
Non-Native Grassland General Habitat	N/A	N/A	725.0

Table 4. Vegetation Communities and Land Cover Types within the Review Area

Vegetation Community or Land Cover Type	Alliance	Association	Total Acreage ¹
Upland mustards or star-thistle fields	<i>Brassica nigra</i> - <i>Centaurea (solstitialis, melitensis)</i>	<i>Hirschfeldia incana</i> (provisional)	22.2
<i>Grass and Herb Dominated Subtotal¹</i>			747.2
Chaparral			
Chamise chaparral	<i>Adenostoma fasciculatum</i>	<i>Adenostoma fasciculatum</i>	140.1
		<i>Adenostoma fasciculatum</i> - <i>Diplacus aurantiacus</i>	4.6
		<i>Adenostoma fasciculatum</i> - <i>Eriogonum fasciculatum</i>	12.1
Chamise sage -chaparral	<i>Adenostoma fasciculatum</i> - <i>Salvia</i> spp.	<i>Adenostoma fasciculatum</i> - <i>Salvia mellifera</i> - <i>Artemisia californica</i>	7.1
		<i>Adenostoma fasciculatum</i> - <i>Salvia mellifera</i> - <i>Rhus ovata</i>	0.8
Scrub Oak Chaparral	<i>Quercus berberidifolia</i>	<i>Quercus (berberidifolia, ×acutidens)</i> - <i>Adenostoma fasciculatum</i>	0.3
		<i>Quercus berberidifolia</i>	6.8
<i>Chaparral Subtotal¹</i>			171.9
Scrub			
California buckwheat - Parish's goldeneye scrub	<i>Eriogonum fasciculatum</i> - <i>Viguiera parishii</i>	<i>Eriogonum fasciculatum</i> (Wash)	2.3
California buckwheat scrub	<i>Eriogonum fasciculatum</i> Alliance	<i>Eriogonum fasciculatum</i>	4.3
Menzies's golden bush scrub ²	<i>Isocoma menziesii</i>	<i>Isocoma menziesii</i>	1.0
California sagebrush- (purple sage) scrub	<i>Artemisia californica</i> - (<i>Salvia leucophylla</i>)	<i>Artemisia californica</i> - <i>Eriogonum fasciculatum</i>	3.8
Brittle bush scrub	<i>Encelia farinosa</i>	<i>Encelia farinosa</i>	0.4
Fourwing saltbush scrub	<i>Atriplex canescens</i>	<i>Atriplex canescens</i>	0.9
Palmer's goldenbush scrub ²	<i>Ericameria palmeri</i>	<i>Ericameria palmeri</i>	11.1
<i>Scrub Subtotal¹</i>			23.6
Riparian			
Scale broom scrub ²	<i>Lepidospartum squamatum</i>	<i>Eriogonum fasciculatum</i> - <i>Lepidospartum squamatum</i> alluvial fan	3.4
		<i>Lepidospartum squamatum</i> / ephemeral annuals	0.6
Fremont cottonwood forest and woodland ²	<i>Populus fremontii</i> - <i>Fraxinus velutina</i> - <i>Salix gooddingii</i>	<i>Populus fremontii</i>	4.8
		<i>Populus fremontii</i> - <i>Salix gooddingii</i> / <i>Baccharis salicifolia</i>	5.5

Table 4. Vegetation Communities and Land Cover Types within the Review Area

Vegetation Community or Land Cover Type	Alliance	Association	Total Acreage ¹
		<i>Populus fremontii</i> - <i>Sambucus nigra</i>	0.8
Goodding’s willow – red willow riparian woodland and forest	<i>Salix gooddingii</i> – <i>Salix laevigata</i>	<i>Salix gooddingii</i>	0.9
Basket bush - river hawthorn - desert olive patches ²	<i>Rhus trilobata</i> - <i>Crataegus rivularis</i> - <i>Forestiera pubescens</i>	<i>Sambucus nigra</i>	3.2
Mulefat thickets	<i>Baccharis salicifolia</i> Alliance	<i>Baccharis salicifolia</i>	19.6
		<i>Baccharis salicifolia</i> - <i>Sambucus nigra</i>	1.1
<i>Riparian Subtotal</i> ¹			39.8
Woodland			
Coast live oak woodland and forest	<i>Quercus agrifolia</i>	<i>Quercus agrifolia</i>	18.1
		<i>Quercus agrifolia</i> / grass	48.1
Eucalyptus - tree of heaven - black locust groves	<i>Eucalyptus</i> spp. – <i>Ailanthus altissima</i> – <i>Robinia pseudoacacia</i>	<i>Ailanthus altissima</i>	4.1
		<i>Eucalyptus (globulus, camaldulensis)</i>	1.0
		N/A	1.1
<i>Woodland Subtotal</i> ¹			72.4
Disturbed and Developed			
Ornamental Plantings	N/A	N/A	3.3
Urban/Developed	N/A	N/A	129.3
Disturbed Habitat	N/A	N/A	91.5
General Agriculture	N/A	N/A	88.6
Open Water	N/A	N/A	0.3
<i>Disturbed and Developed Subtotal</i> ¹			312.9
Total ¹			1,367.8

Notes: N/A = not applicable.

¹ Totals may not sum due to rounding.

² Communities listed by California Department of Fish and Wildlife as sensitive (i.e., State Rank [S] 1, 2, or 3) (CDFW 2023).

2.2.1 Mulefat Thickets (63.510.03)

The mulefat thickets alliance features mulefat (*Baccharis salicifolia*) as the dominant or co-dominant shrub in the canopy. Mulefat thicket communities are characterized by a continuous two-tiered canopy that is less than 5 meters (16 feet) in height, with one tier under 5 meters and the secondary tier under 2 meters (6.5 feet) in height. Mulefat thickets commonly have a sparse herbaceous layer (CNPS 2023). Species associated with this alliance include California sagebrush (*Artemisia californica*), coyote brush (*Baccharis pilularis*), laurel sumac (*Malosma laurina*), tree tobacco (*Nicotiana glauca*), arrow weed (*Pluchea sericea*), blackberry (*Rubus* spp.), sandbar willow (*Salix exigua*), arroyo willow (*Salix lasiolepis*), blue elderberry (*Sambucas nigra*), and tamarisk (*Tamarix ramosissima*). Emergent

trees present at low covers may include foothill pine (*Pinus sabiniana*), California sycamore (*Platanus racemose*), Fremont cottonwood (*Populus fremontii*), oak trees (*Quercus* spp.), and willows (*Salix* spp.) (CNPS 2023).

The mulefat thickets alliance is ranked by CDFW (2023) as a G4S4 alliance. This ranking indicates that globally and within California the alliance is apparently secure (CDFW 2023; NatureServe 2023); therefore, this community is not considered sensitive under the California Environmental Quality Act (CEQA).

Associations within the mulefat thickets alliance include *Baccharis salicifolia*, and *Baccharis salicifolia*-*Sambucus nigra*, which were mapped on site accordingly.

Associated species observed within the *Baccharis salicifolia* association in the field include tree of heaven (*Ailanthus altissima*), black elderberry (*Sambucus nigra*), California sagebrush, California buckwheat (*Eriogonum fasciculatum*), and an understory of short-pod mustard (*Hirschfeldia incana*) and various grass species.

Associated species observed within the *Baccharis salicifolia*-*Sambucus nigra* association in the field include tree of heaven, blue elderberry, California buckwheat, California sagebrush, and an understory of short-pod mustard, and various grass species.

On site, mulefat thickets occur in long linear sections adjacent portions of Yucaipa Creek and Glen Oak Creek, in the northeastern, central, and southwestern portions of the review area.

2.2.2 Fremont Cottonwood Forest and Woodland (61.130.00)

Within the Fremont cottonwood forest and woodland alliance, Fremont cottonwood is the dominant or co-dominant tree in the canopy. This alliance has an open to intermittent canopy that is less than 115 feet (35 meters) in height, with an herbaceous layer that is typically sparse or grassy. Species associated with the Fremont cottonwood forest alliance include white alder (*Alnus rhombifolia*), Southern California black walnut (*Juglans californica*), coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), sandbar willow, Goodding's willow (*S. gooddingii*), Oregon ash (*Fraxinus latifolia*), red willow (*S. laevigata*), arroyo willow, Peruvian peppertree (*Schinus molle*), and California bay laurel (*Umbellularia californica*). This alliance occurs on floodplains; along low-gradient rivers, perennial or seasonally intermittent streams, and springs; in lower canyons in desert mountains; in alluvial fans; and in valleys with a dependable subsurface water supply that varies considerably during the year (CNPS 2023).

The Fremont cottonwood forest and woodland alliance is ranked by CDFW (2023) as a G4S3 alliance. This ranking indicates that globally the association is apparently secure, but vulnerable within California (CDFW 2023; NatureServe 2023). Therefore, this alliance is considered a sensitive natural community by CDFW.

Associations within the within the Fremont cottonwood forest and woodland alliance mapped on site include *Populus fremontii*, *Populus fremontii* - *Sambucus nigra*, and *Populus fremontii* - *Salix gooddingii* / *Baccharis salicifolia*.

Populus fremontii is currently ranked as G2S3 by CDFW (2023) despite the overall alliance's G4S3 ranking, indicating that it is imperiled globally. However, the distinctiveness of this association is questionable, and resolution of this uncertainty may result in the association having a lower-priority (numerically higher) conservation status rank. Additionally, the *Populus fremontii* - *Salix gooddingii* / *Baccharis salicifolia* association has a rank of G2S3, indicating that it is imperiled and at high risk globally, as well as vulnerable in California. Therefore, these associations and all others in the alliance are ranked as sensitive by CDFW (2023).

Associated species observed within the *Populus fremontii* association include tree of heaven, California buckwheat, mulefat, and California sagebrush.

Associated species observed within the *Populus fremontii* - *Sambucus nigra* association include black elderberry and mulefat, with an understory of horehound (*Marrubium vulgare*), and various grass species.

On site, Fremont cottonwood forest and woodland occurs in long linear sections adjacent portions of Yucaipa Creek and Glen Oak Creek throughout the review area.

2.2.3 Goodding’s Willow–Red Willow Riparian Woodlands (61.216.00)

The Goodding’s willow–red willow riparian woodlands alliance features Goodding’s willow or red willow as the dominant or co-dominant tree in the canopy. This alliance has an open to continuous tree canopy that is less than 30 meters (26 feet) in height with a variable herbaceous layer (CNPS 2023). Some tree species associated with the alliance include white alder, Oregon ash, California sycamore, Fremont cottonwood, coast live oak, and valley oak. Shrubs may form a sparse to continuous canopy and include mulefat, California rose (*Rosa californica*), blue elderberry, and sandbar willow (CNPS 2023).

The Goodding’s willow–red willow riparian woodlands alliance is ranked by CDFW (2023) as a G4S3 alliance. This ranking indicates that it is apparently secure globally but vulnerable and at moderate risk within California (CDFW 2023; NatureServe 2023). Therefore, this alliance is considered a sensitive natural community by CDFW.

The only association within the Goodding’s willow–red willow riparian woodlands alliance mapped on site is *Salix gooddingii*. This associations and all others in the alliance are ranked as sensitive by CDFW (2023).

Associated species observed within this alliance in the field included mulefat, southern California black walnut, and tree of heaven.

On site, Goodding’s willow–red willow riparian woodlands occur in two small patches near Yucaipa Creek in the northeastern corner of the review area.

2.2.4 Basket Bush – River Hawthorn – Desert Olive Patches (61.580.00)

Within the basket bush – river hawthorn – desert olive patches alliance, desert olive (*Forestiera pubescens*), skunkbush sumac (*Rhus trilobata*), and/or black elderberry are dominant or co-dominant in the shrub canopy. The basket bush – river hawthorn – desert olive patches alliance has an intermittent to continuous canopy that may be two tiered and is less than 5 meters (16 feet) in height, with a sparse to intermittent herbaceous layer. Species associated with this alliance include fourwing saltbush (*Atriplex canescens*), coyote bush, broom snakeweed (*Gutierrezia sarothrae*), and sandbar willow. Emergent trees may be present at low cover, including Fremont cottonwood, *Quercus* species, or red willow.

The basket bush – river hawthorn – desert olive patches alliance is ranked by CDFW (2023) as G4S3. This ranking indicates that globally the association is apparently secure, but vulnerable within California (CDFW 2023; NatureServe 2023). Therefore, this alliance is considered a sensitive natural community by CDFW.

The only association within the basket bush – river hawthorn – desert olive patches alliance mapped on site is *Sambucus nigra*.

Associated species observed within the basket bush – river hawthorn – desert olive patches alliance includes Peruvian peppertree and coast live oak.

On site, the basket bush – river hawthorn – desert olive patches alliance comprises of a single medium-sized patch in the northeastern portion of the site, along a portion of Yucaipa Creek.

2.2.5 Scale Broom Scrub (32.070.00)

The scale broom scrub alliance is dominated by scale broom (*Lepidospartum squamatum*) and often occurs in semi-alluvial environments. The alliance usually displays an open to continuous two-tiered shrub canopy less than 2 meters (6.5 feet) in height; the herbaceous layer is variable and may be grassy (CNPS 2023). Species associated with this alliance include cheesebush (*Ambrosia salsola*), California sagebrush, mulefat, bladderpod (*Peritoma arborea*), California cholla (*Cylindropuntia californica*), California buckwheat, chaparral yucca (*Hesperoyucca whipplei*), poison oak (*Toxicodendron pubescens*), and other arid scrub and wash species. Emergent trees or tall shrubs may be present at low cover and include mountain mahogany (*Cercocarpus ledifolius*), California juniper (*Juniperus californica*), California sycamore, Fremont cottonwood, or blue elderberry (CNPS 2023).

The scale broom scrub alliance is ranked by CDFW (2023) as a G3S3 alliance. This ranking indicates that globally and within California the alliance is considered vulnerable and at moderate risk (CDFW 2023; NatureServe 2022). Therefore, this alliance is considered a sensitive natural community by CDFW and under CEQA.

Two associations within the scale broom scrub alliance are mapped on site: *Eriogonum fasciculatum* – *Lepidospartum squamatum* alluvial fan and *Lepidospartum squamatum*–ephemeral annuals. The *Lepidospartum squamatum*–ephemeral annuals association is ranked G2S2, despite the overall alliance ranking of G3S3. This ranking indicates that the association is imperiled and at high risk globally and within California (CDFW 2023; NatureServe 2023). Therefore, this association is considered a sensitive natural community by CDFW and under CEQA.

On site, scale broom scrub alliance is comprised of three small- to medium-sized patches in the eastern portion of the site, along a portion of Yucaipa Creek.

2.3 Watershed

The review area is in the Yucaipa Creek subwatershed (Hydrologic Unit Code 180702030402), which lies within the San Timoteo Wash watershed (Hydrologic Unit Code 1807020304) and the Santa Ana subbasin (Figure 3, Hydrology Map). The Yucaipa Creek subwatershed is 45.6 square miles (29,266 acres) and Yucaipa Creek, Wilson Creek, and Oak Glen Creek are prominent features within the watershed. Wilson Creek and Oak Glen Creek flow into Yucaipa Creek. Yucaipa Creek flows west and north through several downstream features before converging with the Santa Ana River. The Santa Ana River flows south and west, terminating at the Pacific Ocean. The review area is bisected by Yucaipa Creek and the northwestern portion of the review area is bisected by Oak Glen Creek.

2.4 Review Area Alterations, Current and Past Land Use

The review area has not changed significantly over the past 20 years (Google 2023; UCSB n.d.). The review area encompasses undeveloped open space that is intersected by Yucaipa Creek and Glen Oak Creek, as well as active agricultural and developed areas. The southern portion of the study area contains developed areas with facilities and dirt roads, while the central northern portion of the study area contains graded disturbed areas used for vehicle storage, ornamental plantings, and active agricultural operations run by Live Oak Canyon Farm.

3 Precipitation Data and Analysis⁸

The USACE-developed Antecedent Precipitation Tool (APT) was used to assess whether the delineation date occurred in a drier, average, or wetter than normal period (USACE 2023). To determine what constitutes a “typical year,” USACE developed the APT. The information generated from the APT can help to determine whether normal hydrologic and/or climatic conditions were present during the site visit and assist with completing the Wetland Determination Data Form.

The APT provides three climatological parameters: Palmer Drought Severity Index (PDSI), season, and antecedent precipitation condition. The PDSI is a standardized index calculated on a monthly basis with PDSI value outputs ranging from -4 (extreme drought) to +4 (very wet) (NOAA 2021) to assess drought conditions (i.e., PDSI Class). The APT determines wet versus dry season based on related procedures provided in the applicable regional supplement for the review area (in this case, the Arid West Supplement). If the antecedent runoff condition (ARC) score is less than 10, then the antecedent precipitation condition is classified as drier than normal; normal conditions are present with an ARC score of 10 to 14; conditions are wetter than normal when an ARC score is greater than 14 (USACE 2022).

Table 5 summarizes the key data extrapolated from the APT output: estimated drought conditions (PDSI Class), wet or dry season determination, ARC score, and antecedent precipitation condition. Based on the APT output provided in Appendix B and summarized in Table 5, the precipitation and climatic conditions for the review area were wetter than normal during the July 13, 2022, July 14, 2022, January 18, 2023, and January 19, 2023, field survey dates. The precipitation and climatic conditions were within the normal range during the July 20, 2022, field survey.

Table 5. Antecedent Precipitation Tool Data for the Review Area

Main Field Survey Date	PDSI Class	Season	ARC Score	Antecedent Precipitation Condition
07/13/2022	Extreme drought	Dry Season	15	Wetter than Normal
07/14/2022	Extreme drought	Dry Season	15	Wetter than Normal
07/20/2022	Extreme drought	Dry Season	12	Normal Conditions
01/18/2023	Severe drought	Wet Season	15	Wetter than Normal
01/19/2023	Severe drought	Wet Season	15	Wetter than Normal

Notes: PDSI = Palmer Drought Severity Index; ARC = antecedent runoff condition.

The review area is located in the inland valley region of southwest San Bernardino County. Maximum and minimum air temperatures near Yucaipa range from 41°F to 103°F (CIMIS 2022). The average annual precipitation for the last 5 years is 14.3 inches (CIMIS 2022).

⁸ Minimum Standards Item 11 (Discussion of Hydrology)

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4 Investigation Methods⁹

The jurisdictional delineation was conducted by Dudek biologists Anna Cassady, Britney Strittmater, Kathleen Dayton, Dylan Ayers, Megan Correa, and Sierra Lippert on five separate occasions (Table 6). Prior to conducting the jurisdictional delineation, the U.S. Fish and Wildlife Service’s National Wetlands Inventory (NWI) data (USFWS 2023) and U.S. Geological Survey’s National Hydrography Dataset (USGS 2023) were reviewed to determine if the review area contained any features mapped by the U.S. Fish and Wildlife Service or U.S. Geological Survey. Site-specific topographical data were reviewed in conjunction with aerials, both current and historical, to determine the potential presence of non-wetland waters. Current vegetation mapping was reviewed to assess whether the review area supported hydrophytic vegetation and potential wetlands; nine areas supporting hydrophytic vegetation were also assessed for the presence of wetland hydrology and hydric soils to determine whether they were three-parameter wetlands. Jurisdictional boundaries were mapped in the field using Esri Collector on a mobile device. Both current and historical imagery were used to supplement field investigation efforts, particularly on private lands or in areas where anthropogenic impacts have obscured aquatic indicators normally found in the field. Small portions of the review area were inaccessible and were delineated via topographical data and available aerial imagery. Remote sensing was not used for the delineation.

Table 6. Schedule of the Aquatic Resources Delineation

Date	Hours	Personnel	Conditions
07/13/2022	7:23 a.m.–2:25 p.m.	AC, MC, SL	67°F–90°F; 0% cloud cover; 0–4 mph wind
07/14/2022	6:30 a.m.–1:00 p.m.	AC, BS	66°F–91°F; 10%–60% cloud cover; 1–3 mph wind
07/20/2022	7:00 a.m.–1:31 p.m.	AC, SL	77°F–87°F; 40%–50% cloud cover; 1–2 mph wind
01/18/2023	8:20 a.m.–3:52 p.m.	BS, KD	43°F–53°F; 0%–40% cloud cover; 0–4 mph wind
01/19/2023	8:15 a.m.–12:42 p.m.	KD, DA	53°F–59°F; 10%–30% cloud cover; 0–2 mph wind

Notes: °F = degrees Fahrenheit; mph = miles per hour.

Personnel: AC = Anna Cassady; BS = Britney Strittmater; DA = Dylan Ayers; KD = Kathleen Dayton; MC = Megan Correa; SL = Sierra Lippert

4.1 U.S. Army Corps of Engineers

The USACE wetlands delineation was conducted in accordance with the 1987 USACE Wetlands Delineation Manual (USACE 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE 2008a). A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual (USACE 2008b) was used to determine the limits of non-wetland waters. Non-wetland waters were delineated on topographical maps in conjunction with Esri Collector on a mobile device. The widths of each non-wetland water were determined in the field according to the OHWM manual.

Wetland Determination Forms were taken at certain points within drainages or vegetation communities where a predominance of hydrophytic vegetation was present; hydrology, vegetation, and soils were assessed to determine whether USACE three-parameter wetlands were present. USACE OHWM Forms were completed at representative

⁹ Minimum Standards Item 8 (Dates of Field Work), Item 5 (Use of 1987 Manual, Regional Supplement, and OHWM guide), Item 12 (Statement Regarding Use of Remote Sensing), Item 18 (Data Forms) and Item 19 (Methods)

cross sections of non-wetland waters to capture their characteristics and widths. All data forms can be found in Appendix C.

4.2 Regional Water Quality Control Board

Waters of the state regulated by RWQCB were mapped in accordance with the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (SWRCB 2019). As described in these procedures, wetland waters of the state are mapped based on the procedures in USACE’s 1987 Corps of Engineers Wetlands Delineation Manual (USACE 1987) and its 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (USACE 2008a). Non-wetland waters are mapped at the OHWM based on the procedures defined in USACE’s 2008 A Field Guide to Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (USACE 2008b).

4.3 California Department of Fish and Wildlife

CDFW jurisdictional areas were mapped to include the bank of the stream/channel and outer dripline of adjacent riparian vegetation, as set forth under California Fish and Game Code Section 1602. Streambeds under the jurisdiction of CDFW were delineated using the Cowardin method of waters classification, which defines waters boundaries by a single parameter (i.e., hydric soils, hydrophytic vegetation, or hydrology) (Cowardin et al. 1979).

5 Aquatic Resource Narrative¹⁰

5.1 Waters of the United States (USACE)

Approximately 15.47 acres of non-wetland waters potentially regulated by USACE are present in the review area (Figures 4-1 through 4-7, Potentially Jurisdictional Aquatic Resources Delineation).¹¹ Table 7 provides a detailed summary of aquatic resources delineated within the review area. Table 7 provides a detailed summary of delineated aquatic resources potentially regulated by USACE. Table 7 also includes information on each feature identified within the review area; its Cowardin type, if available (Cowardin et al. 1979; USACE 2022); any OHWM indicators present; the location; and the acreage/linear feet. Narrative descriptions of each non-wetland water feature are included below. A copy of the ORM Bulk Upload Aquatic Resources or Consolidated Excel spreadsheet is not submitted with this report because Table 7 in this section provides all the information requested.¹²

Non-Wetland Water (NWW)-01

Non-Wetland Water (NWW)-01 is located south of I-10 and represents the portion of Yucaipa Creek, an intermittent stream feature, that occurs within the review area. NWW-01 enters the Project's review area approximately 0.6 miles north of West County Line Road at an I-10 culvert crossing and generally flows east to west across the review area (Figures 4-1 through 4-7). NWW-01 exhibits various indicators of an OHWM; cross section T-05 describes a break in bank slope, and a change in average sediment texture, vegetation species, and cover in the eastern portion of NWW-01 (Appendix C). NWW-01 flows west approximately 14,279 feet across the review area, through a culvert crossing at Live Oak Canyon Road, and west beyond the review area boundary; cross section T-07 describes the OHWM indicators observed in this portion of the feature, including a sharp break in bank slope, and a change in average sediment texture, vegetation species, and cover (Appendix C). No flowing water was observed within the feature. One wetland sampling point, WSP-6, was established directly adjacent to NWW-01. Wetland hydrology was observed at this location; however, the area did not meet the hydrophytic vegetation and hydric soils parameters (Appendix C).

NWW-02

NWW-02 is located southwest of I-10 and represents the portion of Oak Glen Creek, an intermittent stream feature, that occurs within the review area. NWW-02 enters the Project's review area approximately 0.1 miles north of Live Oak Canyon Road and generally flows northeast to southwest across the northwesternmost portion of the review area (Figures 4-1 through 4-7). NWW-02 exhibits various indicators of an OHWM; cross section T-08 describes a sharp break in bank slope, and a change in average sediment texture, vegetation species, and cover (Appendix C). NWW-02 converges with NWW-01 (i.e., Yucaipa Creek) near the western review area boundary (Figures 4-1 through 4-7). Flowing water was observed within the feature.

¹⁰ Minimum Standards Item 6 (Aquatic Resource Narrative)

¹¹ Minimum Standards Items 7 and 16 (Delineation Maps)

¹² Minimum Standards Item 15 (ORM Bulk Upload Aquatic Resources or Consolidated Excel spreadsheet)

CDFW jurisdiction extends to riparian habitat observed as directly associated with the delineated extent of NWW-02, including mulefat thickets and Fremont cottonwood forest and woodland (Figures 4-1 through 4-7). These riparian habitats are further described in Section 2.2, Vegetation.

NWW-03

NWW-03 is primarily located north of I-10 and enters the review area at a box culvert crossing under John Wayne Way. As outlined in cross section T-01, NWW-03 displays various indicators of an OHWM including a sharp break in bank slope and a change in vegetation species and cover in the eastern portion of the feature (Appendix C). Field staff observed flowing water in the eastern segment of NWW-03 and collected a wetland sample point (WSP) approximately 5 feet from flowing water; however, the sample area did not meet the hydric soil parameter (see WSP-1a in Appendix C) (Figures 4-1 through 4-7). NWW-03 drains east to west toward I-10; cross section T-02 describes the various OHWM indicators observed in NWW-03 including a defined bed and bank and a change in average sediment texture, vegetation species, and vegetation cover (Appendix C). NWW-03 then continues northwest, parallel to I-10, before traveling south across an I-10 culvert crossing to converge with NWW-01 (i.e., Yucaipa Creek) (Figures 4-1 through 4-7). Two wetland sampling stations were established in NWW-03; WSP-1a and WSP-1b were established at the upstream limit of the feature near the edge of the review area; WSP-2a and WSP-2b were established in *Baccharis salicifolia* Alliance at the culvert crossing; neither sample area met hydric soil parameters (see WSP-2a in Appendix C) (Figures 4-1 through 4-7).

NWW-04

NWW-04 is located in the northwesternmost portion of the review area southwest of I-10. NWW-04 enters the review area via a culvert along Outer Highway 10 South approximately 0.3 miles northwest of Live Oak Canyon Road and drains northeast to southwest (Figures 4-1 through 4-7). NWW-04 displayed various OHWM indicators; cross section T-09 describes a sharp break in bank slope and a change in vegetation cover (Appendix C). An artificially constructed berm is located near NWW-04's terminus. The feature continues across the berm through a culvert crossing and terminates just south of the culvert; however, based on field observations and a review of current and historical aerials, the feature may sheet flow south approximately 175 feet to converge with NWW-02 (i.e., Oak Glen Creek) (Google 2023). No flowing water was observed within the feature at the time of the survey, though areas of standing water were recorded in various locations. One wetland sampling point, WSP-7, was established directly adjacent to NWW-04 in an area that exhibited some indication of recent flow. Both wetland hydrology and hydrophytic vegetation were observed at his location, however hydric soils were not (Appendix C). The indicators of wetland hydrology and vegetation are likely a result of flooding from NWW-04.

NWW-05

NWW-05 is located near the southeasternmost corner of the review area west of I-10. NWW-05 originates at a culvert along 7th Place (Figures 4-1 through 4-7). NWW-5 drains east to west before terminating on site. NWW-05 is primarily an ephemeral stream channel; however, it also includes a human-made basin and an engineered trapezoidal channel (see cross section T-04, Appendix C). Based on a review of current and historical aerials, various human-made berms were constructed along the feature path between 1953 and 1959 (UCSB n.d.). The basin mapped as part of NWW-05 appears to be a result of one of these human-made berms. The stream segment of NWW-5 displays various OHWM indicators; cross section T-03 describes a defined bed and bank and a change in vegetation species and cover (Appendix C). One wetland sampling point, WSP-4, was established in NWW-05, and

an additional sampling point, WSP-5, was established directly adjacent to NWW-05. The sample areas did not meet all three wetland parameters (Appendix C).

NWW-06

NWW-06 is a small aquatic feature located near the southeasternmost corner of the review area west of I-10. NWW-06 drains northeast to southwest for approximately 525 feet before converging with NWW-05. Due to limited site access and nearby construction activities, no direct sampling of the feature took place as part of this delineation. The physical extent and condition of the feature described in this report is based on review of historical imagery and site photographs. On-site disturbances unrelated to the Project have affected NWW-06.

Based on field investigations, NWI and National Hydrography Dataset data, and a review of historical imagery, NWW-01, -02, -03, and -04 appear to exhibit a significant nexus with the Pacific Ocean, a traditional navigable water; this connection is established downstream via the Santa Ana River. NWW-05 and -06 terminate within the review area and do not exhibit a significant nexus with any traditional navigable water. As such, any on-site impacts to NWW-01, -02, -03, and -04 would constitute impacts to USACE jurisdictional waters. Impacts to NWW-05 and -06 would not constitute impacts to USACE jurisdictional waters.

Other Features

In addition to the non-wetland features describes above, multiple upland swales and drainage ditches were also observed within the review area. These features lacked any indicators of an OHWM during field investigations, which excludes them from consideration as potential jurisdictional waters. Therefore, they are not depicted in any of the included figures; cross section T-06, collected to demonstrate the lack of OHWM indicators, describes these non-jurisdictional features.

Photos of all observed aquatic features delineated within the review area, as well as additional areas reviewed for the presence of these resources, are provided in Appendix D.¹³ The locations of these photos are shown in the Figures 4-1 through 4-7.

Table 7. USACE Aquatic Resource Summary for the Review Area¹⁴

Feature Name	Cowardin ¹	Primary OHWM Indicators	Location (Latitude/ Longitude; Decimal Degrees)	Acres/Linear Feet ²
Non-Wetland Waters				
NWW-01	R4	BBS, CVS, CVC, CAST	34.014321, -117.088285	8.92/14,264
NWW-02	R4	BBS, CVS, CVC, CAST	34.014726, -117.101927	2.85/3,912
NWW-03	R6	BBS, CVS, CVC, CAST	34.016268, -117.080874	3.44/5,301
NWW-04	R6	BBS, CVC	34.017776, -117.102210	0.16/1,750
Grand Total				15.37/25,227

Notes: USACE = U.S. Army Corps of Engineers; OHWM = ordinary high-water mark; NWW = non-wetland water; BBS = break in bank slope; CVS = change in vegetation species; CVC = change in vegetation cover; CAST = change in average sediment texture.

¹³ Minimum Standards Item 17 (Ground Photos)

¹⁴ Minimum Standards Item 9 (Table Listing All Aquatic Resources)

- 1 Pursuant to Classification of Wetlands and Deepwater Habitats of the United States (Cowardin et al. 1979) and USACE Cowardin Codes for ORM Data Entry (USACE 2022).
- 2 Totals may not sum due to rounding.

5.2 Waters of the State (RWQCB)

All the features described in Section 5.1, Waters of the United States (USACE), have been identified as waters of the state. These features are subject to regulation by RWQCB under Section 401 of the Clean Water Act and the Porter-Cologne Water Quality Control Act (Figures 4-1 through 4-7). Table 8 lists all features within the review area that are subject to RWQCB regulation.

Table 8. RWQCB Aquatic Resource Summary for the Review Area

Feature Name	Location (Latitude/Longitude; Decimal Degrees)	Acreage/Linear Feet ¹
Non-Wetland Waters		
NWW-01	34.014321, -117.088285	8.92/14,264
NWW-02	34.014726, -117.101927	2.85/3,912
NWW-03	34.016268, -117.080874	3.44/5,301
NWW-04	34.017776, -117.102210	0.16/1,750
NWW-05	34.007134, -117.069553	0.57/2,970
NWW-06 ²	34.007791, -117.068443	0.09/525
Grand Total		16.03/28,721

Notes: RWQCB = Regional Water Quality Control Board; NWW = non-wetland water.

- ¹ Totals may not sum due to rounding.
- ² Not directly observed; assessment made via historical aerial imagery due to unauthorized grading in this portion of the review area.

5.3 CDFW Jurisdiction

All the features described in Section 5.1 have been identified as streambed potentially regulated by CDFW. In addition, the riparian vegetation communities in the review area described in Section 2.2 are also potentially regulated by CDFW. Because CDFW regulates from bank to bank, certain portions of the review area where the top of a channel bank extended beyond the OHWM are subject to regulation by CDFW as streambed. These areas are displayed in Figures 4-1 through 4-7. The full extent of CDFW jurisdictional areas is described in Table 9.

Table 9. CDFW Aquatic Resource Summary for the Review Area

Feature Name	Aquatic Resource Type	Location (Latitude/Longitude; Decimal Degrees)	Acreage	Linear Feet ¹
NWW-1	Streambed	34.014321, -117.088285	22.04	14,279
	Riparian	34.014184, -117.087905	7.59	N/A
NWW-2	Streambed	34.014726, -117.101927	3.88	3,912
	Riparian	34.010493, -117.106665	1.92	N/A
NWW-3	Streambed	34.016268, -117.080874	5.12	5,301
	Riparian	34.015414, -117.084149	7.41	N/A
NWW-4	Streambed	34.017776, -117.102210	0.16	1,750

Table 9. CDFW Aquatic Resource Summary for the Review Area

Feature Name	Aquatic Resource Type	Location (Latitude/Longitude; Decimal Degrees)	Acreage	Linear Feet ¹
	Riparian	34.014252-117.103236	0.32	N/A
NWW-5	Streambed	34.007134, -117.069553	0.57	2,970
NWW-6	Streambed	34.007791, -117.068443	0.09	525
<i>Non-Wetlands Subtotal</i>			31.86	28,737
<i>Riparian Subtotal</i>			17.24	N/A
Grand Total			49.1	28,737

Notes: CDFW = California Department of Fish and Wildlife; NWW = non-wetland water, N/A = not applicable.

¹ Totals may not sum due to rounding.

5.4 National Wetlands Inventory

The review area contains several mapped resources from the U.S. Fish and Wildlife Service’s NWI database (USFWS 2023) (see Figure 3). Intermittent riverine (R4 Cowardin classification) features are generally mapped overlapping NWW-01 and NWW-02 (i.e., Yucaipa Creek and Oak Glen Creek). Additionally, portions of NWW-03 and NWW-05 overlap with intermittent riverine (R4 Cowardin classification) features mapped by NWI. NWI also maps two additional intermittent riverine features near the southern boundary of the review area; however, they do not correspond with any observed aquatic features.

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6 Results and Conclusions

Based on the jurisdictional delineation and review of relevant information provided in this ARDR, six non-wetland water features were delineated within the review area. Of the six non-wetland waters, four features totaling 15.37 acres are potentially under the jurisdiction of the USACE since they exhibit a downstream connection with a traditional navigable water (the Pacific Ocean). The other two non-wetland water features, totaling 0.66 acres, terminate within the review area and therefore are likely not USACE jurisdictional. All non-wetland water features within the review area may also be regulated by RWQCB and CDFW. In addition, CDFW may regulate streambeds beyond the OHWM (to top of bank), and associated riparian habitat. In total, 16.03 acres of non-wetland waters (below OHWM) fall under RWQCB jurisdiction, and 49.1 acres of CDFW Streambed (below and above OHWM, to top of bank) and associated riparian habitat occur in the review.

