# Appendix B:
# Biological Resource Assessment

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# Biological Resources Assessment
# Lilac Avenue and Santa Ana Avenue Warehouse Project
# City of Rialto, San Bernardino County, California

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# SECTION 1: INTRODUCTION

This Biological Resources Assessment (BRA) was prepared by FirstCarbon Solutions (FCS) to support the Lilac Avenue and Santa Ana Avenue Warehouse Project (proposed project) in the City of Rialto, California. The purpose of the BRA is to (1) document existing and potentially occurring biological resources on the project site and adjacent areas; (2) analyze potential project-related impacts on regulated biological resources; (3) summarize relevant local, State, and federal regulations; and (4) recommend appropriate measures to mitigate potential impacts on biological resources to less than significant levels.

## 1.1 - Project Location and Setting

The proposed project site is located in the City of Rialto, in San Bernardino County, California (Exhibit 1). Rialto is surrounded by the City of San Bernardino to the north, Muscoy (a census-designated place in San Bernardino County) and the City of San Bernardino to the east, portions of the cities of Bloomington, Colton, Riverside, and Grand Terrace to the south, and the City of Fontana to the west. Regional access to the site is provided via Interstate 10 (I-10) at the South Riverside Avenue exit. Local access to the site is provided via Lilac Avenue and Santa Ana Avenue.

The approximately 13.68-acre project site is located west of Lilac Avenue and south of Santa Ana Avenue in the City of Rialto, corresponding to Assessor's Parcel Numbers (APNs) 0258-102-58-0000, -59, -60, -61, and -68 (Exhibit 2). The project site is located within the Fontana, California United States Geological Survey (USGS) 7.5-minute Topographic Quadrangle Map.

### 1.1.1 - General Setting

The project site is surrounded by Santa Ana Avenue and existing logistics operations to the north, Lilac Avenue and existing logistics operations to the east, a vacant lot to the south, and residential development to the west (Exhibit 2).

Most of the project site is located on APN 0258-102-58-0068 and is currently developed with a truck and trailer parking lot and three associated structures. The existing truck and trailer operation is surrounded by an approximately 8-foot high masonry block wall along the eastern and western property lines and by chain-link fencing along the northern and southern property lines. The northern parcels consisting of APNs 0258-102-58-0000, -59, -60, -61 consist of undeveloped land with no structures or fencing. A drainage channel is located at the southern boundary of the project site.

## 1.2 - Project Description

Seefried Industrial Properties, Inc., proposes to develop a building with a floor area up to approximately 301,000 square feet with a warehouse up to approximately 297,500 square feet,[1] approximately 3,500-square-foot office/mezzanine (Exhibit 3). The proposed project would include

[1] Cold storage is not proposed as part of the project.

35 dock-high doors and 180 automobile parking stalls (including six Americans with Disabilities Act [ADA] stalls and 18 electric vehicle [EV] stalls) and 48 trailer stalls. Access to the site would be provided via two driveways along Santa Ana Avenue and one driveway along Lilac Avenue.

### 1.2.1 - Off-site Improvements

The proposed project would include approximately 1.5 acres of off-site improvements (Exhibit 3). Improvements include construction of two commercial driveways on Santa Ana Avenue, one commercial driveway on Lilac Avenue, and approximately 8,250 square feet of sidewalk and 7,300 square feet landscape improvements along the project frontages. One existing driveway along Lilac Avenue would be removed and curb and gutter would be replaced along the entire project frontage. Paving, curb, and gutter improvements would total approximately 49,790 square feet. On Santa Ana Avenue, one 10-inch fire water service, one 3-inch domestic service, and one 2-inch irrigation service would be extended to the property line from the water main. On Lilac Avenue, one 10-inch fire service line would be constructed extending from the main to the project site and one 6-inch sewer lateral would be constructed extending from the main to the project site. Public fire hydrants would be provided on both project frontages to adhere to City of Rialto spacing requirements.[2]

The site is currently served by an existing water service, fire service, and irrigation service. These services would be removed and new improvements for service would be constructed to tie into the existing infrastructure, as described above. There are no anticipated improvements for the existing public water mains or sewer mains located in Santa Ana Avenue and Lilac Avenue. Above ground utilities within the public right-of-way would be undergrounded per the City of Rialto Municipal Code.[3]

### 1.2.2 - Site Access and Circulation

The proposed project would include 180 automobile stalls (including six ADA stalls and 18 EV stalls) and 48 trailer stalls. Trailer stalls would be located north of the building along Lilac Avenue, and standard parking stalls would be located throughout the site to the west, north, and east of the building. Access to the site would be provided via one 40-foot-wide driveway and one 26-foot-wide driveway along Santa Ana Avenue and one 40-foot-wide driveway along Lilac Avenue. Regional access to the site is provided via Interstate 10 (I-10) at the South Riverside Avenue exit. Local access to the site is provided via Lilac Avenue, Santa Ana Avenue, and South Cactus Avenue.

### 1.2.3 - Design and Appearance

The proposed warehouse building would be concrete tilt-up panel construction with metal roof deck over steel bar joist. Entrances would be covered with aluminum entry canopies. The building would be designed for a 36-foot interior height at the perimeter walls with the maximum overall height of approximately 40 feet at office corners and a 42-foot-high accent wall.

