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Biological Resources Technical Report

2240 Fleetwood Drive Industrial Building Project

NOVEMBER 2024

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
BSA	biological study area
Cal-IPC	California Invasive Plant Council
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
City	City of Jurupa Valley
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
CWA	Clean Water Act
EPA	U.S. Environmental Protection Agency
FESA	Federal Endangered Species Act
GIS	geographic information system
HCP	habitat conservation plan
MBTA	Migratory Bird Treaty Act
MM	Mitigation Measure
MSHCP	Western Riverside County Multiple Species Habitat Conservation Plan
NEPSSA	Narrow Endemic Plant Species Survey Area
PQP	Public Quasi-Public
Project	2240 Fleetwood Drive Industrial Building Project
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

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1 Introduction

This biological resources technical report documents the results of surveys conducted to identify potential biological resources constraints for the 2240 Fleetwood Drive Industrial Building Project (Project) located in the City of Jurupa Valley (City), Riverside County, California. Figure 1, Project Location, shows the regional location of the Project and the site vicinity. All figures are provided in Appendix A, Figures.

The purpose of this report is to (1) describe the conditions of biological resources within the biological study area (BSA) in terms of vegetation communities, plants, wildlife, wildlife habitats, and wetlands; (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 the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) and the City of Jurupa Valley (City) General Plan and Municipal Code (policies); 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 55.2-acre BSA, which includes the 6.8-acre Project site and surrounding 500-foot buffer consisting of 48.4 acres, is located in the northeastern portion of the City, which is located in western Riverside County (Figure 1). The Project site is located at 2240 Fleetwood Drive, south of the intersection of Via Ricard and Fleetwood Drive. The Project site is depicted in the middle of Section 16, Township 4 South, and Range 6 West of the San Bernardino Baseline and Meridian, U.S. Geological Survey (USGS) Corona South 7.5-minute quadrangle. The approximate center of the Project site corresponds to 34.016358 latitude and −117.375485 longitude. The Project consists of Assessor's Parcel Numbers 178-350-029 and 178-350-030, with portions of the Project occurring in Assessor's Parcel Numbers 178-350-024 and 178-350-026.

1.1.2 Project Description

The Project site is designated as Heavy Industrial under the City's General Plan and zoned Manufacturing-Heavy (M-H) under the City's Municipal Code. The Project is within the City's Aqua Mansa Industrial Corridor Specific Plan.

The Project proposes development of an 84,200-square-foot industrial building and associated appurtenances, including an equipment yard/storage area, truck scale, and circulation area (Figure 2, Site Plan). The Project does not include any temporary impacts or off-site improvements.

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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. 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). Executive Order 13186 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) provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. Section 401 requires a project operator for a federal license or permit that allows activities resulting in a discharge to waters of the United States to obtain state certification, thereby ensuring that the discharge will comply with provisions of the CWA. The Regional Water Quality Control Boards administer the certification program in California. Section 402 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 at Title 33 Code of Federal Regulations (CFR) Parts 320 through 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 system 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. The Supreme Court recently clarified what waters are considered "waters of the United States" under the CWA. In *Sackett v. EPA*, the Supreme Court held that waters of the United States refers only to "those relatively permanent, standing or continuously flowing bodies of water forming geographic[al] features that are described in ordinary parlance as streams, oceans, rivers, and lakes."[1] In determining wetlands subject to CWA jurisdiction, the majority opinion presents a two-step process under which federal jurisdiction may be asserted over a wetland. The agency must establish "first, that 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 second, that the wetland has a continuous surface connection with that water, making it difficult to determine where the 'water' ends and the 'wetland' begins."[2]

On August 29, 2023, EPA and USACE announced the final rule amending the 2023 definition of waters of the United States to conform the rule with the *Sackett v. EPA* decision. The 2023 rule eliminates the "significant nexus" test invalidated by the Sackett decision for identifying tributaries, wetlands, and other waters as federally protected and clarifies that the CWA extends only to (a) relatively permanent bodies of water (tributaries such as streams and rivers) connected to traditional navigable waters, the territorial seas, or interstate waters and (b) wetlands that have a continuous surface connection with those waters. Although the Sackett opinion did not specifically reference streams, EPA's new rule extends the "continuous surface connection" standard to streams, thereby removing non-permanent, ephemeral streams that do not meet these standards from federal jurisdiction. There is ongoing litigation regarding the waters of the United States rule; therefore, the 2023 rule is not applicable in all states. As confirmed by EPA, the 2023 rule is applicable in California, as one of the states that has not challenged EPA's and USACE's current waters of the United States rules.

The term "wetlands" (a subset of waters of the United States) is defined as "areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."[3] As noted above, the Sackett decision and 2023 rule implementing the Sackett decision state that only "adjacent" wetlands, defined as having a continuous surface connection with traditional navigable waters, are subject to federal regulation.[4] 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,"[5] which is defined as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas."[6]

1 *Sackett v. Env't Prot. Agency*, 598 U.S. 651, 671 (2023).
2 *Sackett v. Env't Prot. Agency*, 598 U.S. 678 (2023).
3 33 CFR 328.3(c)(1).
4 33 CFR 328.3(a)(4), 33 CFR 328.3(c)(2).
5 33 CFR 328.4(c)(1).
6 33 CFR 328.3(c)(4).

2.2 State

2.2.1 California Endangered Species Act

The California Endangered Species Act (CESA) (California Fish and Game Code Chapter 1.5, Sections 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 mitigation 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 California Fish and Game Code outline protection for fully protected species of mammals, birds, reptiles, amphibians, and fish. Species that are fully protected by these sections may not be taken or possessed at any time. CDFW cannot issue permits or licenses that authorize the "take" of any fully protected species, except under certain circumstances, such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock. 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 definable bed and banks, as well as 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 to be claimed as jurisdictional. CDFW does not have jurisdiction over ocean or shoreline resources.

Under California Fish and Game Code 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 (Sections 1900 et seq. of the California Fish and Game Code) 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 California Fish and Game Code. To align with federal regulations, the categories of "threatened" and "endangered" species were added to CESA. All "rare" animals in CESA were converted to "threatened," but this did not change 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 project proponents.

Nesting Birds

Section 3503 of the California Fish and Game Code 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. CEQA 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 CEQA Guidelines 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 (CNDDB) is interested in tracking, regardless of their legal or protection status." This is a broader list than those species that are protected under FESA, CESA, and other California Fish and Game Code provisions and includes lists developed by other organizations, including, for example, the Audubon Watch List. Guidance documents prepared by other agencies, including the Bureau of Land Management Sensitive Species and USFWS Birds of Special Concern, are also included on this 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 Wildlife 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 Regional Water Quality Control Boards 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 water 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 ordinary high-water mark 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 Regional Water Quality Control Board 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 Western Riverside County Multiple Species Habitat Conservation Plan

The Project is located within the MSHCP (Figure 3, Western Riverside MSHCP). The MSHCP is a comprehensive, multijurisdictional habitat conservation plan focusing on the permanent conservation of 500,000 acres and the protection of 146 species, including 34 that are currently listed as threatened or endangered. The MSHCP is one of several large, multijurisdictional habitat-planning efforts in Southern California with the overall goal of maintaining biological and ecological diversity within a rapidly urbanizing region. The MSHCP will allow the County of Riverside and its cities, including the City, to better control local land-use decisions and maintain a strong economic climate in the region while addressing the requirements of the state and federal endangered species acts (RCA 2003).

The MSHCP serves as a habitat conservation plan (HCP) pursuant to Section 10(a)(1)(B) of FESA (16 USC 1531 et seq.) and a Natural Communities Conservation Plan under the Natural Community Conservation Planning Act of 2001 (California Fish and Game Code, Section 2800 et seq.). The MSHCP allows the participating jurisdictions to authorize "take" of plant and wildlife species identified within the plan area. USFWS and CDFW have authority to regulate the take of threatened, endangered, and rare species. Under the MSHCP, the wildlife agencies have granted "take authorization" for otherwise lawful actions, such as public and private development that may incidentally take or harm individual species or their habitat outside of the MSHCP conservation areas, in exchange for the assembly and management of a coordinated MSHCP conservation area.

The MSHCP is a "criteria-based plan" and does not rely on a hardline preserve map. Instead, within the MSHCP area, the MSHCP reserve will be assembled over time from a smaller subset of the plan area, referred to as the "Criteria Area." The Criteria Area consists of Criteria Cells (Cells) or Cell Groupings and flexible guidelines (Criteria) for the assembly of conservation within the Cells or Cell Groupings. Cells and Cell Groupings may also be included within larger units known as Cores, Linkages, or Non-Contiguous Habitat Blocks.

Local Development Mitigation Fee

In order to implement the goals and objectives of the MSHCP and to mitigate the impacts caused by new development, the MSHCP seeks to acquire and conserve certain lands that support covered species. A MSHCP Local Development Mitigation Fee is necessary to supplement the financing of the acquisition of lands supporting species covered by the MSHCP and to pay for new development's fair share of this cost (RCA 2003). The MSHCP Local Development Mitigation Fee assists in the maintenance of biological diversity and protects vegetation communities that are known to support threatened, endangered, or sensitive populations of plant and wildlife species.

2.3.2 Stephens' Kangaroo Rat Habitat Conservation Plan

The Stephens' Kangaroo Rat HCP describes the proposed conservation, mitigation, and monitoring measures to be implemented for the preservation of the federally endangered Stephens' kangaroo rat (*Dipodomys stephensi*) (RCHCA 1996). The Stephens' Kangaroo Rat HCP establishes a regional system of Core Reserves throughout western Riverside County for the specific conservation of Stephens' kangaroo rat and the ecosystem upon which it

depends. A standard fee, known as the Development Mitigation Fee, is charged to development projects to supplement the financing of reserve management for the Stephens' Kangaroo Rat HCP.

The Project is outside of the Stephens' Kangaroo Rat HCP Core Reserve Area and is located outside the Stephens' Kangaroo Rat HCP fee area. However, because the Project is located within the MSHCP area, the Project has "take" coverage for any Stephens' kangaroo rat potentially occurring on the site through the MSHCP.

2.3.3 City of Jurupa Valley General Plan

The City adopted its General Plan in 2017 with proposed technical amendments to the General Plan in 2024; it has been used as the basis for standards for the development of public and private projects within the City (City of Jurupa Valley 2017, 2024). The General Plan provides goals, policies, and program goals for Conservation and Open Space Elements. The Project would be designed to be consistent with all the pertinent goals, objectives, and policies outlined in the General Plan.

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3 Methods

Data regarding biological resources present within the 55.2-acre BSA, which includes the Project site and a 500-foot buffer, was obtained through review of pertinent literature, field reconnaissance, and vegetation mapping, which are described in detail in this section. For purposes of this report, special-status resources are defined as follows:

- Special-status plant species include the following:
  - Species designated as either rare, threatened, or endangered by CDFW or USFWS and protected under either CESA (California Fish and Game Code, Section 2050 et seq.) or 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 2024a), or species with a CRPR of 1 or 2 in the CNPS Rare Plant Inventory (CNPS 2024a)
- Special-status wildlife species include the following:
  - Species designated as either rare, threatened, or endangered by CDFW or USFWS and protected under either CESA (California Fish and Game Code Section 2050 et seq.) or FESA (16 USC 1531 et seq.)
  - Species that are candidate species being considered or proposed for listing under FESA or CESA
  - Other species that are included on the CDFW Special Animals List (CDFW 2024b) as Species of Special Concern
- Special-status vegetation communities are those designated as sensitive by CDFW (CDFW 2024c)

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 BSA. Special-status biological resources present or potentially present on the BSA were identified through a literature search using the following sources: Information for Planning and Consultation records (USFWS 2024a), USFWS Critical Habitat for Threatened & Endangered Species (USFWS 2024b), the most recent versions of the CNDDB and special-status species lists (CDFW 2024a, 2024b, 2024d), and the CNPS Inventory (CNPS 2024a). Potential and/or historical drainages and aquatic features were investigated based on a review of USGS topographic maps (1:24,000-scale), aerial photographs, the USFWS National Wetland Inventory database (USFWS 2024c), the USGS National Hydrography Dataset (USGS 2024), and the National Resources Conservation Service Web Soil Survey (USDA 2024). These databases were reviewed to identify sensitive biological resources present or potentially present for the USGS 7.5-minute quadrangle on which the majority of the BSA is located (San Bernardino South) and the eight surrounding quadrangles (San Bernardino North, Devore, Riverside East, Riverside West, Harrison Mountain, Redlands, Sunnymead, and Fontana).

3.2 Field Surveys

Dudek conducted a biological reconnaissance survey including vegetation mapping and habitat assessment on February 15, 2024. A focused habitat assessment for Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*) was conducted on March 15, 2024, by permitted biologist Dale Powell. Table 1 lists the date, focus,

scope, conditions, and personnel for the survey. Photos of the Project site can be found in Appendix B, Representative Photographs.

Table 1. Survey Details

Date	Biologist(s)	Survey Type/Pass	Times	Conditions
02/15/2024	Joshua Elson; Kimberly Narel	Reconnaissance; Vegetation Mapping and Habitat Assessment	9:30 a.m.–12:15 p.m.	55°F–62°F; 0%–40% cc; 1–5 mph winds
03/15/2024	Dale Powell (USFWS Permit No. TE-006559-8	Delhi Sands Flower-loving Fly Habitat Assessment	12:30 p.m.–2:00 p.m.	50°F; 0% cc; 0 mph winds

Note: °F = degrees Fahrenheit; cc = cloud cover; mph = miles per hour.

3.2.1 Vegetation Community and Land Cover Mapping

Dudek biologists conducted vegetation mapping within the BSA on February 15, 2024. The survey date, biologists, and weather conditions are included in Table 1. Vegetation communities and land uses within the BSA were mapped in the field using Environmental Systems Research Institute (Esri) Collector, 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 BSA was determined.

Vegetation community classifications used in this report follow A Manual of California Vegetation, online edition (CNPS 2024b), and California Natural Community List (CDFW 2024c), 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 the CDFW (2020). Mapping standards call for a minimum mapping unit of not greater than 10 acres and is usually 1 or 2 acres for upland natural communities not considered sensitive; a minimum mapping unit of 0.25 acres was used 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 2024a). 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 2024c) or the U.S. Department of Agriculture Natural Resources Conservation Service Plants Database (USDA 2023).

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 (AOS 2021) for birds, American Society of Mammologists (ASM 2023) for mammals, North American Butterfly Association (NABA 2016) or San Diego Natural History Museum (SDNHM 2002) for butterflies, and Moyle (2002) for fish.

3.2.4 Special-Status and Regulated Resources

3.2.4.1 Special-Status Plants

Based on the results of the literature review discussed in Section 3.1, no special-status plant species were determined to have a moderate or high potential to occur within the BSA based on known species distribution, species-specific habitat preferences, and habitat conditions on site. However, the BSA is located within the MSHCP Narrow Endemic Plant Species Survey Area (NEPSSA) (Figure 4a, Western Riverside MSHCP Survey Areas – Narrow Endemic Plants). Most of the Project is located within the MSHCP NEPSSA for San Diego ambrosia (*Ambrosia pumila*), Brand's phacelia (*Phacelia stellaris*), and San Miguel savory (*Clinopodium chandleri*) (Figure 4a). Per MSHCP Section 6.1.3, for areas within identified NEPSSAs, focused surveys shall be required where appropriate habitat is present. Therefore, the Project was assessed to determine if suitable habitat was present for these species.

3.2.4.2 Burrowing Owl

Most of the Project is located within the MSHCP habitat assessment area for burrowing owl (*Athene cunicularia*) (Figure 4b, Western Riverside MSHCP Survey Areas – Burrowing Owl). To meet requirements in the Burrowing Owl Survey Instructions (County of Riverside 2006), a Step I habitat assessment was conducted to identify suitable vegetation for burrowing owl. The habitat assessment was conducted within the Project boundary and a 500-foot buffer, where legally accessible. Following the confirmation of suitable habitat in the Project boundary, a Step II-A focused burrow survey was performed with pedestrian transects spaced approximately 20 meters apart to allow for 100% visual coverage of the Project site. Suitable habitat within the 500-foot buffer was surveyed via binoculars from the Project site or public roads due to access limitations.

3.2.4.3 Small Mammals

A small portion of the Project is located within the MSHCP habitat assessment area for small mammals, specifically San Bernardino kangaroo rat (*Dipodomys merriami parvus*) and Los Angeles pocket mouse (*Perognathus longimembris brevinasus*) (Figure 4c, Western Riverside MSHCP Survey Areas – Small Mammal). Therefore, a habitat assessment was conducted for these species within the Project site, where legally accessible, to determine present/absence of suitable habitat.

3.2.4.4 Delhi Sands Flower-loving Fly

A portion of the Project is located within the MSHCP habitat assessment area for Delhi Sands flower-loving fly (Figure 4d, Western Riverside MSHCP Survey Areas – Delhi Sands Flower-Loving Fly). Therefore, a habitat assessment was conducted for this species within the Project by permitted biologist Dale Powell to determine present/absence of suitable habitat.

3.2.5 Survey Limitation

Access to portions of the BSA was not accessible during the reconnaissance survey because some of the properties are private and access was not granted or there were safety issues associated with access. These areas included the properties west of Fleetwood Drive and properties to the north of the Project site, which were areas of developed or disturbed habitat land covers. The Santa Ana River was not considered safe to access due to the presence of extensive human encampments established by unhoused individuals. Therefore, vegetation mapping and habitat assessments were conducted from the main, elevated portion of the Project site or other public roads visually using binoculars. Visual surveys were complimented with the use of aerial signatures of vegetation communities occurring within the BSA.

The reconnaissance survey was conducted during the winter season, which resulted in detection and identification of most trees, shrubs, and perennial plant species that may potentially occur in the area. Due to the timing of the surveys, early spring or summer annual and cryptic perennials may not have been detectable.

Conditions were suitable for detection of most wildlife species (i.e., partly cloudy skies, 55°F–62°F temperatures, and light winds). Surveys specifically aimed at detection of the full range of wildlife species were not conducted. However, notes were taken for incidental wildlife observations made during surveys to establish a general baseline of wildlife diversity within the BSA. Surveys were conducted during the daytime, which usually results in few observations of mammals, many of which may be active at night. In addition, many species of reptiles and amphibians are nocturnal or cryptic in their habitats and are difficult to observe using standard meandering transects.

The current survey effort provides an accurate representation of the potential for special-status species to occur in the BSA. The surveys conducted to date were thorough and comprehensive, and the results of the study contained herein provide a reasonable, accurate assessment of the BSA.

4 Environmental Setting

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

4.1 Land Use

The eastern part of the BSA includes a portion of the Santa Ana River flood plain, which is highly disturbed due to the establishment of human encampments and vehicle use in the area. To the west and southwest of the BSA are warehouses, office spaces, industrial uses, and several disturbed, unimproved parcels. To the north and northeast of the BSA are a self-storage facility, water treatment facility, truck driving school office, and urban waste recycling center. The main part of the Project site is used as a truck yard, which appears to have been disked and/or graded since at least 1993 (Google Earth 2024). Fleetwood Drive abuts the western border of the Project site.

4.2 Climate

The BSA is in the inland valley region of western Riverside County. The average annual temperature is not available for Jurupa Valley, but annual temperatures in Riverside range from 41°F to 94°F (WRCC 2024). The average annual precipitation for Riverside is 9.86 inches (WRCC 2024). Periods of extended drought are common throughout the region.