This report can be used by those agencies to determine if they would regulate the features described herein. The geographic information system data for the delineation is provided digitally.¹⁵

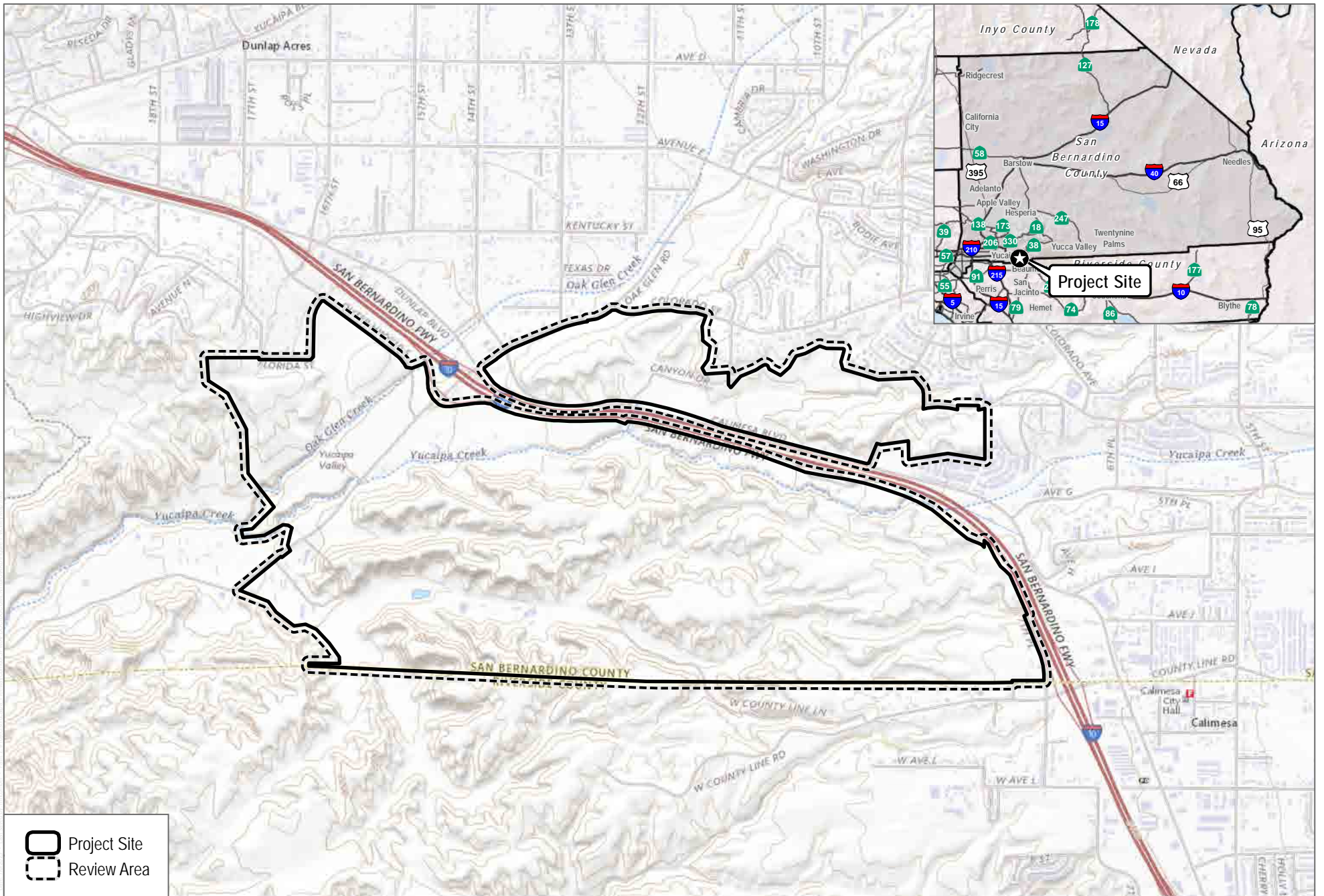
¹⁵ Minimum Standards Item 20 (Digital Data)

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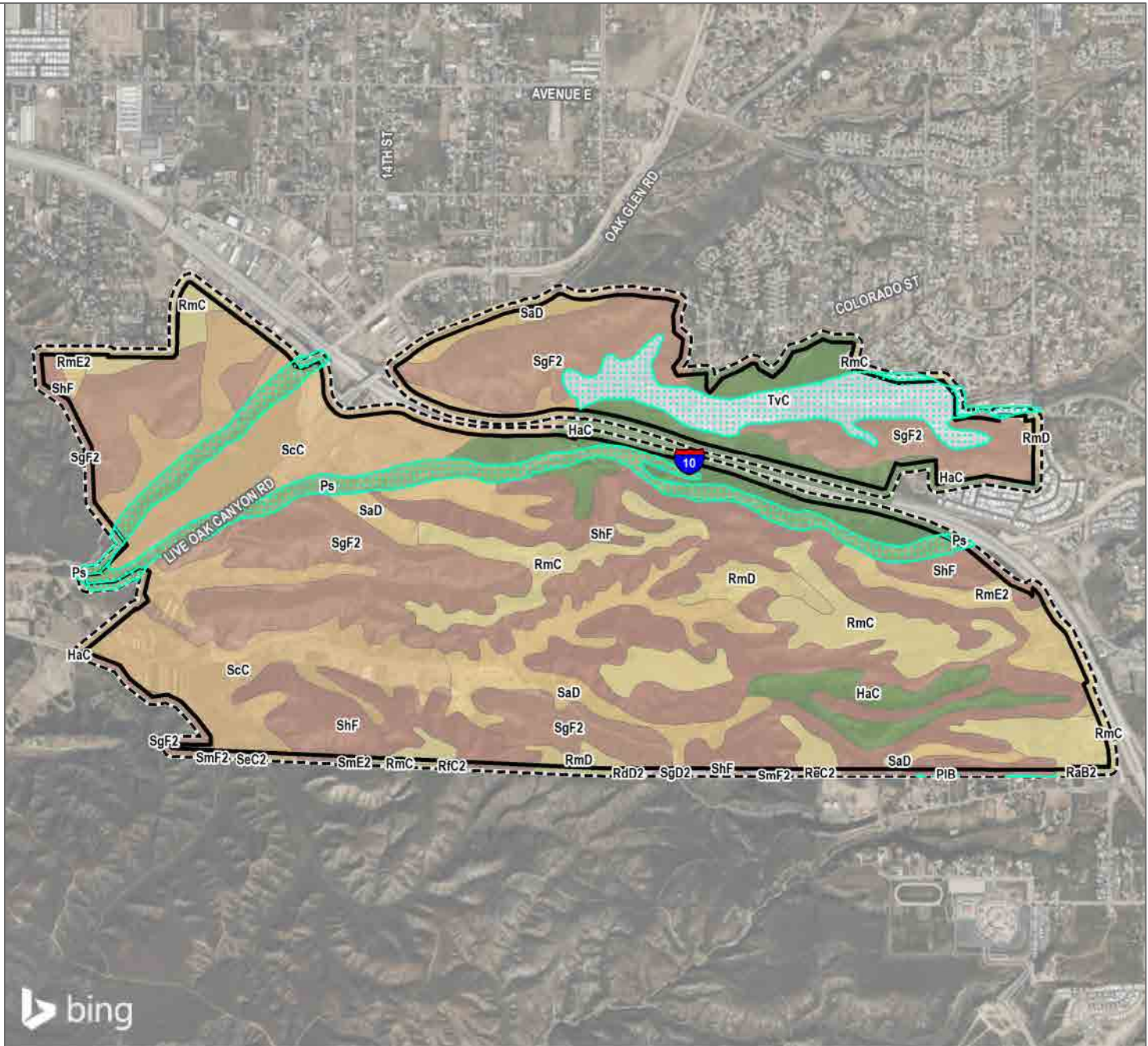
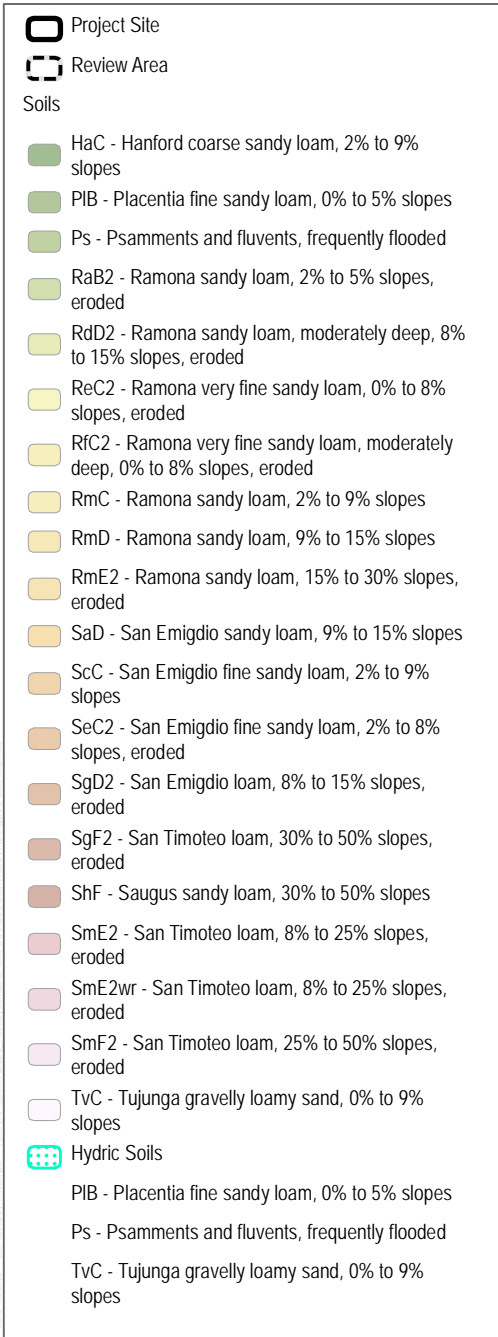
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- USACE. 2023. Cowardin Codes for ORM Data Entry. Accessed February 2023. <https://www.spa.usace.army.mil/Portals/16/docs/civilworks/regulatory/Bulk%20Upload/Bulk%20Data%20Cowardin.pdf>.
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- USDA. 2023b. "State Soil Data Access (SDA) Hydric Soils List." Accessed January 2023. <https://www.nrcs.usda.gov/publications/query-by-ssa.html>.
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- USGS (U.S. Geological Survey). 2023. "National Hydrography Dataset" [map]. Accessed January 2023. <http://nhd.usgs.gov/>.



SOURCE: USGS Topo Maps 2013

FIGURE 1
Vicinity Map
 City of Yucaipa Freeway Corridor Specific Plan Project

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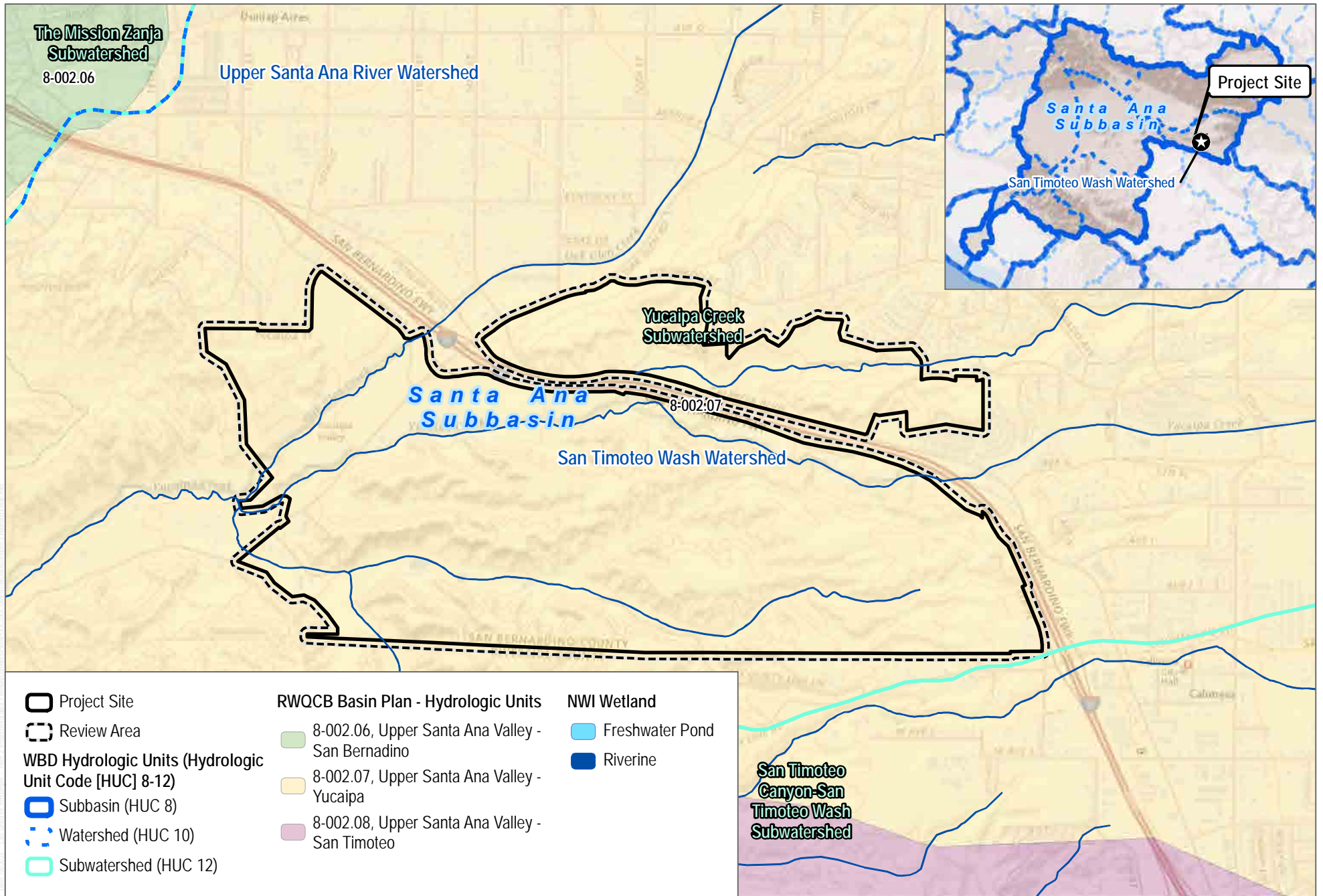


SOURCE: Bing Maps (accessed 2023); USDA SSURGO 2023



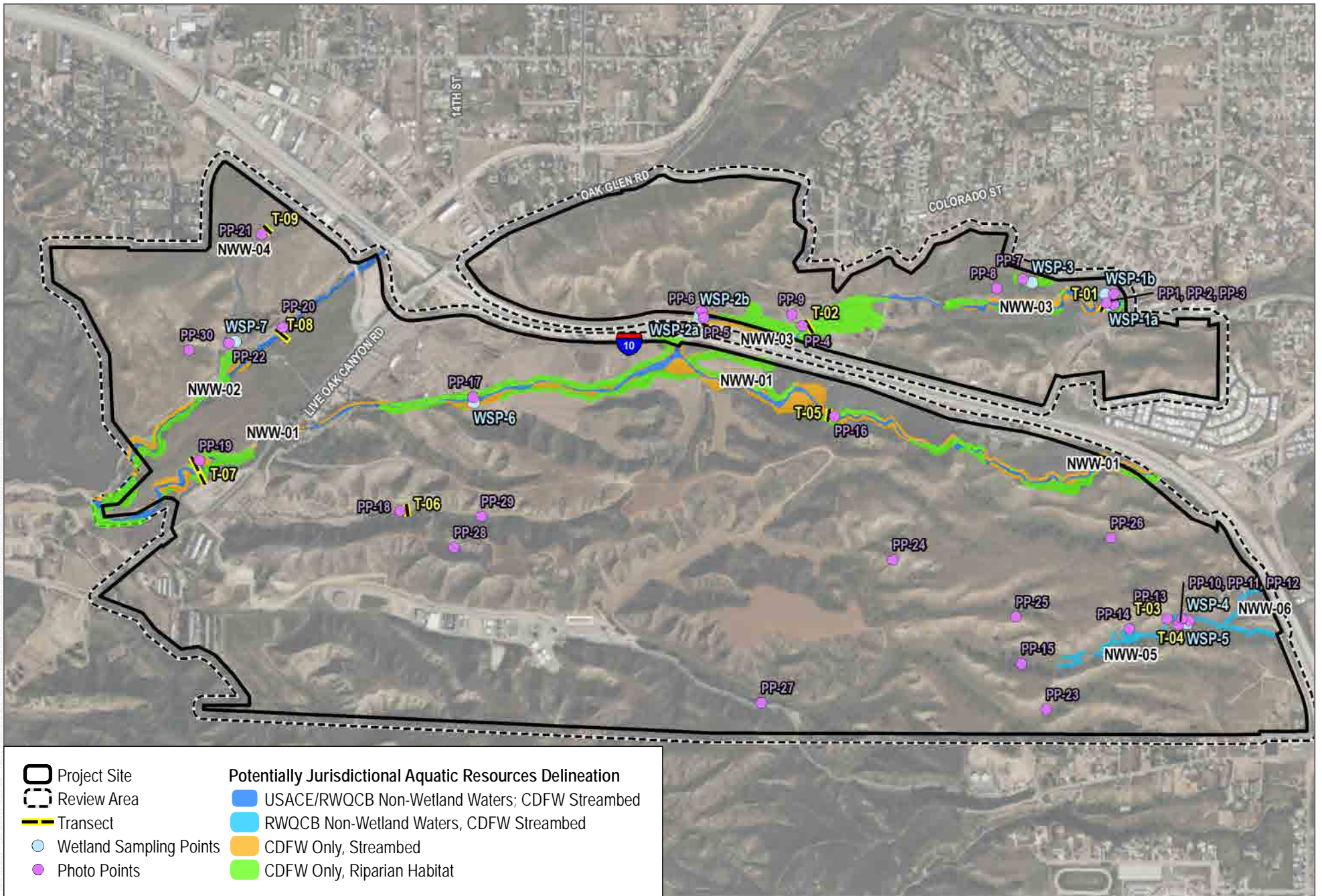
FIGURE 2
Soils Map
City of Yucaipa Freeway Corridor Specific Plan Project

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SOURCE: USGS Topo Maps 2013; USGS 2023; NWI 2023; RWQCB 2023

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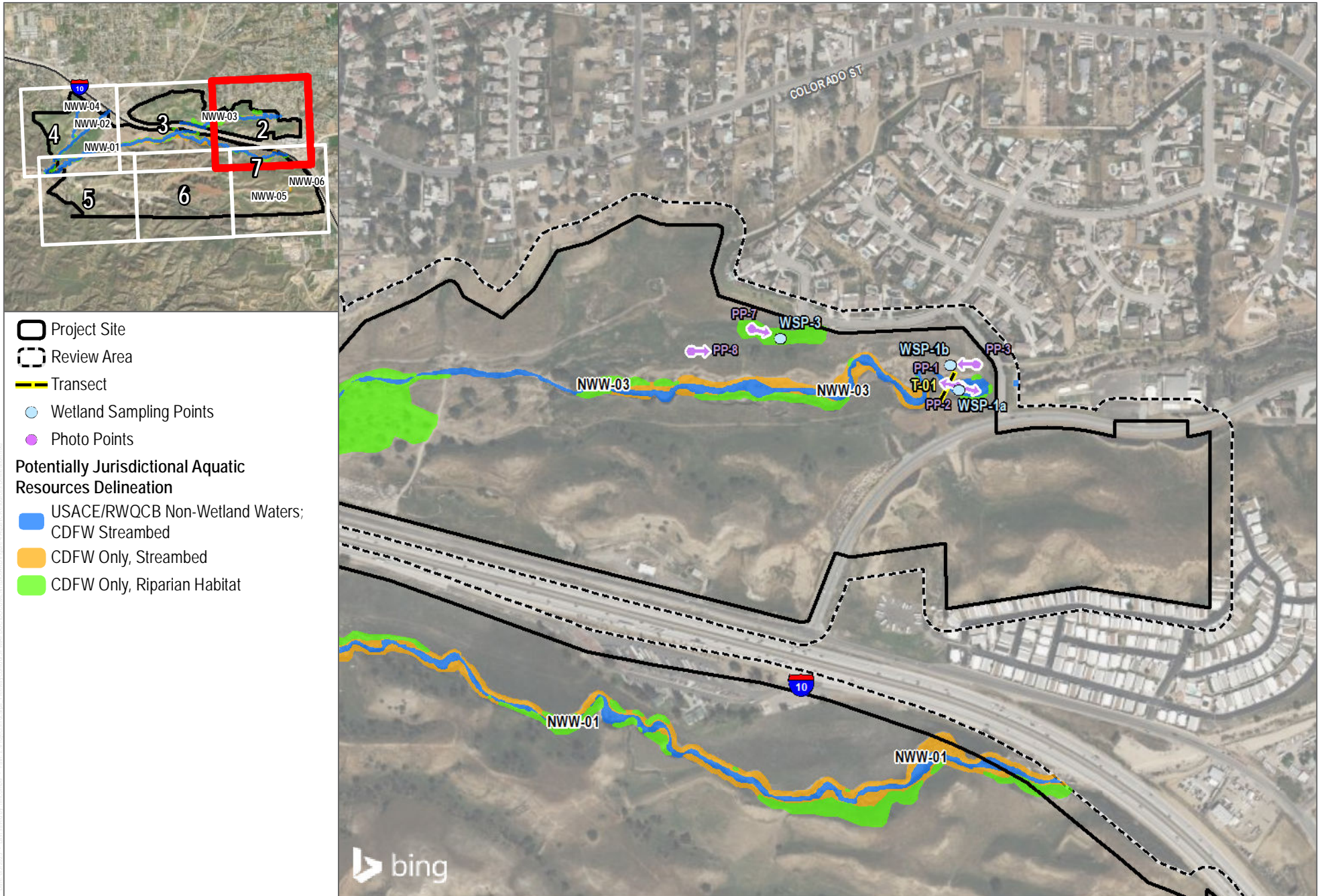


SOURCE: Bing Maps (accessed 2023); San Bernardino County 2023



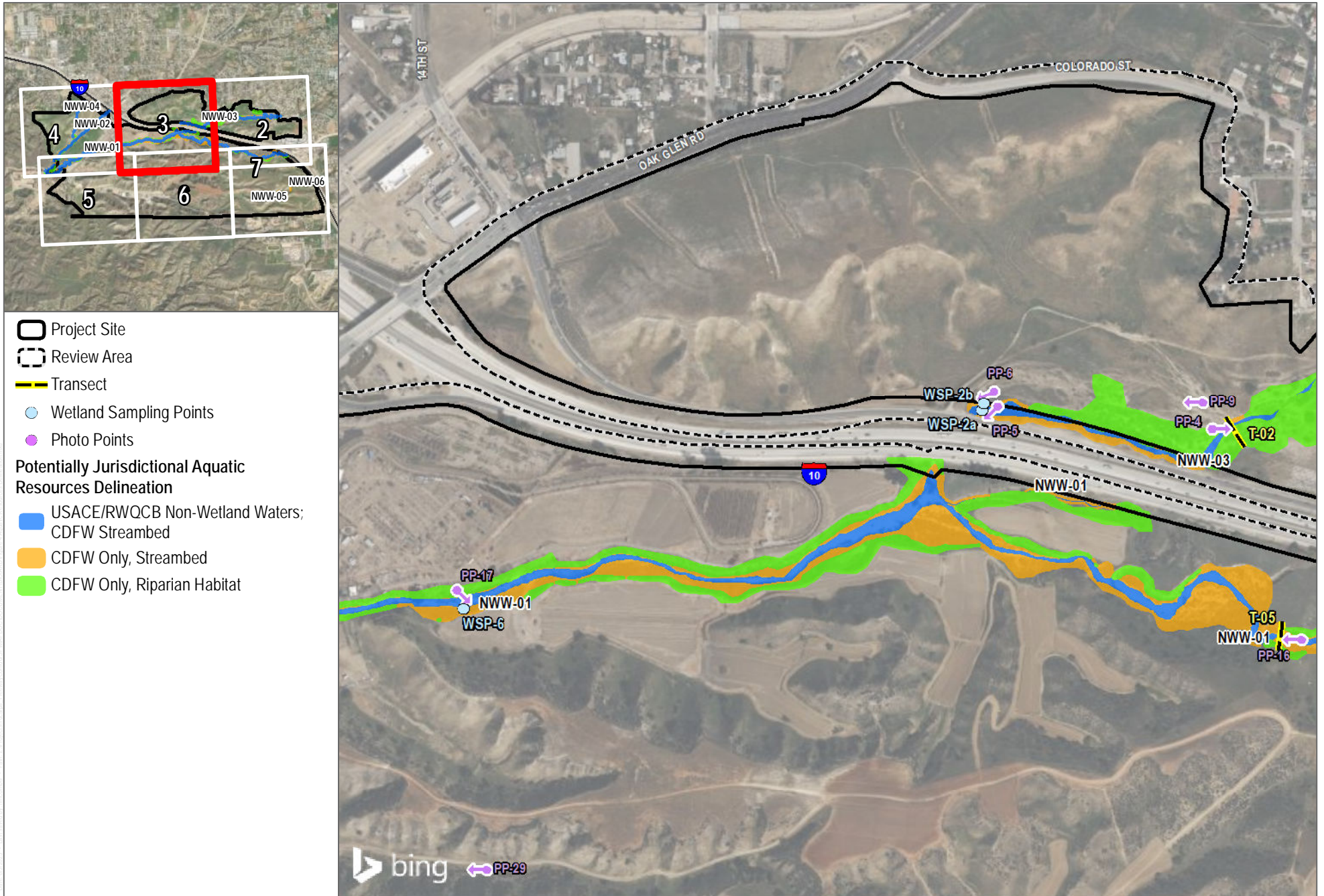
FIGURE 4-1
Potentially Jurisdictional Aquatic Resources Delineation
City of Yucaipa Freeway Corridor Specific Plan Project

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SOURCE: Bing Maps (accessed 2023); San Bernadino County 2023

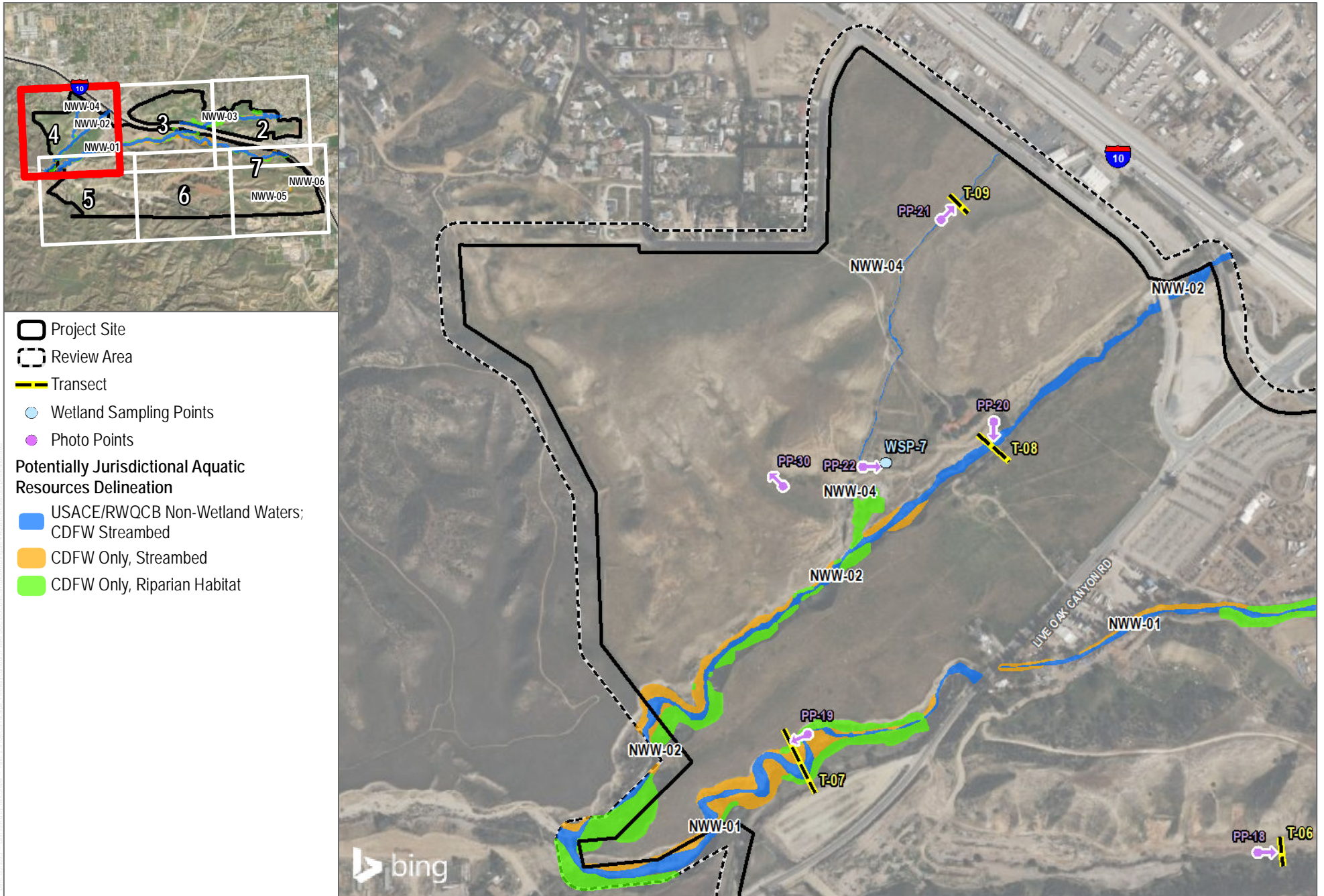
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SOURCE: Bing Maps (accessed 2023); San Bernardino County 2023

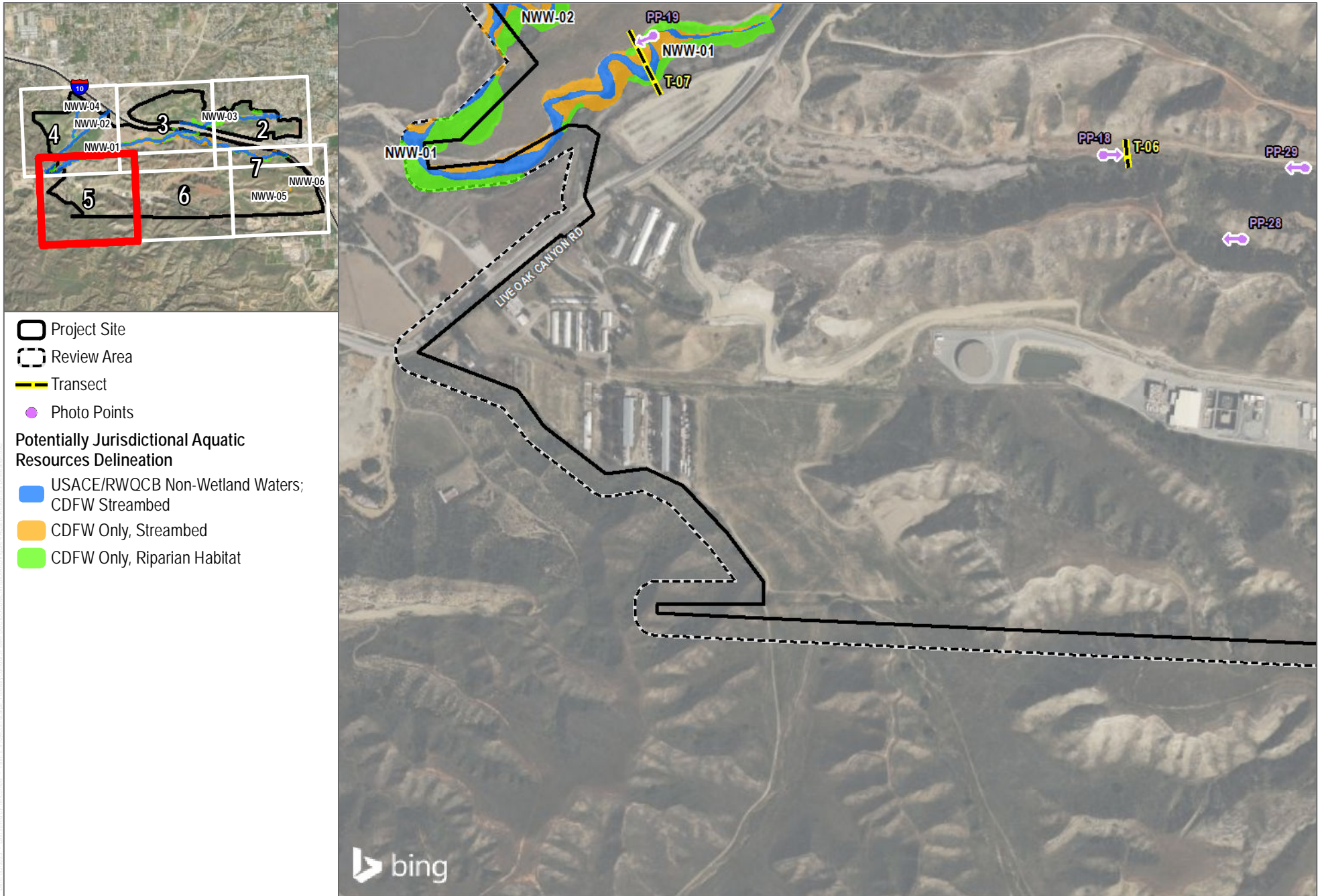
FIGURE 4-3
Potentially Jurisdictional Aquatic Resources Delineation
City of Yucaipa Freeway Corridor Specific Plan Project

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SOURCE: Bing Maps (accessed 2023); San Bernardino County 2023

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SOURCE: Bing Maps (accessed 2023); San Bernardino County 2023

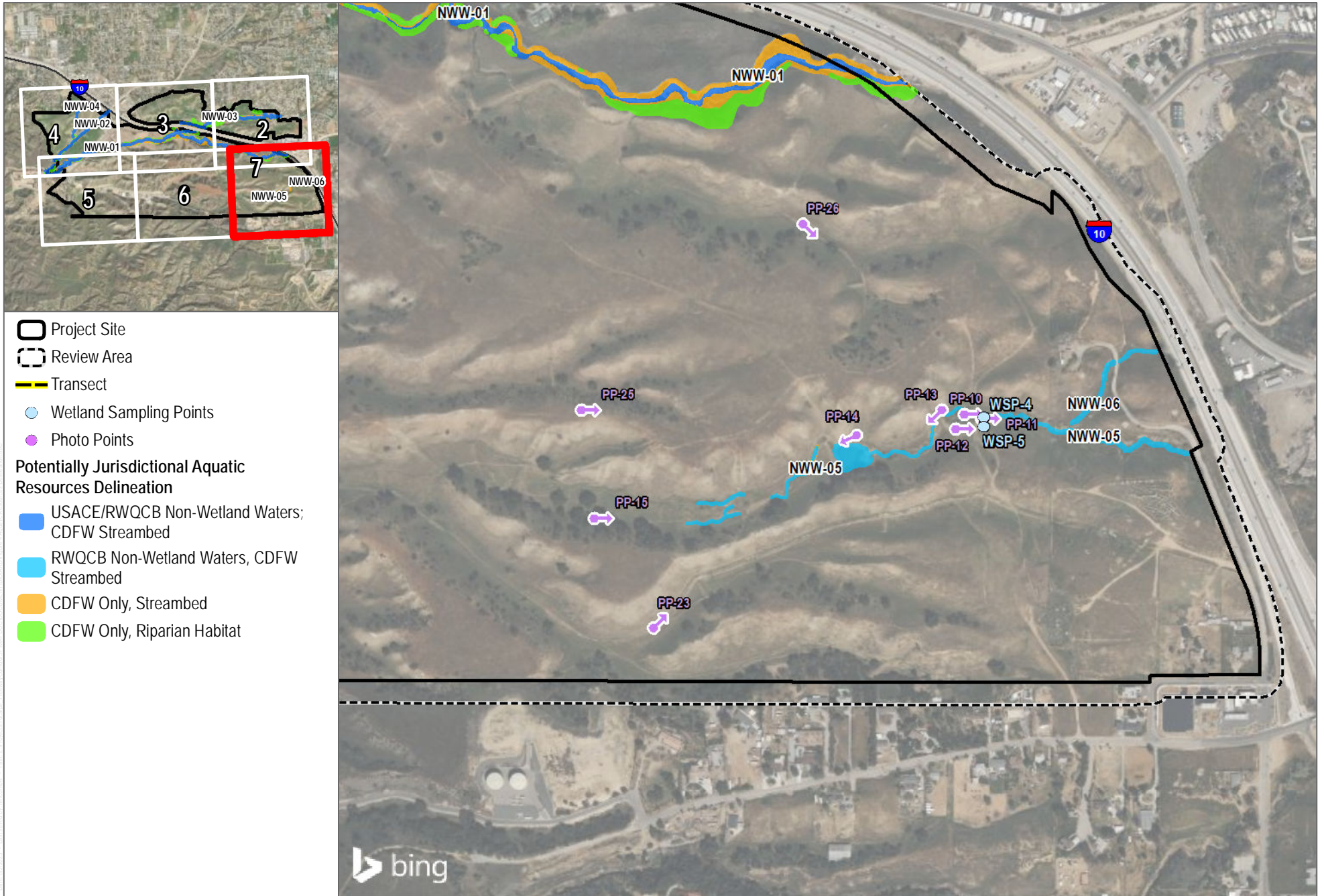
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SOURCE: Bing Maps (accessed 2023); San Bernadino County 2023

FIGURE 4-6
 Potentially Jurisdictional Aquatic Resources Delineation
 City of Yucaipa Freeway Corridor Specific Plan Project

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SOURCE: Bing Maps (accessed 2023); San Bernadino County 2023

FIGURE 4-7
Potentially Jurisdictional Aquatic Resources Delineation
City of Yucaipa Freeway Corridor Specific Plan Project

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Appendix A

Request for a Jurisdictional Determination

Appendix 1 - REQUEST FOR CORPS JURISDICTIONAL DETERMINATION (JD)

To: District Name Here

- I am requesting a JD on property located at: Approx. north & south of I-10 from near Oak Glen Rd. to W. County Line Rd.
(Street Address)

City/Township/Parish: Yucaipa County: San Bernardino State: CA

Acreage of Parcel/Review Area for JD: _____

Section: 3, 4, 8-11 Township: 2 South Range: 2 West

Latitude (decimal degrees): 34.011 Longitude (decimal degrees): -117.0878

(For linear projects, please include the center point of the proposed alignment.)