[2] City of Rialto requires one public fire hydrant per 300 linear feet of project frontage.
[3] City of Rialto. 2022. Title 15, Chapter 15.32, Underground Utilities. Website: https://library.municode.com/ca/rialto/codes/code_of_ordinances?nodeId=TIT15BUCO_CH15.32UNUT. Accessed July 19, 2022.

### 1.2.4 - Storm Drainage

The proposed project would install an on-site storm drain system consisting of ribbon gutters, catch basin inlets, and underground pipes. Runoff would be directed toward three underground infiltration basins located within the drive aisle around the site. Stormwater quality low-flows from the site are expected to be retained and infiltrated into the native soil while the excess overflow would be released towards Lilac Avenue and the southerly drainage channel. In terms of drainage and stormwater quality, the proposed project would be designed to conform to the requirements of the San Bernardino County Hydrology Manual, and Santa Ana Regional Water Quality Control Board (Santa Ana RWQCB) Order No. R8-2002-0012 (NPDES Permit No. CAS618036) and relevant design would be documented in technical report formats (i.e.,–Water Quality Management Plan [WQMP] and Drainage Report).

### 1.2.5 - Wastewater

The project site would eventually be served by a public sanitary sewer located in Lilac Avenue; however, it is anticipated that sewer service would not be available until after the occupancy of the building. Therefore, the proposed project would include a temporary septic field at the southeast corner of the project site as an interim measure. This system would remain in use until the public sewer is available, at which point the system would be decommissioned.

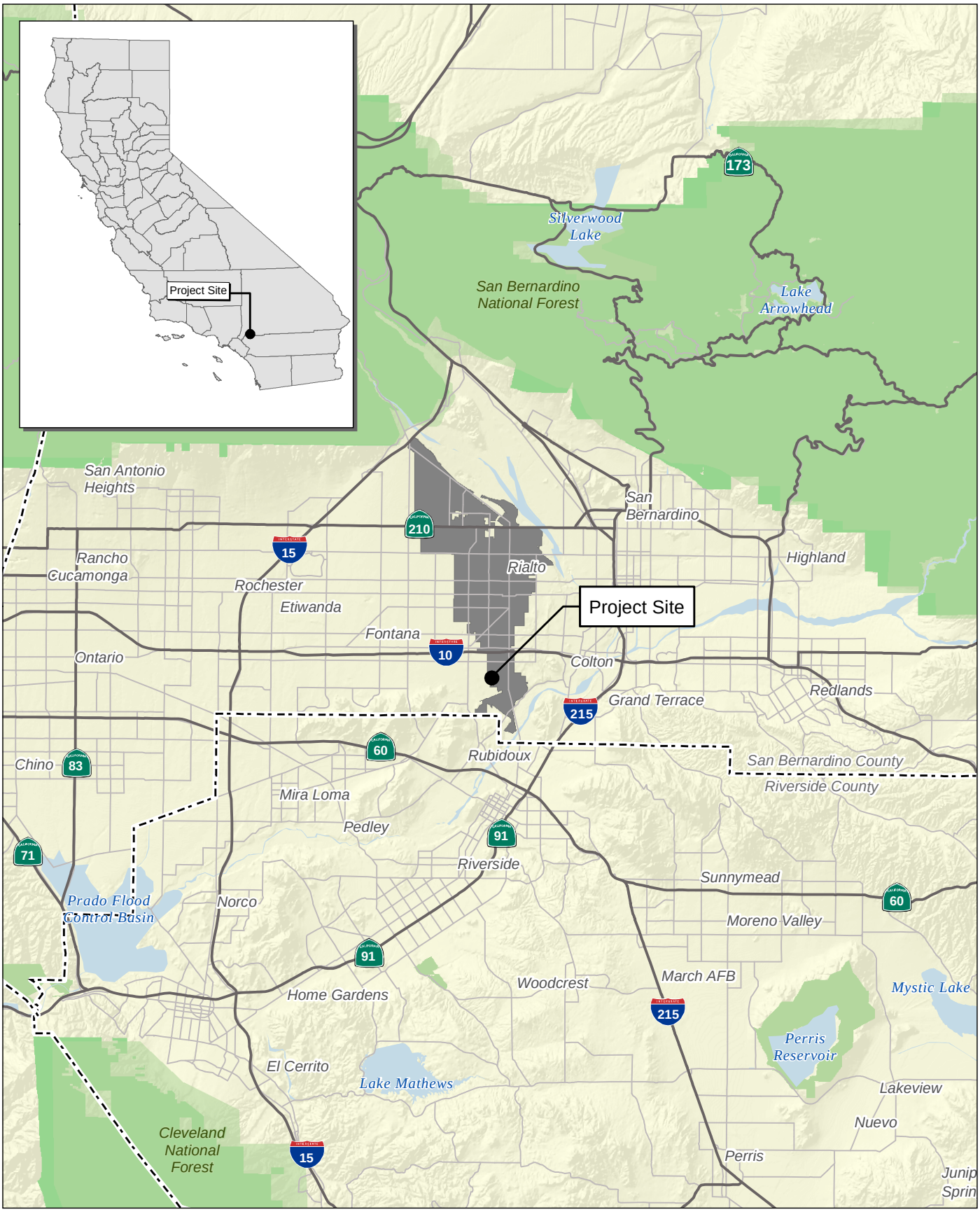
### 1.2.6 - Phasing and Construction

The proposed project would demolish the three existing buildings and associated parking areas on-site. Construction of the proposed project and off-site roadway improvements is estimated to start in summer 2023; grading of the site would take approximately 30 days. Demolition and construction would be completed in one phase that is estimated to begin in summer 2023 and conclude in summer 2024. The proposed project is expected to be operational in the fourth quarter of 2024.