4.3 Topography

The BSA can be divided into the terrace upon which the majority of the Project site and surrounding land uses are located and the riverbed area to the east formed by the Santa Ana River. Elevations within the riverbed are fairly level, ranging from approximately 810 to 813 feet above mean sea level. Elevations within the remainder of the BSA slope gradually from south to north and range from approximately 865 to 875 feet above mean sea level.

4.4 Soils

According to the U.S. Department of Agriculture's Natural Resource Conservation Service's Web Soil Survey, four soil series and five map units are mapped within the BSA: Delhi fine sand (2% to 15% slopes), Dello loamy sand (0% to 2% slopes); Ramona sandy loam (0% to 5% slopes); Ramona sandy loam (5% to 8% slopes); and terrace escarpments (USDA 2024). The spatial distribution of these soils is depicted in Figure 5, Soils.

Delhi Series consists of very deep, somewhat excessively drained soils that formed in wind modified material weathered from granitic rock sources. Surface runoff is negligible to slow, and soils have a rapid permeability. These soils typically occur on floodplains, alluvial fans, and terraces (USDA 2024). This soil series occurs in the BSA within the northcentral portion within existing disturbed/developed areas.

Dello Series consists of very deep, very poorly drained soils that formed in alluvium from granitic rock sources. Surface runoff is slow with rapid permeability. These soils typically occur in small depressions (USDA 2024). This soil series occurs within the southern and eastern portion of the BSA, primarily outside of the Project site and within the Santa Ana River terrace.

Ramona Series consists of well drained soils that formed in alluvium derived mostly from granitic and related rock sources. Surface runoff is slow to rapid and soils have a slow permeability. These soils typically occur on terraces and fans at elevations of 250 to 3,000 feet (USDA 2024). This soil series occurs within the western and northeastern portions of the BSA.

Terrace Escarpments consists of alluvial outwash derived from granite, gabbro, metamorphosed sandstone, sandstone, or mic-schist. Terrace escarpments may have exposed "rim pan," gravel, cobblestones, stones, or large boulders. These typically occur on terraces or barrancas (USDA 1971). This soils series occurs in the central portions of the BSA along the slope down to the Santa Ana River terrace.

4.5 Watersheds and Hydrology

The review area is within the Santa Ana Subbasin, Hydrologic Unit Code 8 (18070203), and within the East Etiwanda Creek–Santa Ana River sub-watershed Hydrologic Unit Code 12 (180702030804) of the Middle Santa Ana River watershed Hydrologic Unit Code 10 (1807020308) (Figure 6, Hydrology). The Santa Ana Subbasin comprises approximately 1,680 square miles and spans Orange, Riverside and San Bernardino Counties. The primary geographic and surface hydrologic feature of the watershed is the Santa Ana River, which flows southwest from the San Bernardino Mountains for approximately 100 miles until it reaches its terminus at the Pacific Ocean in between the Cities of Huntington Beach and Costa Mesa. The Santa Ana River is located outside and adjacent to the BSA.

A review of the National Wetlands Inventory surface waters and wetlands dataset identifies the Santa Ana River outside of the BSA, classified as a semi-permanently flooded riverine system with an unconsolidated bottom (Cowardin Classification PUBx) (USFWS 2024c). No "blue line" mapped drainages or wetland features occur within the Project site or BSA.

5 Results

This section describes the results of the literature review, field surveys, and habitat assessments within the BSA.

5.1 Vegetation Communities and Land Covers

A total of five vegetation communities and land cover types were mapped in the BSA. The spatial distribution of the vegetation communities and land covers is presented in Figure 7, Biological Resources. The acreages of the mapped vegetation alliances/associations and other land covers in the BSA are presented in Table 2. Vegetation communities considered sensitive biological resources by CDFW under CEQA (CDFW 2024c) are noted in Table 2 with an asterisk.

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

Table 2. Vegetation Communities and Land Cover Types within the BSA

Vegetation Community or Land Cover Type	Alliance	Association	Ranking[1]	Acreage
Vegetation Community				
Common and giant reed marshes*	*Phragmites australis–Arundo donax*	*Arundo donax–Salix exigua*	SNR	0.6
Non-native grassland general habitat	Non-native grassland	Non-native grassland	SNA	5.5
Upland mustards or star-thistle fields*	*Brassica nigra–Centaurea (solstitialis, melitensis)*	N/A	SNA	4.5
Land Cover Type				
Disturbed Habitat	N/A	N/A	SNA	17.4
Urban/Developed	N/A	N/A	SNA	27.3
			Total[2]	**55.2**

Source: CDFW 2024c.
Notes: N/A = not applicable.

1 The conservation status of a vegetation community is designated by a number from 1 to 5, preceded by a letter reflecting the appropriate geographic scale of the assessment (G = global, N = national, and S = subnational). The numbers have the following meaning (NatureServe 2024):
1 = critically imperiled
2 = imperiled
3 = vulnerable to extirpation or extinction
4 = apparently secure
5 = demonstrably widespread, abundant, and secure
SNR = unranked, subnational rank not yet assessed
SNA = state ranking not assigned

2 Totals may not sum due to rounding.

* Community is considered a semi-natural stand dominated by non-native/invasive species.

5.1.1 Common and Giant Reed Marshes

The common and giant reed marshes semi-natural alliance communities include giant reed (*Arundo donax*) or common reed (*Phragmites australis*) as dominant in the herbaceous layer. Giant reed is a non-native/invasive species. Per membership rules, common reed must make up at least 2% of the absolute cover of vegetation and generally at least 50% (sometimes 30%) of the relative cover in the herbaceous layer; giant reed must make up more than 60% of the relative cover in the herbaceous and shrub layers. Communities within this alliance typically have a continuous herbaceous layer under 8 meters (26.2 feet) in height. Common and giant reed marshes occur in riparian areas, along low-gradient streams and ditches, semi-permanently flooded and slightly brackish marshes, and impoundments. Species associated with the common and giant reed marshes semi-natural alliance include ragweed (*Ambrosia psilostachya*), perennial pepperweed (*Lepidium latifolium*), cocklebur (*Xanthium strumarium*), Fremont cottonwood (*Populus fremontii*), and salt marsh baccharis (*Baccharis douglasii*) (CNPS 2024b).

The common and giant reed marshes semi-natural alliance is ranked by CDFW as a semi-natural alliance and does not have specific global or state rankings. Therefore, common and giant reed marshes alliance is not considered a special-status vegetation community under CEQA.

One association was mapped within this alliance: *Arundo donax–Salix exigua*. Within the BSA, this association is dominated by giant reed and occurs within the Santa Ana River bed in the eastern portion of the study area buffer but outside of the Project site. Other species present at lower cover include eucalyptus (*Eucalyptus* spp.) and likely sandbar willow (*Salix exigua*) and mulefat (*Baccharis salicifolia*). Dudek biologists were unable to access this patch of giant reed marsh to confirm the vegetation species due to human encampments established within the vegetation and associated safety issues.

5.1.2 Upland Mustards or Star-Thistle Fields

The upland mustards or star-thistle fields alliance features non-native species, including either black mustard (*Brassica nigra*), field mustard (*Brassica rapa*), cardoon (*Cynara cardunculus*), tocalote (*Centaurea melitensis*), Geraldton carnation weed (*Euphorbia terracina*), shortpod mustard (*Hirschfeldia incana*), or cultivated radish (*Raphanus sativus*), among other similar ruderal forbs, as the dominant species in the herbaceous layer. Per membership rules, tocalote must make up greater than 90% of relative cover with other non-natives in the herbaceous layer. Communities within this semi-natural stand typically have an open to continuous herbaceous canopy under 3 meters (9.8 feet). Emergent trees and shrubs may be present at low cover. Upland mustards and other ruderal forbs occur in fallow fields, grasslands, roadsides, levee slopes, disturbed coastal scrub, riparian areas, and generally within disturbed areas (CNPS 2024b).

The upland mustards or star-thistle fields alliance is ranked by CDFW as a semi-natural alliance and does not have specific global or state rankings. Therefore, upland mustards or star-thistle fields alliance is not considered a special-status vegetation community under CEQA.

Within the BSA, this vegetation community occurs in the central portion, in the section of river terrace between the Santa Ana River bed and the developed portion of the Project site. The community is dominated by tocalote, along with a lower cover of other non-native herbs such as black mustard, shortpod mustard, and curly dock (*Rumex crispus*). Native herbs observed included telegraph weed (*Heterotheca grandiflora*), slender sunflower (*Helianthus gracilentus*), and California croton (*Croton californicus*). A significant number of castor bean (*Ricinus communis*) plants exist within the shrub layer.

5.1.3 Non-Native Grasslands

California non-native grassland or California annual grassland is described in the first edition of A Manual of California Vegetation (Sawyer et al. 2009) as being dominated by annual grasses and herbs in the ground layer including bromes (*Bromus* spp.), California poppy (*Eschscholzia californica*), filaree (*Erodium* spp.), lupines (*Lupinus* spp.), mustards (*Brassica* spp.), and wild oats (*Avena* spp.).

Non-native grasslands does not have specific global or state rankings. Therefore, this alliance is not considered a special-status vegetation community under CEQA.

Within the BSA, this vegetation community occurs in the central portion, in the section of river terrace between the Santa Ana River bed and the developed portion of the site, southwest of the upland mustards vegetation community. Characteristic species observed include a dominance of non-native grasses and herbs including ripgut brome, mouse barley (*Hordeum murinum*), and tocalote. Other herbs observed included common fiddleneck (*Amsinckia intermedia*), London rocket (*Sisymbrium irio*), redstem stork's bill (*Erodium cicutarium*), cheeseweed mallow (*Malva parviflora*) and wild radish (*Raphanus raphanistrum*). Shrubs present included non-natives such as tree tobacco (*Nicotiana glauca*) and castor bean, and limited areas of native brittlebush (*Encelia farinosa*).

5.1.4 Disturbed Habitat

The classification of disturbed habitat is due to the predominance of bare ground, non-native plant species, and other disturbance-tolerant plant species. Oberbauer et al. (2008) describes disturbed habitat as areas that have been physically disturbed by previous human activity and are no longer recognizable as a native or naturalized vegetation association, but that continue to retain a soil substrate. Typically, vegetation, if present, is nearly exclusively composed of non-native annual plant species.

Disturbed habitat is not a listed vegetation community under the California Natural Community List (CDFW 2024c), but it has been used in this report because it best describes what was observed in the field. As such, this non-natural land cover is not globally or state ranked and is not considered a sensitive natural community under CEQA.

Within the BSA, disturbed habitat includes adjacent upland parcels to the Project site, such as a lot across Fleetwood Drive from the Project site, and the patch of undeveloped land south of Wilson Street. It also includes a significant area of land within the Santa Ana Riverbed in the eastern portion of the BSA. Within this area, a considerable network of dirt roads and human encampments have been established. Automobiles, recreational vehicles and motor homes, tents, and large quantities of litter and debris were observed. Patches of what was presumed to be non-native grassland and scattered trees including eucalyptuses, tamarisk (*Tamarix ramosissima*), and native riparian species (*Salix* spp., *Populus fremontii*) exist in between the dirt roads. However, these areas exist disparately and in a disturbed condition such that it was not feasible to map them as separate vegetation communities. Further investigation of the vegetation in this area by Dudek biologists was prevented due to the safety issues associated with entering the encampments.

5.1.5 Urban and 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 supported. Urban or developed areas are characterized by permanent or semi-

permanent structures, pavement or hardscapes, landscaped areas, and areas with a large amount of debris or other materials (Oberbauer et al. 2008).

Urban or developed land is not a listed vegetation community under the California Natural Community List (CDFW 2024c), but it has been used in this report because it best describes what was observed in the field. As such, this non-natural land cover is not globally or state ranked and is not considered a sensitive natural community under CEQA.

Within the BSA, urban/developed land takes the form of industrial and office developments with paved roads and landscaped ornamentals present.

5.2 Plants and Wildlife Observed

5.2.1 Plants

A total of 29 species of native or naturalized plants, 9 native (31%) and 20 non-native (69%), were recorded within the BSA. A list of observed plant species observed is provided in Appendix C, Plant Compendium. The diversity of native plant species is low due to the developed nature of the BSA.

5.2.2 Wildlife

A total of 13 wildlife species, consisting of 13 native species (100%) and no non-native species (0%), were recorded within the BSA or vicinity during surveys (Appendix D, Wildlife Compendium).

Birds detected on or within the vicinity of the BSA include black phoebe (*Sayornis nigricans*), black-chinned hummingbird (*Archilochus alexandri*), Allen's/rufous hummingbird (*Selasphorus* sp.), house finch (*Haemorhous mexicanus*), mourning dove (*Zenaida macroura*), yellow-rumped warbler (*Setophaga coronata*), Bewick's wren (*Thryomanes bewickii*), song sparrow (*Melospiza melodia*), California towhee (*Melozone crissalis*), and white-crowned sparrow (*Zonotrichia leucophrys*). Mammals detected included brush rabbit (*Sylvilagus bachmani*). Reptiles detected included a western fence lizard (*Sceloporus occidentalis*). Invertebrates detected included a painted lady (*Vanessa cardui*).

5.3 Special-Status and Regulated Resources

Appendix E, Special-Status Plant Species Potential to Occur, and Appendix F, Special-Status Wildlife Species Potential to Occur, provide tables of all special-status species whose geographic ranges fall within the general BSA vicinity. Special-status species' potential to occur within the BSA were evaluated based on known species distribution, species-specific habitat preferences, and Dudek biologists' knowledge of regional biological resources. Species potentially occurring within the BSA 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 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 BSA. 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.

No listed species are expected to occur within the BSA, and no non-listed special-status species have a high or moderate potential to occur. Those special-status plant species that occur in the region but are not expected or have low potential to occur in the BSA due to a lack of suitable habitat or the BSA being located outside of the species' known geographic or elevation range are also included in Appendix E; 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 BSA (USFWS 2024b).

Based on the results of the literature review and database searches, 54 special-status plant species were reported in the CNDDB and CNPS databases as occurring in the nine U.S. Geological Survey 7.5-minute quadrangles containing and surrounding the BSA. No species were determined to have a moderate to high potential to occur based on the developed and disturbed nature of the site, the lack of suitable soils and vegetation communities (habitat) present, the elevation range, and previous known locations based on the CNDDB and CNPS Rare Plant Inventory (Appendix E).

5.3.2 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 BSA. 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 BSA are also included in Appendix F; 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, 42 special-status wildlife species were reported in the CNDDB and USFWS databases as occurring in the vicinity of the BSA. Of these 42 species, no non-listed special-status wildlife species were determined to have a moderate or high potential to occur within the BSA based on habitat present and/or the BSA's proximity to previous known locations in CNDDB. One listed species, Crotch's bumblebee (*Bombus crotchii*; a state candidate for listing as endangered), was determined to have a low potential to occur within the BSA. This species is not covered by the MSHCP and is detailed in the following discussion and presented below in Table 3.

The BSA is within a burrowing owl habitat assessment area for the MSHCP. Therefore, a habitat assessment and focused burrow survey was conducted for this species. The focused burrow surveys were negative (i.e., no suitable burrows greater than 4 inches in diameter or any suitable human-made surrogates were detected within the BSA). Therefore, focused burrowing owl surveys were not warranted. The BSA is also within a small mammal habitat assessment area for the MSHCP for San Bernardino Kangaroo rat and Los Angeles pocket mouse. Therefore, a habitat assessment was conducted for these species. Suitable habitat was determined absent; therefore, focused surveys were not warranted. Finally, the BSA is located within a Delhi sands flower-loving fly

habitat assessment area for the MSHCP. Therefore, a focused habitat assessment for Delhi Sands flower-loving fly was conducted by permitted biologist Dale Powell. Suitable habitat was determined absent; therefore, focused surveys were not warranted. More information for these species is provided below in Table 3 and in Section 5.4 of this report.

In addition, there is no USFWS-designated critical habitat for listed wildlife species overlapping the Project site; however, designated critical habitat for Santa Ana sucker (*Catostomus santaanae*) is located within the BSA buffer (USFWS 2024b).

Table 3. Special-Status Wildlife Species with a Moderate Potential to Occur in the BSA

Scientific Name	Common Name	Status (Federal/State)	Primary Habitat Associations/ Life Form/Blooming Period/Elevation Range (feet)	Potential to Occur
Bombus crotchii	Crotch's bumble bee	None/SCE	Open grassland and scrub communities supporting suitable floral resources	**Low potential to occur.** While the Project site is mainly disturbed, there is a small amount of ruderal habitat containing floral resources, and additional floral resources may be present within the Santa Ana River terrace located within the BSA buffer.

Notes: BSA = biological survey area.
Status Designations
Federal
BCC: U.S. Fish and Wildlife Service Bird of Conservation Concern
FT: Federally listed as threatened
State
SC: State candidate
SCE: State candidate for listing as endangered
SSC: California Species of Special Concern
ST: State listed as threatened

Burrowing Owl

Burrowing owl is a USFWS bird of conservation concern and a candidate for listing under CESA. With a relatively wide-ranging distribution throughout the west, burrowing owls are habitat generalists (Lantz et al. 2004). In California, burrowing owls are yearlong residents of open, dry grassland and desert habitats, as well as grass, forb, and open shrub stages of pinyon-juniper and ponderosa pine habitats (Zeiner et al. 1990). 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 caching 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 (*Otospermophilus beecheyi*). 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), useable

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.

The BSA buffer contains suitable habitat (non-native grasslands and disturbed areas that provide open cover); however, the Project site is highly disturbed with compacted soils. No burrows greater than 4 inches in diameter were present within the BSA. As such, no further actions, such as mitigation measures or incidental take permitting, are recommended. However, due to the continued presence of suitable habitat on the BSA, there is a potential for burrowing owl to move onto or over winter on the BSA prior to the start of construction. Therefore, as stipulated by the MSHCP Burrowing Owl Survey Instructions (County of Riverside 2006) a 30-day clearance survey is required to ensure that owls are still absent from the BSA and will not be impacted by the Project.

San Bernardino Kangaroo Rat

The San Bernardino kangaroo rat is federally listed as endangered, and a California Species of Special Concern. This species occurs from the San Bernardino Valley in San Bernardino County to the Menifee Valley in Riverside County (Hall and Kelson 1959; Lidicker 1960). The San Bernardino kangaroo rat occupies alluvial sage scrub, coastal sage scrub, and chaparral vegetation types (Braden and McKernan 2000). In addition to alluvial fans, this species is typically found in habitat consisting of relatively flat masses of loose rock, gravel, and sand deposited by streams, including areas such as floodplains, washes, areas with braided channels, and in adjacent upland areas (USFWS 2007).

The Project site lacks suitable scrub and alluvial scrub habitat and soils to support this species. Soils within the Project are highly compacted due to past disturbances. While the Santa Ana River terrace is located within the BSA buffer and contains sandy soil near the Santa Ana River, this area is outside of the Project footprint. Furthermore, there are no known occurrences of this species within the Santa Ana River. The nearest known occurrence is approximately 5.5 miles east of the BSA (CDFW 2024d).

Los Angeles Pocket Mouse

The Los Angeles pocket mouse is a California Species of Special Concern. This species' historical 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, 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 (RCA 2003).

The Project site lacks suitable scrub and alluvial sage scrub habitat to support this species and soils within the Project are highly compacted due to past disturbances. This species appears to be limited to sparsely vegetated habitat areas in patches of fine sandy soils associated with washes or of aeolian (windblown) origin, such as dunes (RCA 2003), which are absent from the BSA. While the Santa Ana River terrace is located within the BSA buffer and contains sandy soil, this area lacks suitable habitat and is outside of the Project footprint. The nearest known occurrence is approximately 5.5 miles east of the BSA (CDFW 2024d).