- Please attach a survey/plat map and vicinity map identifying location and review area for the JD.
- I currently own this property. I plan to purchase this property.
- I am an agent/consultant acting on behalf of the requestor.
- Other (please explain): _____.
- Reason for request: (check as many as applicable)
 - I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all aquatic resources.
 - I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all jurisdictional aquatic resources under Corps authority.
 - I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps, and the JD would be used to avoid and minimize impacts to jurisdictional aquatic resources and as an initial step in a future permitting process.
 - I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps; this request is accompanied by my permit application and the JD is to be used in the permitting process.
 - I intend to construct/develop a project or perform activities in a navigable water of the U.S. which is included on the district Section 10 list and/or is subject to the ebb and flow of the tide.
 - A Corps JD is required in order to obtain my local/state authorization.
 - I intend to contest jurisdiction over a particular aquatic resource and request the Corps confirm that jurisdiction does/does not exist over the aquatic resource on the parcel.
 - I believe that the site may be comprised entirely of dry land.
 - Other: _____
- Type of determination being requested:
 - I am requesting an approved JD.
 - I am requesting a preliminary JD.
 - I am requesting a "no permit required" letter as I believe my proposed activity is not regulated.
 - I am unclear as to which JD I would like to request and require additional information to inform my decision.

By signing below, you are indicating that you have the authority, or are acting as the duly authorized agent of a person or entity with such authority, to and do hereby grant Corps personnel right of entry to legally access the site if needed to perform the JD. Your signature shall be an affirmation that you possess the requisite property rights to request a JD on the subject property.

*Signature: _____ Date: _____

- Typed or printed name: Anna Cassidy
Company name: Dudek
Address: 605 Third Street
Encinitas, CA 92024
Daytime phone no.: 951-300-1088
Email address: acassady@dudek.com

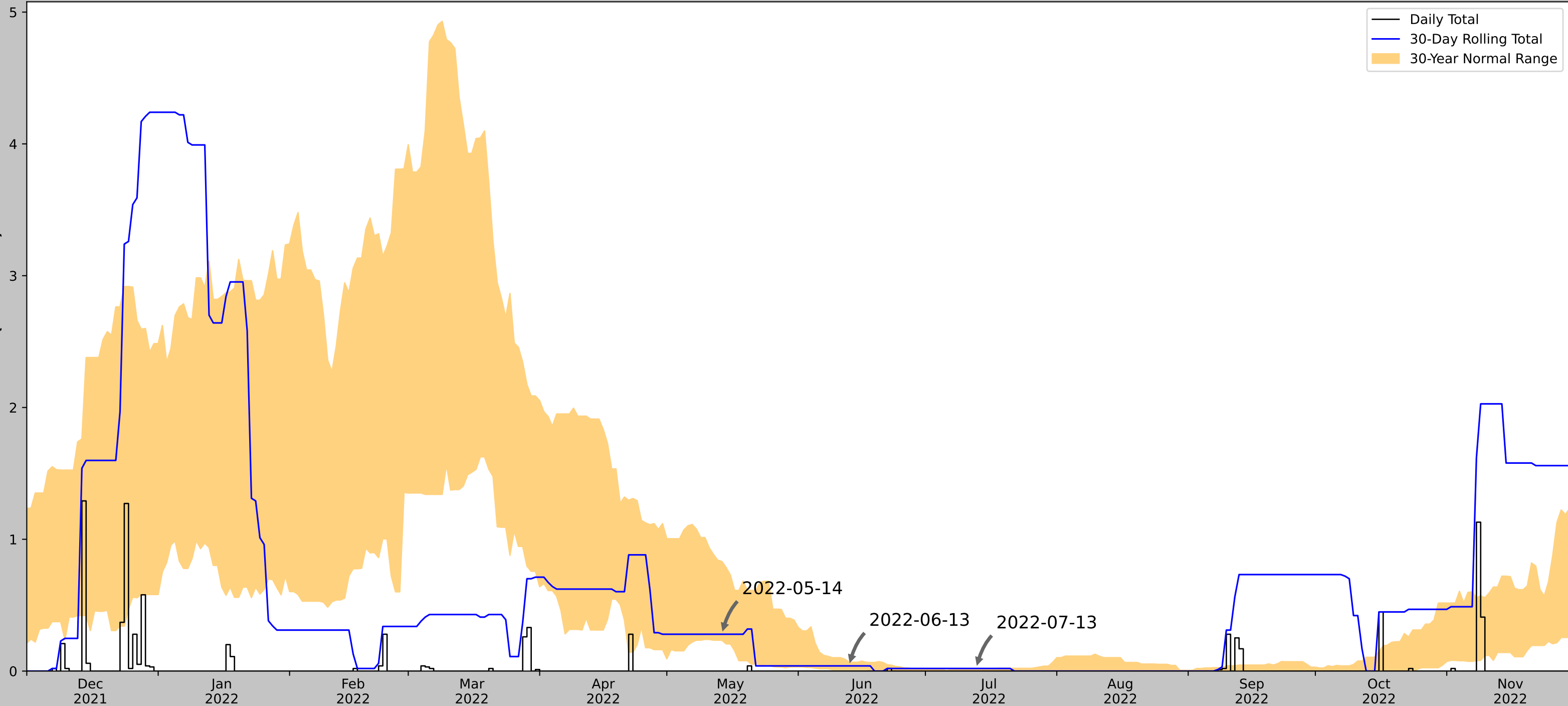
***Authorities:** Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Program of the U.S. Army Corps of Engineers; Final Rule for 33 CFR Parts 320-332.
Principal Purpose: The information that you provide will be used in evaluating your request to determine whether there are any aquatic resources within the project area subject to federal jurisdiction under the regulatory authorities referenced above.
Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public, and may be made available as part of a public notice as required by federal law. Your name and property location where federal jurisdiction is to be determined will be included in the approved jurisdictional determination (AJD), which will be made available to the public on the District's website and on the Headquarters USACE website.
Disclosure: Submission of requested information is voluntary; however, if information is not provided, the request for an AJD cannot be evaluated nor can an AJD be issued.

Appendix B

Antecedent Precipitation Tool Output


Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network

Rainfall (Inches)




Coordinates	34.0101, -117.0884
Observation Date	2022-07-13
Elevation (ft)	2197.977
Drought Index (PDSI)	Extreme drought
WebWIMP H ₂ O Balance	Dry Season

30 Days Ending	30 th %ile (in)	70 th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2022-07-13	0.0	0.014173	0.019685	Wet	3	3	9
2022-06-13	0.011811	0.067717	0.03937	Normal	2	2	4
2022-05-14	0.234252	0.831496	0.279528	Normal	2	1	2
Result							Wetter than Normal - 15



Figures and tables made by the
Antecedent Precipitation Tool
Version 2.0

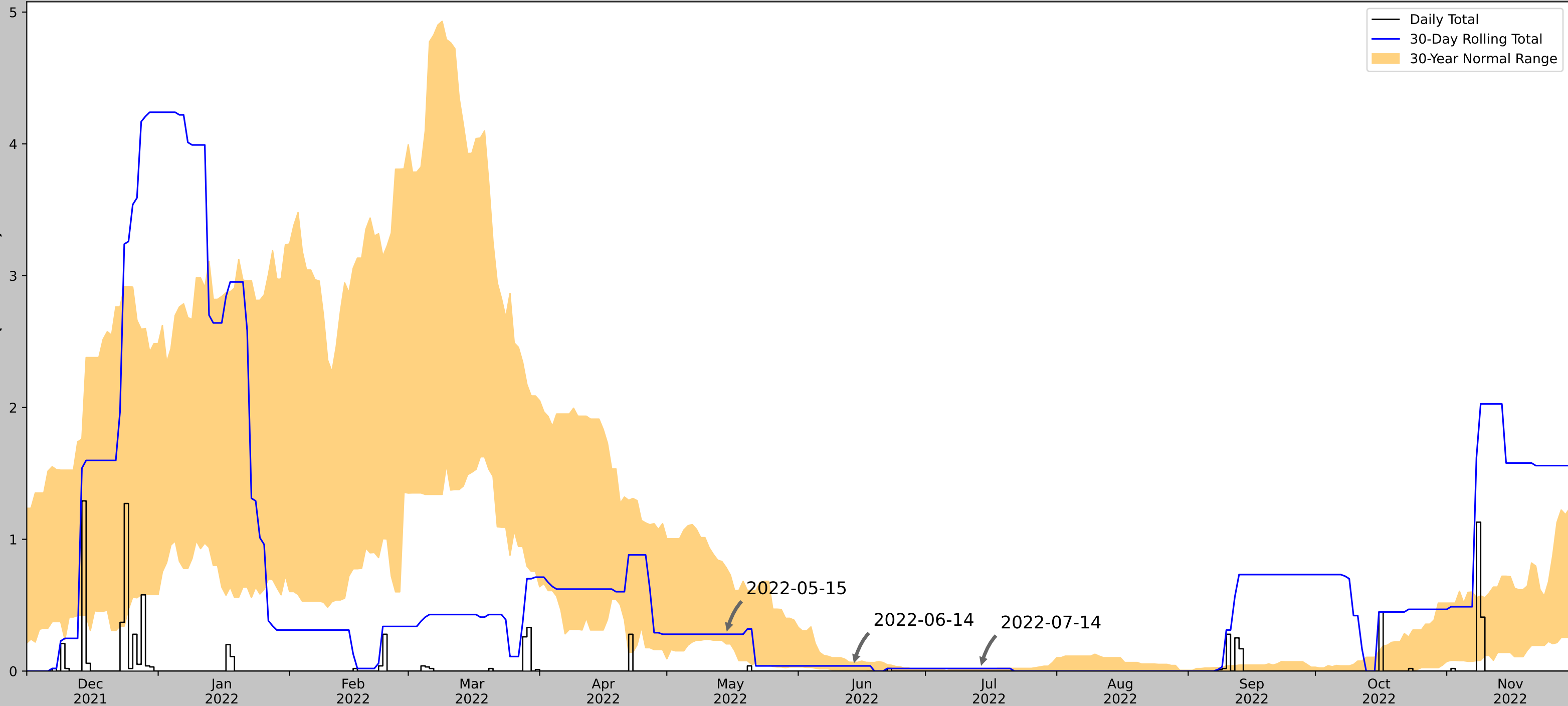
Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and
Development Center



Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
REDLANDS	34.0369, -117.1947	1410.105	6.363	787.872	7.876	11218	90
RIVERSIDE 5.8 E	33.9406, -117.2964	1536.089	8.844	125.984	5.094	1	0
SAN BERNARDINO F S 226	34.1344, -117.2539	1140.092	7.54	270.013	5.429	41	0
RIVERSIDE CITRUS EXP	33.9669, -117.3614	985.892	10.704	424.213	9.358	93	0


Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network

Rainfall (Inches)




Coordinates	34.0101, -117.0884
Observation Date	2022-07-14
Elevation (ft)	2197.977
Drought Index (PDSI)	Extreme drought
WebWIMP H ₂ O Balance	Dry Season

30 Days Ending	30 th %ile (in)	70 th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2022-07-14	0.0	0.011811	0.019685	Wet	3	3	9
2022-06-14	0.011811	0.066535	0.03937	Normal	2	2	4
2022-05-15	0.206299	0.785433	0.279528	Normal	2	1	2
Result							Wetter than Normal - 15



Figures and tables made by the
Antecedent Precipitation Tool
Version 2.0

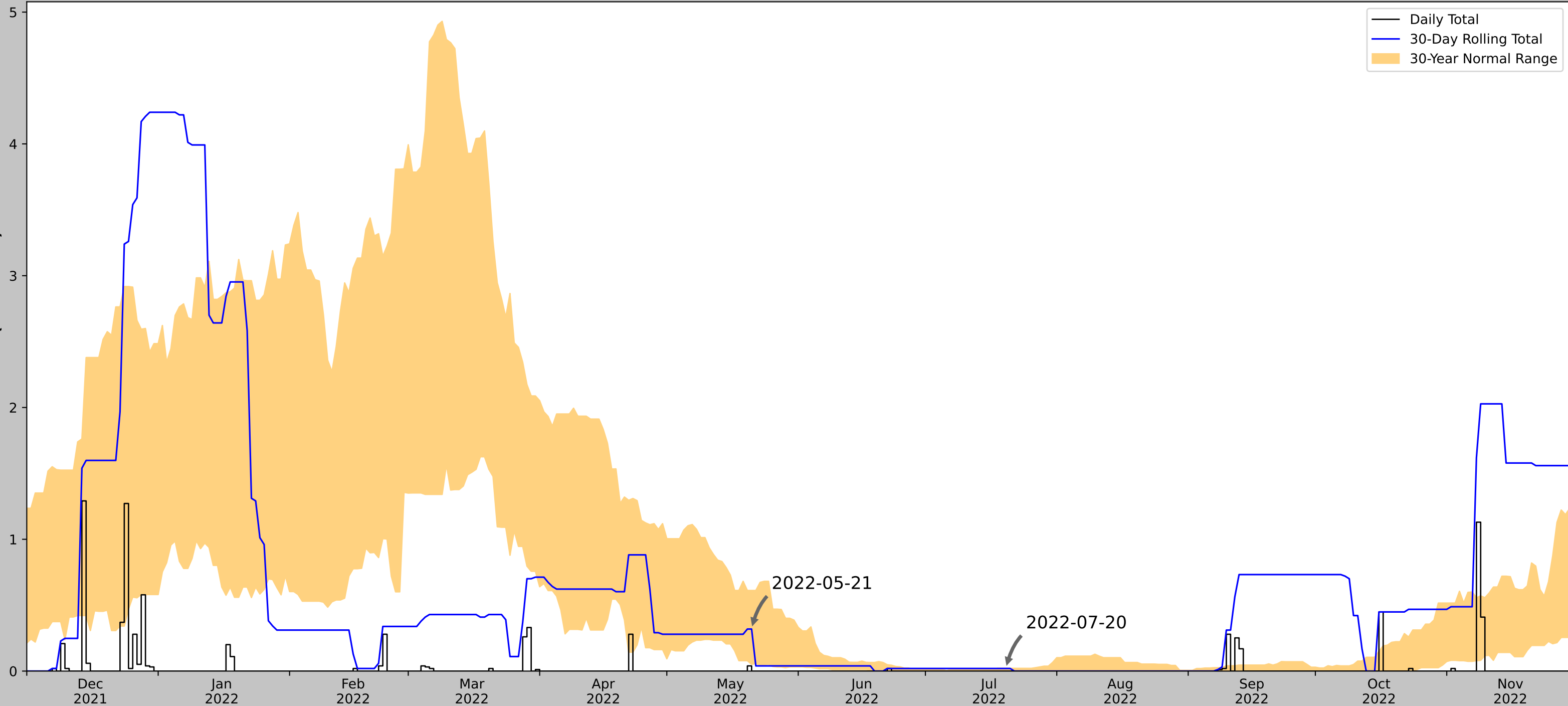
Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and
Development Center



Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
REDLANDS	34.0369, -117.1947	1410.105	6.363	787.872	7.876	11218	90
RIVERSIDE 5.8 E	33.9406, -117.2964	1536.089	8.844	125.984	5.094	1	0
SAN BERNARDINO F S 226	34.1344, -117.2539	1140.092	7.54	270.013	5.429	41	0
RIVERSIDE CITRUS EXP	33.9669, -117.3614	985.892	10.704	424.213	9.358	93	0


Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network

Rainfall (Inches)




Coordinates	34.0101, -117.0884
Observation Date	2022-07-20
Elevation (ft)	2197.977
Drought Index (PDSI)	Extreme drought
WebWIMP H ₂ O Balance	Dry Season

30 Days Ending	30 th %ile (in)	70 th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2022-07-20	0.0	0.020866	0.019685	Normal	2	3	6
2022-06-20	0.0	0.072047	0.0	Normal	2	2	4
2022-05-21	0.051181	0.611811	0.318898	Normal	2	1	2
Result							Normal Conditions - 12



Figures and tables made by the
Antecedent Precipitation Tool
Version 2.0

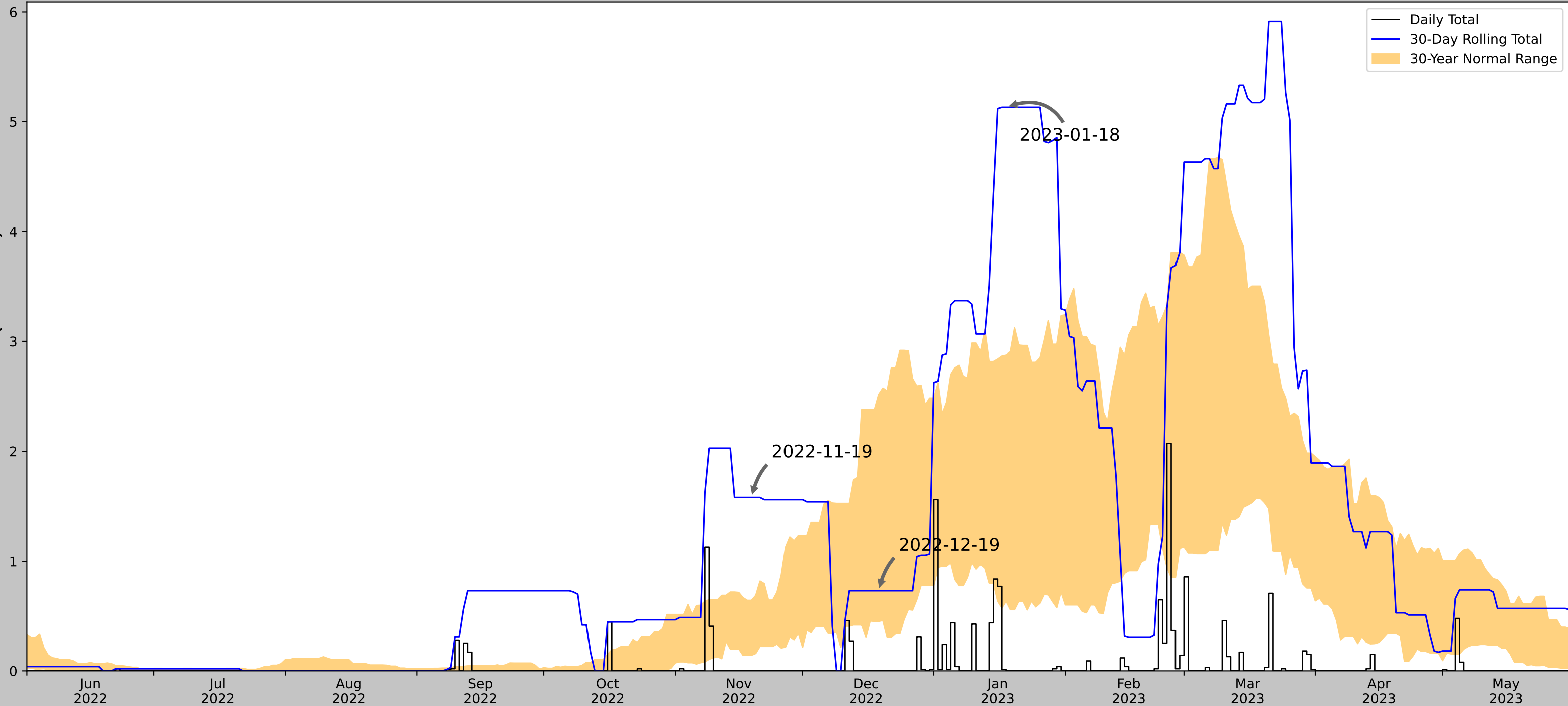
Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and
Development Center



Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
REDLANDS	34.0369, -117.1947	1410.105	6.363	787.872	7.876	11218	90
RIVERSIDE 5.8 E	33.9406, -117.2964	1536.089	8.844	125.984	5.094	1	0
SAN BERNARDINO F S 226	34.1344, -117.2539	1140.092	7.54	270.013	5.429	41	0
RIVERSIDE CITRUS EXP	33.9669, -117.3614	985.892	10.704	424.213	9.358	93	0


Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network

Rainfall (Inches)




Coordinates	34.0101, -117.0884
Observation Date	2023-01-18
Elevation (ft)	2197.977
Drought Index (PDSI)	Moderate wetness
WebWIMP H ₂ O Balance	Wet Season

30 Days Ending	30 th %ile (in)	70 th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2023-01-18	0.637402	2.878347	5.129921	Wet	3	3	9
2022-12-19	0.453543	2.516929	0.732283	Normal	2	2	4
2022-11-19	0.141339	0.644882	1.57874	Wet	3	1	3
Result							Wetter than Normal - 16



Figures and tables made by the
Antecedent Precipitation Tool
Version 2.0

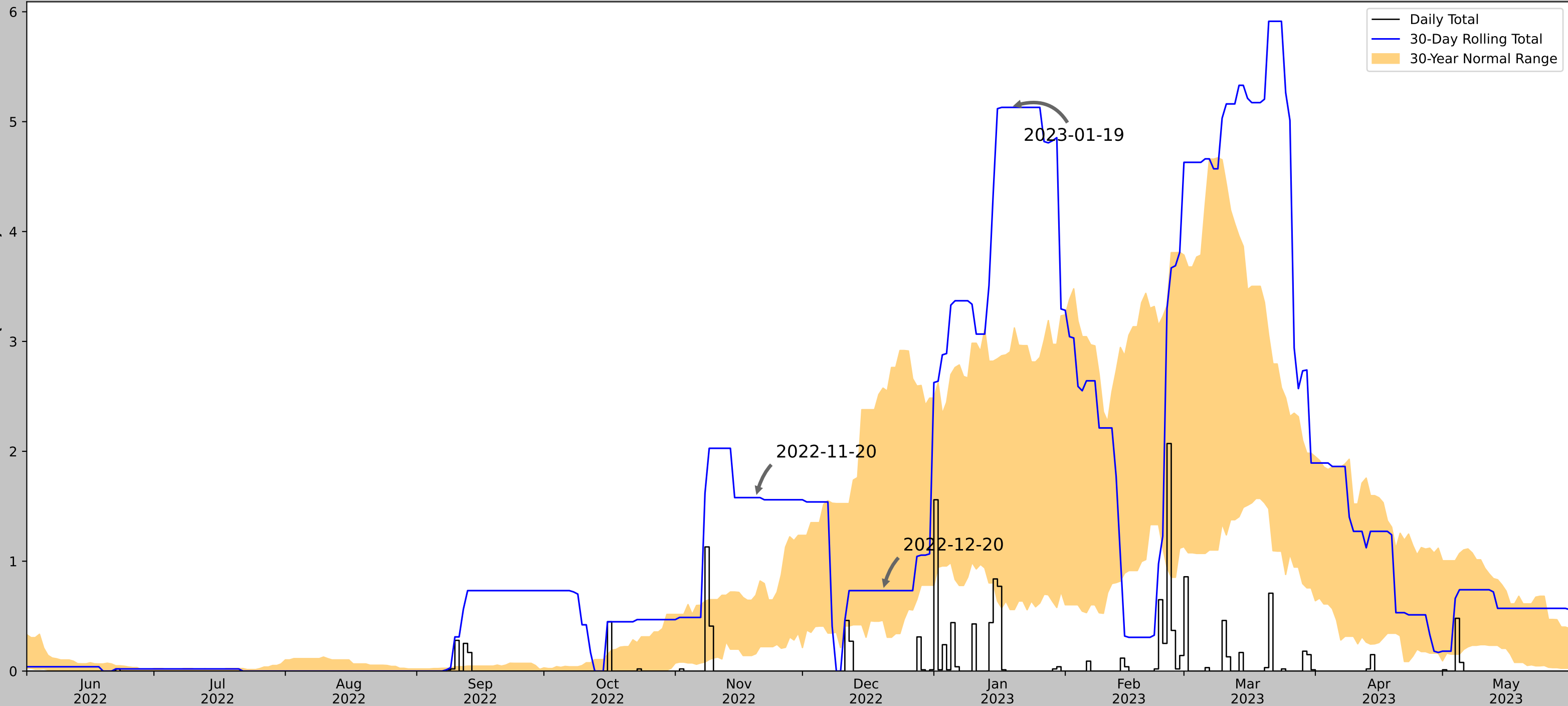
Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and
Development Center



Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
REDLANDS	34.0369, -117.1947	1410.105	6.363	787.872	7.876	11220	90
RIVERSIDE 5.8 E	33.9406, -117.2964	1536.089	8.844	125.984	5.094	1	0
SAN BERNARDINO F S 226	34.1344, -117.2539	1140.092	7.54	270.013	5.429	39	0
RIVERSIDE CITRUS EXP	33.9669, -117.3614	985.892	10.704	424.213	9.358	93	0


Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network

Rainfall (Inches)




Coordinates	34.0101, -117.0884
Observation Date	2023-01-19
Elevation (ft)	2197.977
Drought Index (PDSI)	Moderate wetness
WebWIMP H ₂ O Balance	Wet Season

30 Days Ending	30 th %ile (in)	70 th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2023-01-19	0.559843	2.905906	5.129921	Wet	3	3	9
2022-12-20	0.461811	2.575591	0.732283	Normal	2	2	4
2022-11-20	0.157874	0.690158	1.57874	Wet	3	1	3
Result							Wetter than Normal - 16



Figures and tables made by the
Antecedent Precipitation Tool
Version 2.0

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and
Development Center



Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
REDLANDS	34.0369, -117.1947	1410.105	6.363	787.872	7.876	11220	90
RIVERSIDE 5.8 E	33.9406, -117.2964	1536.089	8.844	125.984	5.094	1	0
SAN BERNARDINO F S 226	34.1344, -117.2539	1140.092	7.54	270.013	5.429	39	0
RIVERSIDE CITRUS EXP	33.9669, -117.3614	985.892	10.704	424.213	9.358	93	0

Appendix C

Data Forms

OHWM DATA SHEET

Project: Mucaipa

Date: 7/14/22

Transect: T-01bas

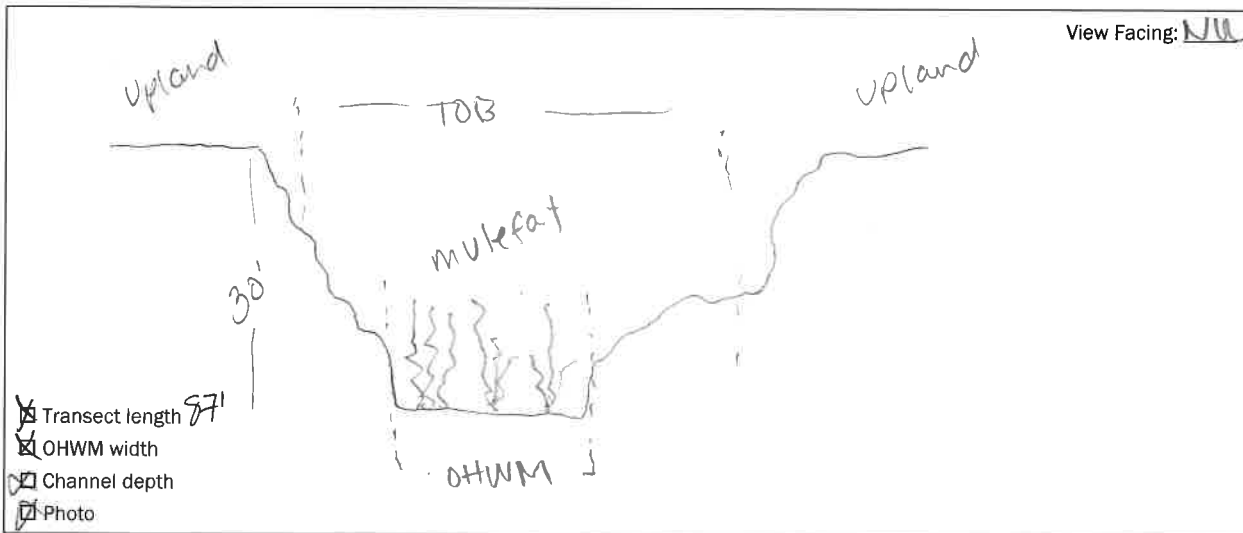
Investigator(s): B. Smithwater, A. Cassidy

Feature Name: _____

Site Location: north of 1-10 and west of John Wayne Way

Feature Type: Ephemeral Intermittent Perennial Other

Transect (cross-section) drawing(s):



Break in Slope at OHWM: Sharp (>60°) Moderate (30-60°) Gentle (<30°)

<input type="checkbox"/> Natural line impressed on the bank	<input checked="" type="checkbox"/> Sediment sorting
<input type="checkbox"/> Shelving	<input checked="" type="checkbox"/> Leaf litter disturbed or washed away
<input type="checkbox"/> Changes in the character of soil	<input type="checkbox"/> Scour
<input type="checkbox"/> Destruction of terrestrial vegetation	<input type="checkbox"/> Deposition
<input checked="" type="checkbox"/> Presence of litter and debris	<input checked="" type="checkbox"/> Bed and banks
<input checked="" type="checkbox"/> Wracking	<input checked="" type="checkbox"/> Water staining
<input type="checkbox"/> Vegetation matted down, bent, or absent	<input checked="" type="checkbox"/> Change in plant community and/or cover

	Clay/Silt	Sand	Gravel	Cobbles	Boulders
Above OHWM					
Below OHWM					

	Tree (%)	Shrub (%)	Herb (%)	Bare (%)
Above OHWM	0	1-5	25-50	25-50
Below OHWM	0	15-25	1-5	50-75

Stage: Early (herbs & seedlings) Mid (herbs, shrubs, saplings) Late (herbs, shrubs, mature trees)

Upland Species:	Bank Species:	Emergent Species:
BRO HIR INC	NIC EIA HIR INC BROMES	BAC SAL AMB PSI DAT WK I ERI FAS

OHWM DATA SHEET

Condition/Disturbances (e.g., erosion, grazing, culverts, etc.):

Box culverts under John Wayne Road to east.
Upstream portion dominated by SALSOD / AILALT / BACSAL
Downstream w/ BACSAL w/in channel

Hydrology:

- Flowing water
- Standing water
- Saturated
- Dry

Avg. depth: 0.5 - 1.5 "

Min. depth: 0.5

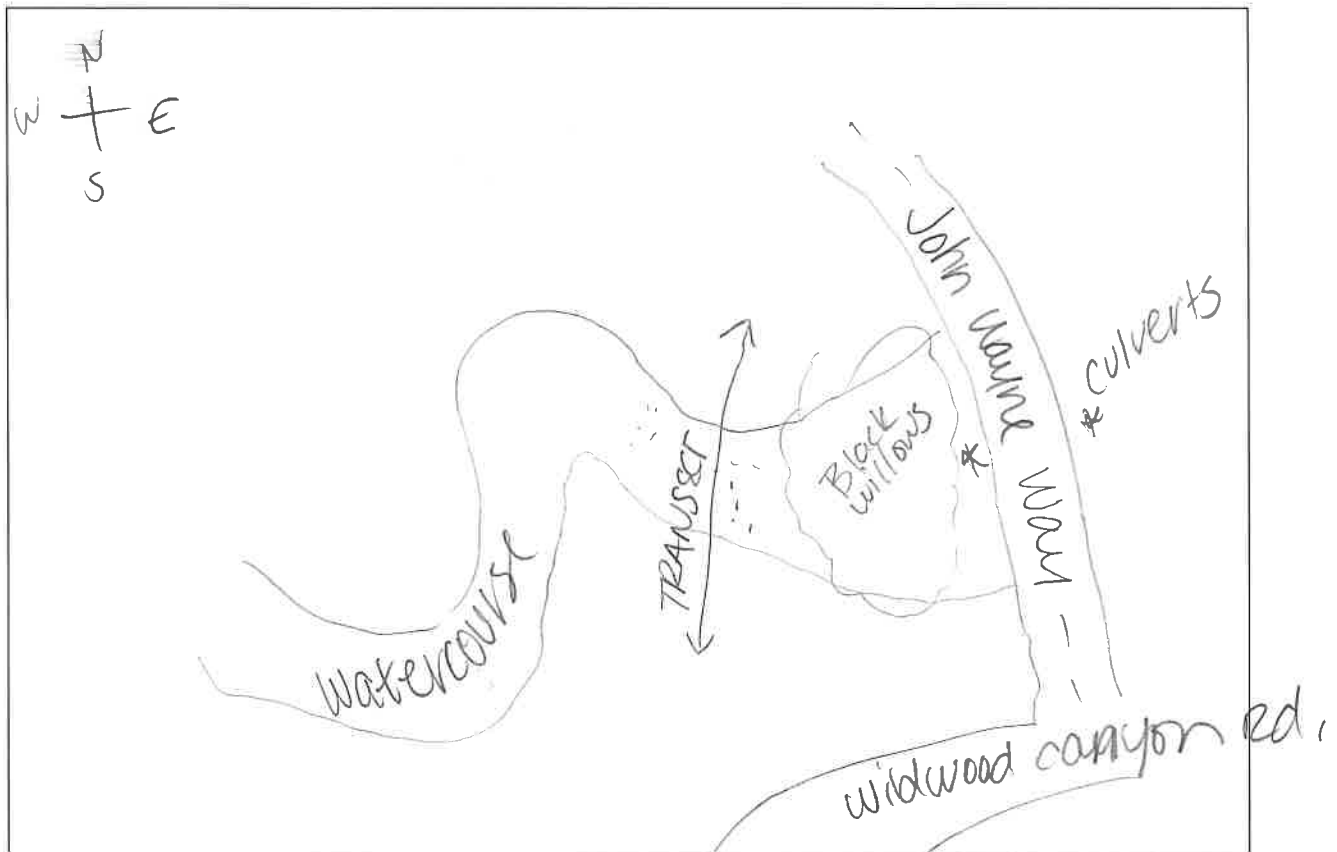
Temp: —

Max. depth: 1.5

Checklist of resources (if available):

<input checked="" type="checkbox"/> Aerial photography	<input type="checkbox"/> Vegetation maps	<input checked="" type="checkbox"/> GPS unit
<input type="checkbox"/> Remotely-sensed images	<input checked="" type="checkbox"/> Soil maps	<input type="checkbox"/> Stream gage data
<input checked="" type="checkbox"/> Topographic maps	<input type="checkbox"/> Rainfall/precipitation data	<input type="checkbox"/> Other studies:
<input type="checkbox"/> Geologic maps	<input type="checkbox"/> Existing delineation(s) for site	

Other drawings (plan view), notes:



Other forms related to this feature: Yes No

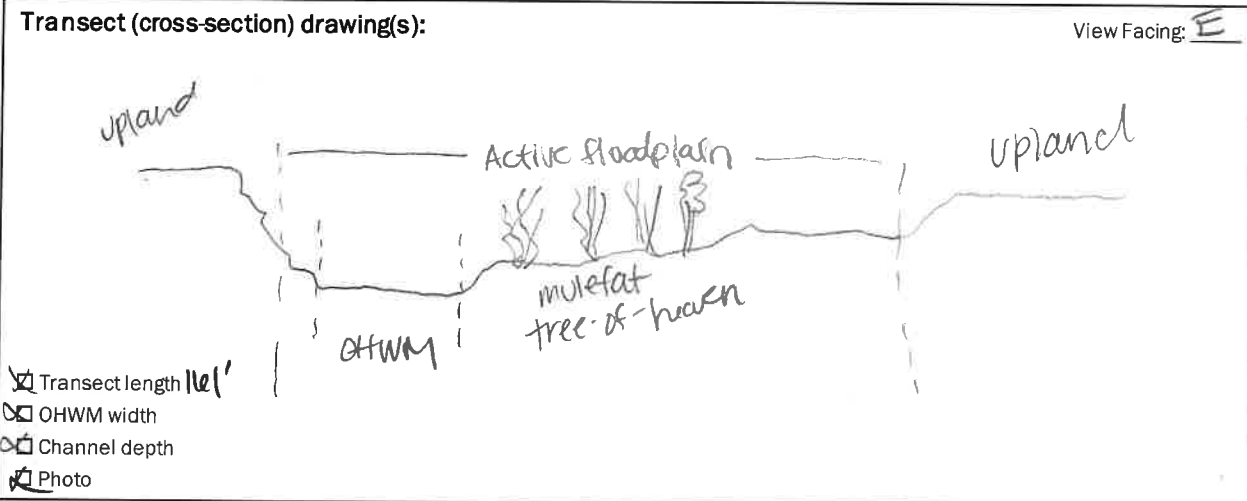
- Terrace, fringe, or floodplain wetland (wetland datasheet)
- Low flow channel or other representative section (OHWM datasheet)

OHWM DATA SHEET

Project: Yucaipa Freeway Date: 7/14/22 Feature ID: _____
 Investigator(s): B. Stithwater; A. Cassidy Transect ID: T-020as

Site Location: North of I-10 and Calimesa Blvd.