### 1.2.7 - Operation and Employment

Hours of operation for the proposed project would be 24 hours a day, 7 days a week. Operational activities within the project site would comply with the permitted uses of the Light Industrial designation and Light Manufacturing zone, as described in the Rialto General Plan and Rialto Municipal Code (see Section 1.3 above). The proposed project would employ approximately 252 employees on-site.

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Source: Census 2000 Data, The California Spatial Information Library (CaSIL).

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# Exhibit 1
## Regional Location Map

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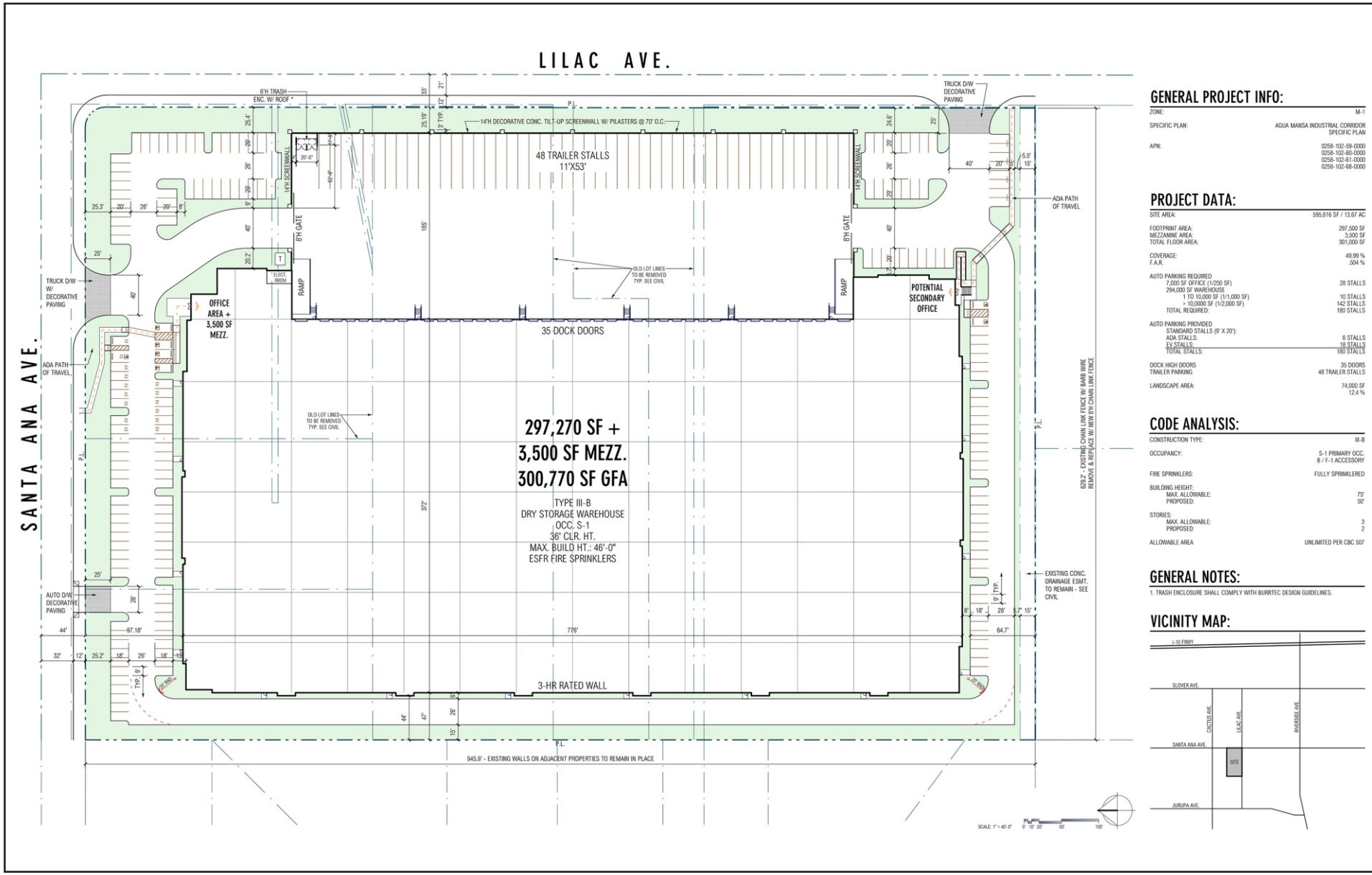

Source: Bing Aerial Imagery. Kimley-Horn 7/13/2022.