Crotch's Bumble Bee

Crotch's bumble bee is a state candidate for listing as endangered. 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's bumble bee occurs in open grassland and scrub communities supporting suitable floral resources. Data from a variety of resources state that Crotch's bumble bee is most commonly associated with the species from the following families, in descending order based on number of observations: Fabaceae, Apocynaceae, Asteraceae, Lamiaceae, and Boraginaceae (Richardson 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). Nesting is primarily located underground in abandoned holes made by ground squirrels, mice, and rats, but may be aboveground in abandoned bird nests or empty cavities (Osborne et al. 2008; Williams et al. 2014).

While the Project site is mainly disturbed, there is a small amount of ruderal habitat containing floral resources, and additional floral resources may be present within the Santa Ana River terrace located within the BSA buffer. Crotch's bumble bee has a low potential to occur within the BSA, as it contains open grassland and ruderal habitat with floral resources. Crotch's bumble bee is a generalist forager and could forage anywhere within the BSA where suitable floral resources are present.

Delhi Sands Flower-loving Fly

The Delhi sands flower-loving fly is federally listed as endangered. This species is narrowly distributed within portions of San Bernardino and Riverside Counties and is restricted to fine, sandy Delhi soil series (Graham 2021).

While the BSA does contain mapped Delhi fine sands, the habitat assessment conducted concluded that these soils were contaminated with wood chips and other debris. There is no unconsolidated, uncontaminated Delhi fine sand present.

5.3.3 Potential Aquatic Resources

While a formal jurisdictional delineation was not conducted, the BSA was inspected during the field reconnaissance survey for any evidence of streams that appear in the National Hydrography Dataset or wetlands in the National Wetlands Inventory (USGS 2024; USFWS 2024c). The Project site does not include any National Hydrography Dataset or National Wetlands Inventory mapped resources; however, the Santa Ana River is located immediately adjacent and outside of the BSA (Figure 7). The Project site comprises primarily developed/disturbed lands. No jurisdictional aquatic resources were observed within the Project site.

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 corridors 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 (e.g., roads, housing tracts) or some other form of fragmentation.

Western Riverside County Multiple Species Habitat Conservation Plan

The BSA is located within the MSHCP along the northcentral portion of the plan area, in the Jurupa Area Plan, and is not located within a subunit. The BSA is located immediately adjacent to MSHCP Existing Core A (Santa Ana River), which is also MSHCP Conserved Public Quasi-Public (PQP) Land.

Existing Core A

Existing Core A is described as follows (RCA 2003):

> Existing Core A consists of Prado Basin and the Santa Ana River, located in the northwest region of the Plan Area. This southwest-to-northeast trending swath of land is composed largely of Public/Quasi-Public Lands owned by a variety of entities, but it also contains a small number of privately-owned lands. The Core also functions as a Linkage, connecting Orange County to the west with San Bernardino County to the north. Existing Core A is connected to Existing Core B (Cleveland National Forest) via both and upland and a riparian connection (Proposed Constrained Linkage 1 and Proposed Constrained Linkage 2, respectively). This Core is constrained on all sides by existing urban development and agricultural use, and planned land uses surrounding the Core consist largely of high impact land uses such as city and community Development. Therefore, high quality riparian Habitat within the Core and along the edges must be maintained for species such as southwestern willow flycatcher, yellow warbler, yellow-breasted chat, western yellow-billed cuckoo, and others listed in the table below. Guidelines Pertaining to Urban/Wildlands Interface for the management of edge factors such as lighting, urban runoff, toxics, and domestic predators are presented in Section 6.1 of this document [MSHCP]. Maintenance of existing floodplain processes and water quality along the Santa Ana River is also important to Santa Ana River woollystar and arroyo chub. Management entities in this existing Core include: the County of Riverside Parks and Open Space District, U.S. Army Corps of Engineers, Orange County Water District, and California Department of Parks and Recreation.

CDFW Areas of Conservation Emphasis

The BSA is not mapped as an essential connectivity area or natural landscape block; however, these areas are present within 3 miles of the BSA from the east. Nonetheless, the BSA is mapped as a rank 1 Area of Conservation Emphasis (CDFW 2024e). According to CDFW (2024e), Rank 1 is defined as follows:

> Limited Connectivity Opportunity. These are areas where land use may limit options for providing connectivity (e.g., agriculture, urban) or no connectivity importance has been identified in models. Includes lakes. Some DOD lands are also in this category because they have been excluded from models due to lack of conservation opportunity, although they may provide important connectivity habitat.

The BSA is likely mapped as a rank 1 due to the presence of the surrounding commercial and residential development to the north and west. Wildlife may locally move through Santa Ana River, which borders the BSA to the east and south, as a corridor. Due to the undeveloped land on the BSA, there are opportunities for passage or live-in habitat for some small, urbanized wildlife. However, the BSA does not currently function as a corridor or linkage between two larger habitat blocks. The Project site does not appear to serve as a significant regional wildlife corridor. On a local level, wildlife may move across the site when foraging or hunting. Since the Project does not provide for regional wildlife movement or serve as a regional wildlife corridor, it is not expected to contribute to the impediment of local or seasonal movement of wildlife through the surrounding habitat.

6 Western Riverside County Multiple Species Habitat Conservation Plan

As previously stated, the Project site is located within the MSHCP area. The MSHCP area is divided into 16 Area Plans, which are further subdivided into Area Plan subunits. The Project site is located in the northcentral portion of the MSHCP area, in the Jurupa Area Plan, and is not located within any subunit. The Project site is not located in any Criteria Cells (Figure 3). This means that the Project will need to demonstrate consistency with MSHCP requirements, but is not subject to Reserve Assembly requirements.

6.1 MSHCP Section 6.1.2, Riparian/Riverine Resources and Vernal Pool

The identification of MSHCP riparian/riverine resources is based on the potential for the habitat to support, or be a tributary to habitat that supports, MSHCP riparian/riverine Covered Species. MSHCP riparian/riverine Covered Species are identified in MSHCP Section 6.1.2. The MSHCP defines riparian/riverine habitat as "lands which contain Habitat dominated by trees, shrubs, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with freshwater flow during all or a portion of the year" (RCA 2003).

The MSHCP defines vernal pools as "seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season" (RCA 2003). Artificially created wetlands, except for those created intentionally to provide habitat or resulting from the creation of open waters or alteration of natural stream courses, are not considered MSHCP vernal pools.

The MSHCP defines non-vernal pool suitable fairy shrimp habitat as "stock ponds, ephemeral pools and other features" (RCA 2003).

Riparian/Riverine Resources

The Project site does not contain any riparian/riverine resources. The Project site is comprised mainly of urban/developed lands, with upland mustards or star-thistle fields and small amount of non-native grasslands. As discussed in Section 5.3.3 of this report, the Santa Ana River occurs immediately outside of the BSA to the east and portions of the Santa Ana River terrace are located within the BSA buffer; these resources will not be impacted by the Project.

Riparian Birds

The Project site does not contain riparian habitat and is dominated by urban/developed lands and upland mustards or star-thistle fields. Therefore, due to the lack of riparian habitat present, focused protocol surveys for riparian bird species such as least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), or yellow-billed cuckoo (*Coccyzus americanus*) are not required. There are portions of the Santa Ana River terrace located within the BSA buffer that contain one isolated patch of riparian habitat that is small in extent, lacks

understory or closed-canopy features, lacks continuity with higher quality habitat, and is not contiguous. Therefore, this area is not sufficient to support MSHCP riparian bird species and protocol surveys are not required.

Vernal Pools

The Project site did not contain any areas with indicators of all three parameters (soils, vegetation, and hydrology), nor were any vernal pool indicator species observed (Appendix C). Furthermore, the Project site contains mainly Delhi fine sands, with a smaller amount of Ramona sandy loam and terrace escarpments. These soils are well-draining soils and are not associated with vernal pool habitat. Therefore, there are no vernal pools located within the BSA or the Project site.

Fairy Shrimp Habitat

In addition to vernal pools, fairy shrimp habitat also includes ephemeral pools and other features such as road ruts or stock ponds. The Project site did not contain any ephemeral pools, depressions, stock ponds, or road ruts to support fairy shrimp habitat. As discussed above related to vernal pools, soils present in these areas are well-draining soils, and therefore it is unlikely that these areas would hold water for prolonged periods of time. Additionally, the Project site was reviewed using aerial imagery and there is no past evidence of ponding or inundation on the Project site. Therefore, the Project site lacks suitable fairy shrimp habitat and focused surveys were not warranted.

6.2 MSHCP Section 6.1.3, Narrow Endemic Plant Species

Most of the BSA is located within the MSHCP NEPSSA for San Diego ambrosia, Brand's phacelia, and San Miguel savory (Figure 4a). Per MSHCP Section 6.1.3, for areas within identified NEPSSAs, focused surveys shall be required where appropriate habitat is present. Therefore, the BSA was assessed to determine if suitable habitat was present for these species (Table 1). The results of the habitat assessment and focused surveys for these species is provided below:

- San Diego Ambrosia: While the BSA is located within the species' known elevation range and non-native grasslands and disturbed habitat are present, the Project site lacks suitable acidic/clay/alkaline soils to support this species. This species is associated with Garretson gravelly fine sandy loam and Las Posas loam in close proximity to silty, alkaline soils of the Willow series (RCA 2003), none of which are present. Additionally, there are no occurrences documented along the Santa Ana River, with the nearest known occurrence documented in 2005 approximately 19 miles southeast of the Project site near Lake Elsinore (CDFW 2024d). Therefore, due to the lack of suitable habitat present, focused surveys for this species are not warranted.
- Brand's Phacelia: While the BSA is located within the species' known elevation range and the species is known to occur within the Santa Ana River (CCH 2024), there is no suitable vegetation present (e.g., coastal dunes, coastal scrub) to support this species. Therefore, due to the lack of suitable habitat present, focused surveys for this species are not warranted.
- San Miguel Savory: The BSA is located within the species' known elevation range and there is non-native grassland present; however, the site lacks gabbroic soils. Furthermore, this species has not been reported within the San Bernardino South quadrangle and the surrounding eight USGS 7.5-minute quadrangles

(CDFW 2024a; CNPS 2024a). Therefore, due to the lack of suitable habitat present, focused surveys for this species are not warranted.

6.3 MSHCP Section 6.1.4, Urban/Wildland Interface Guidelines

Proposed developments adjacent to MSHCP Conservation areas may create edge effects that can impact conserved biological resources. The MSHCP provides several guidelines that address potential indirect effects from proposed developments that are in proximity to MSHCP Conservation areas. These guidelines include measures addressing the quantity and quality of runoff generated by the development (i.e., drainage and toxics), night lighting, noise, non-native invasive plant species, barriers to humans and animal predators, and grading/land development encroachment. The Project is adjacent to Existing Core A (Santa Ana River), which is also designated PQP lands. The Project is committed to following MSHCP Section 6.1.4, Urban/Wildland Interface Guidelines. The proposed Project would not conflict with MSHCP Section 6.1.4.

6.4 MSHCP Section 6.3.2, Additional Surveys

The BSA is not located within an Additional Survey Needs and Procedures area for criteria area plant species or amphibians. The Project site is located within an Additional Survey Needs and Procedures area for burrowing owl, small mammals (San Bernardino kangaroo rat and Los Angels pocket mouse), and Dehi sands flower-loving fly.

Burrowing Owl

The majority of the Project site is located within a burrowing owl survey area (Figure 4b). Therefore, a Step I habitat assessment and Step II-A focused burrow survey for burrowing owl were conducted concurrently on February 15, 2024, within the BSA. The 500-foot buffer was not legally accessible and therefore was visually surveyed from the Project site boundary. Suitable habitat for burrowing owl was detected within the Project site and is characterized as herbaceous vegetation along the slope that could support burrows. The BSA contains sandy loam soils that could support burrow formation. The urban/developed areas within the Project site contain highly compacted gravel that is not suitable.

No suitable burrows (i.e., burrows with openings 4 inches or greater in diameter or artificial features that function as burrow surrogates) were observed. No California ground squirrels were present within the BSA. Therefore, due to no suitable burrows or burrow surrogates being detected, a Step II-B focused burrowing owl survey was not warranted. Although suitable burrows or burrow surrogates were not detected during the survey, due to the presence of potentially suitable habitat, a pre-construction survey is required within 30 days prior to ground disturbance pursuant to the MSHCP to confirm conditions have not changed prior to construction.

Small Mammals

A small portion of the Project site within the southern and eastern areas overlaps the small mammal survey area for San Bernardino kangaroo rat and Los Angeles pocket mouse (Figure 4c).

The Project site lacks suitable scrub and alluvial scrub habitat and soils to support San Bernardino kangaroo rat within the Project, and soils are highly compacted due to past disturbances. Furthermore, there are no known occurrences

of this species along the Santa Ana River, and the nearest known occurrence is approximately 5.5 miles east of the BSA (CDFW 2024d). Additionally, the Project site lacks suitable scrub and alluvial sage scrub habitat and soils to support Los Angeles pocket mouse, and soils within the Project are highly compacted due to past disturbances. This species appears to be limited to sparsely vegetated habitat areas in patches of fine sandy soils associated with washes or of aeolian (windblown) origin, such as dunes (RCA 2003), which are absent from the Project. While the Santa Ana River terrace is located within the BSA buffer and contains sandy soil, this area lacks suitable habitat and is outside of the Project footprint. The nearest known occurrence is approximately 5.5 miles east of the BSA (CDFW 2024d).

Therefore, due to lack of suitable habitat for San Bernardino kangaroo rat and Los Angeles pocket mouse, focused surveys are not warranted.

Delhi Sands Flower-loving Fly

Portions of the Project site contains mapped Delhi series soils (Figure 4d), which can provide potential habitat for the federally listed endangered Delhi Sands flower-loving fly. According to the focused habitat assessment conducted by permitted biologist Dale Powell, Delhi fine sands were mapped within the majority of the Project site (Figure 5). Most of the area mapped as Delhi sands was being utilized for parking trucks. The area to the east of the parking area also contains Delhi fine sand; however, this area may have been used for industrial purposes, perhaps as a parking lot. The soil was contaminated with wood chips and other debris. There is no unconsolidated, uncontaminated Delhi fine sand present. Additionally, Delhi Sands flower-loving fly indicator plants such as California buckwheat (*Eriogonum fasciculatum*), California croton, annual bursage (*Ambrosia acanthicarpa*), and telegraph weed[7] were absent from the Project site. As a result, the Project site does not meet the minimal requirements for focused surveys for the Delhi Sands flower-loving fly (i.e., native soils do not remain and the Project site does not contain suitable habitat for Delhi Sands flower-loving fly). As such, focused surveys are not warranted, and no impacts are expected to occur.

[7] This species was observed outside of the Project site within the buffer area of the BSA.

7 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 environmental impact report.

7.1 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 rare 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.

7.2 Definition of Impacts

Direct impacts refer to complete loss of a biological resource. For purposes of this report, it refers to the area 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 BSA. Direct impacts would occur from development of an 84,200-square-foot industrial building and associated appurtenances, including an equipment yard/storage area, truck scale, and circulation area. All direct impacts are considered permanent. No temporary impacts are proposed.

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 disturbance zone. Indirect impacts may be short term and construction related or long term and associated with development in proximity to biological resources.

The evaluation of Project impacts is organized by the resource potentially affected: special-status species, riparian and sensitive vegetation communities (special-status vegetation communities), jurisdictional waters and wetlands, and wildlife movement.

7.3 Impacts Analysis

A total of 6.8 acres would be impacted from Project implementation; all impacts are considered permanent (Figure 8, Impacts to Biological Resources). Table 4 summarizes permanent direct impacts to vegetation communities and land covers within the BSA.

Table 4. Permanent Impacts to Vegetation Communities and Land Cover Types (Acres)

Vegetation Community or Land Cover Type	Alliance	Association	Ranking[1]	Total Existing BSA	Permanent Impacts
Vegetation Communities					
Common and giant reed marshes*	*Phragmites australis–Arundo donax*	*Arundo donax–Salix exigua*	SNR	0.6	0.0
Non-native grassland general habitat	Non-native grassland	Non-native grassland	SNA	5.5	0.2
Upland mustards or star-thistle fields*	*Brassica nigra –Centaurea (solstitialis, melitensis)*	N/A	SNA	4.5	2.2

Table 4. Permanent Impacts to Vegetation Communities and Land Cover Types (Acres)

Vegetation Community or Land Cover Type	Alliance	Association	Ranking[1]	Total Existing BSA	Permanent Impacts
Vegetation Communities Subtotal				*10.5*	*2.3*
Disturbed and Developed Land Cover Types					
Disturbed habitat	N/A	N/A	N/A	17.4	0.0
Urban/developed	N/A	N/A	N/A	27.3	4.5
Disturbed and Developed Land Cover Types Subtotal				*44.6*	*4.5*
Total[2]				**55.2**	**6.8**

Notes: BSA = biological study area; N/A = not applicable.

[1] The conservation status of a vegetation community is designated by a number from 1 to 5, preceded by a letter reflecting the appropriate geographic scale of the assessment (G = global, N = national, and S = subnational). The numbers have the following meaning (NatureServe 2024):
1 = critically imperiled
2 = imperiled
3 = vulnerable to extirpation or extinction
4 = apparently secure
5 = demonstrably widespread, abundant, and secure
N/A = not applicable
SNR = unranked, subnational rank not yet assessed
SNA = state ranking not assigned

[2] Totals may not sum due to rounding.

7.3.1 Impact BIO-1: Special-Status Species

7.3.1.1 Impacts to Special-Status Plants

Direct Impacts

No special-status plant species were observed or have high or moderate potential to occur within the BSA; therefore, the Project would have no direct impacts to special-status plant species. In addition, the BSA does not occur within federally designated critical habitat for special-status plant species, and there would be no direct impacts to critical habitat. Therefore, **no impact** would occur.

Construction-Related Indirect Impacts

Potential short-term or temporary indirect impacts to special-status plant species resulting from construction activities include inadvertent spillover impacts, including 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 **Mitigation Measure (MM) BIO-1** (Construction-Related Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level by requiring implementation of biological monitoring and a Worker Environmental Awareness Program Training, delineation of Project boundaries, implementation of standard dust control measures, development of a stormwater pollution prevention plan (SWPPP), and servicing of all vehicles and equipment in designated staging areas. With implementation of **MM-BIO-**

1 (Construction-Related Indirect Impacts to Biological Resources), construction-related indirect impacts to special-status plant species would be minimized to **less than significant with mitigation incorporated.**

Long-Term Indirect 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-BIO-2** (Long-Term Indirect Impacts to Biological Resources) would reduce potential long-term 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, 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-BIO-2** (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.**

7.3.1.2 Impacts to Special-Status Wildlife

No special-status wildlife species were observed or determined to have a moderate or high potential to occur within the BSA based on known species distribution, species-specific habitat preferences, and habitat conditions on the BSA. One listed species, Crotch's bumblebee (a state candidate for listing as endangered), was determined to have a low potential to occur within the BSA. This species is not covered by the MSHCP and is detailed in the following discussion.