Feature Type: Ephemeral Intermittent Perennial Other



OHWM Indicators (at OHWM; primary indicators indicated with *)

- | | |
|--|---|
| <input type="checkbox"/> Natural line impressed on the bank | <input checked="" type="checkbox"/> Sediment sorting |
| <input checked="" type="checkbox"/> Shelving | <input type="checkbox"/> Leaf litter disturbed or washed away |
| <input checked="" type="checkbox"/> Changes in the character of soil (texture)* | <input type="checkbox"/> Scour |
| <input type="checkbox"/> Destruction of terrestrial vegetation | <input checked="" type="checkbox"/> Deposition |
| <input type="checkbox"/> Presence of litter and debris | <input checked="" type="checkbox"/> Bed and banks |
| <input checked="" type="checkbox"/> Wracking | <input type="checkbox"/> Water staining |
| <input type="checkbox"/> Vegetation matted down, bent, or absent | <input checked="" type="checkbox"/> Change in plant community and/or cover* |
| <input type="checkbox"/> Break in Slope at OHWM*: <input type="checkbox"/> Sharp (>60°) <input type="checkbox"/> Moderate (30-60°) <input checked="" type="checkbox"/> Gentle (<30°) | |

Soil Texture

	Clay/Silt	Sand	Gravel	Cobbles	Boulders
Above OHWM					
Below OHWM					

Total Vegetation Cover

	Tree (%)	Shrub (%)	Herb (%)	Bare (%)
Above OHWM	<u>1-5</u>	<u>25-50</u>	<u>25-50</u>	<u>15-25</u>
Below OHWM	<u>0</u>	<u><1</u>	<u>1-5</u>	<u>775</u>

Veg Stage: Early (herbs & seedlings) Mid (herbs, shrubs, saplings) Late (herbs, shrubs, mature trees)

Upland Species: <u>HIR INC</u> <u>BROME SPP.</u> <u>(cattle disturbance)</u>	Bank Species: <u>Floodplain</u> <u>BAC SAL</u> <u>AILALT</u> <u>SAMNIGCAE</u>	Emergent Species: <u>OHWM</u> <u>HIR INC</u> <u>SCH BAR</u>
--	---	--

OHWM DATA SHEET

Condition/Disturbances/Anthropogenic Influences (e.g., erosion, grazing, culverts, etc.):

cattle grazing and erosion along some banks. cattle barb-wire fencing downstream to SW.

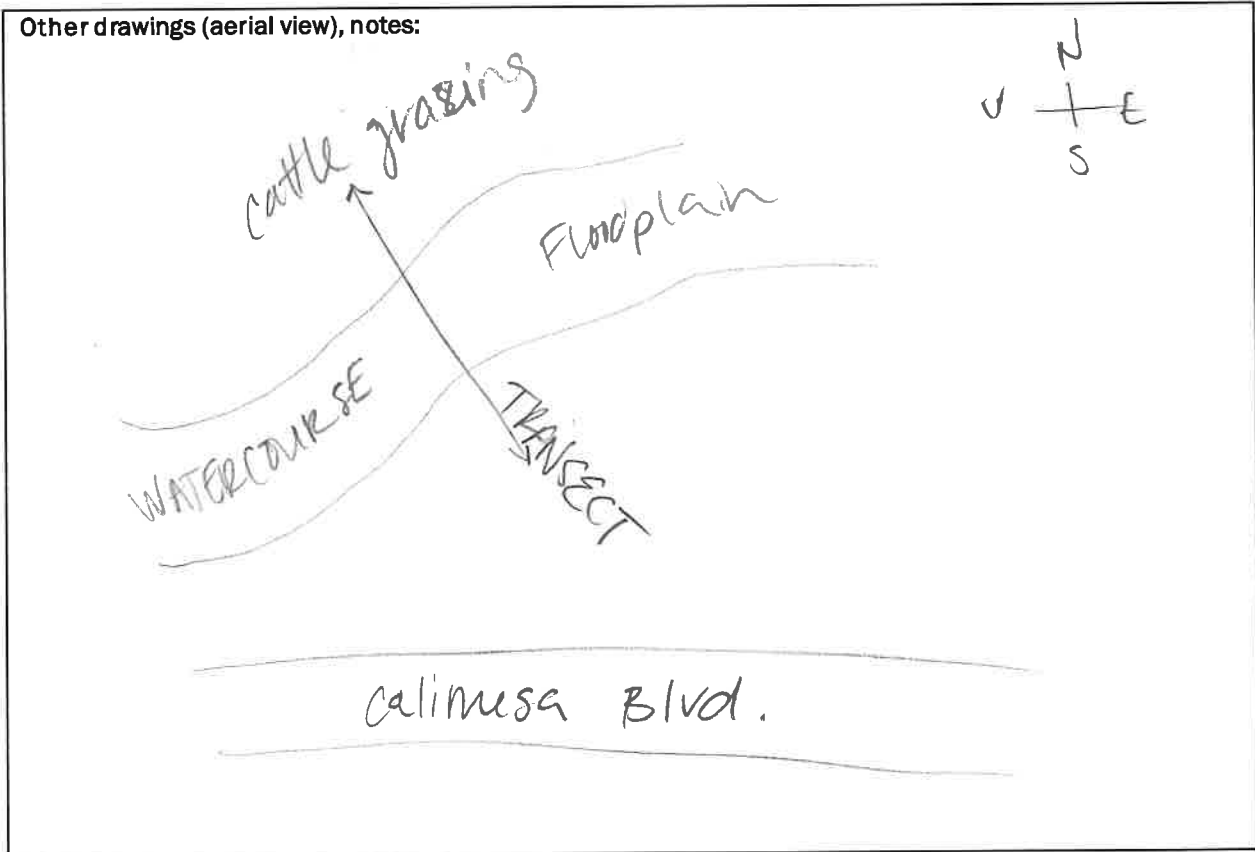
Hydrology

<input type="checkbox"/> Flowing water	Avg. depth:	Min. depth:
<input type="checkbox"/> Standing water	Temp:	Max. depth:
<input type="checkbox"/> Saturated		
<input checked="" type="checkbox"/> Dry		

Checklist of resources (if available):

<input checked="" type="checkbox"/> Aerial photography	<input type="checkbox"/> Vegetation maps	<input checked="" type="checkbox"/> GPS unit
<input type="checkbox"/> Remotely-sensed images	<input checked="" type="checkbox"/> Soil maps	<input type="checkbox"/> Stream gage data
<input checked="" type="checkbox"/> Topographic maps	<input type="checkbox"/> Rainfall/precipitation data	<input type="checkbox"/> Other studies:
<input type="checkbox"/> Geologic maps	<input type="checkbox"/> Existing delineation(s) for site	

Other drawings (aerial view), notes:



Other forms related to this feature: Yes No

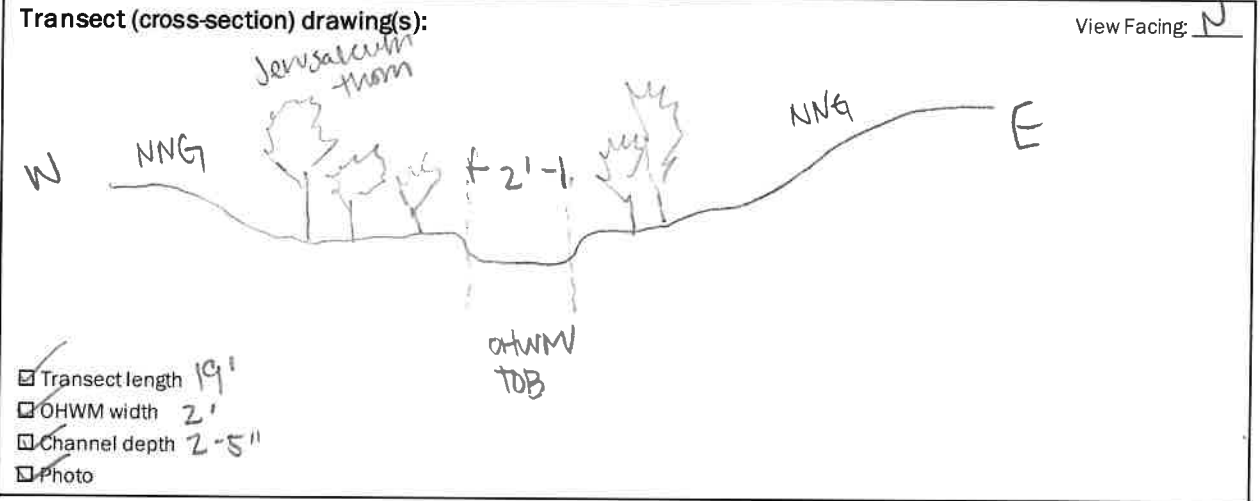
- Terrace, fringe, or floodplain wetland (wetland datasheet)
- Low flow channel or other representative section (OHWM datasheet)

OHWM DATA SHEET

Project: Yucaipa Date: 01/18/23 Feature ID: -
 Investigator(s): Brihney Schultz, Katie Dayton Transect ID: T-03-d

Site Location: Eastern portion of site, west of I-10 and 7th pl.

Feature Type: Ephemeral Intermittent Perennial Other



OHWM Indicators (at OHWM; primary indicators indicated with *)

- | | |
|--|---|
| <input type="checkbox"/> Natural line impressed on the bank | <input checked="" type="checkbox"/> Sediment sorting |
| <input checked="" type="checkbox"/> Shelving | <input checked="" type="checkbox"/> Leaf litter disturbed or washed away |
| <input type="checkbox"/> Changes in the character of soil (texture)* | <input type="checkbox"/> Scour |
| <input type="checkbox"/> Destruction of terrestrial vegetation | <input checked="" type="checkbox"/> Deposition |
| <input type="checkbox"/> Presence of litter and debris | <input checked="" type="checkbox"/> Bed and banks |
| <input type="checkbox"/> Wracking | <input type="checkbox"/> Water staining |
| <input checked="" type="checkbox"/> Vegetation matted down, bent, or absent | <input checked="" type="checkbox"/> Change in plant community and/or cover* |
| <input type="checkbox"/> Break in Slope at OHWM*: <input type="checkbox"/> Sharp (>60°) <input type="checkbox"/> Moderate (30-60°) <input checked="" type="checkbox"/> Gentle (<30°) | |

Soil Texture

	Clay/Silt	Sand	Gravel	Cobbles	Boulders
Above OHWM					
Below OHWM					

Total Vegetation Cover

	Tree (%)	Shrub (%)	Herb (%)	Bare (%)
Above OHWM	<u>80</u>	<u>5</u>	<u>775</u>	<u>5-15</u>
Below OHWM	<u>—</u>	<u>—</u>	<u><1</u>	<u>775</u>

Veg Stage: Early (herbs & seedlings) Mid (herbs, shrubs, saplings) Late (herbs, shrubs, mature trees)

Upland Species:	Bank Species:	Emergent Species:
<u>PAK ACU</u> <u>MAR VUL</u> <u>BROMUS SPP</u> <u>HIR INC</u>	<u>BROMUS SPP</u> <u>HIR INC</u>	<u>BROMUS SPP</u> <u>1</u>

OHWM DATA SHEET

Condition/Disturbances/Anthropogenic Influences (e.g., erosion, grazing, culverts, etc.):

culvert under I-10, also receiving runoff from 7th place. Historic grazing in area and dominance of PARAW (non-native ornamental).

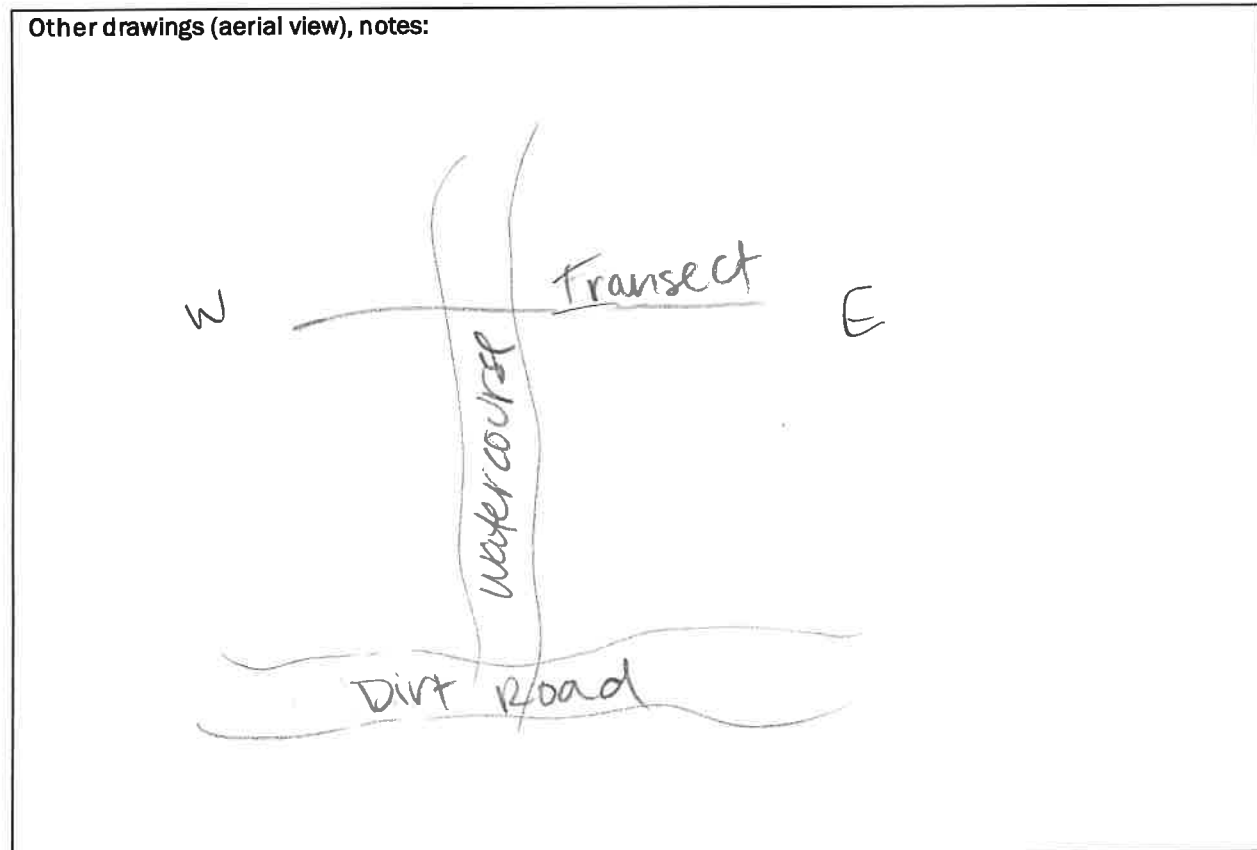
Hydrology

<input type="checkbox"/> Flowing water	Avg. depth: _____	Min. depth: _____
<input type="checkbox"/> Standing water	Temp: _____	Max. depth: _____
<input checked="" type="checkbox"/> Saturated	from sign. recent storm events	
<input type="checkbox"/> Dry		

Checklist of resources (if available):

<input checked="" type="checkbox"/> Aerial photography	<input checked="" type="checkbox"/> Vegetation maps	<input checked="" type="checkbox"/> GPS unit
<input type="checkbox"/> Remotely-sensed images	<input checked="" type="checkbox"/> Soil maps	<input type="checkbox"/> Stream gage data
<input type="checkbox"/> Topographic maps	<input type="checkbox"/> Rainfall/precipitation data	<input type="checkbox"/> Other studies:
<input type="checkbox"/> Geologic maps	<input type="checkbox"/> Existing delineation(s) for site	

Other drawings (aerial view), notes:



Other forms related to this feature: Yes No

- Terrace, fringe, or floodplain wetland (wetland datasheet)
- Low flow channel or other representative section (OHWM datasheet)

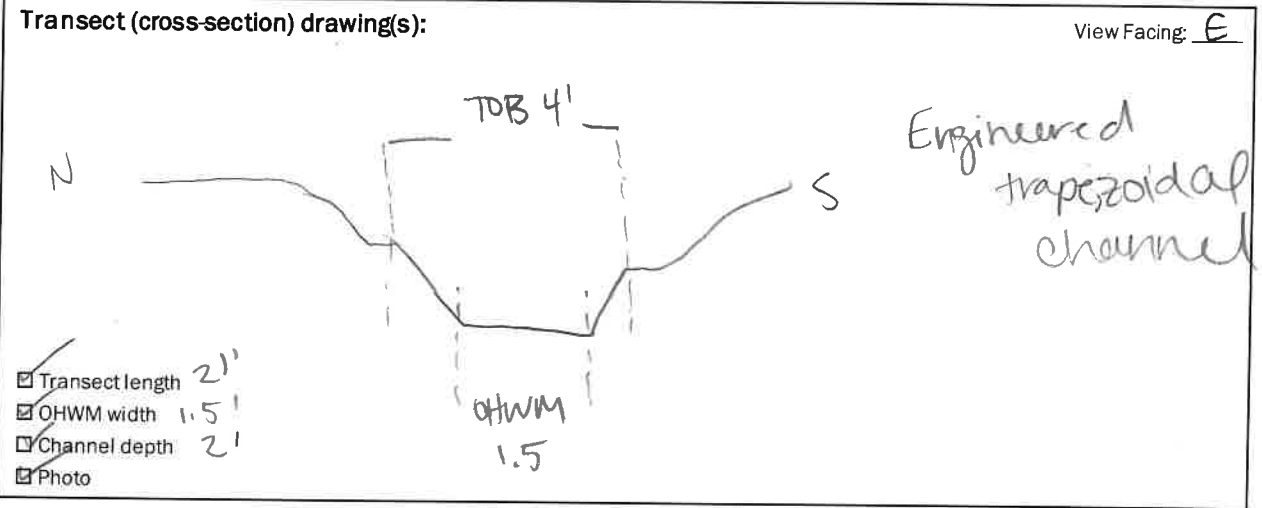
WSP-01a-keed

OHWM DATA SHEET

Project: Yucaipa Date: 1/18/23 Feature ID:
 Investigator(s): Britney Schwitz, Katie Clayton Transect ID: T-T-04 Kcd

Site Location: west of 7th place in eastern portion of site

Feature Type: Ephemeral Intermittent Perennial Other



OHWM Indicators (at OHWM; primary indicators indicated with *)

- | | |
|--|--|
| <input type="checkbox"/> Natural line impressed on the bank | <input type="checkbox"/> Sediment sorting |
| <input type="checkbox"/> Shelving | <input type="checkbox"/> Leaf litter disturbed or washed away |
| <input type="checkbox"/> Changes in the character of soil (texture)* | <input type="checkbox"/> Scour |
| <input type="checkbox"/> Destruction of terrestrial vegetation | <input type="checkbox"/> Deposition |
| <input type="checkbox"/> Presence of litter and debris | <input checked="" type="checkbox"/> Bed and banks |
| <input type="checkbox"/> Wracking | <input type="checkbox"/> Water staining |
| <input type="checkbox"/> Vegetation matted down, bent, or absent | <input type="checkbox"/> Change in plant community and/or cover* |
| <input type="checkbox"/> Break in Slope at OHWM*: <input type="checkbox"/> Sharp (>60°) <input checked="" type="checkbox"/> Moderate (30-60°) <input type="checkbox"/> Gentle (<30°) | |

Soil Texture

	Clay/Silt	Sand	Gravel	Cobbles	Boulders
Above OHWM					
Below OHWM					

Total Vegetation Cover

	Tree (%)	Shrub (%)	Herb (%)	Bare (%)
Above OHWM	—	—	77.5	25.50
Below OHWM	—	—	—	—

Veg Stage: Early (herbs & seedlings) Mid (herbs, shrubs, saplings) Late (herbs, shrubs, mature trees)

Upland Species:	Bank Species:	Emergent Species:
<u>ERO UC</u> <u>H1R INC</u>	<u>N/A</u>	<u>N/A</u>
<u>Engineered trapezoidal channel</u>		

OHW M DATA SHEET

Condition/Disturbances/Anthropogenic Influences (e.g., erosion, grazing, culverts, etc.):

Dirt roads/trails and cattle grazing

Hydrology

<input type="checkbox"/> Flowing water	Avg. depth:	Min. depth:
<input type="checkbox"/> Standing water	Temp:	Max. depth:
<input type="checkbox"/> Saturated		
<input checked="" type="checkbox"/> Dry		

Checklist of resources (if available):

<input checked="" type="checkbox"/> Aerial photography	<input checked="" type="checkbox"/> Vegetation maps	<input checked="" type="checkbox"/> GPS unit
<input type="checkbox"/> Remotely-sensed images	<input type="checkbox"/> Soil maps	<input type="checkbox"/> Stream gage data
<input checked="" type="checkbox"/> Topographic maps	<input type="checkbox"/> Rainfall/precipitation data	<input type="checkbox"/> Other studies:
<input type="checkbox"/> Geologic maps	<input type="checkbox"/> Existing delineation(s) for site	

Other drawings (aerial view), notes:

Other forms related to this feature: Yes No

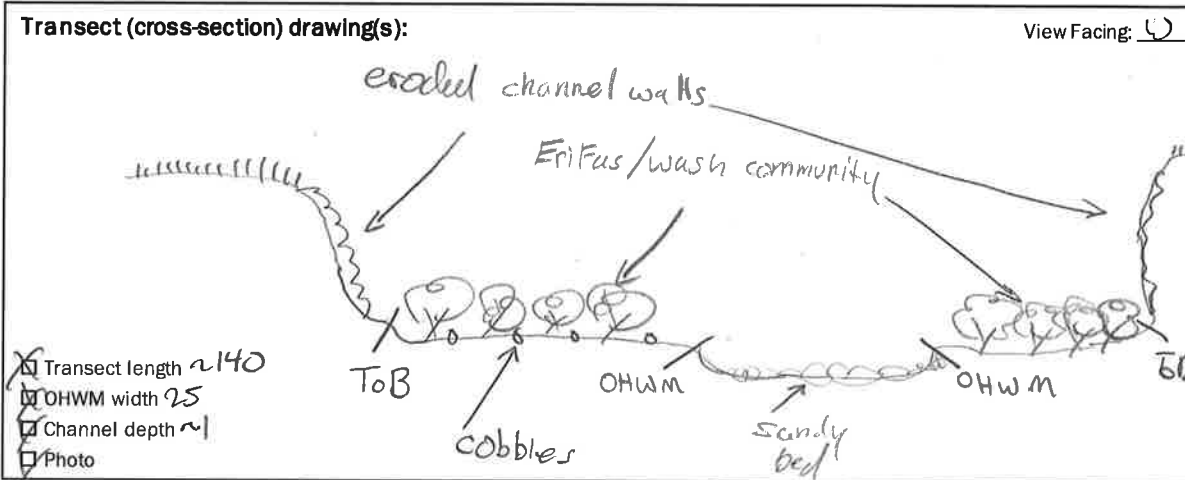
- Terrace, fringe, or floodplain wetland (wetland datasheet)
- Low flow channel or other representative section (OHWM datasheet)

OHWM DATA SHEET

Project: Freeway Date: 7/13/22 Feature ID: _____
 Investigator(s): Anna C, Sierra L, Megan C Transect ID: **T-05**

Site Location: undeveloped lands south of freeway in Yucaipa

Feature Type: Ephemeral Intermittent Perennial Other



OHWM Indicators (at OHWM; primary indicators indicated with *)

- | | |
|---|---|
| <input type="checkbox"/> Natural line impressed on the bank | <input checked="" type="checkbox"/> Sediment sorting |
| <input type="checkbox"/> Shelving | <input type="checkbox"/> Leaf litter disturbed or washed away |
| <input checked="" type="checkbox"/> Changes in the character of soil (texture)* | <input type="checkbox"/> Scour |
| <input type="checkbox"/> Destruction of terrestrial vegetation | <input type="checkbox"/> Deposition |
| <input type="checkbox"/> Presence of litter and debris | <input checked="" type="checkbox"/> Bed and banks |
| <input type="checkbox"/> Wracking | <input type="checkbox"/> Water staining |
| <input type="checkbox"/> Vegetation matted down, bent, or absent | <input checked="" type="checkbox"/> Change in plant community and/or cover* |
| <input checked="" type="checkbox"/> Break in Slope at OHWM*: <input type="checkbox"/> Sharp (>60°) <input type="checkbox"/> Moderate (30-60°) <input checked="" type="checkbox"/> Gentle (<30°) | |

Soil Texture

	Clay/Silt	Sand	Gravel	Cobbles	Boulders
Above OHWM	x	x	x	x	
Below OHWM		x	x	x	x

Total Vegetation Cover

	Tree (%)	Shrub (%)	Herb (%)	Bare (%)
Above OHWM	0	70	10	20
Below OHWM	0	0	0	100

Veg Stage: Early (herbs & seedlings) Mid (herbs, shrubs, saplings) Late (herbs, shrubs, mature trees)

Upland Species:	Bank Species:	Emergent Species:
- EriFas - upland mustards	- EriFas	- none

OHWM DATA SHEET

Condition/Disturbances/Anthropogenic Influences (e.g., erosion, grazing, culverts, etc.):

- Significant erosion present in area
- trash input
- Ag activities

Hydrology

<input type="checkbox"/> Flowing water	Avg. depth:	Min. depth:
<input type="checkbox"/> Standing water	Temp:	Max. depth:
<input type="checkbox"/> Saturated		
<input checked="" type="checkbox"/> Dry		

Checklist of resources (if available):

<input type="checkbox"/> Aerial photography	<input type="checkbox"/> Vegetation maps	<input checked="" type="checkbox"/> GPS unit
<input checked="" type="checkbox"/> Remotely-sensed images	<input checked="" type="checkbox"/> Soil maps	<input type="checkbox"/> Stream gage data
<input checked="" type="checkbox"/> Topographic maps	<input type="checkbox"/> Rainfall/precipitation data	<input type="checkbox"/> Other studies:
<input type="checkbox"/> Geologic maps	<input type="checkbox"/> Existing delineation(s) for site	

Other drawings (aerial view), notes:

Other forms related to this feature: Yes No

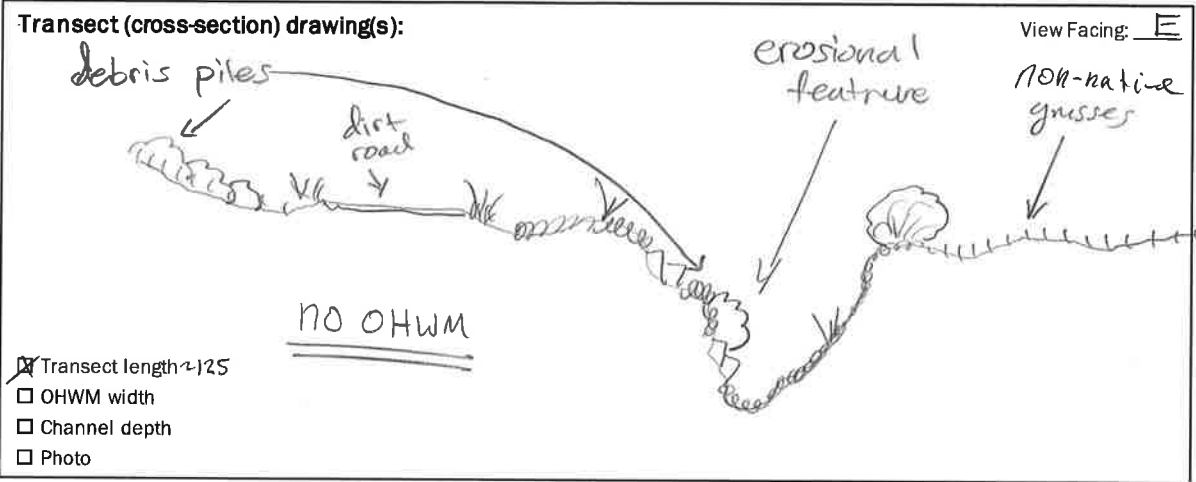
- Terrace, fringe, or floodplain wetland (wetland datasheet)
- Low flow channel or other representative section (OHWM datasheet)

OHWM DATA SHEET

Project: Freeway Date: 1/19/23 Feature ID: Snake
 Investigator(s): Dylan A Transect ID: **F-06**

Site Location: undeveloped lands south of freeway in Yucaipa, CA

Feature Type: Ephemeral Intermittent Perennial Other



OHWM Indicators (at OHWM; primary indicators indicated with *)

- | | |
|---|--|
| <input type="checkbox"/> Natural line impressed on the bank | <input type="checkbox"/> Sediment sorting |
| <input type="checkbox"/> Shelving | <input type="checkbox"/> Leaf litter disturbed or washed away |
| <input type="checkbox"/> Changes in the character of soil (texture)* | <input type="checkbox"/> Scour |
| <input type="checkbox"/> Destruction of terrestrial vegetation | <input type="checkbox"/> Deposition |
| <input type="checkbox"/> Presence of litter and debris | <input type="checkbox"/> Bed and banks |
| <input type="checkbox"/> Wracking | <input type="checkbox"/> Water staining |
| <input type="checkbox"/> Vegetation matted down, bent, or absent | <input type="checkbox"/> Change in plant community and/or cover* |
| <input type="checkbox"/> Break in Slope at OHWM*: <input type="checkbox"/> Sharp (>60°) <input type="checkbox"/> Moderate (30-60°) <input type="checkbox"/> Gentle (<30°) | |

Soil Texture

	Clay/Silt	Sand	Gravel	Cobbles	Boulders
Above OHWM					
Below OHWM					

Total Vegetation Cover

	Tree (%)	Shrub (%)	Herb (%)	Bare (%)
Above OHWM				
Below OHWM				

Veg Stage: Early (herbs & seedlings) Mid (herbs, shrubs, saplings) Late (herbs, shrubs, mature trees)

Upland Species:	Bank Species:	Emergent Species:
<u>Sal Tra</u> <u>Rha Cro</u>	_____	_____

OHWM DATA SHEET

Condition/Disturbances/Anthropogenic Influences (e.g., erosion, grazing, culverts, etc.):

-feature is significantly disturbed from surrounding Ag activities
 -trash input

Hydrology

<input type="checkbox"/> Flowing water	Avg. depth:	Min. depth:
<input type="checkbox"/> Standing water	Temp:	Max. depth:
<input type="checkbox"/> Saturated		
<input checked="" type="checkbox"/> Dry		

Checklist of resources (If available):

<input type="checkbox"/> Aerial photography	<input type="checkbox"/> Vegetation maps	<input type="checkbox"/> GPS unit
<input type="checkbox"/> Remotely-sensed images	<input type="checkbox"/> Soil maps	<input type="checkbox"/> Stream gage data
<input type="checkbox"/> Topographic maps	<input type="checkbox"/> Rainfall/precipitation data	<input type="checkbox"/> Other studies:
<input type="checkbox"/> Geologic maps	<input type="checkbox"/> Existing delineation(s) for site	

Other drawings (aerial view), notes:

Other forms related to this feature: Yes No

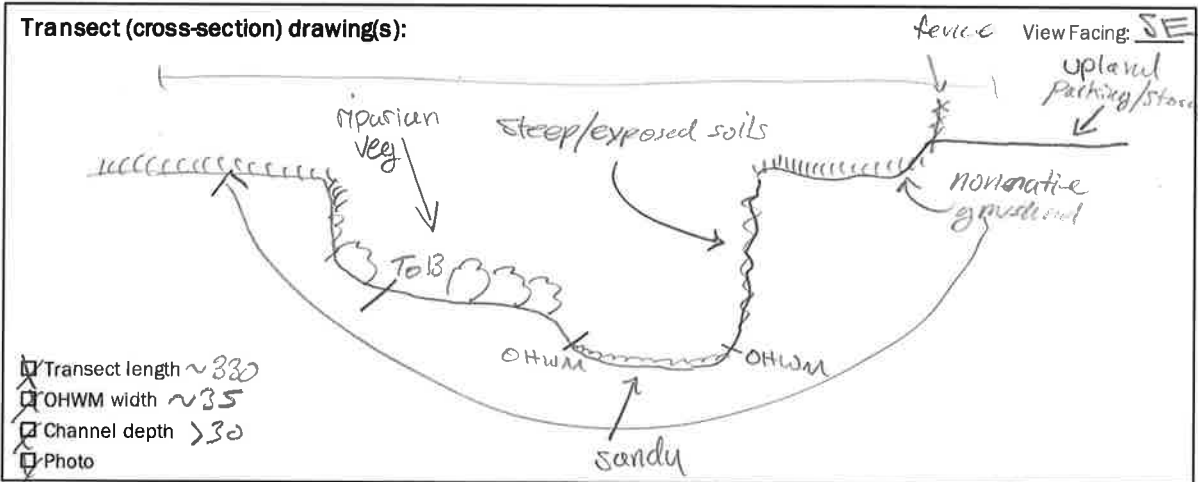
- Terrace, fringe, or floodplain wetland (wetland datasheet)
- Low flow channel or other representative section (OHWM datasheet)