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1,000 500 0 1,000 Feet

# Exhibit 2
# Local Vicinity Map

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## GENERAL PROJECT INFO:

| | |
|---|---|
| ZONE: | M-1 |
| SPECIFIC PLAN: | AGUA MANSA INDUSTRIAL CORRIDOR SPECIFIC PLAN |
| APN: | 0258-102-59-0000<br>0258-102-60-0000<br>0258-102-61-0000<br>0258-102-68-0000 |

## PROJECT DATA:

| | |
|---|---|
| SITE AREA: | 595,616 SF / 13.67 AC |
| FOOTPRINT AREA: | 297,500 SF |
| MEZZANINE AREA: | 3,500 SF |
| TOTAL FLOOR AREA: | 301,000 SF |
| COVERAGE: | 49.99 % |
| F.A.R. | .504 % |
| AUTO PARKING REQUIRED | |
| 7,000 SF OFFICE (1/250 SF) | 28 STALLS |
| 294,000 SF WAREHOUSE | |
| 1 TO 10,000 SF (1/1,000 SF) | 10 STALLS |
| > 10,0000 SF (1/2,000 SF) | 142 STALLS |
| TOTAL REQUIRED: | 180 STALLS |
| AUTO PARKING PROVIDED | |
| STANDARD STALLS (9' X 20'): | |
| ADA STALLS: | 6 STALLS |
| EV STALLS: | 18 STALLS |
| TOTAL STALLS: | 180 STALLS |
| DOCK HIGH DOORS | 35 DOORS |
| TRAILER PARKING | 48 TRAILER STALLS |
| LANDSCAPE AREA: | 74,000 SF<br>12.4 % |

## CODE ANALYSIS:

| | |
|---|---|
| CONSTRUCTION TYPE: | III-B |
| OCCUPANCY: | S-1 PRIMARY OCC.<br>B / F-1 ACCESSORY |
| FIRE SPRINKLERS: | FULLY SPRINKLERED |
| BUILDING HEIGHT: | |
| MAX. ALLOWABLE: | 75' |
| PROPOSED: | 50' |
| STORIES: | |
| MAX. ALLOWABLE: | 3 |
| PROPOSED: | 2 |
| ALLOWABLE AREA | UNLIMITED PER CBC 507 |

## GENERAL NOTES:

1. TRASH ENCLOSURE SHALL COMPLY WITH BURRTEC DESIGN GUIDELINES.

## VICINITY MAP:




Source: RGA Architectural Design; Seefried Industrial Properties, 09/20/2022.

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# Exhibit 3
# Site Plan

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# SECTION 2: REGULATORY SETTING

## 2.1 - Federal

### 2.1.1 - Endangered Species Act

The United States Fish and Wildlife Service (USFWS) has jurisdiction over species listed as threatened or endangered under the Endangered Species Act. Section 9 of the Endangered Species Act protects listed species from "take," which is broadly defined as actions taken to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." The Endangered Species Act protects threatened and endangered plants and animals and their critical habitat. Candidate species are those proposed for listing; during the environmental review process, these species are usually treated by resource agencies as if they were actually listed.

### 2.1.2 - Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) implements international treaties between the United States and other nations devised to protect migratory birds, their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. All migratory birds and their nests are protected from take and other impacts under the MBTA (16 United States Code [USC] § 703, *et seq*.).

### 2.1.3 - Bald and Golden Eagle Protection Act

The golden eagle (*Aquila chrysaetos*) and bald eagle (*Haliaeetus leucocephalus*) are afforded additional protection under the Eagle Protection Act, amended in 1973 (16 USC § 669, *et seq*.) and the Bald and Golden Eagle Protection Act (16 USC §§ 668–668d).

### 2.1.4 - Clean Water Act

#### Section 404

The United States Army Corps of Engineers (USACE) administers Section 404 of the federal Clean Water Act (CWA), which regulates the discharge of dredge and fill material into waters of the United States. The USACE has established a series of nationwide permits that authorize certain activities in waters of the United States if a proposed activity can demonstrate compliance with standard conditions. Normally, USACE requires an individual permit for an activity that will affect an area equal to or greater than 0.5 acre or greater than 0.5 acre of waters of the United States. A project that results in impacts to less than 0.5 acre of waters of the United States can normally be conducted pursuant to one of the nationwide permits if it is consistent with the standard permit conditions. The USACE also has discretionary authority to require an Environmental Impact Statement for projects that result in impacts to between 0.1 and 0.5 acre. Use of any nationwide permit is contingent on the activities having no impacts on endangered species.

### Section 401

As stated in Section 401 of the CWA, "any applicant for a federal permit for activities that involve a discharge to waters of the State, shall provide the federal permitting agency a certification from the State in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the federal Clean Water Act." Therefore, before the USACE will issue a Section 404 permit, applicants must apply for and receive a Section 401 Water Quality Certification from the RWQCB.

## 2.2 - State

### 2.2.1 - CEQA Guidelines

The following California Environmental Quality Act (CEQA) Guidelines Appendix G checklist questions serve as thresholds of significance when evaluating the potential impacts of a proposed project on biological resources. Impacts are considered significant if a project would:

- Have 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 California Department of Fish and Wildlife (CDFW) or USFWS.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS.
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or State habitat conservation plan.

### 2.2.2 - California Endangered Species Act

The State of California enacted the California Endangered Species Act (CESA) in 1984. CESA pertains to State-listed endangered and threatened species. CESA requires State agencies to consult with the CDFW when preparing CEQA documents to ensure that the State lead agency actions do not jeopardize the continued existence of a listed species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available (Fish and Game Code [FGC] § 2080). CESA directs agencies to consult with the CDFW on projects or actions that could affect listed species, directs the CDFW to determine whether jeopardy would occur, and allows the CDFW to identify "reasonable and prudent alternatives" to the project consistent with conserving the species. CESA allows the CDFW to

authorize exceptions to the State's prohibition against take of a listed species if the "take" of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (FGC § 2081).