The BSA is within an MSHCP habitat assessment area for the following MSHCP Covered Species: burrowing owl, San Bernardino Kangaroo rat, Los Angeles pocket mouse, and Delhi Sands flower-loving fly. More information for these species is provided below in Section 7.3.6 of this report. Impacts to species covered by the MSHCP shall be mitigated through **MM-BIO-3** (Local Development Mitigation Fee) by payment of the MSHCP Local Development Mitigation Fee.

In addition, there is no USFWS-designated critical habitat for listed wildlife species overlapping the Project site; however, designated critical habitat for Santa Ana sucker is located within the BSA buffer (USFWS 2024b).

Direct Impacts

Birds

Burrowing Owl

While burrowing owl has a low potential to occur within the BSA, burrowing owls are a transient species and have the potential to occupy the site prior to initiation of construction activities. Adults of these species can reside belowground and therefore are susceptible to injury and mortality during construction activities. This impact would be significant absent mitigation.

Project implementation of **MM-BIO-4** (Pre-Construction Burrowing Owl Survey) would reduce potential direct impacts to a less-than-significant level by requiring a pre-construction survey for burrowing owl within 30 days prior to ground disturbance pursuant to the MSHCP to confirm conditions have not changed prior to construction. Therefore, direct impacts to burrowing owl would be **less than significant with mitigation incorporated.**

Invertebrates

Crotch's Bumble Bee

Crotch's bumble bee has a low potential to occur within the BSA, as it contains open grassland and ruderal habitat with floral resources. Direct impacts to individuals of this uncommon species could occur with Project implementation. Although the Project site supports a low amount of suitable floral resources, Crotch's bumble bee is a generalist forager and could forage anywhere within the BSA where suitable floral resources are present. Nesting is primarily located underground in abandoned holes made by ground squirrels, mice, and rats, but may be aboveground in abandoned bird nests or empty cavities (Osborne et al. 2008; Williams et al. 2014). These 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. Because Crotch's bumble bee typically nests underground, individuals would also be highly vulnerable to injury and mortality during construction, which could crush nests and individuals, if present on site. Therefore, the Project has the potential to result in direct impacts to individuals that may be harmed or killed during vegetation removal and grading for Project buildings and/or construction of.

Project implementation of **MM-BIO-5** (Pre-Construction Survey for Crotch's Bumble Bee) would reduce potential direct impacts to a less-than-significant level by requiring a pre-construction survey for Crotch's bumble bee and avoidance of nesting resources, if present, until the nesting period has concluded. Furthermore, Project implementation of **MM-BIO-3** (Local Development Mitigation Fee) would require that the Project pay an MSHCP Local Development Mitigation Fee to the City of Jurupa Valley that will contribute to MSHCP land acquisition and conserved land management. The MSHCP has identified large and interconnected swaths of conservation land that either have been conserved or are described for conservation to aid in the recovery of Covered Species. While Crotch's bumble bee is not covered under the MSHCP, there is overlap in suitable habitat preferences for this species and MSHCP Covered Species. Therefore, the conservation of land in western Riverside County, supported in part by the MSHCP Local Development Mitigation Fee required by **MM-BIO-3**, includes potentially suitable habitat for Crotch's bumble bee and is expected to directly benefit this species. Therefore, direct impacts to Crotch's bumble bee would be **less than significant with mitigation incorporated.**

Nesting Birds

The Project and BSA contain opportunities for birds of prey (raptors) and other avian species to nest on site. Native nesting bird species are protected by California Fish and Game Code, Sections 3503 and 3503.5, and by the federal MBTA (16 USC 703–711). In particular, Section 3503 provides that it is unlawful to take, possess, or needlessly destroy the active nests or eggs of any bird in California; Section 3503.5 protects all raptors and their eggs and active nests; and the MBTA prohibits the take (including killing, capturing, selling, trading, and transport) of native migratory bird species throughout the United States. Currently, California considers any nest that is under construction or modification or is supporting eggs, nestlings, or juveniles as "active." Therefore, impacts to nesting migratory birds and raptors would be considered significant absent mitigation under CEQA.

Project implementation of **MM-BIO-6** (Pre-Construction Nesting Bird Survey) would reduce potential direct impacts to a less-than-significant level through the recommendation that vegetation removal activities be conducted outside the general bird nesting season (January 1 through September 30, depending on the species), a requirement for a pre-construction nesting bird survey by a qualified biologist conducted prior to vegetation removal if vegetation cannot be removed outside the nesting bird season, and avoidance buffers and monitoring if active nests are found. Therefore, direct impacts to nesting birds would be **less than significant with mitigation incorporated.**

Indirect Impacts

Birds

Burrowing Owl

Project development has the potential to result in indirect impacts to burrowing owl.

Construction-Related

Potential short-term or temporary indirect impacts to burrowing owl 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 burrowing owl would be potentially significant absent mitigation.

Project implementation of **MM-BIO-1** (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, delineation of Project boundaries, development of a SWPPP, implementation of standard dust control measures, requirement that all vehicles and equipment be serviced in designated staging areas, and mandating that construction will not be conducted at night. In addition, Project implementation of **MM-BIO-4** (Pre-Construction Burrowing Owl Pre-Construction Survey) would result in identification and avoidance of any burrowing owls within areas potentially impacted by the Project, which would minimize indirect impacts from noise, vibration, and increased human presence. Implementation of **MM-BIO-1** (Construction-Related Indirect Impacts to Biological Resources) and **MM-BIO-4** (Pre-Construction Burrowing Owl Pre-Construction Survey) 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 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 burrowing owl; 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 burrowing owl would be potentially significant absent mitigation.

Project implementation of **MM-BIO-2** (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, preparation of landscaping plans that will 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 burrowing owl, and stipulations that night-lighting will

not be directed towards open space areas. Long-term indirect impacts to burrowing owl would be **less than significant with mitigation incorporated.**

Invertebrates

Crotch's Bumble Bee

Project development has the potential to result in indirect impacts to Crotch's bumble bee.

Construction-Related

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

Project implementation of **MM-BIO-1** (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, delineation of Project boundaries, development of a SWPPP, implementation of standard dust control measures, requirement that all vehicles and equipment be serviced in designated staging areas, and mandating that construction will not be conducted at night. In addition, Project implementation of **MM-BIO-5** (Pre-Construction Survey for Crotch's Bumble Bee) would result in identification and avoidance of occupied nest resources for Crotch's bumble bee within areas potentially impacted by the Project, which would minimize indirect impacts from noise, vibration, and increased human presence. Implementation of **MM-BIO-1** (Construction-Related Indirect Impacts to Biological Resources) and **MM-BIO-5** (Pre-Construction Survey for Crotch's Bumble Bee) would minimize the effect of construction-related indirect impacts to Crotch's bumble bee to **less than significant with mitigation incorporated.**

Long-Term

Potential long-term indirect impacts that could result from development near Crotch's bumble bee nest resources 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's 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's bumble bee would be potentially significant absent mitigation.

Project implementation of **MM-BIO-2** (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, preparation of landscaping plans that will 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 nesting Crotch's bumble bee, and stipulations that night-lighting will not be directed towards open space areas. Implementation of **MM-BIO-2** (Long-Term Indirect Impacts to Biological Resources) would minimize the effect of long-term indirect impacts to Crotch's bumble bee to **less than significant with mitigation incorporated.**

7.3.2 Impact BIO-2: Sensitive Vegetation Communities

Direct Impacts

As stated in Section 5.1, Vegetation Communities and Land Covers, CDFW state rankings of 1, 2, or 3 are considered high priority for inventory or special status, and impacts to these communities typically require mitigation. The BSA does not contain any vegetation communities that are considered a sensitive biological resource by CDFW under CEQA; therefore, **no direct impacts** to special-status vegetation communities are anticipated, and no avoidance or compensatory mitigation measures are required.

Indirect Impacts

Construction-Related

Special-status vegetation communities may be indirectly impacted during future construction of the proposed Project. Potential short-term or temporary indirect impacts to special-status vegetation communities resulting from construction activities include inadvertent spillover impacts, including 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 special-status vegetation communities would be potentially significant absent mitigation.

Project implementation of **MM-BIO-1** (Construction-Related Indirect Impacts to Biological Resources) would reduce potential indirect impacts to a less-than-significant level by requiring implementation of biological monitoring and a Worker Environmental Awareness Program Training, delineation of Project boundaries, implementation of standard dust control measures, development of a SWPPP, and servicing of all vehicles and equipment in designated staging areas. Implementation of **MM-BIO-1** (Construction-Related Indirect Impacts to Biological Resources) would minimize the effect of construction-related indirect impacts to sensitive vegetation communities 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 communities would be potentially significant absent mitigation.

Project implementation of **MM-BIO-2** (Long-Term Indirect Impacts to Biological Resources) would reduce potential long-term 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 impact areas, preparation of landscaping plans that will 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 special-status plants. Implementation of **MM-BIO-2** (Long-Term Indirect Impacts to Biological Resources) would minimize the effect of long-term indirect impacts to sensitive vegetation communities to **less than significant with mitigation incorporated.**

7.3.3 Impact BIO-3: State or Federally Protected Wetlands

Direct Impacts

There are no state or federally protected wetlands or non-wetland waters within the BSA; therefore, **no direct impacts** are anticipated, and no avoidance or compensatory mitigation measures are required.

Indirect Impacts

Construction-Related

Jurisdictional aquatic resources of the United States/state may be indirectly impacted during construction. Potential short-term or temporary indirect impacts to jurisdictional aquatic resources 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 aquatic resources would be potentially significant.

MM-BIO-1 (Construction-Related Indirect Impacts to Biological Resources) would minimize construction-related indirect impacts through biological monitoring, requirement of a Worker Environmental Awareness Program Training, 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 jurisdictional aquatic resources 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 aquatic resources would be potentially significant.

MM-BIO-2 (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 impact areas, preparation of landscaping plans that will 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 jurisdictional aquatic resources would be **less than significant with mitigation incorporated.**

7.3.4 Impact BIO-4: Wildlife Corridors and Habitat Linkages

Direct Impacts

The BSA does not contain any native wildlife nursery sites. Due to the undeveloped land on the BSA, there are opportunities for passage or live-in habitat for some small, urbanized wildlife; however, the BSA does not currently function as a corridor or linkage between two larger habitat blocks. The Project site does not serve as a significant regional wildlife corridor. On a local level, wildlife may move across the site when foraging or hunting. Since the

Project does not provide for regional wildlife movement or serve as a regional wildlife corridor, it is not expected to contribute to the impediment of local or seasonal movement of wildlife through the surrounding habitat.

Wildlife may locally move through Santa Ana River, which borders the BSA to the east and south, as a corridor. The BSA is located immediately adjacent to MSHCP Existing Core A (Santa Ana River), which is also MSHCP Conserved PQP. Given that the Project site does not serve as a significant regional wildlife corridor and given that the Project does not conflict with the conservation goals of the MSHCP and is located outside of MSHCP Existing Core A (Santa Ana River), there would be **no direct impacts** associated with wildlife movement, wildlife corridors, and wildlife nursery sites.

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 adverse effects from noise, vibration, increased human presence, and nighttime lighting. These potential construction-related indirect impacts to wildlife movement would be potentially significant absent mitigation.

Project implementation of **MM-BIO-1** (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, delineation of Project boundaries, and ensuring that construction will not be conducted at night.

Implementation of **MM-BIO-1** (Construction-Related Indirect Impacts to Biological Resources) would minimize 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 would be potentially significant absent mitigation.

Project implementation of **MM-BIO-2** (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 Cal-IPC California Invasive Plant Inventory, incorporation of barriers to prevent unauthorized public access to open space areas, and stipulations that night-lighting will not be directed toward open space areas.

Implementation of **MM-BIO-2** (Long-Term Indirect Impacts to Biological Resources) would minimize long-term indirect impacts to wildlife movement to **less than significant with mitigation incorporated.**

7.3.5 Impact BIO-5: Local Policies and Ordinances

The Project would be designed to be consistent with all the pertinent goals, objectives, and policies outlined in the General Plan. Therefore, the proposed Project would not be in conflict with the City of Jurupa Valley General Plan.

7.3.6 Impact Bio-6: Habitat Conservation Plans

Stephens' Kangaroo Rat Habitat Conservation Plan

The Project is outside of the Stephens' Kangaroo Rat HCP Core Reserve Area and is located outside the Stephens' Kangaroo Rat HCP fee area. However, because the Project is located within the MSHCP area, the Project has "take" coverage for any Stephens' kangaroo rat potentially occurring on the site through the MSHCP.

Western Riverside County Multiple Species Habitat Conservation Plan

The following discussion provides information demonstrating that there are no conflicts with the MSHCP. In order for the proposed Project to participate in the MSHCP, the Project applicant is required to pay a MSHCP Local Development Mitigation Fee to contribute to the funding required to implement the MSHCP, including acquisition of conservation areas that provide habitat for MSHCP Covered Species. The mitigation fee must be paid to the City prior to the issuance of a building permit, and the City transfers MSHCP fees to the Regional Conservation Authority (**MM-BIO-3** [Local Development Mitigation Fee]).

MSHCP Section 6.1.2, Riparian/Riverine Areas and Vernal Pools

Riparian/Riverine Resources: The Project site does not contain any riparian/riverine resources. The Project site comprises mainly urban/developed lands, with upland mustards or star-thistle fields and a small amount of non-native grasslands. The Santa Ana River occurs immediately outside of the BSA to the east, and portions of the Santa Ana River terrace are located within the BSA buffer; these resources will not be impacted by the Project.

Riparian Birds: The Project site does not contain riparian habitat and is dominated by urban/developed lands and upland mustards or star-thistle fields. Therefore, due to the lack of riparian habitat present, focused protocol surveys for riparian bird species such as least Bell's vireo, southwestern willow flycatcher, or yellow-billed cuckoo are not required. While there are portions of the Santa Ana River terrace located within the BSA buffer that contain one isolated patch of riparian habitat, this habitat is small in extent, lacks understory or closed-canopy features, lacks continuity with higher quality habitat, and is not contiguous. Therefore, this area is not sufficient to support MSHCP riparian bird species and protocol surveys are not required.

Vernal Pools: The Project site did not contain any areas with indicators of all three parameters (soils, vegetation, and hydrology), nor were any vernal pool indicator species observed (Appendix C). Furthermore, the Project site contains mainly Delhi fine sands, with a smaller amount of Ramona sandy loam and terrace escarpments. These soils are well-draining soils and are not associated with vernal pool habitat. Therefore, there are no vernal pools located within the BSA or the Project site.

Fairy Shrimp Habitat: In addition to vernal pools, fairy shrimp habitat also includes ephemeral pools and other features such as road ruts or stock ponds. The Project site did not contain any ephemeral pools, depressions, stock ponds, or road ruts to support fairy shrimp habitat. As discussed above related to vernal pools, soils present in

these areas are well-draining soils, and therefore it is unlikely that these areas would hold water for prolonged periods of time. Additionally, the Project site was reviewed using aerial imagery and there is no past evidence of ponding or inundation on the Project site. Therefore, the Project site lacks suitable fairy shrimp habitat and focused surveys were not warranted.

As such, the Project would not conflict with Section 6.1.2 of the MSHCP.

MSHCP Section 6.1.3, Narrow Endemic Plant Species

Most of the BSA is located within the MSHCP NEPSSA for San Diego ambrosia, Brand's phacelia, and San Miguel savory; therefore, habitat assessments for these species were conducted. San Diego ambrosia is associated with acidic/clay/alkaline soils, which are absent from the Project site. Additionally, there are no occurrences documented along the Santa Ana River, with the nearest known occurrence documented in 2005 approximately 19 miles southeast of the Project site near Lake Elsinore (CDFW 2024c). There is no suitable vegetation present (e.g., coastal dunes, coastal scrub) to support Brand's phacelia. The Project also lacks suitable gabbroic soils to support San Miguel savory, and this species has not been reported within the San Bernardino South quadrangle and the surrounding eight USGS 7.5-minute quadrangles (CDFW 2024a; CNPS 2024a). Therefore, due to the lack of suitable habitat present for San Diego ambrosia, Brand's phacelia, and San Miguel savory, focused surveys were not warranted. As such, the Project would not conflict with Section 6.1.3 of the MSHCP.

MSHCP Section 6.1.4, Urban/Wildland Interface Guidelines

Proposed developments adjacent to MSHCP Conservation areas may create edge effects that can impact conserved biological resources. The MSHCP provides several guidelines that address potential indirect effects from proposed developments that are in proximity to MSHCP Conservation areas. These guidelines include measures addressing the quantity and quality of runoff generated by the development (i.e., drainage and toxics), night lighting, noise, non-native invasive plant species, barriers to humans and animal predators, and grading/land development encroachment. The Project is adjacent to Existing Core A (Santa Ana River), which is also designated PQP lands. The Project is committed to following Urban/Wildland Interface Guidelines. Therefore, the Project would not conflict with MSHCP Section 6.1.4.

Drainage

Proposed developments in proximity to the MSHCP Conservation area shall incorporate measures, including measures required through the National Pollutant Discharge Elimination System requirements, to ensure that the quantity and quality of runoff discharged to the MSHCP Conservation area (i.e., Existing Core A [Santa Ana River], which is also designated PQP lands) 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 the MSHCP Conservation area. 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 within the MSHCP Conservation area. 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. Measures, as outlined in **MM-BIO-1** (Construction-Related Indirect Impacts to Biological Resources) and **MM-BIO-2** (Long-Term Indirect Impacts to Biological Resources), shall prevent the release of toxins, chemicals, petroleum products, exotic plant materials, or other elements that might degrade or harm biological resources or ecosystem processes outside of the BSA.

Toxics

Land uses that use chemicals or generate bio-products that are potentially toxic or may adversely affect wildlife species, habitat, or water quality shall incorporate measures to ensure that the application of such chemicals does not result in discharge into downstream waters. Measures such as those implemented to address drainage issues would also result in avoidance of potential impacts relative to toxics.

Lighting

Temporary construction lighting and ambient lighting from any proposed development project is required to be selectively placed, directed, and shielded away from any MSHCP Conservation areas (i.e., Existing Core A [Santa Ana River], which is also designated PQP lands). Measures, as outlined in **MM-BIO-1** (Construction-Related Indirect Impacts to Biological Resources) and **MM-BIO-2** (Long-Term Indirect Impacts to Biological Resources), will include ensuring that all night work includes lighting that faces active work areas and that is shielded to avoid light spillover. All permanent lighting shall be directed away from conservation lands.

Noise

Proposed noise-generating land uses affecting the MSHCP Conservation areas would be required to incorporate setbacks, berms, or walls to minimize the effects of noise, as is outlined in **MM-BIO-2** (Long-Term Indirect Impacts to Biological Resources).

Invasives

The Project will not use invasive plants for erosion control, landscaping, wind rows, or other purposes. Specifically, no species listed in MSHCP Table 6-2, Plants that Should Be Avoided Adjacent to the MSHCP Conservation areas, will be used in the Project landscape plans, as is outlined in **MM-BIO-1** (Construction-Related Indirect Impacts to Biological Resources) and **MM-BIO-2** (Long-Term Indirect Impacts to Biological Resources).

Barriers

Proposed land uses adjacent to the MSHCP Conservation areas shall incorporate barriers, where appropriate, in individual project designs to minimize unauthorized public access, domestic animal predation, illegal trespass, or dumping into existing and future MSHCP Conservation areas. Such barriers may include native landscaping, rocks/boulders, fencing, walls, signage, and/or other appropriate mechanisms. The BSA includes slopes adjacent to, but not within, MSHCP Conservation areas. These existing land uses will function as a protective buffer between MSHCP Conservation areas and more urbanized land uses.