OHWM DATA SHEET

Project: Freeway Date: 1/19/23 Feature ID: N(100)-1
 Investigator(s): Dylan A Transect ID: **T-077**

Site Location: undeveloped lands south of freeway in Yuccipa

Feature Type: Ephemeral Intermittent Perennial Other



OHWM Indicators (at OHWM; primary indicators indicated with *)

- | | |
|---|---|
| <input type="checkbox"/> Natural line impressed on the bank | <input type="checkbox"/> Sediment sorting |
| <input checked="" type="checkbox"/> Shelving | <input type="checkbox"/> Leaf litter disturbed or washed away |
| <input checked="" type="checkbox"/> Changes in the character of soil (texture)* | <input checked="" type="checkbox"/> Scour |
| <input type="checkbox"/> Destruction of terrestrial vegetation | <input checked="" type="checkbox"/> Deposition |
| <input type="checkbox"/> Presence of litter and debris | <input checked="" type="checkbox"/> Bed and banks |
| <input type="checkbox"/> Wracking | <input type="checkbox"/> Water staining |
| <input type="checkbox"/> Vegetation matted down, bent, or absent | <input checked="" type="checkbox"/> Change in plant community and/or cover* |
| <input checked="" type="checkbox"/> Break in Slope at OHWM*: <input checked="" type="checkbox"/> Sharp (>60°) <input type="checkbox"/> Moderate (30-60°) <input type="checkbox"/> Gentle (<30°) | |

Soil Texture

	Clay/Silt	Sand	Gravel	Cobbles	Boulders
Above OHWM	X				
Below OHWM		X	X	X	

Total Vegetation Cover

	Tree (%)	Shrub (%)	Herb (%)	Bare (%)
Above OHWM	5	5	90	10
Below OHWM	0	0	5	95

Veg Stage: Early (herbs & seedlings) Mid (herbs, shrubs, saplings) Late (herbs, shrubs, mature trees)

Upland Species:	Bank Species:	Emergent Species:
<u>Bromus sp.</u> <u>Avena sp.</u>	<u>Salix sp.</u>	<u>none</u>

OHWM DATA SHEET

Condition/Disturbances/Anthropogenic Influences (e.g., erosion, grazing, culverts, etc.):

- significant erosion in channel
 - nearby Ag uses

Hydrology

<input type="checkbox"/> Flowing water	Avg. depth:	Min. depth:
<input type="checkbox"/> Standing water	Temp:	Max. depth:
<input type="checkbox"/> Saturated		
<input checked="" type="checkbox"/> Dry		

Checklist of resources (if available):

<input type="checkbox"/> Aerial photography	<input checked="" type="checkbox"/> Vegetation maps	<input checked="" type="checkbox"/> GPS unit
<input checked="" type="checkbox"/> Remotely-sensed images	<input checked="" type="checkbox"/> Soil maps	<input type="checkbox"/> Stream gage data
<input checked="" type="checkbox"/> Topographic maps	<input type="checkbox"/> Rainfall/precipitation data	<input type="checkbox"/> Other studies:
<input type="checkbox"/> Geologic maps	<input type="checkbox"/> Existing delineation(s) for site	

Other drawings (aerial view), notes:

Other forms related to this feature: Yes No

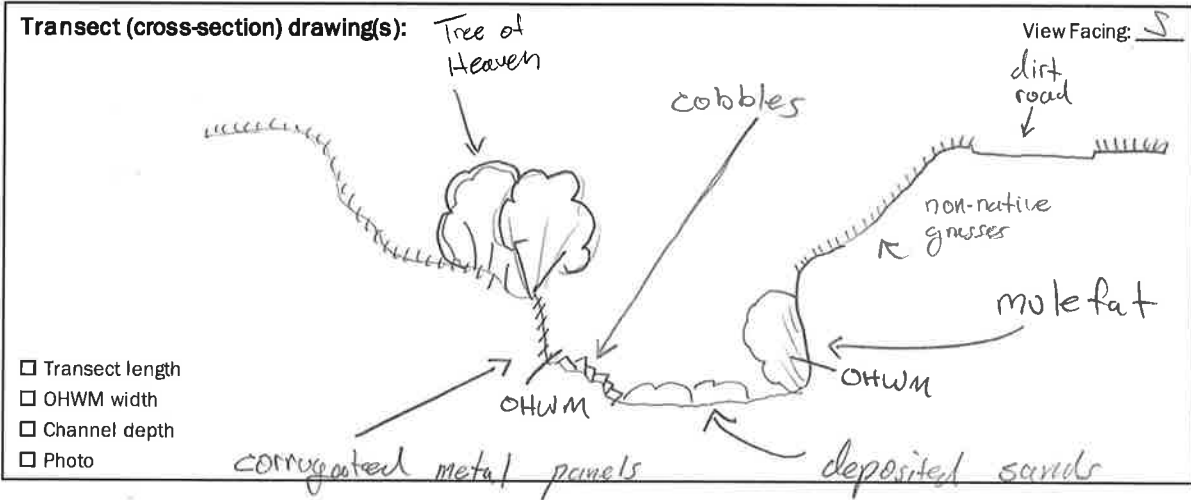
- Terrace, fringe, or floodplain wetland (wetland datasheet)
- Low flow channel or other representative section (OHWM datasheet)

OHWM DATA SHEET

Project: Freeway Date: 1/19/23 Feature ID: MW-2
 Investigator(s): Dylan A Transect ID: T-08

Site Location: undeveloped lands south of freeway in Yucaipa, CA

Feature Type: Ephemeral Intermittent Perennial Other



OHWM Indicators (at OHWM; primary indicators indicated with *)

- | | |
|---|---|
| <input type="checkbox"/> Natural line impressed on the bank | <input checked="" type="checkbox"/> Sediment sorting |
| <input type="checkbox"/> Shelving | <input type="checkbox"/> Leaf litter disturbed or washed away |
| <input checked="" type="checkbox"/> Changes in the character of soil (texture)* | <input checked="" type="checkbox"/> Scour |
| <input type="checkbox"/> Destruction of terrestrial vegetation | <input checked="" type="checkbox"/> Deposition |
| <input type="checkbox"/> Presence of litter and debris | <input checked="" type="checkbox"/> Bed and banks |
| <input type="checkbox"/> Wracking | <input type="checkbox"/> Water staining |
| <input type="checkbox"/> Vegetation matted down, bent, or absent | <input checked="" type="checkbox"/> Change in plant community and/or cover* |
| <input checked="" type="checkbox"/> Break in Slope at OHWM*: <input checked="" type="checkbox"/> Sharp (>60°) <input type="checkbox"/> Moderate (30-60°) <input type="checkbox"/> Gentle (<30°) | |

Soil Texture

	Clay/Silt	Sand	Gravel	Cobbles	Boulders
Above OHWM	X	X			
Below OHWM		X	X	X	X

Total Vegetation Cover

	Tree (%)	Shrub (%)	Herb (%)	Bare (%)
Above OHWM	20	0	95	5
Below OHWM	30	20	20	80

Veg Stage: Early (herbs & seedlings) Mid (herbs, shrubs, saplings) Late (herbs, shrubs, mature trees)

Upland Species:	Bank Species:	Emergent Species:
<i>Bromus sp.</i> <i>Avena sp.</i> <i>Salsola tragus</i>	<i>Baccharis salicifolia</i> <i>Alnus altissima</i>	none

OHWM DATA SHEET

Condition/Disturbances/Anthropogenic Influences (e.g., erosion, grazing, culverts, etc.):

- past efforts to ~~to~~ reduce erosion have left materials in channel
- trash input
- nearby Ag uses.

Hydrology

<input type="checkbox"/> Flowing water	Avg. depth:	Min. depth:
<input type="checkbox"/> Standing water	Temp:	Max. depth:
<input type="checkbox"/> Saturated		
<input checked="" type="checkbox"/> Dry		

Checklist of resources (if available):

<input checked="" type="checkbox"/> Aerial photography	<input checked="" type="checkbox"/> Vegetation maps	<input type="checkbox"/> GPS unit
<input type="checkbox"/> Remotely-sensed images	<input checked="" type="checkbox"/> Soil maps	<input type="checkbox"/> Stream gage data
<input checked="" type="checkbox"/> Topographic maps	<input type="checkbox"/> Rainfall/precipitation data	<input type="checkbox"/> Other studies:
<input type="checkbox"/> Geologic maps	<input type="checkbox"/> Existing delineation(s) for site	

Other drawings (aerial view), notes:

Other forms related to this feature: Yes No

- Terrace, fringe, or floodplain wetland (wetland datasheet)
- Low flow channel or other representative section (OHWM datasheet)

OHWM DATA SHEET

Project: Freeway Date: 1/19/23 Feature ID: NW-4
 Investigator(s): Dylan A Transect ID: **T-09**

Site Location: undeveloped lands south of Freeway in Yuccipa.

Feature Type: Ephemeral Intermittent Perennial Other

Transect (cross-section) drawings: View Facing: NE

Transect length ~80
 OHWM width ~2
 Channel depth ~2
 Photo

OHWM Indicators (at OHWM; primary indicators indicated with *)

- | | |
|--|---|
| <input type="checkbox"/> Natural line impressed on the bank | <input type="checkbox"/> Sediment sorting |
| <input type="checkbox"/> Shelving | <input type="checkbox"/> Leaf litter disturbed or washed away |
| <input type="checkbox"/> Changes in the character of soil (texture)* | <input type="checkbox"/> Scour |
| <input type="checkbox"/> Destruction of terrestrial vegetation | <input type="checkbox"/> Deposition |
| <input type="checkbox"/> Presence of litter and debris | <input type="checkbox"/> Bed and banks |
| <input type="checkbox"/> Wracking | <input type="checkbox"/> Water staining |
| <input type="checkbox"/> Vegetation matted down, bent, or absent | <input checked="" type="checkbox"/> Change in plant community and/or cover* |
| <input checked="" type="checkbox"/> Break in Slope at OHWM*: <input type="checkbox"/> Sharp (>60°) <input type="checkbox"/> Moderate (30-60°) <input type="checkbox"/> Gentle (<30°) | |

Soil Texture

	Clay/Silt	Sand	Gravel	Cobbles	Boulders
Above OHWM	X				
Below OHWM	X				

Total Vegetation Cover

	Tree (%)	Shrub (%)	Herb (%)	Bare (%)
Above OHWM	0	0	100	0
Below OHWM	0	0	0	100

Veg Stage: Early (herbs & seedlings) Mid (herbs, shrubs, saplings) Late (herbs, shrubs, mature trees)

Upland Species:	Bank Species:	Emergent Species:
<u>-non-native grasses</u>	<u> </u>	<u>None</u>

OHWM DATA SHEET

Condition/Disturbances/Anthropogenic Influences (e.g., erosion, grazing, culverts, etc.):

- relatively untouched
 - some nearby roadways
 - nearby Ag

Hydrology

<input type="checkbox"/> Flowing water	Avg. depth:	Min. depth:
<input type="checkbox"/> Standing water	Temp:	Max. depth:
<input type="checkbox"/> Saturated		
<input checked="" type="checkbox"/> Dry		

Checklist of resources (if available):

<input checked="" type="checkbox"/> Aerial photography	<input checked="" type="checkbox"/> Vegetation maps	<input checked="" type="checkbox"/> GPS unit
<input type="checkbox"/> Remotely-sensed images	<input checked="" type="checkbox"/> Soil maps	<input type="checkbox"/> Stream gage data
<input checked="" type="checkbox"/> Topographic maps	<input type="checkbox"/> Rainfall/precipitation data	<input type="checkbox"/> Other studies:
<input type="checkbox"/> Geologic maps	<input type="checkbox"/> Existing delineation(s) for site	

Other drawings (aerial view), notes:

Other forms related to this feature: Yes No

- Terrace, fringe, or floodplain wetland (wetland datasheet)
- Low flow channel or other representative section (OHWM datasheet)

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Yuccaipa Freeway Corridor City/County: Yuccaipa/Riverside Sampling Date: 7/14/22
 Applicant/Owner: _____ State: CA Sampling Point: **WSP-1a**
 Investigator(s): B. Smithwater; A. Cassidy Section, Township, Range: Section 19SW; Township 2S; Range 1W
 Landform (hillslope, terrace, etc.): drainage Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): C-Mediterranean CA Lat: 34.016151 Long: -117.073018 Datum: WGS 84
 Soil Map Unit Name: Tujunga gravelly loamy sand, 0 to 9% NWI classification: RIVERLINE (R/SBC)
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks: <u>Data station w/in OTWML and ~5' from flowing water</u>	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>SALICOD</u>	<u>55</u>	<u>Y</u>	<u>FACW</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. <u>AILALT</u>	<u>5</u>	<u>N</u>	<u>FACW</u>	Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species <u>55</u> x 2 = <u>110</u> FAC species _____ x 3 = _____ FACU species <u>5</u> x 4 = <u>20</u> UPL species <u>5</u> x 5 = <u>25</u> Column Totals: <u>105</u> (A) <u>155</u> (B) Prevalence Index = B/A = <u>155/105 = 2.4</u>
5. _____	_____	_____	_____	
Sapling/Shrub Stratum (Plot size: <u>5</u>) <u>100</u> = Total Cover				
1. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0' ___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ① Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
Herb Stratum (Plot size: <u>5</u>) _____ = Total Cover				
1. <u>HIB INC</u>	<u>2</u>	<u>Y</u>	<u>UPL</u>	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
Woody Vine Stratum (Plot size: _____) _____ = Total Cover				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
% Bare Ground in Herb Stratum <u>775</u> % Cover of Biotic Crust _____				

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-5	10YR 4/3	100					sand	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

- Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**
- | | | |
|--|---|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> 1 cm Muck (A9) (LRR C) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> 2 cm Muck (A10) (LRR B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) | <input type="checkbox"/> Reduced Vertic (F18) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input type="checkbox"/> Redox Dark Surface (F6) | |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) | |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) | |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Vernal Pools (F9) | |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | | |
- ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):
 Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No

Remarks:

HYDROLOGY

- Wetland Hydrology Indicators:**
- | | | |
|---|--|---|
| Primary Indicators (minimum of one required; check all that apply) | | Secondary Indicators (2 or more required) |
| <input checked="" type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) | <input type="checkbox"/> Water Marks (B1) (Riverine) |
| <input checked="" type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) | <input checked="" type="checkbox"/> Sediment Deposits (B2) (Riverine) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input checked="" type="checkbox"/> Drift Deposits (B3) (Riverine) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Thin Muck Surface (C7) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> FAC-Neutral Test (D5) |

Field Observations:

Surface Water Present?	Yes _____ No _____	Depth (inches): _____
Water Table Present?	Yes <input checked="" type="checkbox"/> No _____	Depth (inches): <u>5</u>
Saturation Present?	Yes _____ No _____	Depth (inches): _____

Wetland Hydrology Present? Yes No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Yucaipa Freeway Corridor City/County: Yucaipa/Riverside Sampling Date: 7/14/22
 Applicant/Owner: _____ State: CA Sampling Point: **WSP-1b**
 Investigator(s): B. St. Humer, A Section, Township, Range: Sec 19SW; T2S; R1W
 Landform (hillslope, terrace, etc.): upland Local relief (concave, convex, none): NONE Slope (%): 0
 Subregion (LRR): C-Mediterranean CA Lat: 34.016428 Long: -117.073139 Datum: WGS84
 Soil Map Unit Name: Tujunga gravelly loamy sand, 0 to 9% NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/> Hydric Soil Present? Yes _____ No _____ Wetland Hydrology Present? Yes _____ No _____ Remarks: _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
--	--

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>0</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = <u>0</u>
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>5</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: <u>5</u>)				
1. <u>CRO SET</u>	<u>1</u>	_____	_____	
2. <u>HIZINC</u>	<u>1</u>	_____	_____	
3. <u>SCH BAR</u>	<u>1</u>	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>775</u> % Cover of Biotic Crust _____				Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 ¹ ___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)
Remarks: _____				Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	10YR 3/3	100	—	—	—	—	Sandy loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

Indicators for Problematic Hydric Soils³:

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

<u>Primary Indicators (minimum of one required; check all that apply)</u>	<u>Secondary Indicators (2 or more required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water Marks (B1) (Riverine)
	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____

Water Table Present? Yes _____ No Depth (inches): _____

Saturation Present? Yes _____ No Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Yuma Freeway Corridor City/County: Yuma/Riverside Sampling Date: 07/14/22
 Applicant/Owner: _____ State: CA Sampling Point: **WSP-2a**
 Investigator(s): B. Strittmatter, A. Cassidy Section, Township, Range: Sec 19 SW; T 2 S; R 1 W
 Landform (hillslope, terrace, etc.): drainage Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): C-Mediterranean CA Lat: 34.015083 Long: -117.087042 Datum: WGS 84
 Soil Map Unit Name: Hanford coarse sandy loam 2 to 9' NWI classification: RIVERINE
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks: _____	

VEGETATION – Use scientific names of plants.

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
Plot size: <u>30</u>				Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
1. _____				Total Number of Dominant Species Across All Strata: <u>1</u> (B)
2. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
3. _____				
4. _____				
5. _____				
_____ = Total Cover				
Plot size: <u>5</u>				
1. <u>BAC SAL</u>	<u>40</u>	<u>Y</u>	<u>FAC</u>	
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				
Plot size: <u>5</u>				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
_____ = Total Cover				
Plot size: _____				
1. _____				
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>775</u>	% Cover of Biotic Crust <u>-</u>			

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species <u>40</u>	x 3 = <u>120</u>
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)
Prevalence Index = B/A = <u>30</u>	

Hydrophytic Vegetation Indicators:

Dominance Test is >50%
 Prevalence Index is ≤3.0¹
 Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No _____

Remarks: _____

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-8	2.5Y 4/3	100	—	—	—	—	Sandy loam	
8-9	10YR 4/4	100%	—	—	—	—	Sand	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

- Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**
- | | | |
|--|---|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> 1 cm Muck (A9) (LRR C) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> 2 cm Muck (A10) (LRR B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) | <input type="checkbox"/> Reduced Vertic (F18) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input type="checkbox"/> Redox Dark Surface (F6) | |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) | |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) | |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Vernal Pools (F9) | |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | | |
- ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):
 Type: ROCK
 Depth (inches): 9"

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

- Wetland Hydrology Indicators:**
- | | | |
|---|--|---|
| Primary Indicators (minimum of one required; check all that apply) | | Secondary Indicators (2 or more required) |
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) | <input type="checkbox"/> Water Marks (B1) (Riverine) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) | <input checked="" type="checkbox"/> Sediment Deposits (B2) (Riverine) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input checked="" type="checkbox"/> Drift Deposits (B3) (Riverine) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input checked="" type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Thin Muck Surface (C7) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> FAC-Neutral Test (D5) |

Field Observations:

Surface Water Present? Yes No Depth (inches): _____

Water Table Present? Yes No Depth (inches): _____

Saturation Present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Yucaipa Freeway Corridor City/County: Yucaipa/Riverside Sampling Date: 7/14/22
 Applicant/Owner: _____ State: CA Sampling Point: **WSP-2b**
 Investigator(s): B. Stittmacher; A. Cassidy Section, Township, Range: Sec. 19SW, T2S; R1W
 Landform (hillslope, terrace, etc.): upland Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): C-Mediterranean CA Lat: 34.0157162 Long: -117.087010 Datum: WGS 84
 Soil Map Unit Name: Hanford coarse sandy loam 2 to 9% NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/> Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks: _____	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>5</u>)				
1. <u>ERI FAS</u>	<u>35</u>	<u>Y</u>	<u>UPL</u>	Prevalence Index worksheet:
2. <u>ART DRA</u>	<u>1</u>	<u>N</u>	<u>FACU</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: <u>5</u>)				
1. <u>HEL ANN</u>	<u>1</u>	<u>N</u>	<u>FACU</u>	Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species <u>2</u> x 4 = <u>8</u> UPL species <u>85</u> x 5 = <u>425</u> Column Totals: <u>87</u> (A) <u>433</u> (B) Prevalence Index = B/A = <u>5</u>
2. <u>BRO MAD</u>	<u>5</u>	<u>N</u>	<u>UPL</u>	
3. <u>BRO DIA</u>	<u>40</u>	<u>Y</u>	<u>UPL</u>	
4. <u>HET GIRA</u>	<u>5</u>	<u>N</u>	<u>UPL</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 ¹ ___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>30</u> % Cover of Biotic Crust _____				Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>
Remarks: _____				

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2	-	-	-	-	-	-	Organic plant matter	
2-14	10YR 3/3	100%	-	-	-	-	loamy sand	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) (LRR C)
- 2 cm Muck (A10) (LRR B)
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) (Nonriverine)
- Sediment Deposits (B2) (Nonriverine)
- Drift Deposits (B3) (Nonriverine)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) (Riverine)
- Sediment Deposits (B2) (Riverine)
- Drift Deposits (B3) (Riverine)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____
 Water Table Present? Yes _____ No Depth (inches): _____
 Saturation Present? Yes _____ No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Yucaipa Freeway City/County: Yucaipa Sampling Date: 01/18/23
 Applicant/Owner: _____ State: CA Sampling Point: WSP-3
 Investigator(s): Britney Schwitz, K Dayton Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): upland Local relief (concave, convex, none): _____ Slope (%): 0
 Subregion (LRR): C-mediterranean Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No _____ Hydric Soil Present? Yes _____ No _____ Wetland Hydrology Present? Yes _____ No _____	Is the Sampled Area within a Wetland? Yes _____ No _____
Remarks: <u>w/in SAL 600 community; no drainage feature present. Relic swale</u>	

VEGETATION – Use scientific names of plants.

Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30'</u>)				Dominance Test worksheet:
1. <u>Salix goodingii</u>	<u>50</u>	<u>Y</u>		Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
2. _____				Total Number of Dominant Species Across All Strata: _____ (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
4. _____				Prevalence Index worksheet:
	<u>50</u>		= Total Cover	Total % Cover of: _____ Multiply by: _____
Sapling/Shrub Stratum (Plot size: _____)				OBL species _____ x 1 = _____
1. <u>BAC SAL</u>	<u>5</u>	<u>Y</u>		FACW species _____ x 2 = _____
2. _____				FAC species _____ x 3 = _____
3. _____				FACU species _____ x 4 = _____
4. _____				UPL species _____ x 5 = _____
5. _____				Column Totals: _____ (A) _____ (B)
	<u>5</u>		= Total Cover	Prevalence Index = B/A = _____
Herb Stratum (Plot size: <u>5</u>)				Hydrophytic Vegetation Indicators:
1. <u>HIR INC</u>	<u>5</u>			<input type="checkbox"/> Dominance Test is >50%
2. <u>BRO MAD</u>	<u>90</u>	<u>Y</u>		<input type="checkbox"/> Prevalence Index is ≤3.0 ¹
3. <u>MAR VUL</u>	<u>5</u>			<input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4. _____				<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
5. _____				
6. _____				
7. _____				
8. _____				
	<u>100</u>		= Total Cover	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: _____)				Hydrophytic Vegetation Present? Yes _____ No _____
1. _____				
2. _____				
			= Total Cover	
% Bare Ground in Herb Stratum _____			% Cover of Biotic Crust _____	

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-1 1/2"	10YR 3/1	100%	—	—	—	—	Silty clay	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water Marks (B1) (Riverine)
	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Yuccaipa Freeway City/County: Yuccaipa Sampling Date: 1/10/23
 Applicant/Owner: _____ State: CA Sampling Point: WSP-4
 Investigator(s): B. Schultz, K. Dayton Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): drainage Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): C-Med. Terranean Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: Riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No _____ Hydric Soil Present? Yes _____ No _____ Wetland Hydrology Present? Yes _____ No _____	Is the Sampled Area within a Wetland? Yes _____ No _____
Remarks: <u>pit ~ 10' from NWN (OTNM), terrace down by Paracw</u>	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status		
1. <u>Parkinsonia aculeata</u>	<u>80</u>		<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)	
2. _____					
3. _____					
4. _____					
<u>80</u> = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
Sapling/Shrub Stratum (Plot size: <u>5</u>)	Absolute % Cover	Dominant Species?	Indicator Status		
1. <u>Mammillaria vivipara</u>	<u>1</u>				Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 ¹ ___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)
2. _____					
3. _____					
4. _____					
5. _____					
<u>1</u> = Total Cover				Hydrophytic Vegetation Present? Yes _____ No _____ <small>¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.</small>	
Herb Stratum (Plot size: <u>5</u>)	Absolute % Cover	Dominant Species?	Indicator Status		
1. <u>Hieracium</u>	<u>15</u>			Hydrophytic Vegetation Present? Yes _____ No _____	
2. <u>Bromus spp.</u>	<u>70</u>				
3. <u>Elymus bonariensis</u>	<u>3</u>				
<u>1</u> = Total Cover					
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status		
1. _____					
2. _____					
_____ = Total Cover					
% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____					

Remarks: _____

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16"	10YR 3/3	100	-	-	-	-	loamy sand	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) (LRR C)
- 2 cm Muck (A10) (LRR B)
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

- | | | |
|--|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) | <input type="checkbox"/> Water Marks (B1) (Riverine) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) | <input type="checkbox"/> Sediment Deposits (B2) (Riverine) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input type="checkbox"/> Drift Deposits (B3) (Riverine) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Thin Muck Surface (C7) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> FAC-Neutral Test (D5) |

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____
 Water Table Present? Yes _____ No Depth (inches): _____
 Saturation Present? (includes capillary fringe) Yes _____ No Depth (inches): _____

Wetland Hydrology Present? Yes _____ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Yucaipa Freeway City/County: Yucaipa Sampling Date: 1/18/23
 Applicant/Owner: _____ State: CA Sampling Point: WSP-5
 Investigator(s): B. Schultz, K. Dayton Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): _____ Slope (%): 30
 Subregion (LRR): C-mediterranean Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No _____ Hydric Soil Present? Yes _____ No _____ Wetland Hydrology Present? Yes _____ No _____	Is the Sampled Area within a Wetland? Yes _____ No _____
Remarks: <u>pit outside of Paracu comm. along upland slope</u>	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
				_____ = Total Cover
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
				_____ = Total Cover
Herb Stratum (Plot size: _____)				
1. <u>Erodium cic</u>	<u>80</u>	_____	_____	
2. <u>Bromus</u>	<u>10</u>	_____	_____	
3. <u>Ambrosia int</u>	<u>5</u>	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
				_____ = Total Cover
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
				_____ = Total Cover
% Bare Ground in Herb Stratum <u>10</u>	% Cover of Biotic Crust _____			
Remarks: _____				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
 Total Number of Dominant Species Across All Strata: _____ (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by: _____
 OBL species _____ x 1 = _____
 FACW species _____ x 2 = _____
 FAC species _____ x 3 = _____
 FACU species _____ x 4 = _____
 UPL species _____ x 5 = _____
 Column Totals: _____ (A) _____ (B)
 Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
 Dominance Test is >50%
 Prevalence Index is ≤3.0¹
 Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-10"	10R133	100	-	-	-	-	loamy sand	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) (LRR C) <input type="checkbox"/> 1 cm Muck (A9) (LRR D) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Vernal Pools (F9)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> 1 cm Muck (A9) (LRR C) <input type="checkbox"/> 2 cm Muck (A10) (LRR B) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)
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³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>
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Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) (Nonriverine) <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Biotic Crust (B12) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)

<input type="checkbox"/> Water Marks (B1) (Riverine) <input type="checkbox"/> Sediment Deposits (B2) (Riverine) <input type="checkbox"/> Drift Deposits (B3) (Riverine) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)	Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)
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Wetland Hydrology Present? Yes _____ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

WSP-6

Project/Site: Freeway Corridor City/County: Yuba / San Bernardino Sampling Date: _____
 Applicant/Owner: _____ State: CA Sampling Point: _____
 Investigator(s): A. Cassidy; S. Lippert; M. Correa Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/> Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks: _____	

VEGETATION – Use scientific names of plants.

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30'</u>)					
1.	<u>N/A</u>				
2.					
3.					
4.					
<u>0</u> = Total Cover					
Sapling/Shrub Stratum (Plot size: <u>30'</u>)					
1.	<u>Baccharis salicifolia</u>	<u>35</u>	<u>yes</u>	<u>FAC</u>	
2.	<u>Nicotiana glauca</u>	<u>5</u>	<u>no</u>	<u>FAC</u>	
3.					
4.					
5.					
<u>40</u> = Total Cover					
Herb Stratum (Plot size: <u>5'</u>)					
1.	<u>Hirschfeldia incana</u>	<u>2</u>	<u>no</u>	<u>UPL</u>	
2.	<u>Marubium vulgare</u>	<u>5</u>	<u>yes</u>	<u>FACU</u>	
3.					
4.					
5.					
6.					
7.					
8.					
<u>7</u> = Total Cover					
Woody Vine Stratum (Plot size: _____)					
1.	<u>N/A</u>				
2.					
_____ = Total Cover					
% Bare Ground in Herb Stratum <u>95</u>		% Cover of Biotic Crust <u>0</u>			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = _____
FACW species <u>0</u>	x 2 = _____
FAC species <u>40</u>	x 3 = <u>120</u>
FACU species <u>5</u>	x 4 = <u>20</u>
UPL species <u>2</u>	x 5 = <u>10</u>
Column Totals: <u>47</u> (A)	<u>150</u> (B)

Prevalence Index = B/A = 3.19

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%
 ___ Prevalence Index is ≤3.0¹
 ___ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No

Remarks: _____

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features			Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹		
0-8	10 YR 4/4	100	N/A	0		sand	
8-16	7.5YR 5/6	100	N/A	0		sand	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input checked="" type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input checked="" type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input checked="" type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Salt Crust (B11)	
<input type="checkbox"/> Biotic Crust (B12)	
<input type="checkbox"/> Aquatic Invertebrates (B13)	
<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	
<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	
<input type="checkbox"/> Presence of Reduced Iron (C4)	
<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	
<input type="checkbox"/> Thin Muck Surface (C7)	
<input type="checkbox"/> Other (Explain in Remarks)	

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? Yes _____ No _____ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Yucaipa Freeway City/County: San Bernardino County Sampling Date: 2023-01-19
 Applicant/Owner: _____ State: California Sampling Point: **WSP-7**
 Investigator(s): DA, KD Section, Township, Range: S00 T2S R2W
 Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Undulating Slope (%): 0
 Subregion (LRR): C 19 Lat: 34.0148825 Long: -117.1029074 Datum: WGS 84
 Soil Map Unit Name: ScC - San Emigdio fine sandy loam, 2 to 9 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/> Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks: _____ _____ _____	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Parkinsonia aculeata</u>	<u>35</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.3</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>35%</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>5 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>35</u> x 3 = <u>105</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>50</u> x 5 = <u>250</u> Column Totals: <u>85</u> (A) <u>355</u> (B) Prevalence Index = B/A = <u>4.18</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: <u>5 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Hirschfeldia incana</u>	<u>25</u>	<input checked="" type="checkbox"/>	<u>UPL</u>	Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 ¹ ___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Raphanus raphanistrum</u>	<u>25</u>	<input checked="" type="checkbox"/>	<u>UPL</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>50%</u> = Total Cover				
Woody Vine Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____				

Remarks:
Hydrophytic vegetation here is a result of water input from nearby stream which has blown out bank wall. Parkinsonia an non-native species which has been naturalized, occupies mesic areas.

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 2	10YR 3/2	100					Sand	This layer seems recently deposited
2 - 8	10YR 4/3	100					Sandy Loam	
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) (LRR C)
- 2 cm Muck (A10) (LRR B)
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Hard soils
 Depth (inches): 8

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) (Nonriverine)
- Sediment Deposits (B2) (Nonriverine)
- Drift Deposits (B3) (Nonriverine)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) (Riverine)
- Sediment Deposits (B2) (Riverine)
- Drift Deposits (B3) (Riverine)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? (includes capillary fringe) Yes No Depth (inches): 0

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Hydrology seems to be result of overflowing feature nearby, all deposited materials appear to be from recent rain storms

Appendix D

Review Area Photos



Photo Number 1. View of Transect (T)-01 collected at Non-Wetland Water (NWW)-3, facing northwest.



Photo Number 2. View of wetland sample point (WSP)-1a collected at NWW-3.



Photo Number 3. View of WSP 1b collected adjacent to NWW-3.



Photo Number 4. View of T-02 collected at NWW-3, facing east.



Photo Number 5. View of WSP-2a collected at NWW-3.



Photo Number 6. View of WSP 2b collected at NWW-3.



Photo Number 7. View of WSP 3 taken within a Goodding's willow – red willow riparian woodland and forest. The sample area did not meet the hydric soil parameter.



Photo Number 8. View of area north of NWW-3, facing east.



Photo Number 9. View of cattle grazing disturbance north of Interstate (I)-10, facing west.



Photo Number 10. View of T-03 collected at NWW-5, facing east.



Photo Number 11. View of WSP-4 collected at NWW-5, facing east.



Photo Number 12. View of WSP 5 collected at NWW-5.

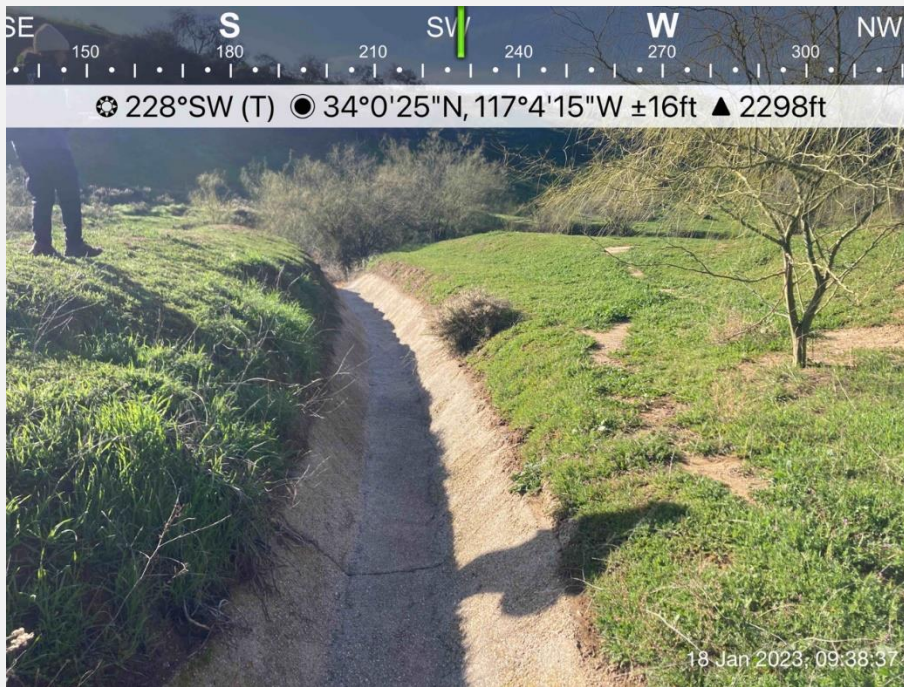


Photo Number 13. View of T-04 collected at engineered trapezoidal portion of NWW-5, facing southwest.