### 2.2.3 - California Fish and Game Code

Under CESA, the CDFW has the responsibility for maintaining a list of endangered and threatened species (FGC § 2070). Fish and Game Code Sections 2050 through 2098 outline the protection provided to California's rare, endangered, and threatened species. Fish and Game Code Section 2080 prohibits the taking of plants and animals listed under the CESA, and Fish and Game Code Section 2081 established an incidental take permit program for State-listed species. The CDFW maintains a list of "candidate species," which it formally notices as being under review for addition to the list of endangered or threatened species.

In addition, the Native Plant Protection Act of 1977 (NPPA) (FGC § 1900, *et seq*.) prohibits the taking, possessing, or sale within the State of any plants with a State designation of rare, threatened, or endangered (as defined by the CDFW). An exception to this prohibition in the NPPA allows landowners to take listed plant species under specified circumstances, provided that the owners first notify CDFW and give the agency at least 10 days to come and retrieve (and presumably replant) the plants before they are plowed under or otherwise destroyed. Fish and Game Code Section 1913 exempts from "take" prohibition "the removal of endangered or rare native plants from a canal, lateral ditch, building site, or road, or other right-of-way." Project impacts to these species are not considered significant unless the species are known to have a high potential to occur within the area of disturbance associated with construction of the proposed project.

In addition to formal listing under the Endangered Species Act and CESA, some species receive additional consideration by the CDFW and local lead agencies during the CEQA process. Species that may be considered for review are those listed as a "Species of Special Concern." The CDFW maintains lists of "Species of Special Concern" that serve as species "watch lists." Species with this status may have limited distributions or limited populations and/or the extent of their habitats has been reduced substantially, such that their populations may be threatened. Thus, their populations are monitored, and they may receive special attention during environmental review. While they do not have statutory protection, they may be considered rare under CEQA, and specific protection measures may be warranted. In addition to Species of Special Concern, the CDFW Special Animals List identifies animals that are tracked by the California Natural Diversity Database (CNDDB) and may be potentially vulnerable but warrant no federal interest and no legal protection.

Sensitive species that would qualify for listing but are not currently listed are afforded protection under CEQA. CEQA Guidelines Section 15065 (Mandatory Findings of Significance) requires that a substantial reduction in numbers of a rare or endangered species be considered a significant effect. CEQA Guidelines Section 15380 (Rare or Endangered Species) provides for the assessment of unlisted species as rare or endangered under CEQA if the species can be shown to meet the criteria for listing. Unlisted plant species on the California Native Plant Society (CNPS) List ranked 1A, 1B, and 2 would typically require evaluation under CEQA.

Fish and Game Code Sections 3500—5500 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. The 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.

Under Fish and Game Code Section 3503.5, it is unlawful to take, possess, or destroy any birds in the orders of *Falconiformes* or *Strigiformes* (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto. To comply with the requirements of CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any State-listed endangered or threatened species may be present in the project study area and determine whether the proposed project will have a potentially significant impact on such species. In addition, the CDFW encourages informal consultation on any proposed project that may impact a candidate species.

Project-related impacts to species on the CESA endangered or threatened list would be considered significant. State-listed species are fully protected under the mandates of CESA. "Take" of protected species incidental to otherwise lawful management activities may be authorized under Fish and Game Code Section 206.591. Authorization from the CDFW would be in the form of an Incidental Take Permit.

Fish and Game Code Section 1602 requires any entity to notify the CDFW before beginning any activity that "may substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of any river, stream, or lake" or "deposit debris, waste, or other materials that could pass into any river, stream, or lake." "River, stream, or lake" includes waters that are episodic and perennial and ephemeral streams, desert washes, and watercourses with a subsurface flow. A Lake or Streambed Alteration Agreement will be required if the CDFW determines that project activities may substantially adversely affect fish or wildlife resources through alterations to a covered body of water.

### 2.2.4 - California Porter-Cologne Water Quality Control Act

The RWQCB regulates actions that would involve "discharging waste, or proposing to discharge waste, within any region that could affect the water of the State" (Water Code § 13260(a)), pursuant to provisions of the Porter-Cologne Water Quality Act. "Waters of the State" are defined as "any surface water or groundwater, including saline waters, within the boundaries of the State" (Water Code § 13050(e)).

### 2.2.5 - California Native Plant Society Rare Plant Rankings

The CNPS maintains a rank of plant species that are native to California and that have low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. Following are the definitions of the CNPS ranks:

- **Rank 1A:** Plants presumed extirpated in California and either rare or extinct elsewhere
- **Rank 1B:** Plants Rare, Threatened, or Endangered in California and elsewhere
- **Rank 2A:** Plants presumed extirpated in California but common elsewhere
- **Rank 2B:** Plants rare, threatened, or endangered in California but more common elsewhere
- **Rank 3:** Plants about which more information is needed
- **Rank 4:** Watch List: Plants of limited distribution

Potential impacts to populations of CNPS-ranked plants receive consideration under CEQA review. All plants appearing on the CNPS List ranked 1 or 2 are considered to meet the CEQA Guidelines Section 15380 criteria. Rank 3 and 4 plants do not automatically meet this definition. Rank 4 plants do not clearly meet CEQA standards and thresholds for impact considerations.[4]

## 2.3 - Regional and Local

The proposed project does not lie within the boundaries of any adopted Habitat Conservation Plan (HCP) Natural Community Conservation Plan (NCCP), or other approved local, regional, or State habitat conservation plan.