Grading/Land Development

All manufactured slopes are included in the direct impact footprint and analyzed as permanent impacts. As such, there will be no impacts that extend beyond what is identified as the Project footprint. Therefore, manufactured slopes will not extend into the MSHCP Conservation area.

Invasives

Invasive species provided in MSHCP Table 6-2 are not to be used in development or restoration plan activities for projects adjacent to MSHCP Conservation areas. The Project shall not use invasive species as defined in MSHCP

Table 6-2 within its landscape plan. With implementation of this measure, the Project would be consistent with this requirement of the MSHCP.

Fuel Modification

The Project would not require weed abatement or fuel modification zones.

MSHCP Section 6.3.2, Additional Surveys

The BSA is not located within an Additional Survey Needs and Procedures area for criteria area plant species or amphibians. The Project site is located within an Additional Survey Needs and Procedures area for burrowing owl, small mammals (San Bernardino kangaroo rat and Los Angeles pocket mouse), and Dehi Sands flower-loving fly.

Burrowing Owl

Based on the results of the Step I habitat assessment and Step II-A focused burrow survey for burrowing owl, the BSA supports suitable habitat for burrowing owl; however, no suitable burrows (i.e., burrows with openings 4 inches or greater in diameter or artificial features that function as burrow surrogates) were observed. No California ground squirrels were present within the BSA. Therefore, due to the absence of suitable burrows or burrow surrogates detected, a Step II-B focused burrowing owl surveys was not warranted. However, due to the presence of suitable habitat, a pre-construction survey is required within 30 days prior to ground disturbance pursuant to the MSHCP to confirm conditions have not changed prior to construction (refer to **MM-BIO-4** [Pre-Construction Burrowing Owl Survey]). The Project would not conflict with MSHCP Section 6.3.2.

8 Project Mitigation

MM-BIO-1 Construction-Related Indirect Impacts to Biological Resources. Prior to issuance of a grading permit, the Project's Applicant/Developer shall include the following in the construction contractor's plans and specifications to address indirect construction-related impacts to special-status species:

- **Biological Monitoring.** A qualified Project biologist 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 fencing 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 Federal Endangered Species Act, California 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 study area 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 shall be made available to construction personnel. The video can be recorded so that multiple personnel are able to watch the material. The training shall be provided in alternate languages, as needed.
- **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 shall be clearly delineated. Prior to implementing construction activities, the biological monitor shall verify that the flagging clearly delineates the construction limits and any sensitive environmental resources to be avoided.

- **Standard Dust Control Measures.** Standard dust control measures as per the South Coast Air Quality Management District shall be implemented to reduce dust impacts on nearby conserved lands, 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 Jurupa Valley 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).
- **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 and 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.
- **Wildlife Hazards.** The following measures shall be implemented to ensure that wildlife do not become trapped, entangled, injured, or poisoned by constructuction activities:
    - Structures in which wildlife may become trapped (e.g., open pipes, pits, trenches) shall be tightly covered at the end of each work day. If covering the structure is not possible, an escape ramp shall be provided to allow any wildlife that falls in to safely escape.
    - Debris piles, construction materials, equipment, and other items that may be used as wildlife refuge shall be inspected for wildlife at the start of each work day and prior to disturbance. If wildlife is discovered, it shall either be moved out of harm's way by a qualified biologist or allowed to move off of the study area on its own.
    - Nets and mesh shall be made of loose-weave material that is not fused at the intersections of the weave, as nets with welded weaves present an entanglement risk.
    - Toxic materials and garbage shall be removed from the work site and safely stored or disposed of at the end of each work day.
- **Invasive Weeds.** In order to reduce the spread of invasive plant species, landscape plants shall not be those found in MSHCP Table 6-2, Plants that Should be Avoided Adjacent to the MSHCP Conservation areas, or on the most recent version of the California Invasive Plant Council California Invasive Plant Inventory (http://www.cal-ipc.org/ip/inventory/index.php).
- **Night Work.** All short-term construction lighting shall be facing active work areas only and shall be shielded to avoid light spillover and shall be directed away from Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Conservation areas and open space areas to protect species from direct lighting. If lighting is required during construction activities that would occur during or after sunset, the lighting fixtures shall be

located on the interior of work areas with a minimum of 50-foot buffer from the edge of any MSHCP Conservation areas the adjacent open space.

MM-BIO-2 Long-Term Indirect Impacts to Biological Resources. Prior to issuance of a construction permit, the Project's Applicant/Developer shall include in the construction plans and specifications the following to address indirect impacts to special-status species:

- **Runoff.** Development 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.** All permanent lighting shall be directed away from Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Conservation areas and open space areas to protect species from direct 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 shall be placed on using native species that occur in the region. Invasive, non-native plant species listed in MSHCP Table 6-2, Plants that Should be Avoided Adjacent to the MSHCP Conservation Areas, or 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.** 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.

MM-BIO-3 Local Development Mitigation Fee. The Project shall make payment of the Western Riverside County Multiple Species Habitat Conservation Plan Local Development Mitigation Fee to the City of

Jurupa Valley prior to issuance of a grading permit for Project implementation. Proof of payment shall be provided to the City of Jurupa Valley.

MM-BIO-4 Pre-Construction Burrowing Owl Survey. A qualified biologist shall conduct a 30-day pre-construction survey for burrowing owls prior to initial ground-disturbing activities for each phase of Project implementation (including vegetation clearing, clearing and grubbing, tree removal, site watering, equipment staging, grading, etc.) to assess whether any burrowing owls have colonized the site in the days or weeks preceding the ground-disturbing activities. If burrowing owls have colonized the study area prior to the initiation of ground-disturbing activities, the Project applicant shall immediately inform the Regional Conservation Authority (RCA), the California Department of Fish and Wildlife (CDFW), and the U.S. Fish and Wildlife Service (USFWS), and will need to coordinate further with RCA, CDFW, and USFWS; occupation of the study area by burrowing owl has the possibility to result in the preparation of a burrowing owl protection and relocation plan prior to initiating ground disturbance. If ground-disturbing activities occur but the site is left undisturbed for more than 30 days, a pre-construction survey shall again be necessary to ensure burrowing owl has not colonized the site since it was last disturbed. If burrowing owl is found, the same coordination described above will be necessary.

MM-BIO-5 Pre-Construction Survey for Crotch's Bumble Bee. A pre-construction survey for Crotch's bumble bee shall be conducted within the construction footprint prior to the start of ground-disturbing construction activities occurring during the Crotch's bumble bee nesting period (February 1 through October 31). The survey shall ensure that no nests for Crotch's 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 on site 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's 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's bumble bee nests are not detected, no further mitigation would be required. The mere presence of foraging Crotch's 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's 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's 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 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 Jurupa Valley 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's 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's 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's 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's 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-BIO-6 Pre-Construction Nesting Bird Survey. Construction activities shall avoid the migratory bird nesting season (typically January 1 through September 30), as feasible, 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 study area 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. A pre-construction survey shall be conducted prior to each phase of Project implementation. 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 shall 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.

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Appendix A
Figures



SOURCE: Bing Maps (Accessed: 2024)

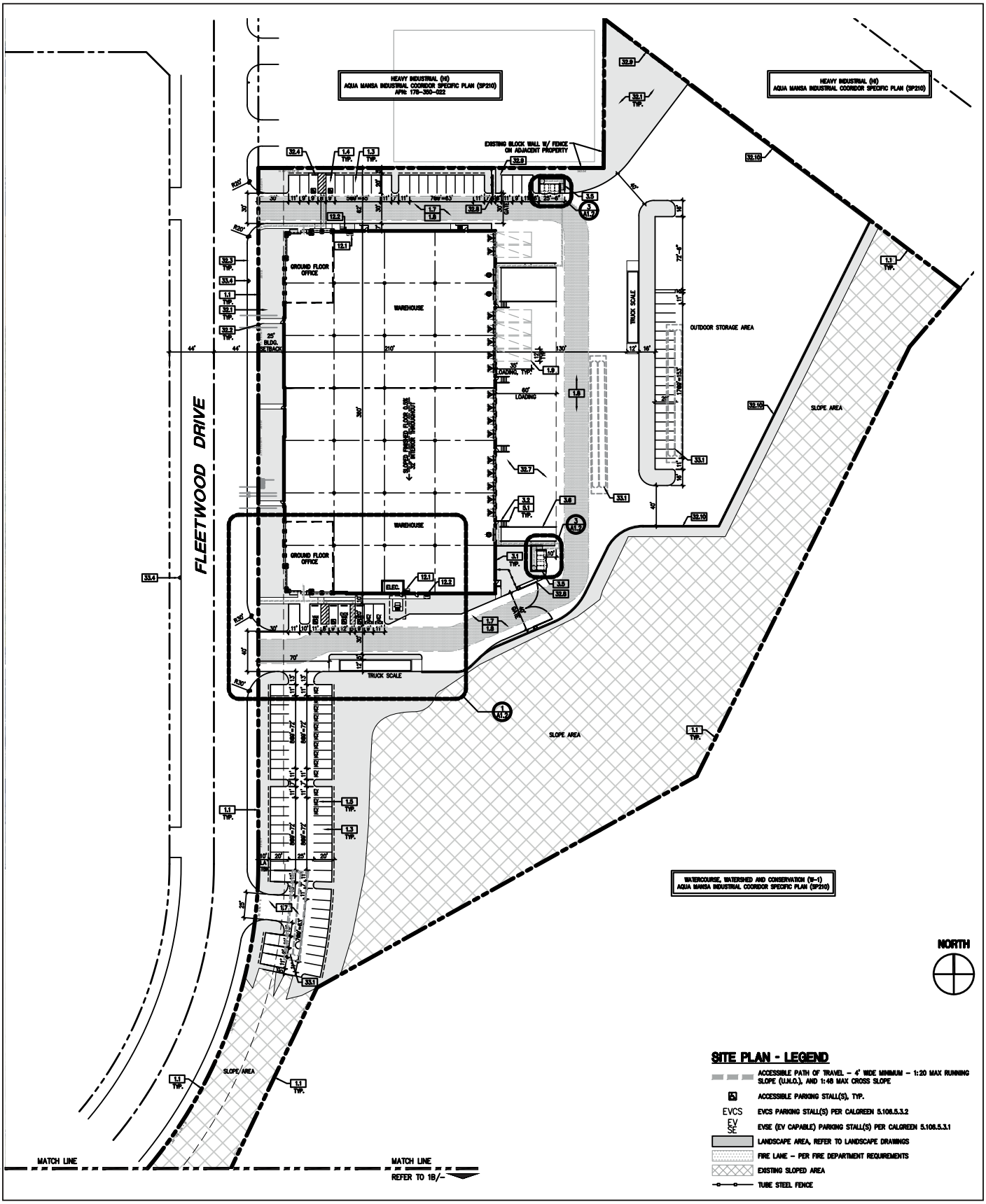
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FIGURE 1

Project Location

2240 Fleetwood Drive Industrial Building Project



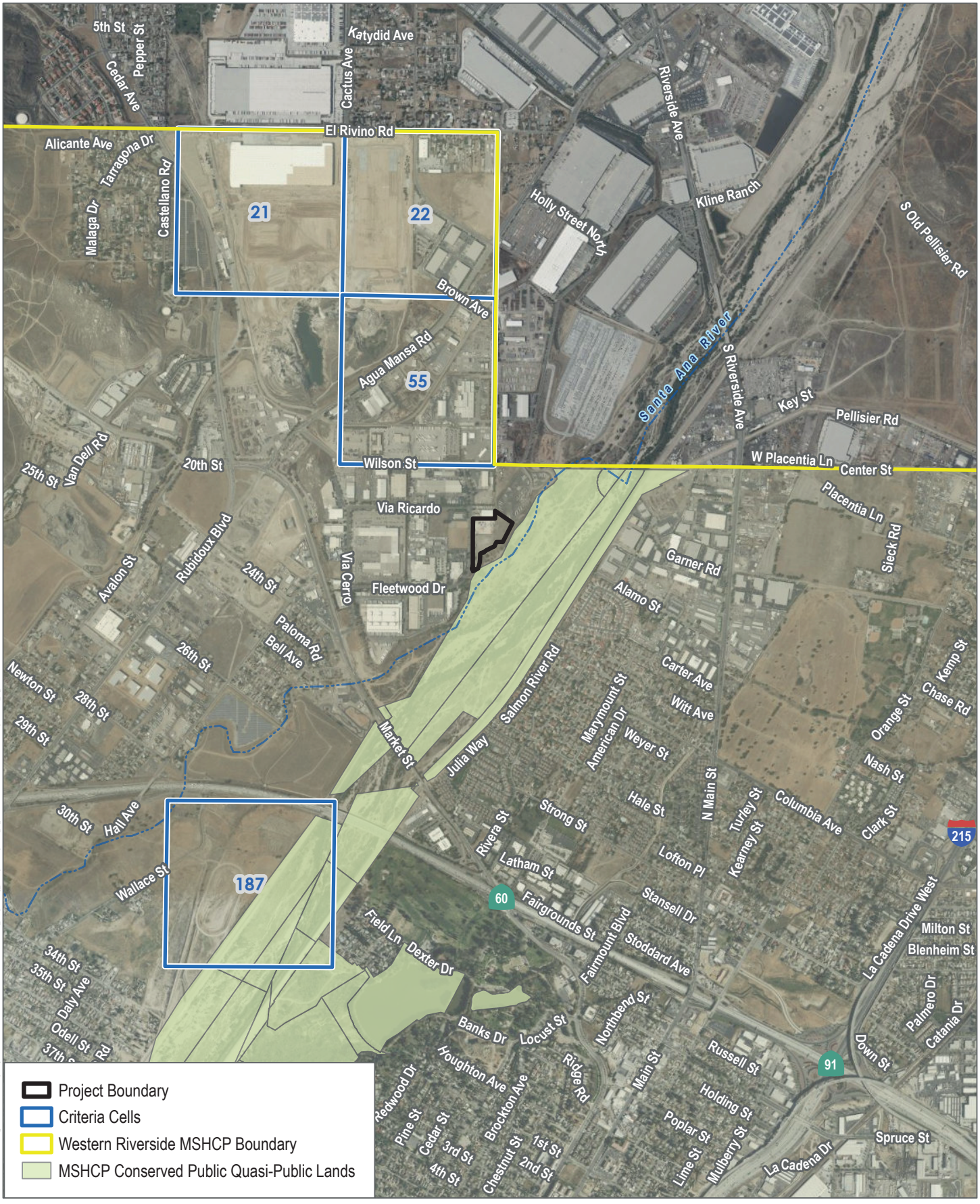
SOURCE: GAA Architects

FIGURE 2

Site Plan

2240 Fleetwood Drive Industrial Building Project

DUDEK



SOURCE: Bing Maps (Accessed: 2024); RCA MSHCP Information Map (Accessed 2024)

DUDEK

0 500 1,000 Feet

FIGURE 3

Western Riverside MSHCP

2240 Fleetwood Drive Industrial Building Project



SOURCE: Bing Maps (Accessed 2024)

DUDEK

0 165 330 Feet

FIGURE 4a

Western Riverside MSHCP Survey Areas - Narrow Endemic Plants

2240 Fleetwood Drive Industrial Building Project



SOURCE: Bing Maps (Accessed 2024)

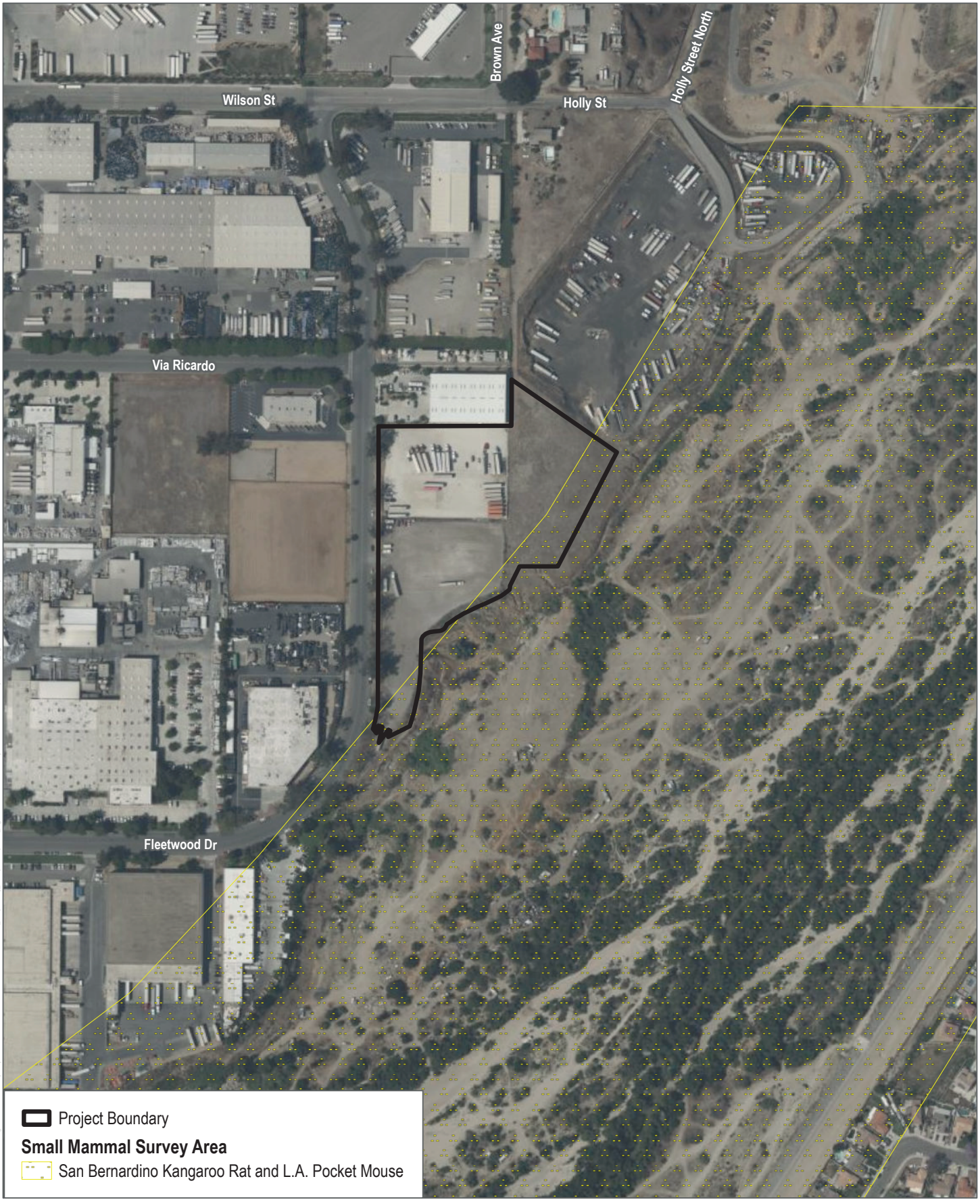
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FIGURE 4b

Western Riverside MSHCP Survey Areas - Burrowing Owl

2240 Fleetwood Drive Industrial Building Project



SOURCE: Bing Maps (Accessed 2024)

DUDEK

0 165 330 Feet

FIGURE 4c

Western Riverside MSHCP Survey Areas - Small Mammal

2240 Fleetwood Drive Industrial Building Project



SOURCE: Bing Maps (Accessed 2024)