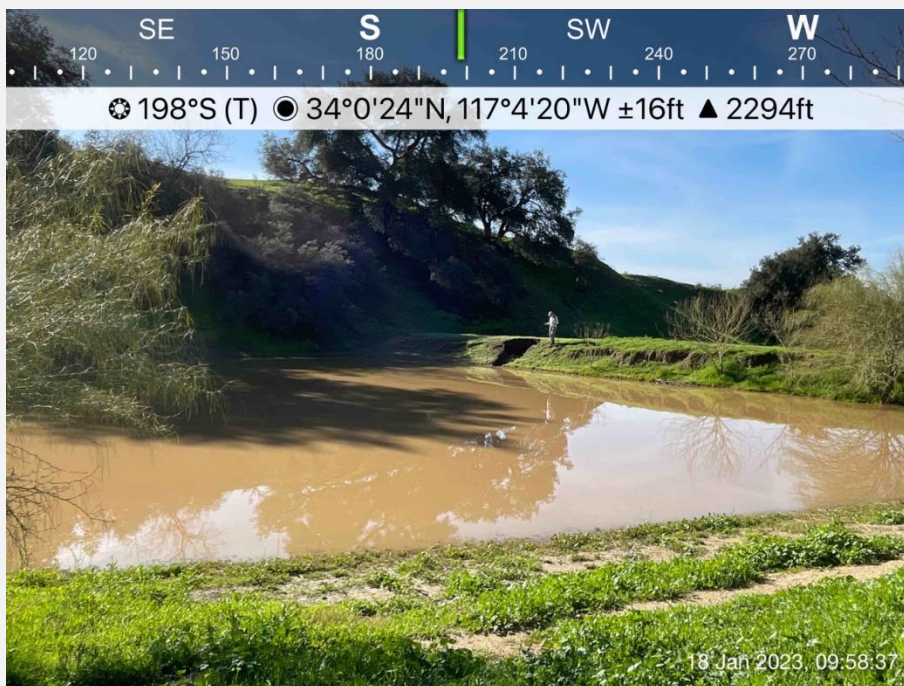


Photo Number 14. View of human-made basin in NWW-5, facing south/southwest.



Photo Number 15. View of non-jurisdictional swale feature. Photo in southeast portion of the review area, facing southwest/west.



Photo Number 16. View of T-05 collected at NWW-1, facing west.



Photo Number 17. View of WSP 6 taken within NWW-1.



Photo Number 18. View of T-06 collected at a non-jurisdictional upland swale, facing east.

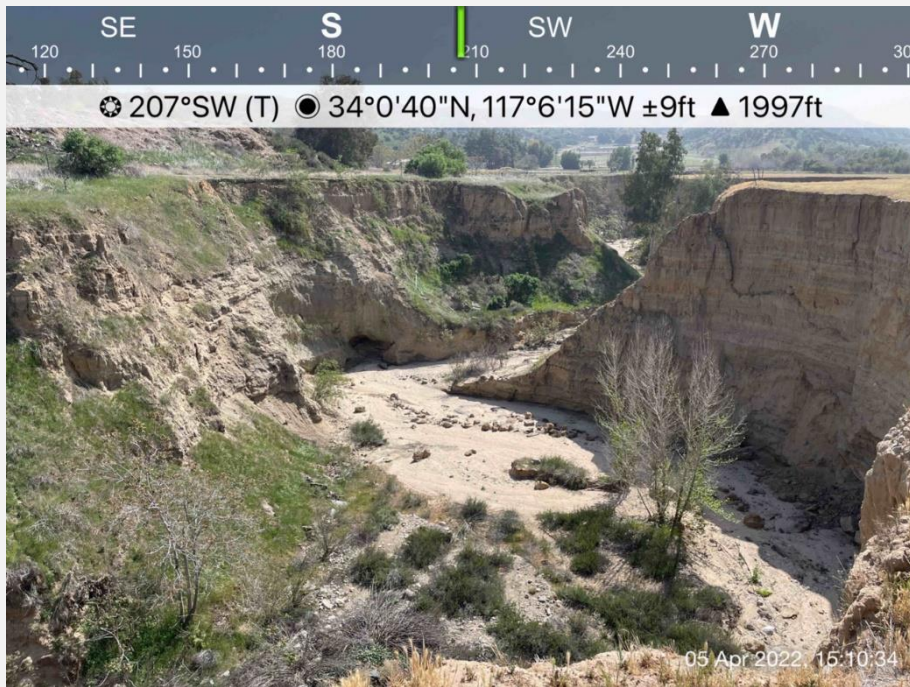


Photo Number 19. View of T-07 collected on NWW-1, facing south-southwest.

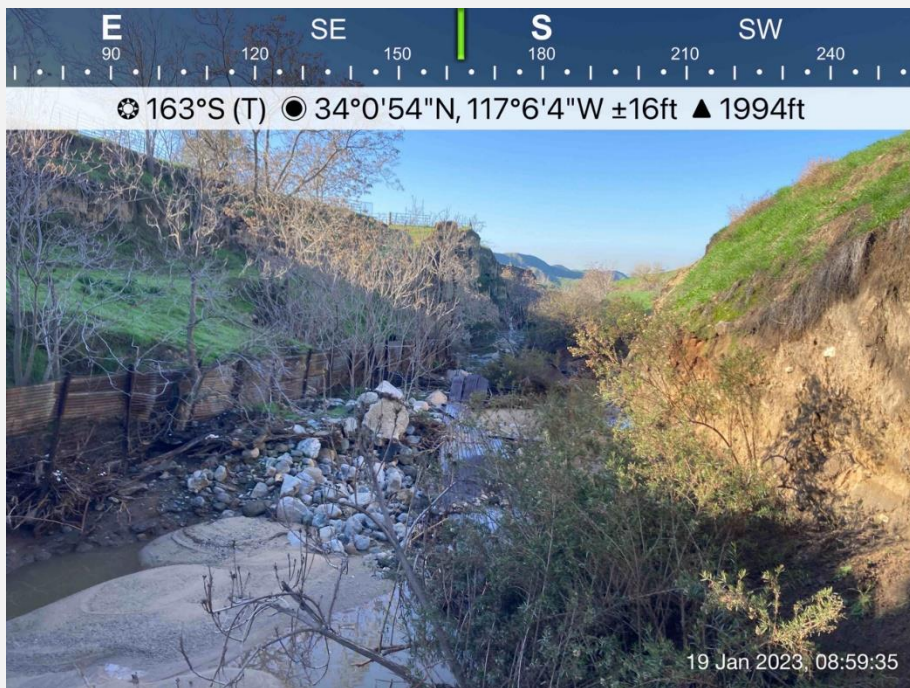


Photo Number 20. View of T-08 collected on NWW-2, facing southeast-south.

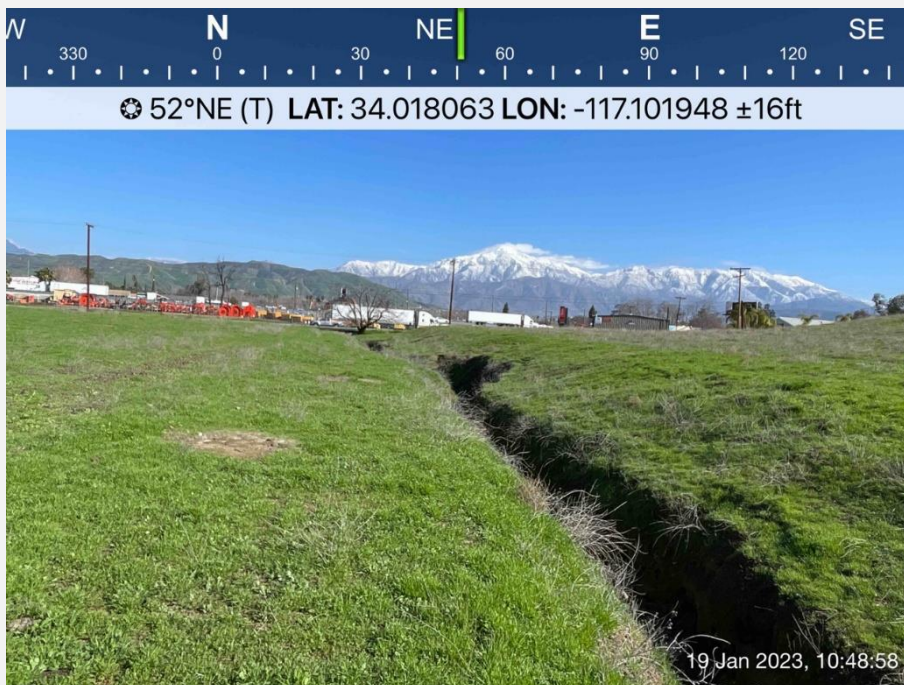


Photo Number 21. View of T-09 collected at NWW-4, facing northeast.



Photo Number 22. View of WSP 7 sample area, facing east.



Photo Number 23. View of area near southern border of the review area. No features present.

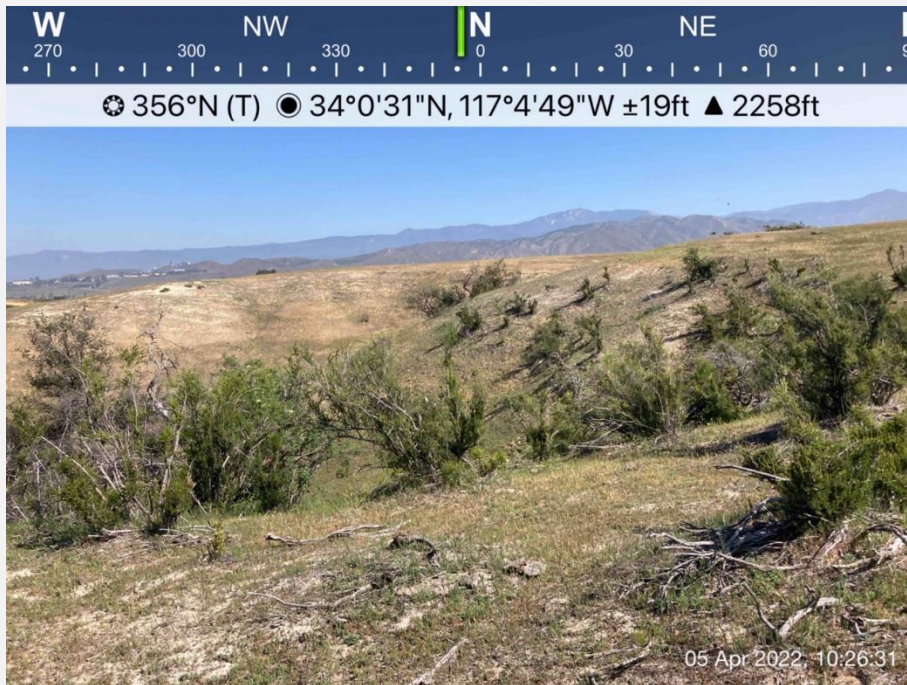


Photo Number 24. Overview of eastern portion of the review area. No features present.



Photo Number 25. Overview of eastern portion of the review area. No features present.



Photo Number 26. View of non-jurisdictional upland swale, facing southeast.



Photo Number 27. View of non-jurisdictional upland swale near the southern review area boundary, facing east.



Photo Number 28. View of non-jurisdictional upland swale, facing west.



Photo Number 29. View of non-jurisdictional upland swale, facing west.

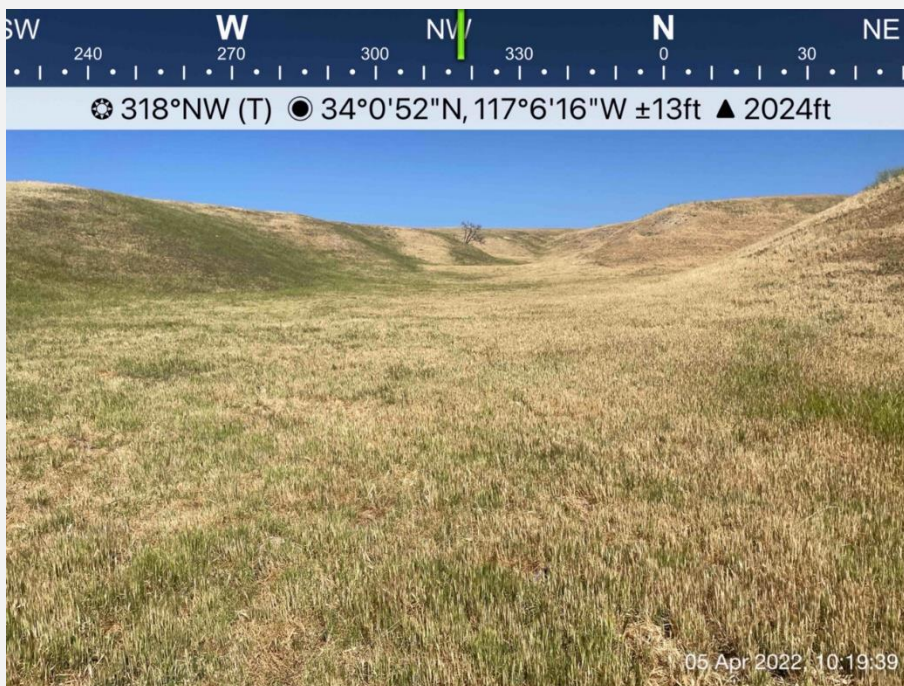


Photo Number 30. View of area northeast of NWW-2. No features present.

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Appendix C

Photo Documentation

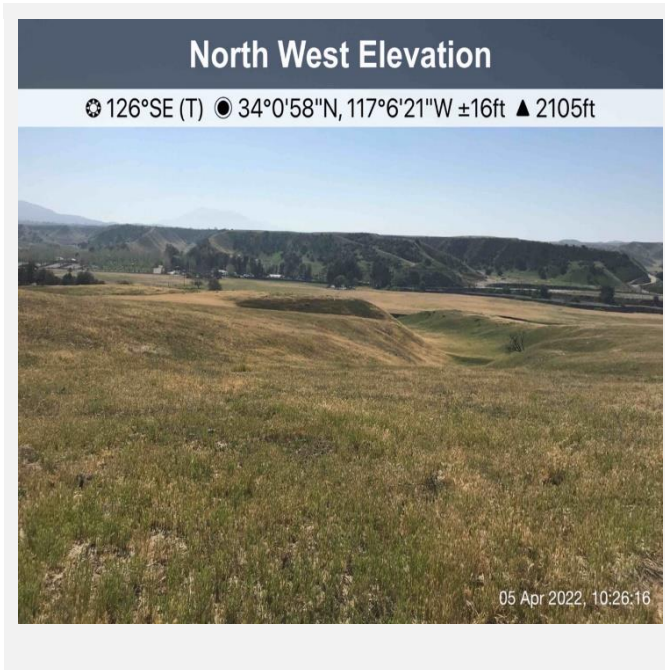


Photo 1. View of non-native grassland in the northwestern portion of the Project site, facing southeast.

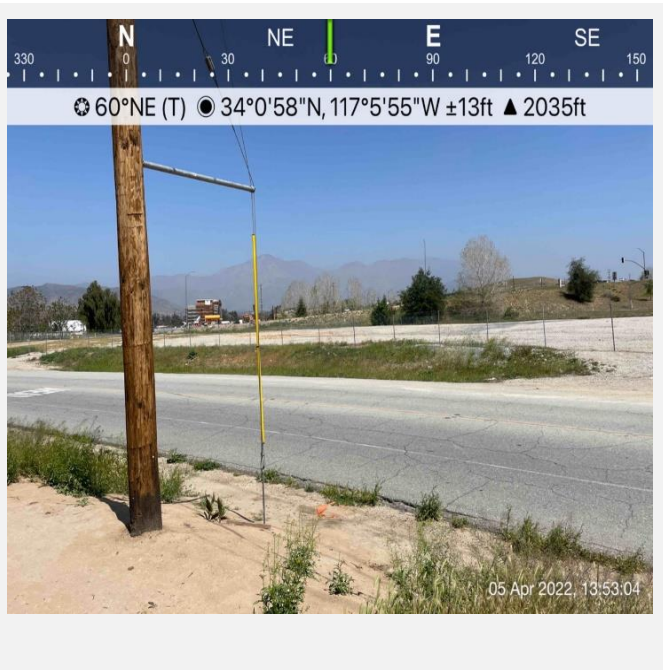


Photo 2. View of paved road in northwestern portion of the Project site, facing northeast.



Photo 3. View of non-native grassland and ditch in the northern portion of the Project site, facing south.



Photo 4. View of riparian scrub vegetation in the northern portion of the Project site, facing east.



Photo 5. View of paved road, non-native grassland, and scattered trees in northern portion of the Project site, facing north.

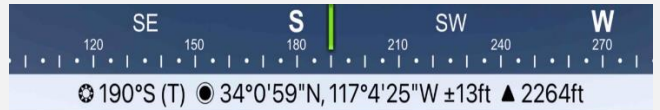


Photo 6. View of Yucaipa Creek in the northern east portion of the Project site, facing south.



Photo 7. View of Glen Oak Creek and non-native grassland in western portion of Project site, facing southwest.



Photo 8. View of Yucaipa Creek and riparian scrub vegetation in the western portion of the Project site, facing east.

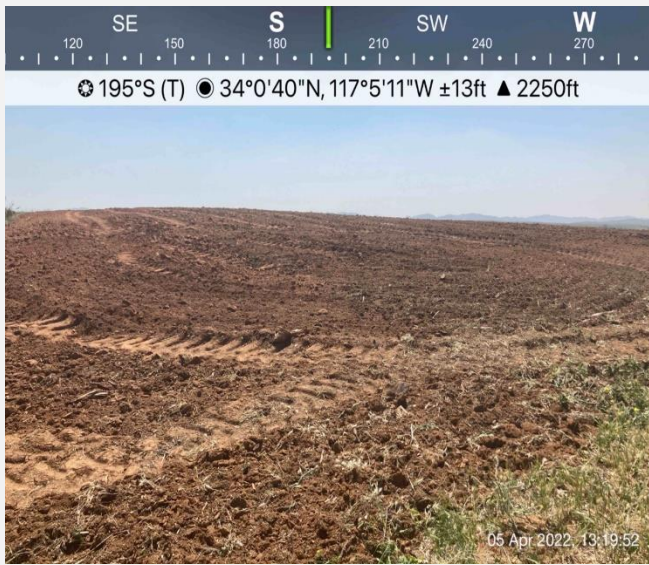


Photo 9. View of disturbed habitat in the central portion of the Project site, facing south.

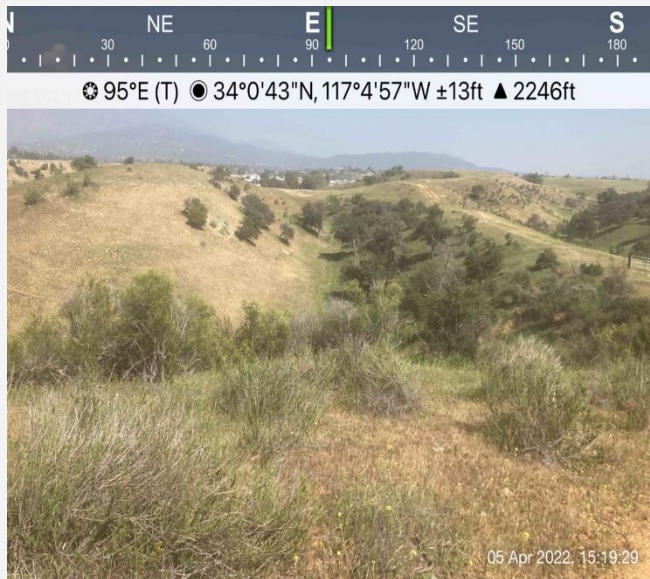


Photo 10. View of non-native grassland and coast live oak woodland in the central portion of the Project site, facing east.



Photo 11. View of disturbed habitat and ditch in the western portion of the Project site, facing west.



Photo 12. View of disturbed habitat in western portion of the Project site, facing west.



Photo 13. View of ephemeral channel and chamise chaparral vegetation in the central portion of the Project site, facing southeast.



Photo 14. View of non-native grassland vegetation and developed area in the central portion of the Project site, facing south.



Photo 15. View of agriculture area in the central portion of the Project site, facing west.



Photo 16. View of flat top mesa area next to sloped, burnt land in the eastern portion of the Project site, facing southeast.



Photo 17. View of fence, dirt road, and non-native grassland in the western portion of the Project site, facing southwest.



Photo 18. View of hillslope of California buckwheat in the southern portion of the Project site, facing northwest.



Photo 19. View of non-native grassland in the southern portion of the Project site, facing north.



Photo 20. View of chamise-sage chaparral in the southern portion of the Project site, facing northwest.



Photo 21. View of unvegetated wash in Yucaipa Creek in the northeastern portion of the Project site, facing west.



Photo 22. View of non-native grassland habitat in northeastern portion of Project site, facing west.



Photo 23. View of coast live oak woodland, non-native grassland, and developed area in background. Photo taken in eastern portion of the Project site, facing north.



Photo 24. View of trail in non-native grassland habitat in eastern portion of Project site, facing northwest.



Photo 25. View of non-native grassland habitat in southeast portion of Project site, facing east.



Photo 26. View of oak woodland and non-native grassland in southeast portion of Project site, facing east.

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Appendix D

Plants Compendium

Vascular Species

Eudicots

AMARANTHACEAE – AMARANTH FAMILY

Amaranthus blitoides – mat amaranth

ANACARDIACEAE – SUMAC OR CASHEW FAMILY

Rhus aromatica – skunkbush sumac

Rhus ovata – sugarbush

* *Schinus molle* – Peruvian peppertree

Toxicodendron diversilobum – poison oak

APIACEAE – CARROT FAMILY

* *Anthriscus caucalis* – bur chervil

Apiastrum angustifolium – mock parsley

* *Conium maculatum* – poison hemlock

Daucus pusillus – American wild carrot

Yabea microcarpa – false carrot

APOCYNACEAE – DOGBANE FAMILY

Asclepias fascicularis – Mexican whorled milkweed

ASTERACEAE – SUNFLOWER FAMILY

Acourtia microcephala – sacapellote

Ambrosia acanthicarpa – flatspine bur ragweed

Ambrosia psilostachya – western ragweed

Ancistrocarphus filagineus – false neststraw

Artemisia californica – California sagebrush

Artemisia douglasiana – Douglas' sagewort

Artemisia dracunculus – wild tarragon

Baccharis salicifolia ssp. *salicifolia* – mulefat

Baccharis salicifolia – mulefat

* *Carduus pycnocephalus* ssp. *pycnocephalus* – Italian plumeless thistle

* *Carduus pycnocephalus* – Italian plumeless thistle

* *Centaurea melitensis* – Maltese star-thistle

* *Cirsium vulgare* – bull thistle

Corethrogyne filaginifolia – sand-aster

Deinandra fasciculata – clustered tarweed

Encelia farinosa – brittle bush

Ericameria palmeri var. *pachylepis* – Palmer's rabbitbrush

- Ericameria parryi* – Parry's rabbitbrush
Ericameria pinifolia – pinebush
Erigeron canadensis – Canadian horseweed
Erigeron foliosus var. *foliosus* – leafy fleabane
Eriophyllum confertiflorum var. *confertiflorum* – golden-yarrow
Eriophyllum confertiflorum – golden-yarrow
Gnaphalium palustre – western marsh cudweed
Gutierrezia sarothrae – broom snakeweed
* *Hedypnois rhagadioloides* – crete weed
Helianthus annuus – common sunflower
Helianthus gracilentus – slender sunflower
Heterotheca grandiflora – telegraphweed
Heterotheca sessiliflora – sessileflower false goldenaster
Isocoma menziesii var. *menziesii* – Menzies' goldenbush
* *Lactuca serriola* – prickly lettuce
Lepidospartum squamatum – scale broom
* *Logfia gallica* – narrowleaf cottonrose
Malacothrix saxatilis var. *commutata* – cliff desertdandelion
Malacothrix saxatilis – cliff desertdandelion
Matricaria discoidea – disc mayweed
* *Oncosiphon pilulifer* – stinknet
Pseudognaphalium biolettii – two-color rabbit-tobacco
Pseudognaphalium californicum – ladies' tobacco
* *Pseudognaphalium luteoalbum* – Jersey cudweed
Rafinesquia californica – California plumeseed
* *Sonchus oleraceus* – common sowthistle
Stephanomeria exigua – small wirelettuce
Tetradymia comosa – hairy horsebrush
Tetradymia stenolepis – Mojave cottonthorn
Uropappus lindleyi – Lindley's silverpuffs
Xanthium strumarium – cocklebur

BORAGINACEAE – BORAGE FAMILY

- Amsinckia intermedia* – common fiddleneck
Amsinckia menziesii – Menzies' fiddleneck
Amsinckia retrorsa – Menzies' fiddleneck
Cryptantha intermedia – Clearwater cryptantha
Cryptantha microstachys – Tejon cryptantha
Emmenanthe penduliflora – whisperingbells
Eucrypta chrysanthemifolia – spotted hideseed
Heliotropium curassavicum var. *oculatum* – seaside heliotrope

Nemophila menziesii – baby blue eyes
Pectocarya penicillata – sleeping combseed
Phacelia cicutaria var. *hispida* – caterpillar phacelia
Phacelia cicutaria – caterpillar phacelia
Phacelia distans – distant phacelia
Phacelia minor – wild Canterbury bells
Phacelia ramosissima – branching phacelia
Phacelia tanacetifolia – lacy phacelia
Plagiobothrys canescens – valley popcornflower

BRASSICACEAE – MUSTARD FAMILY

- * *Brassica nigra* – black mustard
- * *Brassica tournefortii* – Tournefort’s mustard
- * *Capsella bursa-pastoris* – shepherd’s purse
- * *Hirschfeldia incana* – shortpod mustard
- * *Lepidium didymum* – lesser swinecress
- * *Lepidium latifolium* – perennial pepper weed
- * *Raphanus sativus* – cultivated radish
- * *Sisymbrium irio* – London rocket
- * *Sisymbrium officinale* – hedgemustard
- * *Sisymbrium orientale* – Indian hedgemustard

CACTACEAE – CACTUS FAMILY

Cylindropuntia bernardina – brownspined pricklypear
Opuntia littoralis – coast prickly pear

CAPRIFOLIACEAE – HONEYSUCKLE FAMILY

Lonicera interrupta – chaparral honeysuckle
Lonicera subspicata var. *denudata* – Santa Barbara honeysuckle

CARYOPHYLLACEAE – PINK FAMILY

- Cardionema ramosissimum* – sandcarpet
- * *Herniaria hirsuta* – hairy rupturewort
 - * *Polycarpon tetraphyllum* – fourleaf manyseed
 - * *Stellaria media* – common chickweed

CHENOPODIACEAE – GOOSEFOOT FAMILY

- Atriplex canescens* – fourwing saltbush
- * *Atriplex semibaccata* – Australian saltbush
 - * *Chenopodium album* – lambsquarters
- Chenopodium berlandieri* – pitseed goosefoot
Chenopodium californicum – California goosefoot

- * *Chenopodium murale* – nettleleaf goosefoot
- * *Salsola tragus* – prickly Russian thistle

CONVOLVULACEAE – MORNING-GLORY FAMILY

- * *Convolvulus arvensis* – field bindweed
- Cuscuta californica* – chaparral dodder

CUCURBITACEAE – GOURD FAMILY

- Cucurbita foetidissima* – Missouri gourd
- Marah macrocarpa* – Cucamonga manroot

EUPHORBIACEAE – SPURGE FAMILY

- Croton setiger* – dove weed
- Euphorbia albomarginata* – whitemargin sandmat
- * *Ricinus communis* – castorbean

FABACEAE – LEGUME FAMILY

- Acmispon americanus* – Spanish clover
- Acmispon glaber* var. *brevialatus* – western bird's-foot trefoil
- Acmispon glaber* var. *glaber* – common deerweed
- Acmispon glaber* – deer weed
- Acmispon maritimus* – coastal bird's-foot trefoil
- Acmispon wrangelianus* – Chilean bird's-foot trefoil
- Astragalus nuttallianus* – smallflowered milkvetch
- Astragalus pomonensis* – Pomona milkvetch
- Lupinus bicolor* – miniature lupine
- Lupinus hirsutissimus* – stinging annual lupine
- Lupinus microcarpus* var. *densiflorus* – whitewhorl lupine
- Lupinus microcarpus* – valley lupine
- * *Medicago polymorpha* – burclover
- * *Medicago sativa* – alfalfa
- * *Melilotus indicus* – annual yellow sweetclover
- * *Parkinsonia aculeata* – Jerusalem thorn
- Prosopis glandulosa* var. *torreyana* – western honey mesquite
- * *Robinia pseudoacacia* – black locust
- * *Spartium junceum* – Spanish broom
- * *Trifolium hirtum* – rose clover
- * *Vicia villosa* ssp. *villosa* – winter vetch
- * *Vicia villosa* – winter vetch

FAGACEAE – OAK FAMILY

- Quercus agrifolia* – coast live oak
- Quercus berberidifolia* – Inland scrub oak

GERANIACEAE – GERANIUM FAMILY

- * *Erodium botrys* – longbeak stork's bill
- * *Erodium brachycarpum* – shortfruit stork's bill
- * *Erodium cicutarium* – redstem stork's bill
- * *Erodium moschatum* – musky stork's bill

JUGLANDACEAE – WALNUT FAMILY

- Juglans californica* – Southern California black walnut

LAMIACEAE – MINT FAMILY

- * *Marrubium vulgare* – horehound
- Salvia mellifera* – black sage
- Trichostema lanceolatum* – vinegarweed

MALVACEAE – MALLOW FAMILY

- Malacothamnus fasciculatus* – bush mallow
- * *Malva parviflora* – cheeseweed mallow

MONTIACEAE – MONTIA FAMILY

- Calandrinia menziesii* – red maids
- Montia linearis* – narrowleaf minerslettuce

MYRSINACEAE – MYRSINE FAMILY

- * *Lysimachia arvensis* – scarlet pimpernel

MYRTACEAE – MYRTLE FAMILY

- * *Eucalyptus camaldulensis* – river redgum
- * *Eucalyptus polyanthemus* – redbox

NYCTAGINACEAE – FOUR O'CLOCK FAMILY

- Mirabilis laevis* – desert wishbone-bush

OLEACEAE – OLIVE FAMILY

- Fraxinus velutina* – velvet ash

ONAGRACEAE – EVENING PRIMROSE FAMILY

- Camissoniopsis bistorta* – southern suncup
- Clarkia dudleyana* – Dudley's clarkia
- Clarkia purpurea* ssp. *quadrivulnera* – winecup clarkia

Clarkia purpurea – winecup clarkia

Eulobus californicus – California suncup

OXALIDACEAE – OXALIS FAMILY

Oxalis californica – California woodsorrel

PAPAVERACEAE – POPPY FAMILY

Argemone munita – flatbud pricklypoppy

Ehrendorferia chrysantha – golden eardrops

Eschscholzia californica – California poppy

PHRYMACEAE – LOPSEED FAMILY

Diplacus aurantiacus – bush monkeyflower

PLANTAGINACEAE – PLANTAIN FAMILY

Keckiella antirrhinoides var. *antirrhinoides* – snapdragon penstemon

Keckiella antirrhinoides – bush penstemon

Keckiella cordifolia – heartleaf keckiella

Plantago erecta – dwarf plantain

* *Plantago major* – common plantain

PLATANACEAE – PLANE TREE, SYCAMORE FAMILY

Platanus racemosa – California sycamore

POLEMONIACEAE – PHLOX FAMILY

Navarretia atractyloides – hollyleaf pincushionplant

POLYGONACEAE – BUCKWHEAT FAMILY

Eriogonum elongatum var. *elongatum* – longstem buckwheat

Eriogonum fasciculatum var. *fasciculatum* – California buckwheat

Eriogonum fasciculatum var. *foliolosum* – California buckwheat

Eriogonum fasciculatum var. *polifolium* – California buckwheat

Eriogonum fasciculatum – California buckwheat

* *Polygonum aviculare* – prostrate knotweed

* *Rumex pulcher* – fiddle dock

PORTULACACEAE – PURSLANE FAMILY

* *Portulaca oleracea* – little hogweed

RANUNCULACEAE – BUTTERCUP FAMILY

Delphinium parryi ssp. *parryi* – San Bernardino larkspur

RHAMNACEAE – BUCKTHORN FAMILY

- Ceanothus crassifolius* – hoary leaf ceanothus
- Ceanothus oliganthus* – hairy leaf ceanothus
- Ceanothus tomentosus* – woolly leaf ceanothus
- Rhamnus crocea* – redberry buckthorn

ROSACEAE – ROSE FAMILY

- Adenostoma fasciculatum* – chamise
- Cercocarpus betuloides* – birch leaf mountain mahogany
- Heteromeles arbutifolia* – toyon
- Prunus ilicifolia* ssp. *ilicifolia* – mainland cherry

RUBIACEAE – MADDER FAMILY

- Galium angustifolium* ssp. *angustifolium* – narrowleaf bedstraw
- Galium aparine* – stickywilly

SALICACEAE – WILLOW FAMILY

- Populus fremontii* ssp. *fremontii* – Fremont cottonwood
- Populus fremontii* – Fremont cottonwood
- Salix gooddingii* – Goodding's willow

SIMAROUBACEAE – QUASSIA OR SIMAROUBA FAMILY

- * *Ailanthus altissima* – tree of heaven

SOLANACEAE – NIGHTSHADE FAMILY

- Datura wrightii* – sacred thorn-apple
- * *Nicotiana glauca* – tree tobacco
- Nicotiana quadrivalvis* – Indian tobacco
- * *Solanum elaeagnifolium* – silverleaf nightshade
- Solanum umbelliferum* – bluewitch nightshade
- Solanum xanti* – Purple nightshade

TAMARICACEAE – TAMARISK FAMILY

- * *Tamarix ramosissima* – tamarisk

URTICACEAE – NETTLE FAMILY

- Hesperocnide tenella* – western stingingnettle
- Parietaria hespera* – rillita pellitory
- * *Urtica urens* – dwarf nettle

VERBENACEAE – VERVAIN FAMILY

Verbena lasiostachys var. *lasiostachys* – western vervain

Verbena lasiostachys – western vervain

VIBURNACEAE – MUSKROOT FAMILY

Sambucus mexicana – blue elderberry

VIOLACEAE – VIOLET FAMILY

Viola pedunculata – Johnny-jump-up

ZYGOPHYLLACEAE – CALTROP FAMILY

* *Tribulus terrestris* – puncturevine

Ferns and Fern Allies

PTERIDACEAE – BRAKE FAMILY

Pellaea andromedifolia – coffee cliffbrake

Gymnosperms and Gnetophytes

CUPRESSACEAE – CYPRESS FAMILY

* *Cupressus sempervirens* – Italian cypress

PINACEAE – PINE FAMILY

* *Pinus halepensis* – aleppo pine

Monocots

AGAVACEAE – AGAVE FAMILY

Chlorogalum pomeridianum – wavyleaf soap plant

Hesperoyucca whipplei – chaparral yucca

ARECACEAE – PALM FAMILY

Washingtonia filifera – California fan palm

* *Washingtonia robusta* – Washington fan palm

CYPERACEAE – SEDGE FAMILY

* *Cyperus involucratus* – umbrella plant

LILIACEAE – LILY FAMILY

Calochortus concolor – goldenbowl mariposa lily

Calochortus splendens – splendid mariposa lily

POACEAE – GRASS FAMILY

- * *Avena barbata* – slender oat
- * *Avena fatua* – wild oat
- * *Brachypodium distachyon* – purple false brome
- * *Bromus catharticus* – rescuegrass
- * *Bromus diandrus* – ripgut brome
- * *Bromus hordeaceus* – soft brome
- * *Bromus madritensis* – compact brome
- * *Bromus rubens* – red brome
- * *Bromus tectorum* – cheatgrass
- * *Cynodon dactylon* – Bermudagrass
- Elymus condensatus* – giant wild rye
- Festuca microstachys* – small fescue
- * *Festuca myuros* – rat-tail fescue
- * *Festuca perennis* – perennial rye grass
- * *Hordeum murinum* – mouse barley
- * *Hordeum vulgare* – common barley
- Melica imperfecta* – smallflower melicgrass
- * *Poa annua* – annual bluegrass
- * *Schismus barbatus* – common Mediterranean grass
- * *Stipa miliacea* var. *miliacea* – smilgrass
- * *Triticum aestivum* – common wheat

THEMIDACEAE – BRODIAEA FAMILY

- Bloomeria crocea* var. *crocea* – common goldenstar
- Bloomeria crocea* – common goldenstar
- Dipterostemon capitatus* – bluedicks

- * Signifies introduced (non-native) species.