[4] California Native Plant Society (CNPS). 2020. Considerations for Including CRPR 4 Plant Taxa in CEQA Biological Resource Impact Analysis. Sacramento, CA. January.

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# SECTION 3: METHODS

## 3.1 - Literature and Database Reviews

This literature review provides a baseline from which to evaluate potential project impacts on biological resources on the project site and in the surrounding area.

### 3.1.1 - Existing Documentation

As part of the literature review, an FCS Biologist examined existing environmental documentation for the project site and vicinity. This documentation included literature pertaining to the habitat requirements of special-status species with the potential to occur in the project vicinity; and federal register listings, protocols, and species data provided by the USFWS and CDFW.

### 3.1.2 - Topographic Maps and Aerial Photographs

An FCS Biologist reviewed current USGS 7.5-minute topographic quadrangle map(s) and aerial photographs as a preliminary analysis of the existing conditions within the project site and immediate vicinity.[5] Information obtained from the topographic maps included elevation, general watershed information, and potential drainage feature locations using Google Earth in conjunction with the United States Environmental Protection Agency (EPA) Watershed Assessment, Tracking, and Environmental Results System (WATERS).[6] Aerial photographs provided a perspective of the current site conditions relative to on-site and off-site land use, plant community locations, and potential locations of wildlife movement corridors.

### 3.1.3 - Soil Surveys

The United States Department of Agriculture (USDA) has published soil surveys that describe the soil series (i.e., group of soils with similar profiles) occurring within a particular area.[7] These profiles include major horizons with similar thickness, arrangement, and other important characteristics. These series are further subdivided into soil mapping units that provide specific information regarding soil characteristics. Many special-status plant species have a limited distribution based exclusively on soil type. Therefore, pertinent USDA soil survey maps were reviewed to determine the existing soil mapping units within the project site and to establish whether the soil conditions on-site are suitable for any special-status plant species.

### 3.1.4 - Special-status Species Database Search

An FCS Biologist compiled a list of threatened, endangered, and otherwise special-status species previously recorded within the project vicinity based on a search of the USFWS Information for

[5] United States Geological Survey (USGS). 2022. National Geospatial Program. Website: https://www.usgs.gov/core-science-systems/national-geospatial-program/us-topo-maps-america?qt-science_support_page_related_con=4#qt-science_support_page_related_con. Accessed July 14, 2022.

[6] United States Environmental Protection Agency (EPA). 2022. Watershed Assessment, Tracking and Environmental Results System (WATERS). Website: https://www.epa.gov/waterdata/waters-watershed-assessment-tracking-environmental-results-system. Accessed July 14, 2022.

[7] Natural Resources Conservation Service (NRCS). 2022. Web Soil Survey (WSS). United States Department of Agriculture (USDA). Website: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Accessed July 14, 2022.

Planning and Consultation (IPaC) database,[8] the California Natural Diversity Database (CNDDB), and the CNPS Electronic Inventory (CNPSEI) of Rare and Endangered Vascular Plants of California.[9,10] The CNDDB search focused on species records within 10 miles of the project site. The CNPSEI search focused on records from the *Fontana, California,* USGS 7.5-minute Topographic Quadrangle Map and the eight surrounding quadrangles. The CNDDB Biogeographic Information and Observation System (BIOS 5) was used to determine distances between species occurrences and the project site.[11]

The potential for occurrence on the project site was assessed for each of the special-status species identified in the database searches. The potential for occurrence was assessed based on conditions on the project site, habitat requirements of special-status species, and number of recent (< 20 years old) occurrences in the project vicinity.

### 3.1.5 - Trees and Native Vegetation

Prior to conducting the reconnaissance-level field survey, an FCS Biologist reviewed applicable City and County ordinances pertaining to tree and native vegetation preservation and protection and ascertained whether measures or permits are required to remove, replace, or transplant protected trees or native vegetation.

### 3.1.6 - Jurisdictional Waters and Wetlands

Prior to conducting the reconnaissance-level survey, an FCS Biologist reviewed EPA WATERS and aerial photography to identify potential natural drainage features and water bodies.[12] In general, all surface drainage features identified as blue-line streams on USGS maps and linear patches of vegetation are expected to exhibit evidence of flows and considered potentially subject to State and federal regulatory authority as waters of the United States and/or State. A preliminary assessment was conducted to determine the location of any existing drainages and limits of project-related grading activities to aid in determining whether a formal delineation of waters of the United States or State is necessary.

## 3.2 - Field Surveys

### 3.2.1 - Survey Personnel

A general biological survey and vegetation community mapping of the project site was performed on July 15, 2022, by FCS Senior Biologist Michael Tuma, PhD (brief resume presented in Appendix A).