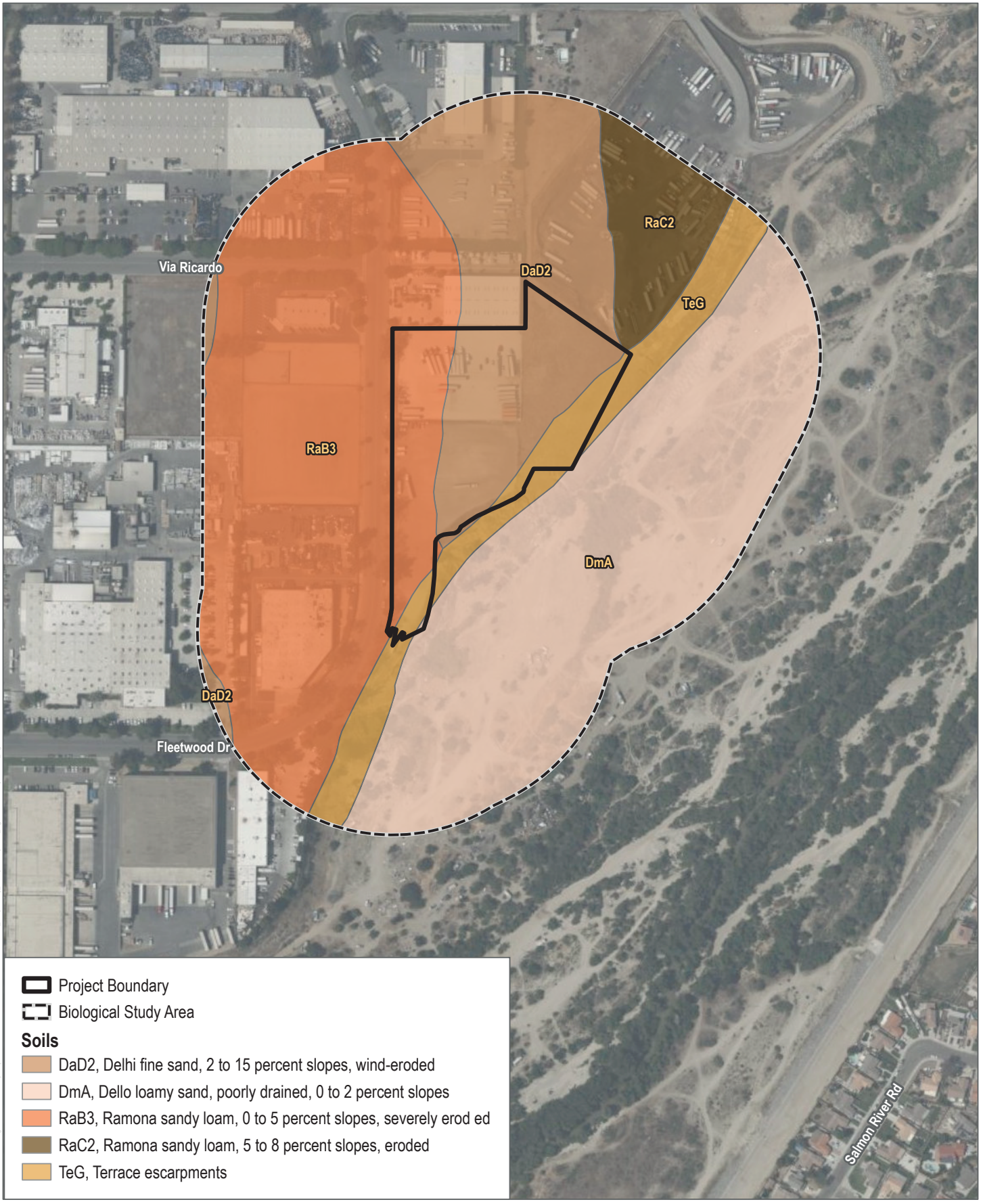
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FIGURE 4d

Western Riverside MSHCP Survey Areas - Delhi Sands Flower-Loving Fly

2240 Fleetwood Drive Industrial Building Project



SOURCE: Bing Maps (Accessed 2024)

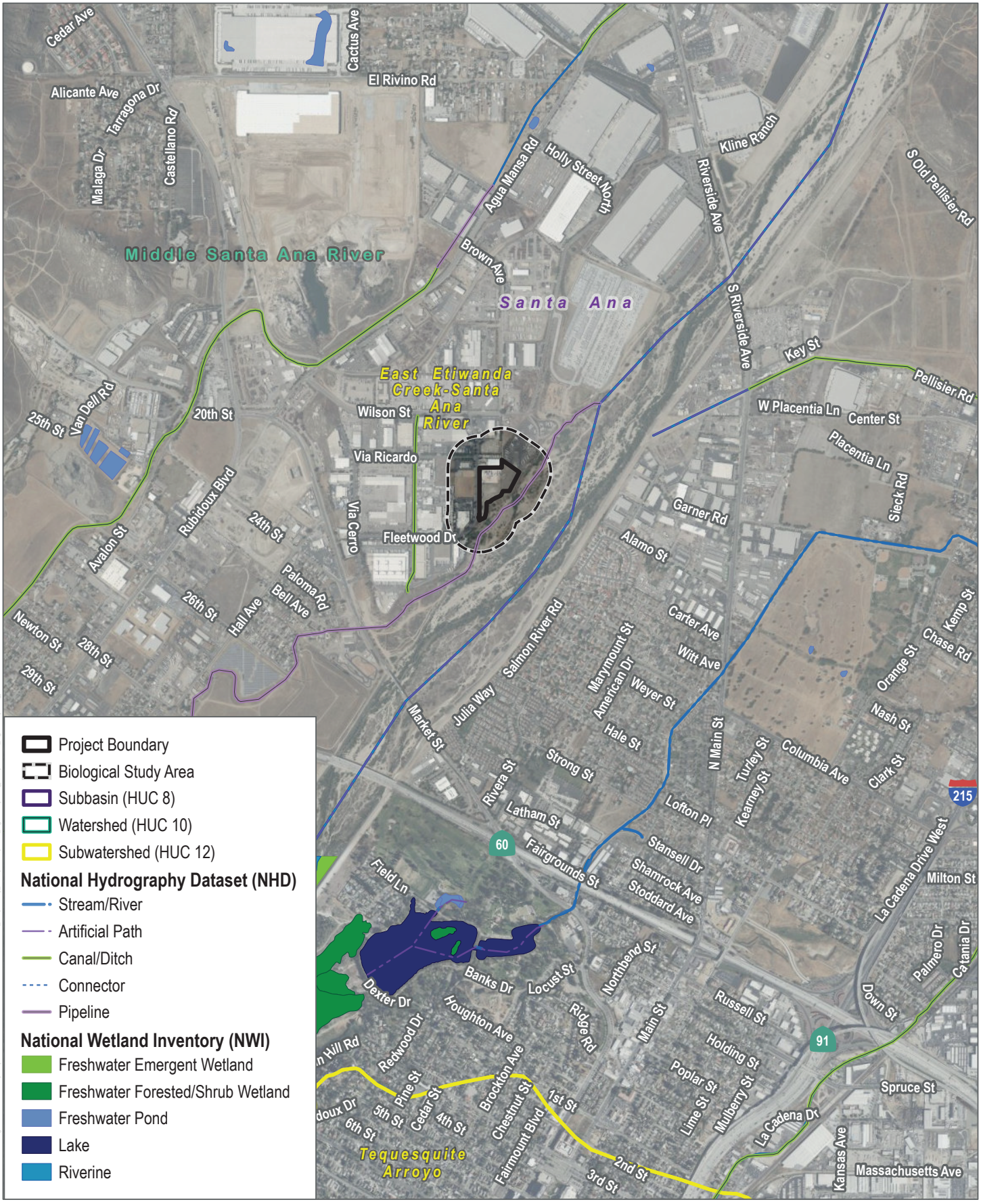
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FIGURE 5

Soils

2240 Fleetwood Drive Industrial Building Project



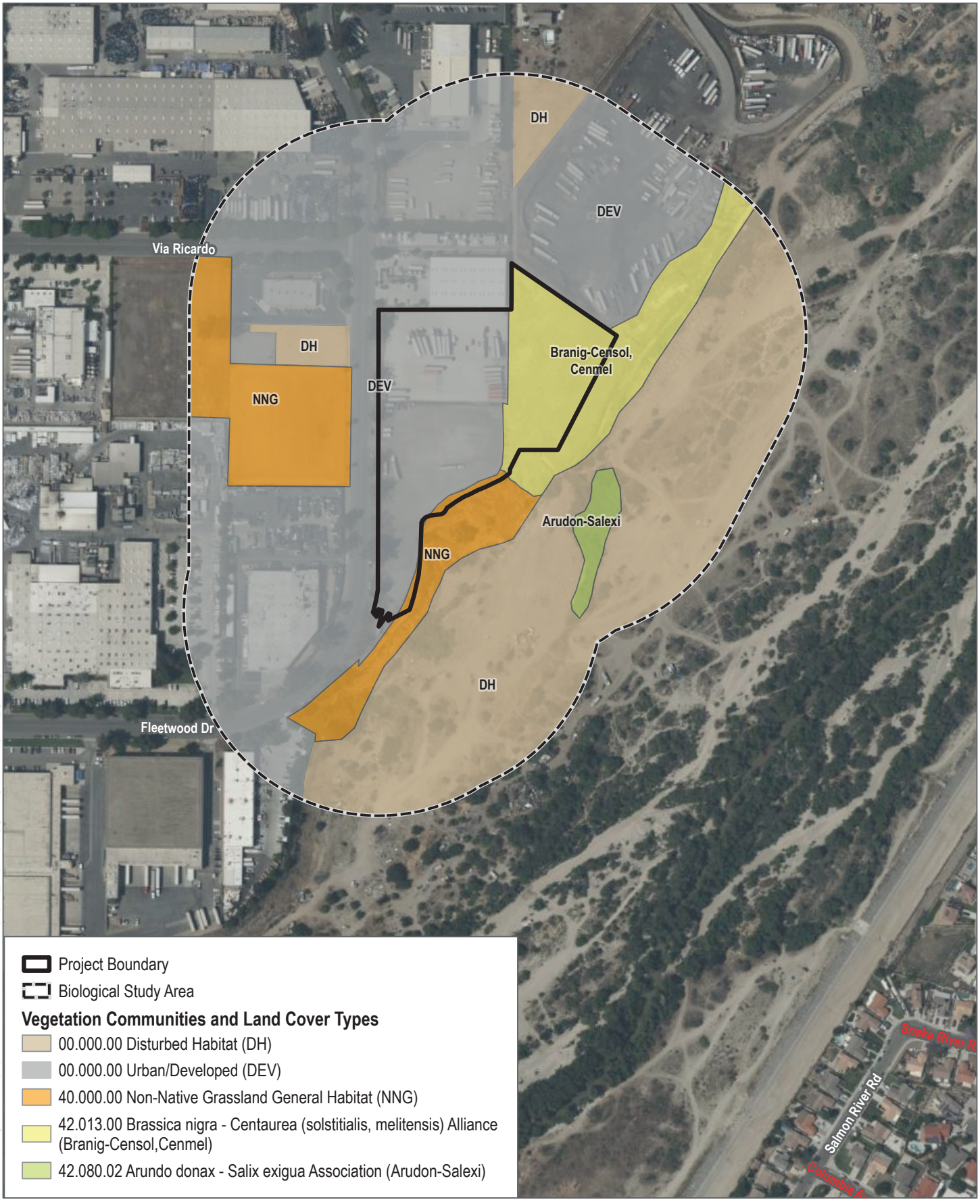
SOURCE: Bing Maps (Accessed 2024)

FIGURE 6

Hydrology

2240 Fleetwood Drive Industrial Building Project

DUDEK



SOURCE: Bing Maps (Accessed 2024)

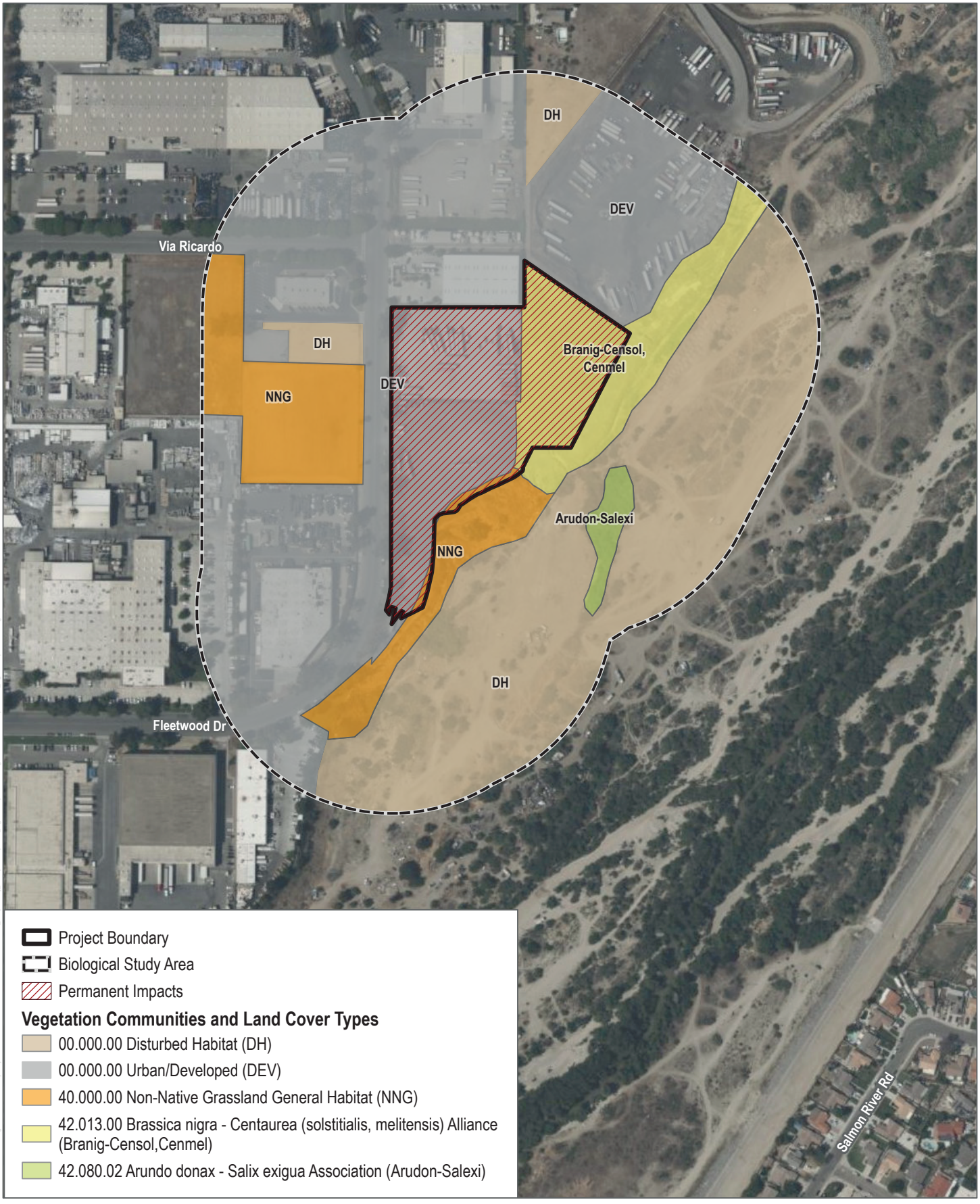
DUDEK

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FIGURE 7

Biological Resources

2240 Fleetwood Drive Industrial Building Project



SOURCE: Bing Maps (Accessed 2024)

DUDEK

0 165 330 Feet

FIGURE 8

Impacts to Biological Resources

2240 Fleetwood Drive Industrial Building Project

Appendix B
Representative Photographs



Photo 1. Representative view of the Project footprint (urban/developed lands) within southern portion of the Project, facing south.



Photo 2. Representative view of the Project footprint (urban/developed lands) facing north.



Photo 3. Representative view of the northeastern portion of the Project footprint (upland mustards or star-thistle fields alliance), facing north/northeast.



Photo 4. Representative view of the northeastern portion of the Project footprint (upland mustards or star-thistle fields alliance), facing northwest.



Photo 5. Representative view of the Project footprint (urban/developed lands in foreground) within northeastern portion of the Project, facing north/northwest.



Photo 6. Representative view of the Project footprint (urban/developed lands in foreground) within central portion of the Project footprint, facing southeast.



Photo 7. Representative view of the Biological Survey Area (BSA) buffer outside of the Project footprint. Sloped areas with Santa Ana River terrace and dirt roads in foreground, facing northeast.



Photo 8. Representative view of the BSA buffer outside of the Project footprint. Sloped areas with Santa Ana River terrace, dirt roads, and disturbance in foreground, facing south.