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Appendix E

Wildlife Compendium

Birds

Blackbirds, Orioles, and Allies

ICTERIDAE – BLACKBIRDS

- Icterus bullockii* – Bullock's oriole
- Icterus cucullatus* – hooded oriole
- Sturnella neglecta* – western meadowlark

Bushtits

AEGITHALIDAE – LONG-TAILED TITS AND BUSHTITS

- Psaltriparus minimus* – bushtit

Cardinals, Grosbeaks, and Allies

CARDINALIDAE – CARDINALS AND ALLIES

- Pheucticus melanocephalus* – black-headed grosbeak

Falcons

FALCONIDAE – CARACARAS AND FALCONS

- Falco sparverius* – American kestrel

Finches

FRINGILLIDAE – FRINGILLINE AND CARDUELINE FINCHES AND ALLIES

- Haemorhous mexicanus* – house finch
- Spinus lawrencei* – Lawrence's goldfinch
- Spinus psaltria* – lesser goldfinch

Flycatchers

TYRANNIDAE – TYRANT FLYCATCHERS

- Myiarchus cinerascens* – ash-throated flycatcher
- Sayornis nigricans* – black phoebe
- Sayornis saya* – Say's phoebe
- Tyrannus verticalis* – western kingbird
- Tyrannus vociferans* – Cassin's kingbird

Hawks

ACCIPITRIDAE – HAWKS, KITES, EAGLES, AND ALLIES

- Accipiter cooperii* – Cooper's hawk
- Buteo jamaicensis* – red-tailed hawk
- Buteo lineatus* – red-shouldered hawk
- Haliaeetus leucocephalus* – bald eagle

Hummingbirds

TROCHILIDAE – HUMMINGBIRDS

- Calypte anna* – Anna's hummingbird
- Selasphorus sasin* – Allen's hummingbird

Jays, Magpies, and Crows

CORVIDAE – CROWS AND JAYS

- Aphelocoma californica* – California scrub-jay
- Corvus brachyrhynchos* – American crow
- Corvus corax* – common raven

Larks

ALAUDIDAE – LARKS

- Eremophila alpestris* – horned lark

Mockingbirds and Thrashers

MIMIDAE – MOCKINGBIRDS AND THRASHERS

- Mimus polyglottos* – northern mockingbird
- Toxostoma redivivum* – California thrasher

New World Quail

ODONTOPHORIDAE – NEW WORLD QUAIL

- Callipepla californica* – California quail

New World Vultures

CATHARTIDAE – NEW WORLD VULTURES

- Cathartes aura* – turkey vulture

Old World Sparrows

PASSERIDAE – OLD WORLD SPARROWS

- * *Passer domesticus* – house sparrow

Old World Warblers and Gnatcatchers

POLIOPTILIDAE – GNATCATCHERS

- Polioptila caerulea* – blue-gray gnatcatcher

Owls

TYTONIDAE – BARN OWLS

- Tyto alba* – barn owl

STRIGIDAE – TYPICAL OWLS

- Bubo virginianus* – great horned owl

Pigeons and Doves

COLUMBIDAE – PIGEONS AND DOVES

- Zenaida macroura* – mourning dove

Roadrunners and Cuckoos

CUCULIDAE – CUCKOOS, ROADRUNNERS, AND ANIS

- Geococcyx californianus* – greater roadrunner

Silky Flycatchers

PTILOGONATIDAE – SILKY-FLYCATCHERS

- Phainopepla nitens* – phainopepla

Starlings and Allies

STURNIDAE – STARLINGS

- * *Sturnus vulgaris* – European starling

Swallows

HIRUNDINIDAE – SWALLOWS

Hirundo rustica – barn swallow

Petrochelidon pyrrhonota – cliff swallow

Stelgidopteryx serripennis – northern rough-winged swallow

Swifts

APODIDAE – SWIFTS

Aeronautes saxatalis – white-throated swift

Thrushes

TURDIDAE – THRUSHES

Sialia mexicana – western bluebird

Wood Warblers and Allies

PARULIDAE – WOOD-WARBLERS

Setophaga coronata – yellow-rumped warbler

Setophaga petechia – yellow warbler

Woodpeckers

PICIDAE – WOODPECKERS AND ALLIES

Melanerpes formicivorus – acorn woodpecker

Dryobates nuttallii – Nuttall's woodpecker

Wrens

TROGLODYTIDAE – WRENS

Salpinctes obsoletus – rock wren

Troglodytes aedon – house wren

New World Sparrows

PASSERELLIDAE – NEW WORLD SPARROWS

Aimophila ruficeps – rufous-crowned sparrow

Chondestes grammacus – lark sparrow

Melospiza melodia – song sparrow

Melospiza crissalis – California towhee

Passerculus sandwichensis – savannah sparrow

Pipilo maculatus – spotted towhee

Zonotrichia leucophrys – white-crowned sparrow

Mammals

Canids

CANIDAE – WOLVES AND FOXES

Canis latrans – coyote

Hares and Rabbits

LEPORIDAE – HARES AND RABBITS

Sylvilagus audubonii – desert cottontail

Sylvilagus bachmani – brush rabbit

Squirrels

SCIURIDAE – SQUIRRELS

Otospermophilus beecheyi – California ground squirrel

Raccoons

PROCYONIDAE – RACCOONS AND RELATIVES

Procyon lotor – northern raccoon

Reptiles

Lizards

PHRYNOSOMATIDAE – IGUANID LIZARDS

Sceloporus occidentalis – western fence lizard

Uta stansburiana – common side-blotched lizard

SCINCIDAE – SKINKS

Plestiodon skiltonianus – western skink

TEIIDAE – WHIPTAIL LIZARDS

Aspidoscelis hyperythra beldingi – Belding's orange-throated whiptail

* Signifies introduced (non-native) species.

Appendix F

Special-Status Plant Species Potentially Occurring within the Study Area

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur (focused survey area)	Potential to Occur (non-focused survey area)
<i>Abronia villosa</i> var. <i>aurita</i>	chaparral sand-verbena	None/None/1B.1	Chaparral, coastal scrub, desert dunes; sandy/annual herb/(Jan)Mar-Sep/245-5,245	Absent. While the study area is within the species' known elevation range and there is suitable chaparral and coastal scrub vegetation present, the site is just north of the specie's known geographic range. The nearest mapped CNDDDB record is 11 miles southeast of the study area in Banning (CDFW 2023). Additionally, this species was not detected during spring 2022 focused rare plant surveys.	Low potential to occur. While the study area is within the species' known elevation range and there is suitable chaparral and coastal scrub vegetation present, the site is just north of the specie's known geographic range. The nearest mapped CNDDDB record is 11 miles southeast of the study area in Banning (CDFW 2023).
<i>Allium howellii</i> var. <i>clokeyi</i>	Mt. Pinos onion	None/None/1B.3	Great Basin scrub, meadows and seeps, pinyon and juniper woodland/perennial bulbiferous herb/ Apr-June/4,265-6,065	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.
<i>Allium marvinii</i>	Yucaipa onion	None/None/1B.2	Chaparral/perennial bulbiferous herb/Apr-May/ 2,490-3,490	Not expected to occur. While there is suitable chaparral vegetation present, the study area is outside of the species' known elevation range.	Not expected to occur. While there is suitable chaparral vegetation present, the study area is outside of the species' known elevation range.
<i>Arenaria lanuginosa</i> var. <i>saxosa</i>	rock sandwort	None/None/2B.3	Subalpine coniferous forest, upper montane coniferous forest; mesic, sandy/perennial herb/July-Aug/4,770-8,530	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.
<i>Arenaria paludicola</i>	marsh sandwort	FE/SE/1B.1	Marshes and swamps; openings, sandy/perennial stoloniferous herb/May-Aug/10-560	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.
<i>Astragalus hornii</i> var. <i>hornii</i>	Horn's milk-vetch	None/None/1B.1	Meadows and seeps, playas; alkaline, lake margins/annual herb/May-Oct/195-2,785	Not expected to occur. While the study area is within the species' known elevation range, there is no suitable meadow or seep vegetation present to support this species.	Not expected to occur. While the study area is within the species' known elevation range, there is no suitable meadow or seep vegetation present to support this species.
<i>Astragalus lentiginosus</i> var. <i>cochellae</i>	Coachella Valley milk-vetch	FE/None/1B.2	Desert dunes, Sonoran Desert scrub/annual/perennial herb/Feb-May/130-2,145	Not expected to occur. While the study area is within the species' known elevation range, there is no suitable desert dune or Sonoran Desert scrub vegetation present to support this species.	Not expected to occur. While the study area is within the species' known elevation range, there is no suitable desert dune or Sonoran Desert scrub vegetation present to support this species.
<i>Astragalus lentiginosus</i> var. <i>sierrae</i>	Big Bear Valley milk-vetch	None/None/1B.2	Meadows and seeps, Mojavean desert scrub, pinyon and juniper woodland, upper montane coniferous forest; gravelly (sometimes), rocky (sometimes)/ perennial herb/Apr-Aug/5,905-8,530	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.
<i>Astragalus leucolobus</i>	Big Bear Valley woollypod	None/None/1B.2	Lower montane coniferous forest, pebble (pavement) plain, pinyon and juniper woodland, upper montane coniferous forest; rocky/perennial herb/ May-July/3,605-9,465	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.
<i>Astragalus pachypus</i> var. <i>jaegeri</i>	Jaeger's milk-vetch	None/None/1B.1	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland; rocky (sometimes), sandy (sometimes)/perennial shrub/Dec-June/ 1,195-3,195	Absent. While the study area is within the species' known elevation range and there is suitable chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland vegetation present, most records of this species are south of the project site (CCH 2023). The nearest mapped CNDDDB record is 11 miles southeast of the study area in Banning (CDFW 2023). Additionally, this species was not detected during spring 2022 focused rare plant surveys.	Low potential to occur. While the study area is within the species' known elevation range and there is suitable chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland vegetation present, most records of this species are south of the project site (CCH 2023). The nearest mapped CNDDDB record is 11 miles southeast of the study area in Banning (CDFW 2023).
<i>Atriplex coronata</i> var. <i>notatior</i>	San Jacinto Valley crownscale	FE/None/1B.1	Playas, valley and foothill grassland, vernal pools; alkaline/annual herb/Apr-Aug/455-1,640	Not expected to occur. While there is suitable valley and foothill grassland present, the study area is outside of the species' known elevation range.	Not expected to occur. While there is suitable valley and foothill grassland present, the study area is outside of the species' known elevation range.

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur (focused survey area)	Potential to Occur (non-focused survey area)
<i>Atriplex serenana</i> var. <i> davidsonii</i>	Davidson's saltscale	None/None/1B.2	Coastal bluff scrub, coastal scrub; alkaline/annual herb/Apr–Oct/35–655	Not expected to occur. While there is suitable coastal scrub vegetation present, the study area is outside of the species' known elevation range.	Not expected to occur. While there is suitable coastal scrub vegetation present, the study area is outside of the species' known elevation range.
<i>Berberis nevinii</i>	Nevin's barberry	FE/SE/1B.1	Chaparral, cismontane woodland, coastal scrub, riparian scrub; gravelly (sometimes), sandy (sometimes)/perennial evergreen shrub/ (Feb)Mar–June/230–2,705	Absent. The study area is within the species' known elevation range and there is suitable chaparral, cismontane woodland, coastal scrub, and riparian scrub vegetation present. There are several CNDDDB records mapped approximately 5 miles east of the study area (CDFW 2023). However, this species was not detected during spring 2022 focused rare plant surveys.	Moderate potential to occur. The study area is within the species' known elevation range and there is suitable chaparral, cismontane woodland, coastal scrub, and riparian scrub vegetation present. There are several CNDDDB records mapped approximately 5 miles east of the study area (CDFW 2023).
<i>Boechera parishii</i>	Parish's rockcress	None/None/1B.2	Pebble (pavement) plain, pinyon and juniper woodland, upper montane coniferous forest; carbonate (sometimes), rocky/perennial herb/ Apr–May/5,805–9,805	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.
<i>Botrychium crenulatum</i>	scalloped moonwort	None/None/2B.2	Bogs and fens, lower montane coniferous forest, marshes and swamps, meadows and seeps, upper montane coniferous forest/perennial rhizomatous herb/June–Sep/4,160–10,760	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.
<i>Bouteloua trifida</i>	three-awned grama	None/None/2B.3	Mojavean desert scrub/perennial herb/ (Apr)May–Sep/2,295–6,560	Not expected to occur. While the study area is within the species' known elevation range, there is no suitable Mojavean desert scrub vegetation present to support this species.	Not expected to occur. While the study area is within the species' known elevation range, there is no suitable Mojavean desert scrub vegetation present to support this species.
<i>Calochortus palmeri</i> var. <i> palmeri</i>	Palmer's mariposa-lily	None/None/1B.2	Chaparral, lower montane coniferous forest, meadows and seeps; mesic/perennial bulbiferous herb/Apr–July/2,325–7,840	Not expected to occur. The study area is within the species known elevation range and there is suitable chaparral vegetation present. However, the study area is outside of the species' known geographic range which is restricted to the transverse mountain range north of the study area. The nearest mapped CNDDDB occurrence is approximately 10 miles east of the study area (CDFW 2023).	Not expected to occur. The study area is within the species known elevation range and there is suitable chaparral vegetation present. However, the study area is outside of the species' known geographic range which is restricted to the transverse mountain range north of the study area. The nearest mapped CNDDDB occurrence is approximately 10 miles east of the study area (CDFW 2023).
<i>Calyptidium pygmaeum</i>	pygmy pussypaws	None/None/1B.2	Subalpine coniferous forest, upper montane coniferous forest; gravelly (sometimes), sandy (sometimes)/annual herb/June–Aug/6,495–10,200	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.
<i>Carex occidentalis</i>	western sedge	None/None/2B.3	Lower montane coniferous forest, meadows and seeps/perennial rhizomatous herb/June–Aug/ 5,395–10,285	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.
<i>Castilleja cinerea</i>	ash-gray paintbrush	FT/None/1B.2	Meadows and seeps, Mojavean desert scrub, pebble (pavement) plain, pinyon and juniper woodland, upper montane coniferous forest/perennial herb (hemiparasitic)/June–Aug/5,905–9,710	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.
<i>Castilleja lasiorhyncha</i>	San Bernardino Mountains owl's-clover	None/None/1B.2	Chaparral, meadows and seeps, pebble (pavement) plain, riparian woodland, upper montane coniferous forest; mesic/annual herb (hemiparasitic)/ May–Aug/4,265–7,840	Not expected to occur. While there is suitable chaparral and riparian woodland vegetation present, the study area is outside of the species' known elevation range.	Not expected to occur. While there is suitable chaparral and riparian woodland vegetation present, the study area is outside of the species' known elevation range.
<i>Centromadia pungens</i> ssp. <i> laevis</i>	smooth tarplant	None/None/1B.1	Chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland; alkaline/annual herb/Apr–Sep/0–2,095	Absent. The study area is within the species' known elevation range and there is suitable riparian woodland and valley and foothill grassland vegetation present. Additionally, this is a disturbance tolerant	High potential to occur. The study area is within the species' known elevation range and there is suitable riparian woodland and valley and foothill grassland vegetation present. Additionally, this is a disturbance

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur (focused survey area)	Potential to Occur (non-focused survey area)
				species, which may be able to grow in many of the disturbed area within the study area. There are several CNDDDB records less than 2 miles south of the study area (CDFW 2023). However, this species was not detected during spring 2022 focused rare plant surveys.	tolerant species, which may be able to grow in many of the disturbed area within the study area. There are several CNDDDB records less than 2 miles south of the study area (CDFW 2023).
<i>Chloropyron maritimum</i> ssp. <i>maritimum</i>	salt marsh bird's-beak	FE/SE/1B.2	Coastal dunes, marshes and swamps/annual herb (hemiparasitic)/May–Oct (Nov)/0–100	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.
<i>Chorizanthe parryi</i> var. <i>parryi</i>	Parry's spineflower	None/None/1B.1	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland; openings, rocky (sometimes), sandy (sometimes)/annual herb/ Apr–June/900–4,000	Absent. The study area is within the species' known elevation range and there is suitable chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland vegetation present. Additionally, the study area contains sandy soils that may be capable of supporting this species. The nearest mapped CNDDDB record is approximately 2.5 miles northeast of the study area (CDFW 2023). However, this species was not detected during spring 2022 focused rare plant surveys.	Moderate potential to occur. The study area is within the species' known elevation range and there is suitable chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland vegetation present. Additionally, the study area contains sandy soils that may be capable of supporting this species. The nearest mapped CNDDDB record is approximately 2.5 miles northeast of the study area (CDFW 2023).
<i>Chorizanthe xanti</i> var. <i>leucotheca</i>	white-bracted spineflower	None/None/1B.2	Coastal scrub, Mojavean desert scrub, pinyon and juniper woodland; gravelly (sometimes), sandy (sometimes)/annual herb/Apr–June/985–3,935	Absent. The study area is within the species' known elevation range and there is suitable coastal scrub vegetation present. Additionally, the study area contains sandy/gravelly soils capable of supporting this species (USDA 2023). However, the study area is east of the species geographic range, the majority of the records of this species are east of the study area near Cabazon (CCH 2023). Additionally, this species was not detected during spring 2022 focused rare plant surveys.	Low potential to occur. The study area is within the species' known elevation range and there is suitable coastal scrub vegetation present. Additionally, the study area contains sandy/gravelly soils capable of supporting this species (USDA 2023). However, the study area is east of the species geographic range, the majority of the records of this species are east of the study area near Cabazon (CCH 2023).
<i>Cuscuta obtusiflora</i> var. <i>glandulosa</i>	Peruvian dodder	None/None/2B.2	Marshes and swamps/annual vine (parasitic)/ July–Oct/50–920	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.
<i>Deinandra mohavensis</i>	Mojave tarplant	None/SE/1B.3	Chaparral, coastal scrub, riparian scrub; mesic/annual herb/(Jan–May) June–Oct/ 2,095–5,245	Not expected to occur. The study area is within the species' known elevation range and there is suitable chaparral, coastal scrub, and riparian scrub vegetation present. However, the study area is southeast of the species geographic range, the majority of the records of this species are near Mount San Jacinto (CCH 2023).	Not expected to occur. The study area is within the species' known elevation range and there is suitable chaparral, coastal scrub, and riparian scrub vegetation present. However, the study area is southeast of the species geographic range, the majority of the records of this species are near Mount San Jacinto (CCH 2023).
<i>Dodecahema leptoceras</i>	slender-horned spineflower	FE/SE/1B.1	Chaparral, cismontane woodland, coastal scrub; sandy/annual herb/Apr–June/655–2,490	Absent. The study area is within the species' known elevation range and there is suitable chaparral, cismontane woodland, and coastal scrub vegetation present. Additionally, the study area contains sandy soils suitable to this species (USDA 2023). The nearest mapped CNDDDB record is less than 1 miles northeast of the study area, however this record is mapped to the best guess (CDFW 2023). However, this species was not detected during spring 2022 focused rare plant surveys.	High potential to occur. The study area is within the species' known elevation range and there is suitable chaparral, cismontane woodland, and coastal scrub vegetation present. Additionally, the study area contains sandy soils suitable to this species (USDA 2023). The nearest mapped CNDDDB record is less than 1 miles northeast of the study area, however this record is mapped to the best guess (CDFW 2023).

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<i>Eremogone ursina</i>	Big Bear Valley sandwort	FT/None/1B.2	Meadows and seeps, pebble (pavement) plain, pinyon and juniper woodland; mesic, rocky/perennial herb/May–Aug/5,905–9,510	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.
<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>	Santa Ana River woollystar	FE/SE/1B.1	Chaparral, coastal scrub; gravelly (sometimes), sandy (sometimes)/perennial herb/Apr–Sep/300–2,000	Absent. The study area is within the species' known elevation range and there is suitable chaparral and coastal scrub vegetation present. Additionally, the study area contains sandy/gravelly soils capable of supporting this species (USDA 2023). There are two records of this species within 3 miles of the study area (CDFW 2023). However, this species was not detected during spring 2022 focused rare plant surveys.	High potential to occur. The study area is within the species' known elevation range and there is suitable chaparral and coastal scrub vegetation present. Additionally, the study area contains sandy/gravelly soils capable of supporting this species (USDA 2023). There are two records of this species less than 3 miles of the study area (CDFW 2023).
<i>Eriogonum kennedyi</i> var. <i>austromontanum</i>	southern mountain buckwheat	FT/None/1B.2	Lower montane coniferous forest, pebble (pavement) plain/perennial herb/June–Sep/5,805–9,480	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.
<i>Eriogonum microthecum</i> var. <i>lacus-ursi</i>	Bear Lake buckwheat	None/None/1B.1	Great Basin scrub, lower montane coniferous forest; clay/perennial shrub/July–Aug/6,560–6,885	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.
<i>Erythranthe exigua</i>	San Bernardino Mountains monkeyflower	None/None/1B.2	Meadows and seeps, pebble (pavement) plain, upper montane coniferous forest; clay, mesic/annual herb/May–July/5,905–7,595	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.
<i>Erythranthe purpurea</i>	little purple monkeyflower	None/None/1B.2	Meadows and seeps, pebble (pavement) plain, upper montane coniferous forest/annual herb/May–June/6,230–7,545	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.
<i>Gilia leptantha</i> ssp. <i>leptantha</i>	San Bernardino gilia	None/None/1B.3	Lower montane coniferous forest/annual herb/June–Aug/4,920–8,395	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.
<i>Heuchera parishii</i>	Parish's alumroot	None/None/1B.3	Alpine boulder and rock field, Lower montane coniferous forest, subalpine coniferous forest, upper montane coniferous forest; carbonate (sometimes), rocky/perennial rhizomatous herb/June–Aug/4,920–12,465	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.
<i>Horkelia cuneata</i> var. <i>puberula</i>	mesa horkelia	None/None/1B.1	Chaparral, cismontane woodland, coastal scrub; gravelly (sometimes), sandy (sometimes)/perennial herb/Feb–July (Sep)/230–2,655	Absent. The study area is within the species' known elevation range and there is suitable chaparral, cismontane woodland, and coastal scrub vegetation present. However, there is only 1 record within the 9 7.5-minute USGS quadrangles containing the study area approximately 11 miles southeast of the study area in Banning (CDFW 2023). Additionally, this species was not detected during spring 2022 focused rare plant surveys.	Low potential to occur. The study area is within the species' known elevation range and there is suitable chaparral, cismontane woodland, and coastal scrub vegetation present. However, there is only 1 record within the 9 7.5-minute USGS quadrangles containing the study area approximately 11 miles southeast of the study area in Banning (CDFW 2023).
<i>Horkelia wilderae</i>	Barton Flats horkelia	None/None/1B.1	Chaparral, lower montane coniferous forest, upper montane coniferous forest/perennial herb/May–Sep/5,495–9,595	Not expected to occur. While there is suitable chaparral vegetation present, the study area is outside of the species' known elevation range.	Not expected to occur. While there is suitable chaparral vegetation present, the study area is outside of the species' known elevation range.
<i>Imperata brevifolia</i>	California satintail	None/None/2B.1	Chaparral, coastal scrub, meadows and seeps, Mojavean desert scrub, riparian scrub; mesic/perennial rhizomatous herb/Sep–May/0–3,985	Absent. The study area is within the species' known elevation range and there is suitable chaparral, coastal scrub, and riparian scrub vegetation present. The nearest mapped CNDDB record is approximately 3 miles northwest of the study area. However, this is a	Moderate potential to occur. The study area is within the species' known elevation range and there is suitable chaparral, coastal scrub, and riparian scrub vegetation present. The nearest mapped CNDDB record is approximately 3 miles northwest of the study

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				historical record from 1891 (CDFW 2023). Additionally, this species was not detected during spring 2022 focused rare plant surveys.	area. However, this is a historical record from 1891 (CDFW 2023).
<i>Ivesia argyrocoma</i> var. <i>argyrocoma</i>	silver-haired ivesia	None/None/1B.2	Meadows and seeps, pebble (pavement) plain, upper montane coniferous forest/perennial herb/ June–Aug/4,795–9,710	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Coulter's goldfields	None/None/1B.1	Marshes and swamps, playas, vernal pools/annual herb/Feb–June/5–4,000	Not expected to occur. While the study area is within the species' known elevation range, there is no suitable marsh, swamp, playa, or vernal pool vegetation present to support this species.	Not expected to occur. While the study area is within the species' known elevation range, there is no suitable marsh, swamp, playa, or vernal pool vegetation present to support this species.
<i>Lewisia brachycalyx</i>	short-sepaed lewisia	None/None/2B.2	Lower montane coniferous forest, meadows and seeps; mesic/perennial herb/(Feb)Apr–June (July)/4,490–7,545	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.
<i>Lilium parryi</i>	lemon lily	None/None/1B.2	Lower montane coniferous forest, meadows and seeps, riparian forest, upper montane coniferous forest; mesic/perennial bulbiferous herb/ July–Aug/4,000–9,005	Not expected to occur. While there is suitable riparian forest vegetation present, the study area is outside of the species' known elevation range.	Not expected to occur. While there is suitable riparian forest vegetation present, the study area is outside of the species' known elevation range.
<i>Malacothamnus parishii</i>	Parish's bush-mallow	None/None/1A	Chaparral, coastal scrub/perennial deciduous shrub/June–July/1,000–1,490	Not expected to occur. While there is suitable chaparral and coastal scrub vegetation present, the study area is outside of the species' known elevation range.	Not expected to occur. While there is suitable chaparral and coastal scrub vegetation present, the study area is outside of the species' known elevation range.
<i>Mentzelia tricuspis</i>	spiny-hair blazing star	None/None/2B.1	Mojavean desert scrub; gravelly, sandy, slopes, washes/annual herb/Mar–May/490–4,195	Not expected to occur. While the study area is within the species known elevation range, there is no suitable Mojavean desert scrub vegetation present to support this species.	Not expected to occur. While the study area is within the species known elevation range, there is no suitable Mojavean desert scrub vegetation present to support this species.
<i>Monardella macrantha</i> ssp. <i>hallii</i>	Hall's monardella	None/None/1B.3	Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland/perennial rhizomatous herb/June–Oct/2,395–7,200	Absent. The study area is within the species' known elevation range and there is suitable chaparral, cismontane woodland, and valley and foothill grassland vegetation present. The nearest mapped CNDDDB record is approximately 6 miles northeast of the study area (CDFW 2023). However, this species was not detected during spring 2022 focused rare plant surveys.	Moderate potential to occur. The study area is within the species' known elevation range and there is suitable chaparral, cismontane woodland, and valley and foothill grassland vegetation present. The nearest mapped CNDDDB record is approximately 6 miles northeast of the study area (CDFW 2023).
<i>Nama stenocarpa</i>	mud nama	None/None/2B.2	Marshes and swamps/annual/perennial herb/ Jan–July/15–1,640	Not expected to occur. The study area is outside of the species' known elevation range, and there is no suitable marsh or swamp vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range, and there is no suitable marsh or swamp vegetation present to support this species.
<i>Navarretia peninsularis</i>	Baja navarretia	None/None/1B.2	Chaparral, lower montane coniferous forest, meadows and seeps, pinyon and juniper woodland; mesic/annual herb/(May) June–Aug/4,920–7,545	Not expected to occur. While there is suitable chaparral vegetation present, the study area is outside of the species' known elevation range.	Not expected to occur. While there is suitable chaparral vegetation present, the study area is outside of the species' known elevation range.
<i>Oxytropis oreophila</i> var. <i>oreophila</i>	rock-loving oxytrope	None/None/2B.3	Alpine boulder and rock field, subalpine coniferous forest; gravelly (sometimes), rocky (sometimes)/perennial herb/June–Sep/11,150–12,465	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.
<i>Packera bernardina</i>	San Bernardino ragwort	None/None/1B.2	Meadows and seeps, pebble (pavement) plain, upper montane coniferous forest/perennial herb/ May–July/5,905–7,545	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.
<i>Parnassia cirrata</i> var. <i>cirrata</i>	San Bernardino grass-of-Parnassus	None/None/1B.3	Lower montane coniferous forest, meadows and seeps, upper montane coniferous forest; mesic,	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.

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			streambanks/perennial herb/Aug-Sep/ 4,100-8,005		
<i>Pelazoneuron puberulum</i> var. <i>sonorensis</i>	Sonoran maiden fern	None/None/2B.2	Meadows and seeps/perennial rhizomatous herb/Jan-Sep/165-2,000	Not expected to occur. While the study area is within the species' known elevation range, there is no suitable meadow or seep vegetation present to support this species.	Not expected to occur. While the study area is within the species' known elevation range, there is no suitable meadow or seep vegetation present to support this species.
<i>Perideridia parishii</i> ssp. <i>parishii</i>	Parish's yampah	None/None/2B.2	Lower montane coniferous forest, meadows and seeps, upper montane coniferous forest/perennial herb/June-Aug/4,805-9,840	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.
<i>Petalonyx linearis</i>	narrow-leaf sandpaper-plant	None/None/2B.3	Mojavean desert scrub, Sonoran desert scrub; rocky (sometimes), sandy (sometimes)/perennial shrub/(Jan-Feb) Mar-May (June-Dec)/-80-3,655	Not expected to occur. While the study area is within the species' known elevation range, there is no suitable Mojavean desert scrub or Sonoran desert scrub vegetation present to support this species.	Not expected to occur. While the study area is within the species' known elevation range, there is no suitable Mojavean desert scrub or Sonoran desert scrub vegetation present to support this species.
<i>Phlox dolichantha</i>	Big Bear Valley phlox	None/None/1B.2	Pebble (Pavement) plain, upper montane coniferous forest/perennial herb/May-July/6,000-9,740	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.
<i>Physaria kingii</i> ssp. <i>bernardina</i>	San Bernardino Mountains bladderpod	FE/None/1B.1	Lower montane coniferous forest, pinyon and juniper woodland, subalpine coniferous forest; carbonate (usually)/perennial herb/May-June/6,065-8,855	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.
<i>Poa atropurpurea</i>	San Bernardino blue grass	FE/None/1B.2	Meadows and seeps/perennial rhizomatous herb/(Apr)May-July (Aug)/4,460-8,050	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.
<i>Pseudorontium cyathiferum</i>	Deep Canyon snapdragon	None/None/2B.3	Sonoran Desert scrub/annual herb/Feb-Apr/ 0-2,620	Not expected to occur. While the study area is within the species' known elevation range, there is no suitable Sonoran desert scrub vegetation present to support this species.	Not expected to occur. While the study area is within the species' known elevation range, there is no suitable Sonoran desert scrub vegetation present to support this species.
<i>Pyrrocoma uniflora</i> var. <i>gossypina</i>	Bear Valley pyrrocoma	None/None/1B.2	Meadows and seeps, pebble (pavement) plain/perennial herb/July-Sep/5,245-7,545	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.
<i>Ribes divaricatum</i> var. <i>parishii</i>	Parish's gooseberry	None/None/1A	Riparian woodland/perennial deciduous shrub/ Feb-Apr/215-985	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable riparian woodland vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable riparian woodland vegetation present to support this species.
<i>Sidalcea hickmanii</i> ssp. <i>parishii</i>	Parish's checkerbloom	None/SR/1B.2	Chaparral, cismontane woodland, lower montane coniferous forest/perennial herb/ (May)June-Aug/3,280-8,195	Not expected to occur. While there is suitable chaparral vegetation present, the study area is outside of the species' known elevation range.	Not expected to occur. While there is suitable chaparral vegetation present, the study area is outside of the species' known elevation range.
<i>Sidalcea malviflora</i> ssp. <i>dolosa</i>	Bear Valley checkerbloom	None/None/1B.2	Lower montane coniferous forest, meadows and seeps, riparian woodland, upper montane coniferous forest/perennial herb/May-Aug/4,900-8,805	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.
<i>Sidalcea neomexicana</i>	salt spring checkerbloom	None/None/2B.2	Chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, playas; alkaline, mesic/perennial herb/Mar-June/50-5,015	Absent. The study area is within the species' known elevation range and there is suitable chaparral and coastal scrub vegetation present. Additionally, approximately 50% of soils within the study area are alkaline, capable of supporting this species. However, this species was not detected during spring 2022 focused rare plant surveys.	Moderate. The study area is within the species' known elevation range and there is suitable chaparral and coastal scrub vegetation present. Additionally, approximately 50% of soils within the study area are alkaline, capable of supporting this species. The nearest CNDDDB record is approximately 3.5 miles northeast of the study area. However, this is a historical record from 1891 (CDFW 2023).

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<i>Sidalcea pedata</i>	bird-foot checkerbloom	FE/SE/1B.1	Meadows and seeps, pebble (pavement) plain/perennial herb/May-Aug/5,245-8,200	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.
<i>Streptanthus campestris</i>	southern jewelflower	None/None/1B.3	Chaparral, lower montane coniferous forest, pinyon and juniper woodland; rocky/perennial herb/ (Apr)May-July/2,950-7,545	Not expected to occur. While there is suitable chaparral vegetation present, the study area is outside of the species' known elevation range.	Not expected to occur. While there is suitable chaparral vegetation present, the study area is outside of the species' known elevation range.
<i>Streptanthus juneae</i>	June's jewelflower	None/None/1B.2	Chaparral, lower montane coniferous forest; openings/perennial herb/June-Aug/7,070-7,775	Not expected to occur. While there is suitable chaparral vegetation present, the study area is outside of the species' known elevation range.	Not expected to occur. While there is suitable chaparral vegetation present, the study area is outside of the species' known elevation range.
<i>Symphotrichum defoliatum</i>	San Bernardino aster	None/None/1B.2	Cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, meadows and seeps, valley and foothill grassland; streambanks/perennial rhizomatous herb/ July-Nov/5-6,690	Absent. The study area is within the species' known elevation range and there is suitable cismontane woodland, coastal scrub, and valley and foothill grassland vegetation present. Additionally, the study area contains stream bank areas. However, this species was not detected during fall 2022 focused rare plant surveys.	Moderate potential to occur. The study area is within the species' known elevation range and there is suitable cismontane woodland, coastal scrub, and valley and foothill grassland vegetation present. Additionally, the study area contains stream bank areas. The nearest mapped CNDDDB record is approximately 2 miles southwest of the study area. However, this is a historical record (CDFW 2023).
<i>Taraxacum californicum</i>	California dandelion	FE/None/1B.1	Meadows and seeps/perennial herb/May-Aug/ 5,310-9,185	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.
<i>Thelypodium stenopetalum</i>	slender-petaled thelypodium	FE/SE/1B.1	Meadows and seeps/perennial herb/May-Sep/ 5,245-8,200	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.
<i>Trichocoronis wrightii</i> var. <i>wrightii</i>	Wright's trichocoronis	None/None/2B.1	Marshes and swamps, meadows and seeps, riparian forest, vernal pools; alkaline/annual herb/ May-Sep/15-1,425	Not expected to occur. While there is suitable riparian forest vegetation present, the study area is outside the species known elevation range.	Not expected to occur. While there is suitable riparian forest vegetation present, the study area is outside the species known elevation range.
<i>Viola pinetorum</i> ssp. <i>grisea</i>	grey-leaved violet	None/None/1B.2	Meadows and seeps, subalpine coniferous forest, upper montane coniferous forest/perennial herb/Apr-July/4,920-11,150	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present to support this species.