[8] United States Fish and Wildlife Service (USFWS). 2022. Information for Planning and Consultation (IPaC). Website: https://ecos.fws.gov/ipac/. Accessed July 14, 2022.
[9] California Department of Fish and Wildlife (CDFW). 2022. CNDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed July 14, 2022.
[10] California Native Plant Society (CNPS). 2022. California Native Plant Society Rare and Endangered Plant Inventory. Website: http://www.rareplants.cnps.org/. Accessed July 14, 2022.
[11] California Department of Fish and Wildlife (CDFW). 2022. Biogeographic Information and Observation System (BIOS 5). Website: https://map.dfg.ca.gov/bios/. Accessed July 14, 2022.
[12] United States Environmental Protection Agency (EPA). 2022. Watershed Assessment, Tracking and Environmental Results System (WATERS). Website: https://www.epa.gov/waterdata/waters-watershed-assessment-tracking-environmental-results-system. Accessed July 14, 2022.

## 3.2.2 - General Biological Survey

The objective of the general biological survey was to ascertain general site conditions and identify whether existing vegetation communities provide suitable habitat for special-status plant or wildlife species. During this survey, the Biologist walked and drove the project site and characterized and mapped vegetation communities, identified and recorded plants and wildlife observed on-site, and recorded evidence of wildlife habitats, including wildlife corridors, nests, dens, or burrows. Special-status or unusual biological resources identified during the literature review were ground-truthed during the field survey for mapping accuracy. Special attention was paid to sensitive habitats and areas potentially supporting special-status floral and faunal species.

### Vegetation Communities and Plants

Common plant species observed during the general biological survey were identified by visual characteristics and morphology in the field and recorded in a field notebook and on field maps. Uncommon and fewer familiar plants were identified with the use of taxonomical guides, including Jepson eFlora and Calflora.[13,14] Taxonomic nomenclature used in this study follows The Jepson Manual: Vascular Plants of California.[15] Common plant names, when not available from The Jepson Manual, were taken from other regionally specific references. Vegetation community types and boundaries were noted on aerial photos, verified through field observation, and digitized using ESRI ArcGIS software® ArcMap 10.0. By incorporating collected field data and interpreting aerial photography, a map of habitat types, land cover types, and other biological resources within the project site was prepared. Vegetation community and land cover types used to help classify habitat types are based on the Manual of California Vegetation (MCV) and cross-referenced with the CDFW Natural Communities List.[16,17]

### Wildlife

Wildlife species detected during the general biological survey by sight, calls, tracks, scat, or other signs were recorded. Notations were made regarding suitable habitat for those special-status species determined to have the potential to occur within the project site.[18] Appropriate field guides were

[13] Jepson Flora Project (eds.) 2022. Jepson eFlora, https://ucjeps.berkeley.edu/eflora/. Accessed on July 14, 2022.
[14] Calflora. 2020. Calflora: Information on California plants for education, research, and conservation. Website: http://www.calflora.org/. Accessed on July 14, 2022
[15] Baldwin, B., et al. 2012. The Jepson Manual: Vascular Plants of California. Berkeley: University of California Press. County of San Bernardino (Bernardino). 2007 (amended 2015).
[16] Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. A Manual of California Vegetation, Second Edition. California Native Plant Society, Sacramento. 1300 pp.
[17] California Department of Fish and Wildlife (CDFW). 2022. Natural Communities List, Sacramento: California Department of Fish and Wildlife. Website: https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities#sensitive%20natural%20communities. Accessed July 14, 2022.
[18] California Department of Fish and Wildlife (CDFW). 2022. CNDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed July 14, 2022.

used to assist in species identification during surveys, such as Peterson, Reid, and Stebbins.[19,20,21] Online resources such as eBird and California Herps were also consulted, as necessary. [22,23]

## Wildlife Movement Corridors

Wildlife movement corridors link areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. Urbanization and the resulting fragmentation of open space areas create isolated "islands" of wildlife habitat, forming separated populations. Corridors act as an effective link between populations.

The project site was evaluated for evidence of a wildlife movement corridor during the general biological survey. The scope of the biological resource assessment did not include a formal wildlife movement corridor study utilizing track plates, camera stations, scent stations, or snares. Rather, the focus of this study was to determine whether a change in land use at the project site could have significant impacts on the regional movement of wildlife. Conclusions are based on the information compiled during the literature review, including aerial photographs, USGS topographic maps, and resource maps for the vicinity; the field survey; and professional experience with the desired topography, habitat, and resource requirements of the special-status species potentially utilizing the project site and vicinity.

[19] Peterson, T.R. 2010. A Field Guide to Birds of Western North America, 4th Edition. Boston: Houghton Mifflin Harcourt.
[20] Reid, F. 2006. A Field Guide to Mammals of North America, Fourth Edition. Boston: Houghton Mifflin Harcourt.
[21] Stebbins, R.C. 2003. A Field Guide to Western Reptiles and Amphibians. Third Edition. Boston: Houghton Mifflin Harcourt.
[22] eBird. 2021. Online bird occurrence database. Website: http://ebird.org/content/ebird/. Accessed July 14, 2022.
[23] California Herps. 2022. A Guide to the Amphibians and Reptiles of California. Website: http://www.californiaherps.com/ Accessed July 14, 2022.