Appendix C
Plant Compendium

Vascular Species

Eudicots

ASTERACEAE — SUNFLOWER FAMILY

Baccharis salicifolia — mulefat
* *Centaurea melitensis* — Maltese star-thistle
Encelia farinosa — brittle bush
Helianthus annuus — common sunflower
Helianthus gracilentus — slender sunflower
Heterotheca grandiflora — telegraphweed
* *Verbesina encelioides* — golden crownbeard

BORAGINACEAE — BORAGE FAMILY

Amsinckia intermedia — common fiddleneck

BRASSICACEAE — MUSTARD FAMILY

* *Brassica nigra* — black mustard
* *Hirschfeldia incana* — shortpod mustard
* *Raphanus raphanistrum* — wild radish
Sisymbrium irio — London rocket*
* *Sisymbrium orientale* — Indian hedgemustard

CHENOPODIACEAE — GOOSEFOOT FAMILY

* *Chenopodium murale* — nettleleaf goosefoot
* *Salsola tragus* — prickly Russian thistle

EUPHORBIACEAE — SPURGE FAMILY

Croton californicus — California croton

GERANIACEAE — GERANIUM FAMILY

* *Erodium cicutarium* — redstem stork's bill

MALVACEAE — MALLOW FAMILY

* Malva parviflora — cheeseweed mallow

MYRTACEAE — MYRTLE FAMILY

* *Eucalyptus camaldulensis* — river redgum
* *Eucalyptus globulus* — Tasmanian bluegum

POLYGONACEAE — BUCKWHEAT FAMILY

* *Rumex crispus* — curly dock
  Rumex hymenosepalus — canaigre dock

SOLANACEAE — NIGHTSHADE FAMILY

* *Nicotiana glauca* — tree tobacco

TAMARICACEAE — TAMARISK FAMILY

* *Tamarix ramosissima* — tamarisk

Monocots

POACEAE — GRASS FAMILY

* *Arundo donax* — giant reed
* *Bromus diandrus* — ripgut brome
* *Hordeum murinum* — mouse barley

* signifies introduced (non-native) species

Appendix D
Wildlife Compendium

Birds

Finches

FRINGILLIDAE — FRINGILLINE AND CARDUELINE FINCHES AND ALLIES

Haemorhous mexicanus — house finch

Flycatchers

TYRANNIDAE — TYRANT FLYCATCHERS

Sayornis nigricans — black phoebe

Hummingbirds

TROCHILIDAE — HUMMINGBIRDS

Archilochus alexandri — black-chinned hummingbird

Selasphorus sp. — Allen's/rufous hummingbird

Pigeons and Doves

COLUMBIDAE — PIGEONS AND DOVES

Zenaida macroura — mourning dove

Wood Warblers and Allies

PARULIDAE — WOOD-WARBLERS

Setophaga coronata — yellow-rumped warbler

Wrens

TROGLODYTIDAE — WRENS

Thryomanes bewickii — Bewick's wren

New World Sparrows

PASSERELLIDAE — NEW WORLD SPARROWS

Melospiza melodia — song sparrow

Melozone crissalis — California towhee

Zonotrichia leucophrys — white-crowned sparrow

Invertebrates

Butterflies

NYMPHALIDAE — BRUSH-FOOTED BUTTERFLIES

Vanessa cardui — painted lady

Mammals

Hares and Rabbits

LEPORIDAE — HARES AND RABBITS

Sylvilagus bachmani — brush rabbit

Reptiles

Lizards

PHRYNOSOMATIDAE — IGUANID LIZARDS

Sceloporus occidentalis — western fence lizard

* signifies introduced (non-native) species

Appendix E

Special-Status Plant Species Potential to Occur

Scientific Name	Common Name	Status (Federal/State/CRPR)	Western Riverside MSHCP	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Abronia villosa var. *aurita*	chaparral sand-verbena	None/None/1B.1	None	Chaparral, Coastal scrub, Desert dunes; Sandy/ annual herb/(Jan)Mar–Sep/245–5,245	**Not expected to occur.** Although the project site is located within the species' known elevation range, there is no suitable vegetation present to support this species.
Ambrosia monogyra	singlewhorl burrobrush	None/None/2B.2	None	Chaparral, Sonoran desert scrub; Sandy/perennial shrub/Aug–Nov/35–1,640	**Not expected to occur.** The project site is located within the species' known elevation range and suitable soils are present; however, no suitable vegetation is present on the project site to support this species. The nearest known occurrence was documented in 1926 approximately 6 miles north, from 1926 (CDFW 2024).
Ambrosia pumila	San Diego ambrosia	FE/None/1B.1	Narrow Endemic Plant Species	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools; Alkaline (sometimes), Clay (sometimes), Disturbed areas (often), Loam (sometimes), Sandy (sometimes)/perennial rhizomatous herb/Apr–Oct/65–1,360	**Not expected to occur.** While non-native grasslands and disturbed habitat are present, the project site lacks suitable acidic/clay/alkaline soils to support this species. This species is associated with Garretson gravelly fine sandy loam, and on Las Posass loam in close proximity to silty, alkaline soils of the Willow series (County of Riverside 2003), all of which are not present. Additionally, there are no occurrences documented along the Santa Ana River, with the nearest known occurrence was documented in 2005 approximately 19 miles southeast of the project site near Lake Elsinore (CDFW 2024).
Arctostaphylos glandulosa ssp. *gabrielensis*	San Gabriel manzanita	None/None/1B.2	None	Chaparral (rocky)/ perennial evergreen shrub/Mar/1,950–4,920	**Not expected to occur.** The project site is located outside of the species' known elevation range and there is no suitable

Scientific Name	Common Name	Status (Federal/State/CRPR)	Western Riverside MSHCP	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
					vegetation present to support this species.
Arenaria paludicola	marsh sandwort	FE/SE/1B.1	None	Marshes and swamps (brackish, freshwater); Openings, Sandy/perennial stoloniferous herb/May–Aug/10–560	**Not expected to occur.** The project site is located outside of the species' known elevation range and there is no suitable vegetation present to support this species.
Astragalus hornii var. *hornii*	Horn's milk-vetch	None/None/1B.1	None	Meadows and seeps, Playas; Alkaline, Lake Margins/annual herb/May–Oct/195–2,785	**Not expected to occur.** While the project site is located within the species' known elevation range, there is no suitable vegetation present to support this species.
Berberis nevinii	Nevin's barberry	FE/SE/1B.1	Criteria Area Survey Plant Species	Chaparral, Cismontane woodland, Coastal scrub, Riparian scrub; Gravelly (sometimes), Sandy (sometimes)/perennial evergreen shrub/(Feb)Mar–June/230–2,705	**Not expected to occur.** While the project site is located within the species' known elevation range and suitable sandy soils are present, the project site lacks suitable vegetation to support this species. A small, isolated patch of riparian scrub is present outside of the project site within the Santa Ana River; however, the habitat is highly disturbed. The nearest known occurrence was documented in 1999 approximately 4 miles south of the project site (CDFW 2024).
Brodiaea filifolia	thread-leaved brodiaea	FT/SE/1B.1	Criteria Area Survey Plant Species	Chaparral (openings), Cismontane woodland, Coastal scrub, Playas, Valley and foothill grassland, Vernal pools; Clay (often)/perennial bulbiferous herb/Mar–June/80–3,670	**Not expected to occur.** While the project site is located within the species' known elevation range, and non-native grassland is present, the project site lacks suitable vernal pools and clay soils. The nearest known occurrence was documented in 2008 approximately 19 miles southwest of the project site (CDFW 2024).

Scientific Name	Common Name	Status (Federal/State/CRPR)	Western Riverside MSHCP	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Calochortus palmeri var. *palmeri*	Palmer's mariposa-lily	None/None/1 B.2	None	Chaparral, Lower montane coniferous forest, Meadows and seeps; Mesic/perennial bulbiferous herb/Apr–July/2,325–7,840	**Not expected to occur.** The project site is located outside of the species' known elevation range and there is no suitable vegetation present to support this species.
Calochortus simulans	La Panza mariposa-lily	None/None/1 B.3	None	Chaparral, Cismontane woodland, Lower montane coniferous forest, Valley and foothill grassland; Granitic (often), Sandy, Serpentinite (sometimes)/perennial bulbiferous herb/Apr–June/1,065–3,770	**Not expected to occur.** The project site is located outside of the species' known elevation range.
Calochortus weedii var. *intermedius*	intermediate mariposa-lily	None/None/1 B.2	Covered	Chaparral, Coastal scrub, Valley and foothill grassland; Rocky/ perennial bulbiferous herb/May–July/345–2,805	**Low potential to occur.** While the project site is located within the species' known elevation range and contains non-native grassland, the project site lacks suitable rocky soils to support this species. The nearest known occurrence was document approximately 19 miles southwest of the project site (CDFW 2024).
Carex comosa	bristly sedge	None/None/2 B.1	None	Coastal prairie, Marshes and swamps (lake margins), Valley and foothill grassland/ perennial rhizomatous herb/May–Sep/0–2,050	**Not expected to occur.** While the project site is located within the species' known elevation range and there is non-native grassland present the only documented occurrence in Riverside County was in 1882 approximately 7 miles north of the project site (CDFW 2024)
Castilleja lasiorhyncha	San Bernardino Mountains owl's-clover	None/None/1 B.2	None	Chaparral, Meadows and seeps, Pebble (Pavement) plain, Riparian woodland, Upper montane coniferous	**Not expected to occur.** The project site is located outside of the species' known elevation and geographic range of the San Bernardino Mountains (CCH 2024).

Scientific Name	Common Name	Status (Federal/State/CRPR)	Western Riverside MSHCP	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				forest; Mesic/annual herb (hemiparasitic)/May–Aug/4,265–7,840	
Centromadia pungens ssp. *laevis*	smooth tarplant	None/None/1B.1	Criteria Area Survey Plant Species	Chenopod scrub, Meadows and seeps, Playas, Riparian woodland, Valley and foothill grassland; Alkaline/annual herb/Apr–Sep/0–2,095	**Not expected to occur.** While the project site is located within the species' known elevation range, and there is non-native grassland present, the project site lacks suitable alkaline soils. The nearest known occurrence was documented in 1905 approximately 2 miles south of the project site (CDFW 2024).
Chloropyron maritimum ssp. *maritimum*	salt marsh bird's-beak	FE/SE/1B.2	None	Coastal dunes, Marshes and swamps (coastal salt)/annual herb (hemiparasitic)/May–Oct(Nov)/0–100	**Not expected to occur.** The project site is located outside of the species' known elevation range and there is no suitable vegetation present to support this species.
Chorizanthe parryi var. *parryi*	Parry's spineflower	None/None/1B.1	Covered	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland; Openings, Rocky (sometimes), Sandy (sometimes)/annual herb/Apr–June/900–4,000	**Low potential to occur.** While the project site is located within the species' known elevation range and contains suitable sandy soils and non-native grassland, nearby occurrences are all from over 100 years ago (CDFW 2024).
Chorizanthe xanti var. *leucotheca*	white-bracted spineflower	None/None/1B.2	None	Coastal scrub (alluvial fans), Mojavean desert scrub, Pinyon and juniper woodland; Gravelly (sometimes), Sandy (sometimes)/annual herb/ Apr–June/985–3,935	**Not expected to occur.** While the project site is located slightly below the species' known elevation range, there is no suitable vegetation present to support this species
Cladium californicum	California saw-grass	None/None/2B.2	None	Marshes and swamps (alkaline, freshwater),	**Not expected to occur.** While the project site is located within the species' known

Scientific Name	Common Name	Status (Federal/State/CRPR)	Western Riverside MSHCP	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				Meadows and seeps/ perennial rhizomatous herb/June–Sep/195–5,245	elevation range, there is no suitable vegetation present to support this species.
Claytonia peirsonii ssp. *peirsonii*	Peirson's spring beauty	None/None/1B.2	None	Subalpine coniferous forest, Upper montane coniferous forest; Granitic, Metamorphic, Scree, Talus/perennial herb/ (Mar)May–June/4,950–9,005	**Not expected to occur.** The project site is located outside of the species' known elevation range and there is no suitable vegetation or soils present to support this species.
Clinopodium chandleri	San Miguel savory	None/None/1B.2	Narrow Endemic Plant Species	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland, Valley and foothill grassland; Gabbroic (sometimes), Rocky (sometimes)/ perennial shrub/Mar–July/395–3,525	**Not expected to occur.** The project site is located within the species' known elevation range and there is non-native grassland present; however, the site lacks gabbroic soils. Furthermore, this species has not been reported within the San Bernardino South quadrangle and the surrounding eight USGS 7.5-minute quadrangles (CDFW 2024a; CNPS 2024a).
Cryptantha incana	Tulare cryptantha	None/None/1B.3	None	Lower montane coniferous forest (gravelly, rocky)/ annual herb/June–Aug/4,690–7,050	**Not expected to occur.** The project site is located outside of the species' known elevation range and there is no suitable vegetation present to support this species.
Cuscuta obtusiflora var. *glandulosa*	Peruvian dodder	None/None/2B.2	None	Marshes and swamps (freshwater)/annual vine (parasitic)/July–Oct/50–920	**Not expected to occur.** While the project site is located within the species' known elevation range, there is no suitable vegetation present to support this species.

Scientific Name	Common Name	Status (Federal/State/CRPR)	Western Riverside MSHCP	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Dodecahema leptoceras	slender-horned spineflower	FE/SE/1B.1	Narrow Endemic Plant Species	Chaparral, Cismontane woodland, Coastal scrub (alluvial fans); Sandy/ annual herb/Apr–June/655–2,490	**Not expected to occur.** While the project site is located within the species' known elevation range, there is no suitable vegetation present to support this species.
Dudleya multicaulis	many-stemmed dudleya	None/None/1B.2	Narrow Endemic Plant Species	Chaparral, Coastal scrub, Valley and foothill grassland; Clay (often)/ perennial herb/Apr–July/50–2,590	**Not expected to occur.** While the project site is located within the species' known elevation range and while there is non-native grassland present, there is no suitable clay soils present to support this species.
Eriastrum densifolium ssp. *sanctorum*	Santa Ana River woollystar	FE/SE/1B.1	Covered	Chaparral, Coastal scrub (alluvial fans); Gravelly (sometimes), Sandy (sometimes)/perennial herb/Apr–Sep/300–2,000	**Not expected to occur.** While the project site is located within the species' known elevation range, there is no suitable vegetation present to support this species.
Eriogonum microthecum var. *johnstonii*	Johnston's buckwheat	None/None/1B.3	None	Subalpine coniferous forest, Upper montane coniferous forest; Rocky/ perennial deciduous shrub/July–Sep/6,000–9,595	**Not expected to occur.** The project site is located outside of the species' known elevation range and there is no suitable vegetation or rocky soils present to support this species.
Fimbristylis thermalis	hot springs fimbristylis	None/None/2B.2	None	Meadows and seeps (alkaline, near hot springs)/perennial rhizomatous herb/July–Sep/360–4,395	**Not expected to occur.** While the project site is located within the species' known elevation range, there is no suitable vegetation or suitable alkaline soils present to support this species.
Galium californicum ssp. *primum*	Alvin Meadow bedstraw	None/None/1B.2	Covered	Chaparral, Lower montane coniferous forest; Granitic, Sandy/perennial herb/May–July/4,425–5,575	**Not expected to occur.** The project site is located outside of the species' known elevation range and there is no suitable vegetation present to support this species.

Scientific Name	Common Name	Status (Federal/State/CRPR)	Western Riverside MSHCP	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Helianthus nuttallii ssp. *parishii*	Los Angeles sunflower	None/None/1A	None	Marshes and swamps (freshwater, coastal salt)/perennial rhizomatous herb/Aug–Oct/35–5,000	**Not expected to occur.** While the project site is located within the species' known elevation range, there is no suitable vegetation present to support this species.
Horkelia cuneata var. *puberula*	mesa horkelia	None/None/1B.1	None	Chaparral (maritime), Cismontane woodland, Coastal scrub; Gravelly (sometimes), Sandy (sometimes)/perennial herb/Feb–July(Sep)/230–2,655	**Not expected to occur.** While the project site is located within the species' known elevation range, there is no suitable vegetation present to support this species.
Imperata brevifolia	California satintail	None/None/2B.1	None	Chaparral, Coastal scrub, Meadows and seeps (often alkali), Mojavean desert scrub, Riparian scrub; Mesic/perennial rhizomatous herb/Sep–May/0–3,985	**Not expected to occur.** While the project site is located within the species' known elevation range, there is no suitable vegetation present.
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	None/None/1B.1	Criteria Area Survey Plant Species	Marshes and swamps (coastal salt), Playas, Vernal pools/annual herb/ Feb–June/5–4,000	**Not expected to occur.** While the project site is located within the species' known elevation range, the project site lacks suitable vegetation and vernal pools to support this species.
Lilium parryi	lemon lily	None/None/1B.2	Covered	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.** The project site is located outside of the species' known elevation range.
Linanthus concinnus	San Gabriel linanthus	None/None/1B.2	None	Chaparral, Lower montane coniferous forest, Upper	**Not expected to occur.** The project site is located outside of the species' known

Scientific Name	Common Name	Status (Federal/State/CRPR)	Western Riverside MSHCP	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				montane coniferous forest; Openings, Rocky/annual herb/Apr–July/4,985–9,185	elevation range and there is no suitable vegetation present.
Lycium parishii	Parish's desert-thorn	None/None/2B.3	None	Coastal scrub, Sonoran desert scrub/perennial shrub/Mar–Apr/445–3,280	**Not expected to occur.** While the project site is located within the species' known elevation range, there is no suitable vegetation present to support this species.
Malacothamnus parishii	Parish's bush-mallow	None/None/1A	None	Chaparral, Coastal scrub/perennial deciduous shrub/June–July/1,000–1,490	**Not expected to occur**. While the project site is located within the species' known elevation range, there is no suitable vegetation present to support this species.
Monardella australis ssp. *jokerstii*	Jokerst's monardella	None/None/1B.1	None	Chaparral, Lower montane coniferous forest; Alluvial Terraces, Scree, Slopes, Talus, Washes/perennial rhizomatous herb/July–Sep/4,425–5,740	**Not expected to occur.** The project site is located outside of the species' known elevation range and there is no suitable vegetation present.
Monardella pringlei	Pringle's monardella	None/None/1A	None	Coastal scrub (sandy)/ annual herb/May–June/985–1,310	**Not expected to occur**. While the project site is located within the species' known elevation range, there is no suitable vegetation present to support this species.
Muhlenbergia utilis	aparejo grass	None/None/2B.2	None	Chaparral, Cismontane woodland, Coastal scrub, Marshes and swamps, Meadows and seeps; Alkaline (sometimes), Serpentinite (sometimes)/ perennial rhizomatous herb/Mar–Oct/80–7,625	**Not expected to occur.** While the project site is located within the species' known elevation range, there is no suitable vegetation or soils (alkaline/serpentinite) are present to support this species.

Scientific Name	Common Name	Status (Federal/State/CRPR)	Western Riverside MSHCP	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Nasturtium gambelii	Gambel's water cress	FE/ST/1B.1	None	Marshes and swamps (brackish, freshwater)/ perennial rhizomatous herb/Apr–Oct/15–1,080	**Not expected to occur.** While the project site is located within the species' known elevation range, there is no suitable vegetation present to support this species.
Navarretia prostrata	prostrate vernal pool navarretia	None/None/1 B.2	Criteria Area Survey Plant Species	Coastal scrub, Meadows and seeps, Valley and foothill grassland (alkaline), Vernal pools; Mesic/annual herb/Apr–July/10–3,965	**Not expected to occur.** While the project site is located within the species' known elevation range, the project site lacks suitable alkaline soils and vernal pools.
Opuntia basilaris var. *brachyclada*	short-joint beavertail	None/None/1 B.2	None	Chaparral, Joshua tree "woodland", Mojavean desert scrub, Pinyon and juniper woodland/ perennial stem/Apr–June(Aug)/1,390–5,905	**Not expected to occur.** The project site is located outside of the species' known elevation range and there is no suitable vegetation present to support this species.
Oreonana vestita	woolly mountain-parsley	None/None/1 B.3	None	Lower montane coniferous forest, Subalpine coniferous forest, Upper montane coniferous forest; Gravelly (sometimes), Talus (sometimes)/ perennial herb/Mar–Sep/5,295–11,480	**Not expected to occur.** The project site is located outside of the species' known elevation range and there is no suitable vegetation present to support this species.
Phacelia stellaris	Brand's star phacelia	None/None/1 B.1	Narrow Endemic Plant Species	Coastal dunes, Coastal scrub/annual herb/Mar–June/5–1,310	**Not expected to occur.** While the project site is located within the species' known elevation range and is known to occur within the Santa Ana River (CCH 2024), there is no suitable vegetation present to support this species.
Pseudognaphalium leucocephalum	white rabbit-tobacco	None/None/2 B.2	None	Chaparral, Cismontane woodland, Coastal scrub,	**Not expected to occur.** While the project site is located within the species' known

Scientific Name	Common Name	Status (Federal/State/CRPR)	Western Riverside MSHCP	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				Riparian woodland; Gravelly, Sandy/perennial herb/(July)Aug–Nov(Dec)/ 0–6,885	elevation range, there is no suitable vegetation present to support this species. Nearest occurrence was documented in 1917 approximately 4 miles northwest of the project site (CDFW 2024).
Ribes divaricatum var. *parishii*	Parish's gooseberry	None/None/1A	None	Riparian woodland/ perennial deciduous shrub/Feb–Apr/215–985	**Not expected to occur.** While the project site is located within the species' known elevation range, there is no suitable vegetation present. While there is an isolated, small patch of riparian present within the Santa Ana River, this is outside of the project limits.
Sagittaria sanfordii	Sanford's arrowhead	None/None/1B.2	None	Marshes and swamps (shallow freshwater)/ perennial rhizomatous herb (emergent)/May–Oct (Nov)/0–2,130	**Not expected to occur.** While the project site is located within the species' known elevation range, there is no suitable vegetation present to support this species.
Schoenus nigricans	black bog-rush	None/None/2B.2	None	Marshes and swamps (often alkaline)/perennial herb/Aug–Sep/490–6,560	**Not expected to occur.** While the project site is located within the species' known elevation range, there is no suitable vegetation present to support this species.
Senecio aphanactis	chaparral ragwort	None/None/2B.2	None	Chaparral, Cismontane woodland, Coastal scrub; Alkaline (sometimes)/ annual herb/Jan–Apr (May)/50–2,620	**Not expected to occur.** While the project site is located within the species' known elevation range, there is no suitable vegetation present to support this species.
Sidalcea neomexicana	salt spring checkerbloom	None/None/2B.2	None	Chaparral, Coastal scrub, Lower montane coniferous forest, Mojavean desert scrub, Playas; Alkaline, Mesic/	**Not expected to occur.** While the project site is located within the species' known elevation range, there is no suitable vegetation present to support this species.