Status Legend

Federal

FE: Federally listed as endangered

FT: Federally listed as threatened

State

SE: State listed as endangered

CRPR: California Rare Plant Rank

1A: Plants presumed extirpated in California and either rare or extinct elsewhere

1B: Plants rare, threatened, or endangered in California and elsewhere

2B: Plants rare, threatened, or endangered in California, but more common elsewhere

Threat Rank:

1: seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)

2: moderately threatened in California (20%-80% of occurrences threatened/moderate degree and immediacy of threat)

3: not very threatened in California (<20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

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Appendix G

Special-Status Wildlife Species Potentially Occurring within the Study Area

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur (Focused Survey Area)	Potential to Occur (Non-Focused Survey Area)
Amphibians					
<i>Anaxyrus californicus</i>	arroyo toad	FE/SSC	Semi-arid areas near washes, sandy riverbanks, riparian areas, palm oasis, Joshua tree, mixed chaparral and sagebrush; stream channels for breeding (typically third order); adjacent stream terraces and uplands for foraging and wintering	Not expected to occur. While Yucaipa Creek and Oak Glen Creek run through the study area, these are ephemeral streams which are only active during the rainy season. The study area does contain semi-arid areas near washes, and sandy riverbanks. However, a focused habitat assessment for arroyo toad was conducted in 2022 and it was determined that this species is not expected to occur within the study area. There are no CNDDDB records of this species in the 9 7.5-minute quadrangles containing the study area. The nearest occurrences are all in the foothill regions north of the specific plan (CDFW 2023).	Not expected to occur. While Yucaipa Creek and Oak Glen Creek run through the study area, these are ephemeral streams which are only active during the rainy season. The study area does contain semi-arid areas near washes, and sandy riverbanks. However, a focused habitat assessment for arroyo toad was conducted in 2022 and it was determined that this species is not expected to occur within the study area. There are no CNDDDB records of this species in the 9 7.5-minute quadrangles containing the study area. The nearest occurrences are all in the foothill regions north of the specific plan (CDFW 2023).
<i>Rana draytonii</i>	California red-legged frog	FT/SSC	Lowland streams, wetlands, riparian woodlands, livestock ponds; dense, shrubby or emergent vegetation associated with deep, still or slow-moving water; uses adjacent uplands	Not expected to occur. While Yucaipa Creek and Oak Glen Creek run through the study area, these are intermittent streams which are only active during the rainy season. The study area lacks perennial water features necessary for breeding habitat. The nearest mapped CNDDDB record is approximately 12 miles northwest of the study area near West Fork City Creek.	Not expected to occur. While Yucaipa Creek and Oak Glen Creek run through the study area, these are intermittent streams which are only active during the rainy season. The study area lacks perennial water features necessary for breeding habitat. The nearest mapped CNDDDB record is approximately 12 miles northwest of the study area near West Fork City Creek.
<i>Rana muscosa</i>	mountain yellow-legged frog	FE/SE, WL	Lakes, ponds, meadow streams, isolated pools, and open riverbanks; rocky canyons in narrow canyons and in chaparral	Not expected to occur. While Yucaipa Creek and Oak Glen Creek run through the study area, these are intermittent streams which are only active during the rainy season. The study area lacks perennial water features necessary for breeding habitat. The nearest mapped CNDDDB record is approximately 5 miles north of the study area near the Santa Ana River.	Not expected to occur. While Yucaipa Creek and Oak Glen Creek run through the study area, these are intermittent streams which are only active during the rainy season. The study area lacks perennial water features necessary for breeding habitat. The nearest mapped CNDDDB record is approximately 5 miles north of the study area near the Santa Ana River.
<i>Spea hammondi</i>	western spadefoot	None/SSC	Primarily grassland and vernal pools, but also in ephemeral wetlands that persist at least 3 weeks in chaparral, coastal scrub, valley-foothill woodlands, pastures, and other agriculture	Moderate potential to occur. The study area contains a marginal amount of suitable ephemeral water features in chaparral and coastal scrub habitat. The nearest mapped CNDDDB record is approximately 2.5 miles east of the study area where one adult was observed crossing Live Oak Canyon Road (CDFW 2023).	Moderate potential to occur. The study area contains a marginal amount of suitable ephemeral water features in chaparral and coastal scrub habitat. The nearest mapped CNDDDB record is approximately 2.5 miles east of the study area where one adult was observed crossing Live Oak Canyon Road (CDFW 2023).
Birds					
<i>Agelaius tricolor</i> (nesting colony)	tricolored blackbird	BCC/SSC, ST	Nests near freshwater, emergent wetland with cattails or tules, but also in Himalayan blackberry; forages in grasslands, woodland, and agriculture	Not expected to occur. The study area lacks wetland vegetation necessary for nesting habitat. The nearest mapped CNDDDB record occurs in a freshwater marsh approximately 1.5 miles south of the study area near San Timoteo Canyon Road (CDFW 2023).	Not expected to occur. The study area lacks wetland vegetation necessary for nesting habitat. The nearest mapped CNDDDB record occurs in a freshwater marsh approximately 1.5 miles south of the study area near San Timoteo Canyon Road (CDFW 2023).
<i>Aquila chrysaetos</i> (nesting and wintering)	golden eagle	None/FP, WL	Nests and winters in hilly, open/semi-open areas, including shrublands, grasslands, pastures, riparian areas, mountainous canyon land, open desert rimrock terrain; nests in large trees and on cliffs in open areas and forages in open habitats	Low potential for nesting/wintering, Moderate potential for foraging. While the study area contains shrubland, grassland, and riparian habitat, it lacks large trees suitable for nesting. It may contain open habitat suitable for foraging. Additionally, this species is sensitive to human disturbance, reducing the likelihood that it would be present within the study area. The nearest mapped CNDDDB record is	Low potential for nesting/wintering, Moderate potential for foraging. While the study area contains shrubland, grassland, and riparian habitat, it lacks large trees suitable for nesting. It may contain open habitat suitable for foraging. Additionally, this species is sensitive to human disturbance, reducing the likelihood that it would be present within the study area. The nearest mapped CNDDDB record is

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur (Focused Survey Area)	Potential to Occur (Non-Focused Survey Area)
<i>Athene cunicularia</i> (burrow sites and some wintering sites)	burrowing owl	BCC/SSC	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows	approximately 1.5 miles south of the study area in San Timoteo Canyon (CDFW 2023). Absent. While the study area contains small mammal burrows and grassland, open scrub, and agriculture areas that may be suitable habitat for this species, 2022 focused burrowing owl surveys were negative.	approximately 1.5 miles south of the study area in San Timoteo Canyon (CDFW 2023). Moderate potential to occur. The study area contains small mammal burrows suitable for nesting with some signs of burrowing owl use. Additionally, the study area contains grassland, open scrub, and agriculture areas suitable for foraging. The nearest mapped CNDDDB record is approximately 8.5 miles northwest of the study area.
<i>Buteo swainsoni</i> (nesting)	Swainson's hawk	None/ST	Nests in open woodland and savanna, riparian, and in isolated large trees; forages in nearby grasslands and agricultural areas such as wheat and alfalfa fields and pasture	Not expected to occur. The study area is outside what is generally considered to be the current breeding range in California (CDFW 2023), but it does contain suitable foraging habitat by migratory individuals. There is only one CNDDDB record of this species within the 9 7.5-minute USGS quadrangles containing the study area, and it is historical and possibly extirpated (CDFW 2023).	Not expected to occur. The study area is outside what is generally considered to be the current breeding range in California (CDFW 2023), but it does contain suitable foraging habitat by migratory individuals. There is only one CNDDDB record of this species within the 9 7.5-minute USGS quadrangles containing the study area, and it is historical and possibly extirpated (CDFW 2023).
<i>Coccyzus americanus occidentalis</i> (nesting)	western yellow-billed cuckoo	FT/SE	Nests in dense, wide riparian woodlands and forest with well-developed understories	Not expected to occur. The study area contains riparian habitat; however, it is generally sparse and may only provide low quality habitat for this species. The nearest mapped CNDDDB record is approximately 8 miles southwest of the study area (CDFW 2023).	Not expected to occur. The study area contains riparian habitat; however, it is generally sparse and may only provide low quality habitat for this species. The nearest mapped CNDDDB record is approximately 8 miles southwest of the study area (CDFW 2023).
<i>Cypseloides niger</i> (nesting)	black swift	BCC/SSC	Nests in moist crevices, caves, and cliffs behind or adjacent to waterfalls in deep canyons; forages over a wide range of habitats	Not expected to occur (nesting). While the study area contains cliff and canyon habitat, it lacks water features associated with nesting for this species. The nearest mapped CNDDDB record is approximately 12 miles northeast of the study area near Forest Falls (CDFW 2023).	Not expected to occur (nesting). While the study area contains cliff and canyon habitat, it lacks water features associated with nesting for this species. The nearest mapped CNDDDB record is approximately 12 miles northeast of the study area near Forest Falls (CDFW 2023).
<i>Elanus leucurus</i> (nesting)	white-tailed kite	None/FP	Nests in woodland, riparian, and individual trees near open lands; forages opportunistically in grassland, meadows, scrubs, agriculture, emergent wetland, savanna, and disturbed lands	High potential to occur. The study area contains some riparian habitat and woodland areas that may be suitable for nesting, and grasslands, scrub land, and disturbed areas that may be suitable for foraging. Additionally, there are three CNDDDB records within 5 miles of the study area that report nesting adults or adults with fledglings (CDFW 2023).	High potential to occur. The study area contains some riparian habitat and woodland areas that may be suitable for nesting, and grasslands, scrub land, and disturbed areas that may be suitable for foraging. Additionally, there are three CNDDDB records within 5 miles of the study area that report nesting adults or adults with fledglings (CDFW 2023).
<i>Empidonax traillii extimus</i> (nesting)	southwestern willow flycatcher	FE/SE	Nests in dense riparian habitats along streams, reservoirs, or wetlands; uses variety of riparian and shrubland habitats during migration	Not expected to occur. The study area contains some riparian habitat; however, it is generally sparse and does not have a sufficient understory to support this species. Additionally, it lacks perennial water features associated with nesting sites. The nearest mapped CNDDDB record is approximately 3.5 miles east of the study area near the San Timoteo Canyon (CDFW 2023).	Not expected to occur. The study area contains some riparian habitat; however, it is generally sparse and does not have a sufficient understory to support this species. Additionally, it lacks perennial water features associated with nesting sites. The nearest mapped CNDDDB record is approximately 3.5 miles east of the study area near the San Timoteo Canyon (CDFW 2023).
<i>Haliaeetus leucocephalus</i> (nesting and wintering)	bald eagle	FPD/FP, SE	Nests in forested areas adjacent to large bodies of water, including seacoasts, rivers, swamps, large lakes; winters near large bodies of water in lowlands and mountains	Not expected to nest or winter. While the study area lacks suitable forest habitats and surface water features necessary for nesting and foraging, a bald eagle was observed flying overhead during the 2022 field surveys. This species may move through the study area but is not expected to nest or winter.	Not expected to nest or winter. While the study area lacks suitable forest habitats and surface water features necessary for nesting and foraging, a bald eagle was observed flying overhead during the 2022 field surveys. This species may move through the study area but is not expected to nest or winter.

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur (Focused Survey Area)	Potential to Occur (Non-Focused Survey Area)
<i>Icteria virens</i> (nesting)	yellow-breasted chat	None/SSC	Nests and forages in dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush	Not expected to occur. The study area contains riparian habitat; however, it is generally sparse and may only provide low quality habitat for this species. The nearest mapped CNDDDB record is approximately 2 miles south of the study area (CDFW 2023).	Not expected to occur. The study area contains riparian habitat; however, it is generally sparse and may only provide low quality habitat for this species. The nearest mapped CNDDDB record is approximately 2 miles south of the study area (CDFW 2023).
<i>Lanius ludovicianus</i> (nesting)	loggerhead shrike	None/SSC	Nests and forages in open habitats with scattered shrubs, trees, or other perches	Moderate potential to occur. The study area contains suitable open habitat with some scattered shrubs. The nearest mapped CNDDDB record is approximately 3 miles west of the study area San Timoteo Canyon Road (CDFW 2023).	Moderate potential to occur. The study area contains suitable open habitat with some scattered shrubs. The nearest mapped CNDDDB record is approximately 3 miles west of the study area San Timoteo Canyon Road (CDFW 2023).
<i>Poliptila californica californica</i>	coastal California gnatcatcher	FT/SSC	Nests and forages in various sage scrub communities, often dominated by California sagebrush and buckwheat; generally avoids nesting in areas with a slope of greater than 40%; majority of nesting at less than 1,000 feet above mean sea level	Not expected to occur. The study area is well above the elevation at which the majority of nest sites occur. Additionally, Dudek biologists conducted a focused habitat assessment for coastal California gnatcatcher in 2022 and determined that this species is not expected to occur within the study area due to the minimal suitable sagebrush and buckwheat vegetation communities. The nearest mapped CNDDDB record is approximately 6 miles northwest of the study area near the Santa Ana River (CDFW 2023).	Not expected to occur. The study area is well above the elevation at which the majority of nest sites occur. Additionally, Dudek biologists conducted a focused habitat assessment for coastal California gnatcatcher in 2022 and determined that this species is not expected to occur within the study area due to the minimal suitable sagebrush and buckwheat vegetation communities. This species is not expected to occur within the study area due to the limited suitable sagebrush and buckwheat vegetation communities. The nearest mapped CNDDDB record is approximately 6 miles northwest of the study area near the Santa Ana River (CDFW 2023).
<i>Progne subis</i> (nesting)	purple martin	None/SSC	Nests and forages in woodland habitats including riparian, coniferous, and valley foothill and montane woodlands; in the Sacramento region often nests in weep holes under elevated freeways	Low potential to occur. The nearest mapped CNDDDB record is approximately 6 miles southeast of the study area in Beaumont. However, this is a historical record from 1910. Most recent eBird sightings in the vicinity are during the migration season, so the species is expected to be a transient in the study area. (CDFW 2023; eBird 2023).	Low potential to occur. The nearest mapped CNDDDB record is approximately 6 miles southeast of the study area in Beaumont. However, this is a historical record from 1910. Most recent eBird sightings in the vicinity are during the migration season, so the species is expected to be a transient in the study area. (CDFW 2023; eBird 2023).
<i>Setophaga petechia</i> (nesting)	yellow warbler	None/SSC	Nests and forages in riparian and oak woodlands, montane chaparral, open ponderosa pine, and mixed-conifer habitats	Present. The study area contains some riparian and chaparral habitat that may be suitable for nesting. Additionally, several auditory observations of this species were recorded in the study area during 2022 field surveys. The nearest mapped CNDDDB record is approximately 2 miles south of the study area near San Timoteo Canyon Road (CDFW 2023).	Present. The study area contains some riparian and chaparral habitat that may be suitable for nesting. Additionally, this species was recorded in the western portion of the study area along Yucaipa Creek during 2022 field surveys. The nearest mapped CNDDDB record is approximately 2 miles south of the study area near San Timoteo Canyon Road (CDFW 2023).
<i>Vireo bellii pusillus</i> (nesting)	least Bell's vireo	FE/SE	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season	Absent. The study area contains riparian habitat along Yucaipa Creek that runs through the northern portion of the focused survey area; however, it is generally sparse and may only provide low quality habitat for this species. Additionally, 2022 focused least Bell's vireo surveys were negative.	Low potential to occur. The study area contains riparian habitat along the drainages Yucaipa Creek and Oak Glen Creek that run through portions of the study area; however, it is generally sparse and may only provide low quality habitat for this species. The nearest mapped CNDDDB record is approximately 3.5 miles west of the study area in San Timoteo Canyon (CDFW 2023).

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur (Focused Survey Area)	Potential to Occur (Non-Focused Survey Area)
Fishes					
<i>Catostomus santaanae</i>	Santa Ana sucker	FT/None	Small, shallow, cool, clear streams less than 7 meters (23 feet) in width and a few centimeters to more than a meter (1.5 inches to more than 3 feet) in depth; substrates are generally coarse gravel, rubble, and boulder	Not expected to occur. The study area lacks suitable perennial water features. Streams within the study area are intermittent.	Not expected to occur. The study area lacks suitable perennial water features. Streams within the study area are intermittent.
<i>Oncorhynchus mykiss irideus</i> pop. 10	southern steelhead - southern California DPS	FE/SCE	Clean, clear, cool, well-oxygenated streams; needs relatively deep pools in migration and gravelly substrate to spawn	Not expected to occur. The study area lacks suitable perennial water features. Streams within the study area are intermittent.	Not expected to occur. The study area lacks suitable perennial water features. Streams within the study area are intermittent.
<i>Rhinichthys osculus</i> ssp. 8	Santa Ana speckled dace	None/SSC	Headwaters of the Santa Ana and San Gabriel Rivers; may be extirpated from the Los Angeles River system	Not expected to occur. The study area lacks suitable perennial water features. Streams within the study area are intermittent.	Not expected to occur. The study area lacks suitable perennial water features. Streams within the study area are intermittent.
Invertebrates					
<i>Bombus crotchii</i>	Crotch bumble bee	None/SCT	Open grassland and scrub communities supporting suitable floral resources.	High potential to occur. The study area contains grassland and scrub communities with <i>Phacelia</i> , <i>Clarkia</i> , <i>Eriogonum</i> , <i>Eschscholzia</i> and <i>Antirrhinum</i> species that have been identified as preferred food plant genera. The eastern portion of the study area overlaps with CNDDDB record of this species in Calimesa; however, the exact location of the record is unknown (CDFW 2023).	High potential to occur. The study area contains grassland and scrub communities with <i>Phacelia</i> , <i>Clarkia</i> , <i>Eriogonum</i> , <i>Eschscholzia</i> and <i>Antirrhinum</i> species that have been identified as preferred food plant genera. The eastern portion of the study area overlaps with CNDDDB record of this species in Calimesa; however, the exact location of the record is unknown (CDFW 2023). Finally, a <i>Bombus</i> sp. was incidentally observed during biological surveys.
<i>Danaus plexippus</i> pop. 1	monarch (California overwintering population)	FC/None	Wind-protected tree groves with nectar sources and nearby water sources	Not expected to occur (overwintering). The study area contains some wind protected tree groves and seasonal water sources; however, the species overwinters within these habitats near the coastline where temperatures are more moderate.	Not expected to occur (overwintering). The study area contains some wind protected tree groves and seasonal water sources; however, the species overwinters within these habitats near the coastline where temperatures are more moderate.
Mammals					
<i>Antrozous pallidus</i>	pallid bat	None/SSC	Grasslands, shrublands, woodlands, forests; most common in open, dry habitats with rocky outcrops for roosting, but also roosts in man-made structures and trees	Low potential to occur. The study area contains grassland and shrubland habitat, as well as some trees, but lacks rocky outcrops for roosting. The nearest mapped CNDDDB record is approximately 4 miles northwest of the study area in Redlands. However, this is a historical record from 1929 (CDFW 2023).	Low potential to occur. The study area contains grassland and shrubland habitat, as well as some trees, but lacks rocky outcrops for roosting. The nearest mapped CNDDDB record is approximately 4 miles northwest of the study area in Redlands. However, this is a historical record from 1929 (CDFW 2023).
<i>Chaetodipus californicus femoralis</i>	Dulzura pocket mouse	None/SSC	Open habitat, coastal scrub, chaparral, oak woodland, chamise chaparral, mixed-conifer habitats; disturbance specialist; 0 to 3,000 feet above mean sea level	Moderate potential to occur. The study area contains suitable coastal scrub, chamise chaparral, and open habitat, and is within the elevation range that this species prefers. The nearest mapped CNDDDB record is approximately 11 miles southeast of the study area (CDFW 2023).	Moderate potential to occur. The study area contains suitable coastal scrub, chamise chaparral, and open habitat, and is within the elevation range that this species prefers. The nearest mapped CNDDDB record is approximately 11 miles southeast of the study area (CDFW 2023).
<i>Chaetodipus fallax fallax</i>	northwestern San Diego pocket mouse	None/SSC	Coastal scrub, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon-juniper, and annual grassland	High potential to occur. The study area contains suitable coastal scrub, chaparral, desert wash and annual grassland habitat. Additionally, the southern border of the study area abuts a CNDDDB record, and there are other CNDDDB records within 5 miles of the study area (CDFW 2023).	High potential to occur. The study area contains suitable coastal scrub, chaparral, desert wash and annual grassland habitat. Additionally, the southern border of the study area abuts a CNDDDB record, and there are other CNDDDB records within 5 miles of the study area (CDFW 2023).

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur (Focused Survey Area)	Potential to Occur (Non-Focused Survey Area)
<i>Dasypterus xanthinus</i>	western yellow bat	None/SSC	Valley–foothill riparian, desert riparian, desert wash, and palm oasis habitats; below 2,000 feet above mean sea level; roosts in riparian and palms	Low potential to occur. The study area contains some riparian and desert wash habitat that may be suitable but lacks palm trees preferred for roosting the nearest mapped CNDDDB record is approximately 1 mile northeast of the study area (CDFW 2023).	Low potential to occur. The study area contains some riparian and desert wash habitat that may be suitable but lacks palm trees preferred for roosting the nearest mapped CNDDDB record is approximately 1 mile northeast of the study area (CDFW 2023).
<i>Dipodomys merriami parvus</i>	San Bernardino kangaroo rat	FE/SSC, SCE	Sparse scrub habitat, alluvial scrub/coastal scrub habitats on gravelly and sandy soils near river and stream terraces	Not expected to occur. Most local CNDDDB records of this species are associated with the Santa Ana River floodplain (CDFW 2023). A focused habitat assessment for the San Bernardino kangaroo rat was conducted within the study area by a permitted biologist. The habitat assessment concluded that there is not sufficient suitable habitat for this species.	Not expected to occur. Most local CNDDDB records of this species are associated with the Santa Ana River floodplain (CDFW 2023). A focused habitat assessment for the San Bernardino kangaroo rat was conducted within the study area by a permitted biologist. The habitat assessment concluded that there is not sufficient suitable habitat for this species.
<i>Dipodomys stephensi</i>	Stephens' kangaroo rat	FE/ST	Annual and perennial grassland habitats, coastal scrub or sagebrush with sparse canopy cover, or in disturbed areas	Not expected to occur. A focused habitat assessment for the Stephens' kangaroo rat was conducted within the study area by a permitted biologist. The site's location relative to verified occurrence records and the absence of kangaroo rat burrows in the grasslands across the project site indicate that Stephens' kangaroo rat is not expected to occur.	Not expected to occur. A focused habitat assessment for the Stephens' kangaroo rat was conducted within the study area by a permitted biologist. The site's location relative to verified occurrence records and the absence of kangaroo rat burrows in the grasslands across the project site indicate that Stephens' kangaroo rat is not expected to occur.
<i>Eumops perotis californicus</i>	western mastiff bat	None/SSC	Chaparral, coastal and desert scrub, coniferous and deciduous forest and woodland; roosts in crevices in rocky canyons and cliffs where the canyon or cliff is vertical or nearly vertical, trees, and tunnels	Moderate potential to occur. The study area contains suitable chaparral and coastal scrub habitat. Additionally, the northwest portion of the study area contains some highly incised washes with vertical walls which may provide roosting habitat. The nearest mapped CNDDDB record is approximately 8 miles northwest of the study area (CDFW 2023).	Moderate potential to occur. The study area contains suitable chaparral and coastal scrub habitat. Additionally, the northwest portion of the study area contains some highly incised washes with vertical walls which may provide roosting habitat. The nearest mapped CNDDDB record is approximately 8 miles northwest of the study area (CDFW 2023).
<i>Glaucomys oregonensis californicus</i>	San Bernardino flying squirrel	None/SSC	Coniferous and deciduous forests, including riparian forests	Not expected to occur. The study area lacks suitable forested habitat. There is marginal riparian habitat, but it is generally sparse. Nearby records of this species are limited to the mountains north of Yucaipa. The nearest mapped CNDDDB record is approximately 10 miles northeast of the study area near Forest falls (CDFW 2023).	Not expected to occur. The study area lacks suitable forested habitat. There is marginal riparian habitat, but it is generally sparse. Nearby records of this species are limited to the mountains north of Yucaipa. The nearest mapped CNDDDB record is approximately 10 miles northeast of the study area near Forest falls (CDFW 2023).
<i>Leptonycteris yerbabuenae</i>	lesser long-nosed bat	FPD/SSC	Sonoran desert scrub, semi-desert grasslands, lower oak woodlands	Not expected to occur. While the study area contains grassland habitat, it lacks Sonoran Desert scrub, or oak woodland habitat and is outside of the species' known geographical range. Additionally, the only CNDDDB record within the 9 7.5-minute USGS quadrangles containing the site is likely a record of a vagrant male during migration (CDFW 2023).	Not expected to occur. While the study area contains grassland habitat, it lacks Sonoran Desert scrub, or oak woodland habitat and is outside of the species' known geographical range. Additionally, the only CNDDDB record within the 9 7.5-minute USGS quadrangles containing the site is likely a record of a vagrant male during migration (CDFW 2023).
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	None/SSC	Coastal scrub, desert scrub, chaparral, cacti, rocky areas	Moderate potential to occur. The study area contains some coastal scrub and chaparral habitat. However, the study area lacks cacti and rocky areas preferred by this species. The nearest mapped CNDDDB record is approximately 3 miles north of the study area (CDFW 2023).	Moderate potential to occur. The study area contains some coastal scrub and chaparral habitat. However, the study area lacks cacti and rocky areas preferred by this species. The nearest mapped CNDDDB record is approximately 3 miles north of the study area (CDFW 2023).
<i>Nyctinomops femorosaccus</i>	pocketed free-tailed bat	None/SSC	Pinyon–juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oases; roosts in high cliffs or rock outcrops with drop-offs, caverns, and buildings	Not expected to occur. While the study area contains some highly incised washes with vertical walls which may provide roosting habitat, it lacks suitable pinyon–juniper woodlands, desert scrub, desert riparian,	Not expected to occur. While the study area contains some highly incised washes with vertical walls which may provide roosting habitat, it lacks suitable pinyon–juniper woodlands, desert scrub, desert riparian,

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur (Focused Survey Area)	Potential to Occur (Non-Focused Survey Area)
				desert wash, Joshua tree, or palm oases habitat. One CNDDDB record is mapped within the 9 7.5-minute USGS quadrangles containing the study area and is approximately 8 miles east of the study area in the city of San Bernardino (CDFW 2023).	desert wash, Joshua tree, or palm oases habitat. One CNDDDB record is mapped within the 9 7.5-minute USGS quadrangles containing the study area and is approximately 8 miles east of the study area in the city of San Bernardino (CDFW 2023).
<i>Onychomys torridus ramona</i>	southern grasshopper mouse	None/SSC	Grassland and sparse coastal scrub	Low potential to occur. While study area contains suitable grassland and sparse coastal scrub the only CNDDDB record of this species within the 9 7.5-minute USGS quadrangles containing the study area is a historical record from 1938 approximately 5 miles south of the study area (CDFW 2023).	Low potential to occur. While study area contains suitable grassland and sparse coastal scrub the only CNDDDB record of this species within the 9 7.5-minute USGS quadrangles containing the study area is a historical record from 1938 approximately 5 miles south of the study area (CDFW 2023).
<i>Perognathus alticola alticolus</i>	white-eared pocket mouse	None/SSC	Arid ponderosa pine communities	Not expected to occur. The study area does not contain ponderosa pine habitat to support this species.	Not expected to occur. The study area does not contain ponderosa pine habitat to support this species.
<i>Perognathus longimembris brevinasus</i>	Los Angeles pocket mouse	None/SSC	Lower-elevation grassland, alluvial sage scrub, and coastal scrub	Moderate potential to occur. The study area contains grassland and coastal scrub habitat. Additionally, the study area is primarily composed of sandy soils, a preferred microhabitat characteristic of the Los Angeles pocket mouse (USDA 2023). The nearest mapped CNDDDB record is approximately 7 miles west of the study area (CDFW 2023).	Moderate potential to occur. The study area contains grassland and coastal scrub habitat. Additionally, the study area is primarily composed of sandy soils, a preferred microhabitat characteristic of the Los Angeles pocket mouse (USDA 2022). The nearest mapped CNDDDB record is approximately 7 miles west of the study area (CDFW 2023).
<i>Taxidea taxus</i>	American badger	None/SSC	Dry, open, treeless areas; grasslands, coastal scrub, agriculture, and pastures, especially with friable soils	High potential to occur. The study area contains dry, open, and treeless areas as well as grasslands, coastal scrub, and agricultural areas. Additionally, the three most prominent soils series mapped in the area (Saugus, San Timoteo and San Emigdio) are described as friable (USDA 2022). The nearest mapped CNDDDB record is approximately 6 miles east of the study area, however this is a historical record from 1908 (CDFW 2023).	High potential to occur. The study area contains dry, open, and treeless areas as well as grasslands, coastal scrub, and agricultural areas. Additionally, the three most prominent soils series mapped in the area (Saugus, San Timoteo and San Emigdio) are described as friable (USDA 2022). The nearest mapped CNDDDB record is approximately 6 miles east of the study area, however this is a historical record from 1908 (CDFW 2023).
Reptiles					
<i>Anniella stebbinsi</i>	southern California legless lizard	None/SSC	Coastal dunes, stabilized dunes, beaches, dry washes, valley-foothill, chaparral, and scrubs; pine, oak, and riparian woodlands; associated with sparse vegetation and moist sandy or loose, loamy soils	High potential to occur. The study area contains suitable dry washes, chaparral, scrub, and riparian habitat with areas of sparse vegetation and sandy loam soils. Additionally, the eastern half of the study area overlaps with a CNDDDB record of this species from 2018. While the exact location of this record was approximated, there are several other CNDDDB records less than 2 miles from the study area (CDFW 2023).	High potential to occur. The study area contains suitable dry washes, chaparral, scrub, and riparian habitat with areas of sparse vegetation and sandy loam soils. Additionally, the eastern half of the study area overlaps with a CNDDDB record of this species from 2018. While the exact location of this record was approximated, there are several other CNDDDB records less than 2 miles from the study area (CDFW 2023).
<i>Arizona elegans occidentalis</i>	California glossy snake	None/SSC	Arid scrub, rocky washes, grasslands, chaparral, open areas with loose soil	Moderate potential to occur. The study area contains grassland, chaparral and open areas with loose sandy loam soils that may be suitable for this species. The nearest mapped CNDDDB record is approximately 6 miles northwest of the study area near the Santa Ana River (CDFW 2023).	Moderate potential to occur. The study area contains grassland, chaparral and open areas with loose sandy loam soils that may be suitable for this species. The nearest mapped CNDDDB record is approximately 6 miles northwest of the study area near the Santa Ana River (CDFW 2023).
<i>Aspidoscelis tigris stejnegeri</i>	Coastal tiger whiptail	None/SSC	Hot and dry areas with sparse foliage, including chaparral, woodland, and riparian areas.	High potential to occur. The study area contains sparse chaparral and riparian habitat that may be suitable to this species. The nearest mapped CNDDDB record is approximately 2 miles southwest of the	High potential to occur. The study area contains sparse chaparral and riparian habitat that may be suitable to this species. The nearest mapped CNDDDB record is approximately 2 miles southwest of the

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur (Focused Survey Area)	Potential to Occur (Non-Focused Survey Area)
<i>Charina umbratica</i>	southern rubber boa	None/ST	Montane oak-conifer and mixed-conifer forests, montane chaparral, wet meadows; usually in vicinity of streams or wet meadows	study area where 2 adults were observed in 2015 (CDFW 2023). Not expected to occur. The study area lacks montane oak-conifer and mixed-conifer forests, montane chaparral, or wet meadow habitat, and is well below the elevation range of the species. Additionally, the streams within the study area are intermittent streams which are only active during the rainy season. CNDDDB records of this species are restricted to the mountains north and east of Yucaipa (CDFW 2023).	study area where 2 adults were observed in 2015 (CDFW 2023). Not expected to occur. The study area lacks montane oak-conifer and mixed-conifer forests, montane chaparral, or wet meadow habitat, and is well below the elevation range of the species. Additionally, the streams within the study area are intermittent streams which are only active during the rainy season. CNDDDB records of this species are restricted to the mountains north and east of Yucaipa (CDFW 2023).
<i>Crotalus ruber</i>	red diamondback rattlesnake	None/SSC	Coastal scrub, chaparral, oak and pine woodlands, rocky grasslands, cultivated areas, and desert flats	Moderate potential to occur. The study area contains coastal scrub, chaparral, and oak woodland that may be suitable to this species. While the study area lacks rocky areas, it does contain rodent burrows which may be used for cover. The nearest mapped CNDDDB record is approximately 2 miles southwest of the study area (CDFW 2023).	Moderate potential to occur. The study area contains coastal scrub, chaparral, and oak woodland that may be suitable to this species. While the study area lacks rocky areas, it does contain rodent burrows which may be used for cover. The nearest mapped CNDDDB record is approximately 2 miles southwest of the study area (CDFW 2023).
<i>Emys marmorata</i>	western pond turtle	None/SSC	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter	Not expected to occur. The streams within the study area are intermittent streams which are only active during the rainy season and would not provide suitable habitat for this species.	Not expected to occur. The streams within the study area are intermittent streams which are only active during the rainy season and would not provide suitable habitat for this species.
<i>Phrynosoma blainvillii</i>	Blainville's horned lizard	None/SSC	Open areas of sandy soil in valleys, foothills, and semi-arid mountains including coastal scrub, chaparral, valley-foothill hardwood, conifer, riparian, pine-cypress, juniper, and annual grassland habitats	Moderate potential to occur. The study area contains sandy soils with coastal scrub, chaparral, and annual grassland habitat. The nearest mapped CNDDDB record is approximately 4 miles northwest of the study area in Redlands. While this is a historical record, there are other more current CNDDDB records within 6 miles of the study area (CDFW 2023).	Moderate potential to occur. The study area contains sandy soils with coastal scrub, chaparral, and annual grassland habitat. The nearest mapped CNDDDB record is approximately 4 miles northwest of the study area in Redlands. While this is a historical record, there are other more current CNDDDB records within 6 miles of the study area (CDFW 2023).
<i>Salvadora hexalepis virgulata</i>	coast patch-nosed snake	None/SSC	Brushy or shrubby vegetation; requires small mammal burrows for refuge and overwintering sites	High potential to occur. The study area contains shrubby vegetation and small mammal burrows that may be suitable for refuge and wintering habitat. The nearest mapped CNDDDB record is approximately 2.5 miles southwest of the study area (CDFW 2023).	High potential to occur. The study area contains shrubby vegetation and small mammal burrows that may be suitable for refuge and wintering habitat. The nearest mapped CNDDDB record is approximately 2.5 miles southwest of the study area (CDFW 2023).
<i>Thamnophis hammondi</i>	two-striped gartersnake	None/SSC	Streams, creeks, pools, streams with rocky beds, ponds, lakes, vernal pools	Not expected to occur. The streams within the study area are intermittent streams which are only active during the rainy season and would not provide suitable habitat for this species.	Not expected to occur. The streams within the study area are intermittent streams which are only active during the rainy season and would not provide suitable habitat for this species.

Status Designations:

- BCC: U.S. Fish and Wildlife Service Bird of Conservation Concern
- FE: Federally listed as endangered
- FP: California Fully Protected Species
- FT: Federally listed as threatened
- FPD: Federally proposed for delisting
- SCE: State candidate for listing as endangered
- SCT: State candidate for listing as threatened
- SSC: California Species of Special Concern
- SE: State listed as endangered
- ST: State listed as threatened
- WL: California Watch List Species

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References

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