Scientific Name	Common Name	Status (Federal/State/CRPR)	Western Riverside MSHCP	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				perennial herb/Mar–June/ 50–5,015	
Sphenopholis obtusata	prairie wedge grass	None/None/2 B.2	None	Cismontane woodland, Meadows and seeps; Mesic/perennial herb/Apr–July/985–6,560	**Not expected to occur.** While the project site is located slightly below the species' known elevation range, there is no suitable vegetation present to support this species.
Streptanthus campestris	southern jewelflower	None/None/1 B.3	None	Chaparral, Lower montane coniferous forest, Pinyon and juniper woodland; Rocky/perennial herb/ (Apr)May–July/2,950–7,545	**Not expected to occur.** The project site is located outside of the species' known elevation range and there is no suitable vegetation present to support this species.
Symphyotrichum defoliatum	San Bernardino aster	None/None/1 B.2	None	Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Marshes and swamps, Meadows and seeps, Valley and foothill grassland (vernally mesic); Streambanks/perennial rhizomatous herb/July–Nov/5–6,690	**Not expected to occur.** While the project site is located within the species' known elevation range, and while there is non-native grassland present, this community is not vernally mesic and is outside of the Santa Ana River.
Viola pinetorum ssp. *grisea*	grey-leaved violet	None/None/1 B.2	None	Meadows and seeps, Subalpine coniferous forest, Upper montane coniferous forest/ perennial herb/Apr–July/4,920–11,150	**Not expected to occur.** The project site is located outside of the species' known elevation range and there is no suitable vegetation present to support this species.

Status Legend:
FE: Federally listed as endangered
FT: Federally listed as threatened
FC: Federal Candidate for listing
DL: Delisted

SE: State listed as endangered
ST: State listed as threatened
SC: State Candidate for listing
SR: State Rare
CRPR 1A: Plants presumed extirpated in California and either rare or extinct elsewhere
CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere
CRPR 2A: Plants presumed extirpated in California but common elsewhere
CRPR 2B: Plants rare, threatened, or endangered in California but more common elsewhere
CRPR 3: Review List: Plants about which more information is needed
CRPR 4: Watch List: Plants of limited distribution
.1 Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2 Moderately threatened in California (20–80% 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)
CBR: Considered but Rejected

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Appendix F

Special-Status Wildlife Species Potential to Occur

Scientific Name	Common Name	Status (Federal/State)	Western Riverside MSHCP	Habitat	Potential to Occur
Amphibians					
Rana muscosa	mountain yellow-legged frog	FE/SE, WL	Covered	Lakes, ponds, meadow streams, isolated pools, and open riverbanks; rocky canyons in narrow canyons and in chaparral	**Not expected to occur.** No suitable aquatic resources are present and the BSA is located outside of this species' known geographic range. This species is known to occur within the Transverse Ranges in southern California (CDFW 2024).
Spea hammondii	western spadefoot	None/SSC	Covered	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	**Not expected to occur.** While Non-native grassland is present on the Project site, these areas are located on slopes and there are no ephemeral wetlands or vernal pools present within both the Project site and BSA. While the BSA includes the Santa Ana River terrace, this area is disturbed, including tire tracks passing through the ponded water and large homeless encampment adjacent and there is a low potential for this species to occur within the buffer of the BSA.
Reptiles					
Anniella stebbinsi	southern California legless lizard	None/SSC	None	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	**Low potential to occur.** The BSA lacks suitable vegetation, dunes, and beaches to support this species; however, the BSA includes sandy soils within the Santa Ana River terrace located outside of the Project site. The nearest known occurrence was documented approximately 1 mile southwest of the BSA in 2015 (CDFW 2024).

Scientific Name	Common Name	Status (Federal/State)	Western Riverside MSHCP	Habitat	Potential to Occur
Arizona elegans occidentalis	California glossy snake	None/SSC	None	Arid scrub, rocky washes, grasslands, chaparral, open areas with loose soil	**Not expected to occur.** The BSA lacks suitable habitat as the soils are compact and the grasslands are overgrown with ruderal vegetation. The nearest occurrence is 3.5 miles to the northeast of the BSA from 2002 (CDFW 2024).
Aspidoscelis tigris stejnegeri	San Diegan tiger whiptail	None/SSC	Covered	Hot and dry areas with sparse foliage, including chaparral, woodland, and riparian areas.	**Low potential to occur.** The Project site lacks suitable vegetation to support this species. While the Santa Ana River terrace is located within the BSA buffer study area, the riparian patch is isolated and disturbed. The nearest occurrence is approximately 5 miles to the northeast of the BSA from 2016 (CDFW 2024).
Charina umbratica	southern rubber boa	None/ST	Covered	Montane oak–conifer and mixed-conifer forests, montane chaparral, wet meadows; usually in vicinity of streams or wet meadows	**Not expected to occur.** No suitable vegetation is present to support this species.
Coleonyx variegatus abbotti	San Diego banded gecko	None/SSC	Covered	Rocky areas within coastal scrub and chaparral	**Not expected to occur.** The BSA lacks suitable vegetation present to support this species.
Crotalus ruber	red diamondback rattlesnake	None/SSC	Covered	Coastal scrub, chaparral, oak and pine woodlands, rocky grasslands, cultivated areas, and desert flats	**Not expected to occur.** No suitable vegetation is present.
Phrynosoma blainvillii	Blainville's horned lizard	None/SSC	Covered	Open areas of sandy soil in valleys, foothills, and semi-arid mountains including coastal scrub, chaparral, valley–foothill hardwood, conifer,	**Low potential to occur.** The BSA does contain open areas with sandy soils within the Santa Ana River terrace located in the BSA buffer; however,

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				riparian, pine–cypress, juniper, and annual grassland habitats	the Project site contains highly compacted soils and a minimal amount of suitable grasslands. The nearest known occurrence is approximately 3.5 miles northwest of the BSA from 1999 (CDFW 2024).
Thamnophis hammondii	two-striped gartersnake	None/SSC	None	Streams, creeks, pools, streams with rocky beds, ponds, lakes, vernal pools	**Not expected to occur.** The Project site lacks suitable aquatic resources to support this species. While the Santa Ana River terrace is present within the BSA, this area is highly disturbed. Furthermore, the nearest known occurrence is approximately 13 miles northeast of the BSA (CDFW 2024).
Actinemys pallida	southwestern pond turtle	FPT/SSC	Covered	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 Project site lacks suitable aquatic resources to support this species. While the Santa Ana River terrace is present within the BSA, this area is highly disturbed. Furthermore, the nearest known occurrence is approximately 12 miles southwest of the BSA (CDFW 2024).
Birds					
Agelaius tricolor (nesting colony)	tricolored blackbird	BCC/SSC, ST	Covered	Nests near freshwater, emergent wetland with cattails or tules, but also in Himalayan blackberrry; forages in grasslands, woodland, and agriculture	**Not expected to occur.** The BSA lacks suitable freshwater, emergent wetlands to support nesting. Nearest documented occurrence is approximately 1 mile south of the BSA from 1951 (CDFW 2024).

Scientific Name	Common Name	Status (Federal/State)	Western Riverside MSHCP	Habitat	Potential to Occur
Athene cunicularia (burrow sites and some wintering sites)	burrowing owl	BCC/SSC, SC	Covered	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows	**Low potential to occur.** The BSA contains suitable habitat (non-native grasslands and disturbed areas that provide open cover). However, the Project site is highly disturbed with compacted soils. No burrows greater than 4 inches in diameter were present.
Buteo swainsoni (nesting)	Swainson's hawk	None/ST	Covered	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 BSA lacks open woodland and savanna, and the Project site lacks suitable riparian habitat.
Coccyzus americanus occidentalis (nesting)	western yellow-billed cuckoo	FT/SE	Covered	Nests in dense, wide riparian woodlands and forest with well-developed understories	**Not expected to occur.** The Project site lacks suitable aquatic resources and riparian vegetation to support this species. While the Santa Ana River terrace is present within the BSA and contains one small, isolated patch of riparian habitat, this area is highly disturbed. This species may occur outside of the BSA within the Santa Ana River as there are known occurrences within the Santa Ana River approximately 0.3 mile to the northeast of the BSA (CDFW 2024).
Coturnicops noveboracensis	yellow rail	BCC/SSC	None	Nesting requires wet marsh/sedge meadows or coastal marshes with wet soil and shallow, standing water	**Not expected to occur.** No suitable vegetation (wet marsh/sedge meadows or coastal marshes) are present to support this species.
Empidonax traillii extimus (nesting)	southwestern willow flycatcher	FE/SE	Covered	Nests in dense riparian habitats along streams, reservoirs, or wetlands; uses variety of riparian and shrubland habitats during migration	**Not expected to occur**. The Project site lacks suitable aquatic resources and riparian vegetation to support this species. While the Santa Ana

Scientific Name	Common Name	Status (Federal/State)	Western Riverside MSHCP	Habitat	Potential to Occur
					River terrace is present within the BSA and contains one small, isolated patch of riparian habitat, this area is highly disturbed, and open (i.e., lacks dense canopy and understory). The nearest documented occurrence is approximately 11 miles east of the BSA (CDFW 2024).
Icteria virens (nesting)	yellow-breasted chat	None/SSC	Covered	Nests and forages in dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush	**Not expected to occur**. The Project site lacks suitable riparian vegetation to support this species. While the Santa Ana River terrace is present within the BSA and contains one small, isolated patch of riparian habitat, this area is highly disturbed, and open. The nearest documented occurrence is approximately 5 miles south of the BSA (CDFW 2024).
Lanius ludovicianus (nesting)	loggerhead shrike	None/SSC	Covered	Nests and forages in open habitats with scattered shrubs, trees, or other perches	**Low potential to occur**. The BSA contains open habitat; however, there is a minimal amount of shrubs and trees present needed to perch, nest and forage on site. Additionally, the nearest documented occurrence is approximately 8 miles southwest of the BSA from 1994 (CDFW 2024).
Laterallus jamaicensis coturniculus	California black rail	None/FP, ST	None	Tidal marshes, shallow freshwater margins, wet meadows, and flooded grassy vegetation; suitable habitats are often supplied by canal leakage in Sierra Nevada foothill populations	**Not expected to occur.** The BSA lacks suitable aquatic resources and vegetation (wet meadows and flooded grasslands) to support this species.

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Polioptila californica californica	coastal California gnatcatcher	FT/SSC	Covered	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 BSA lacks suitable sage scrub communities to support this species.
Setophaga petechia (nesting)	yellow warbler	None/SSC	Covered	Nests and forages in riparian and oak woodlands, montane chaparral, open ponderosa pine, and mixed-conifer habitats	**Not expected to occur.** The Project site lacks suitable riparian vegetation to support this species. While the Santa Ana River terrace is present within the BSA and contains one small, isolated patch of riparian habitat, this area is highly disturbed, and open (i.e., lacks dense canopy and understory). The nearest documented occurrence is approximately 5 miles southwest of the BSA (CDFW 2024).
Vireo bellii pusillus (nesting)	least Bell's vireo	FE/SE	Covered	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	**Not expected to occur**. The Project site lacks suitable riparian vegetation to support this species. While the Santa Ana River terrace is present within the BSA and contains one small, isolated patch of riparian habitat, this area is highly disturbed, and open (i.e., lacks dense canopy and understory). There are documented occurrences within the Santa Ana River immediately outside of the BSA (CDFW 2024).

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Fishes					
Catostomus santaanae	Santa Ana sucker	FT/None	Covered	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 Project site lacks suitable aquatic resources to support this species. While the Santa Ana River terrace is located within the BSA buffer, this area is highly disturbed and lacks flowing water. There are documented occurrences within the Santa Ana River immediately outside of the BSA (CDFW 2024).
Gila orcuttii	arroyo chub	None/SSC	Covered	Warm, fluctuating streams with slow-moving or backwater sections of warm to cool streams at depths >40 centimeters (16 inches); substrates of sand or mud	**Not expected to occur.** The Project site lacks suitable aquatic resources to support this species. While the Santa Ana River terrace is located within the BSA buffer, this area is highly disturbed and lacks flowing water. There are documented occurrences within the Santa Ana River approximately 0.3 miles south of the BSA (CDFW 2024).
Oncorhynchus mykiss irideus pop. 10	southern steelhead - southern California DPS	FE/SCE	None	Clean, clear, cool, well-oxygenated streams; needs relatively deep pools in migration and gravelly substrate to spawn	**Not expected to occur.** The Project site lacks suitable aquatic resources to support this species. While the Santa Ana River terrace is located within the BSA buffer, this area is highly disturbed and lacks flowing water and deep pools. There are documented occurrences within the Santa Ana River immediately adjacent to the BSA (CDFW 2024).

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Rhinichthys osculus ssp. 8	Santa Ana speckled dace	None/SSC	None	Headwaters of the Santa Ana and San Gabriel Rivers; may be extirpated from the Los Angeles River system	**Not expected to occur.** The Project site lacks suitable aquatic resources to support this species and is located outside of the Santa Ana and San Gabriel Rivers headwaters.
Mammals					
Dasypterus xanthinus	western yellow bat	None/SSC	None	Valley–foothill riparian, desert riparian, desert wash, and palm oasis habitats; below 2,000 feet above mean sea level; roosts in riparian and palms	**Not expected to occur.** The BSA lacks suitable riparian habitat and palm oasis for foraging and roosting.
Dipodomys merriami parvus	San Bernardino kangaroo rat	FE/SSC, SCE	Covered	Sparse scrub habitat, alluvial scrub/coastal scrub habitats on gravelly and sandy soils near river and stream terraces	**Not expected to occur.** The Project site lacks suitable scrub and alluvial scrub habitat to support this species and soils within the Project are highly compacted due to past disturbances. While the Santa Ana River terrace is located within the BSA buffer and contains sandy soil near the Santa Ana River, this area is outside of the Project footprint. Furthermore, there are no known occurrences of this species within the Santa Ana River. The nearest known occurrence is approximately 5.5 miles east of the BSA (CDFW 2024).
Dipodomys stephensi	Stephens' kangaroo rat	FT/ST	Covered	Annual and perennial grassland habitats, coastal scrub or sagebrush with sparse canopy cover, or in disturbed areas	**Not expected to occur.** The Project site lacks suitable scrub but contains a small amount of grasslands and disturbed areas; however, these areas contain highly compacted soils from past disturbances. Furthermore, there are no known occurrences of this species within the Santa Ana River. The nearest known occurrence

Scientific Name	Common Name	Status (Federal/State)	Western Riverside MSHCP	Habitat	Potential to Occur
					is approximately 4.6 miles south of the BSA from 1999 (CDFW 2024).
Eumops perotis californicus	western mastiff bat	None/SSC	None	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	**Not expected to occur.** The BSA lacks suitable foraging and roosting habitat for this species.
Glaucomys oregonensis californicus	San Bernardino flying squirrel	None/SSC	Covered	Coniferous and deciduous forests, including riparian forests	**Not expected to occur.** No suitable habitat is present and the BSA is located outside of the species' known geographic range.
Neotoma lepida intermedia	San Diego desert woodrat	None/SSC	Covered	Coastal scrub, desert scrub, chaparral, cacti, rocky areas	**Not expected to occur.** The BSA lacks suitable vegetation and rocky areas to support this species.
Nyctinomops femorosaccus	pocketed free-tailed bat	None/SSC	None	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.** The BSA lacks suitable foraging and roosting habitat to support this species.
Onychomys torridus ramona	southern grasshopper mouse	None/SSC	None	Grassland and sparse coastal scrub	**Low potential to occur.** Marginal habitat is present.
Ovis canadensis nelsoni	Nelson's bighorn sheep	None/FP	None	Steep slopes and cliffs, rough and rocky topography, sparse vegetation; also canyons, washes, and alluvial fans	**Not expected to occur.** The BSA lacks suitable habitat for this species and is located outside of the species' known geographic range.
Perognathus longimembris brevinasus	Los Angeles pocket mouse	None/SSC	Covered	Lower-elevation grassland, alluvial sage scrub, and coastal scrub	**Not expected to occur.** The Project site lacks suitable scrub and alluvial sage scrub habitat to support this species and soils within the Project are highly compacted due to past

Scientific Name	Common Name	Status (Federal/State)	Western Riverside MSHCP	Habitat	Potential to Occur
					disturbances. This species appears to be limited to sparsely vegetated habitat areas in patches of fine sandy soils associated with washes or of aeolian (windblown) origin, such as dunes (County of Riverside 2003) which are absent from the BSA. While the Santa Ana River terrace is located within the BSA buffer and contains sandy soil, this area lacks the suitable habitat and is outside of the Project footprint. The nearest known occurrence is approximately 5.5 miles east of the BSA (CDFW 2024).
Taxidea taxus	American badger	None/SSC	None	Dry, open, treeless areas; grasslands, coastal scrub, agriculture, and pastures, especially with friable soils	**Not expected to occur.** While the Santa Ana River terrace is located within the BSA buffer, the Project site is located in a highly urbanized area and contains compacted soils due to past disturbances.
Invertebrates					
Bombus crotchii	Crotch bumble bee	None/SCE	None	Open grassland and scrub communities supporting suitable floral resources.	**Low potential to occur.** While the Project site is mainly disturbed, there is a small amount of ruderal habitat containing floral resources, and additional floral resources may be present within the Santa Ana River terrace located within the BSA buffer.
Euphydryas editha quino	quino checkerspot butterfly	FE/None	Covered	Annual forblands, grassland, open coastal scrub and chaparral; often soils with cryptogamic crusts and fine-textured clay; host plants include *Plantago erecta*, *P. patagonica*, and	**Not expected to occur.** The BSA lacks suitable vegetation containing preferred host plants for this species.

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				Antirrhinum coulterianum, among others	
Rhaphiomidas terminatus abdominalis	Delhi Sands flower-loving fly	FE/None	Covered	Delhi fine sandy soils and dunes, scrub and ruderal vegetation in the sand verbena series with <50% cover	**Not expected to occur.** While the BSA does contain mapped Delhi fine sands, the habitat assessment conducted concluded that these soils were contaminated with wood chips and other debris. There is no unconsolidated, uncontaminated Delhi fine sand present.
Streptocephalus woottoni	Riverside fairy shrimp	FE/None	Covered	Vernal pools, non-vegetated ephemeral pools	**Not expected to occur**. The BSA does not contain vernal pools nor ephemeral pools to support this species. The Project site has been historically disturbed causing soil compaction.

Notes: CNDDB = California Natural Diversity Database

Status Designations

Federal

BCC: U.S. Fish and Wildlife Service Bird of Conservation Concern
FE: Federally listed as endangered
FT: Federally listed as threatened

State

FP: California Fully Protected Species
SC: State candidate
SCE: State candidate for listing as endangered
SE: State listed as endangered
SSC: California Species of Special Concern
ST: State listed as threatened
WL: California Watch List Species

References

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