# SECTION 4: RESULTS

## 4.1 - Literature Review

### 4.1.1 - Environmental Setting

The project site is situated within Rialto, located in the San Bernardino Valley, which is bounded by the San Gabriel and San Bernardino Mountains to the north; the San Jacinto Mountains to the east; the Temescal and Santa Ana Mountains to the south; and Pomona Valley to the west. The project site and surrounding area are located on an alluvial terrace of the Santa Ana River, which is located approximately 1.7 miles (2.7 kilometers) to the southeast.

#### Soils

The Natural Resource Conservation Service (NRCS) Web Soil Survey (WSS) mapped two soil types (Hanford coarse sandy loam, 2 to 9 percent slopes and Tujunga loamy sand, 0 to 5 percent slopes) on the project site and within the off-site improvements area (Exhibit 4). The Hanford series consists of very deep, well drained soils formed in moderately coarse textured alluvium, predominantly from granite. Hanford series soils occur in stream bottoms, floodplains, and alluvial fans. The Tujunga series consists of very deep, somewhat excessively drained soils formed in alluvium from granitic sources. Tujunga soils occur in alluvial fans and floodplains.

## 4.2 - Biological Surveys

FCS Senior Biologist, Michael Tuma, PhD, conducted a general biological survey of the project site on July 15, 2022, between approximately 6:00 p.m. to 6:45 p.m. Weather conditions during the field survey were hazy, with an average temperature around 93.5°F (degrees Fahrenheit), and wind speeds between 0 and 3 miles per hour (mph).

### 4.2.1 - Vegetation Communities and Land Use

Dr. Tuma recorded the following vegetation community types on-site during the general biological reconnaissance survey. A map of the vegetation communities is presented in Exhibit 5. Photographs of the vegetation communities on-site are presented in Appendix B.

#### Ruderal/Disturbed

Ruderal/disturbed habitat was mapped in the northern, undeveloped portion of the site as well as a strip of landscaped area in the developed portion of the site along Lilac Avenue (Exhibit 5). Ruderal/disturbed habitat is classified as areas that have been physically disturbed (by previous legal human activity) and are no longer recognizable as a native or naturalized vegetation association but continue to retain a soil substrate. Typically, if any vegetation is present, it is nearly exclusively composed of non-native plant species such as ornamentals or ruderal exotic species that take advantage of disturbance or show signs of past or present animal usage that precludes them from providing viable natural habitat for uses other than dispersal. Examples of disturbed land include areas that have been graded, land that is repeatedly cleared for fuel management purposes and/or

experienced repeated use that prevents natural revegetation (i.e., dirt parking lots, trails that have been present for several decades), recently graded firebreaks, graded construction pads, construction staging areas, off-road vehicle (OHV) trails, and old home-sites.

The ruderal/disturbed habitat in the northern portion of the project site had been recently disked, and this portion of the site is likely disked on a regular basis as part of weed abatement activities. Species observed in this habitat included a mixture of non-native and native species (Table 1). Additional ruderal/disturbed habitat was mapped within 500 feet of the project site and includes undeveloped, vacant lots.

**Table 1: Herbaceous Vascular Plants Observed on the Project Site**

| Common Name | Scientific name |
|---|---|
| Carelessweed | *Amaranthus palmeri* |
| Common fiddleneck | *Amsinckia intermedia* |
| Wild oat | *Avena fatua* |
| Rip-gut brome | *Bromus diandrus* |
| Red brome | *Bromus rubens* |
| White goosefoot | *Chenopodium album* |
| Field bindweed | *Convolvulus arvensis* |
| Unid. nutsedge | *Cyperus sp.* |
| Desert saltgrass | *Distichlis spicata* |
| Barnyard grass | *Echinochloa crus-galli* |
| Horseweed | *Erigeron canadensis* |
| Italian ryegrass | *Festuca perennis* |
| Common sunflower | *Helianthus annuus* |
| Shortpod mustard | *Hirschfeldia incana* |
| Mouse barley | *Hordeum murinum* |
| Russian thistle | *Kali tragus* |
| Prickly lettuce | *Lactuca serriola* |
| Cheeseweed | *Malva parviflora* |
| White sweetclover | *Melilotus albus* |
| Prostrate knotweed | *Polygonum aviculare* |
| Mediterranean grass | *Schismus barbatus* |
| London rocket | *Sisymbrium irio* |
| Puncture vine | *Tribulus terrestris* |
| Golden crownbeard | *Verbesina encelioides* |

### *Trees*

Several trees are located in the ruderal/disturbed areas mapped on-site, including a small group of lemon-scented gum (*Corymbia citriodora*) located along Lilac Avenue and a row of Chinaberry trees (*Melia azedarach*) in the landscaped area between the existing development and Lilac Avenue (Exhibit 5). While not shown on Exhibit 5, there are several small Chinaberry trees located in the ruderal/disturbed area in the northern portion of the site as well. None of the trees on-site would be considered street trees subject to Rialto Municipal Code (Chapter 11.08–Street Trees–Vegetation) pertaining to the management of street trees and public trees.

### Urban/Developed

The southern portion of the project site is developed and was mapped as urban/developed (Exhibit 5). Urban developments are characterized by a combination of developed and hardscaped areas and manicured vegetation, including street/shade trees, lawns, and shrubs, and little or no exposed soil substrates. Irrigation and fertilization allow for tropical and other non-native and ornamental species to flourish in urban areas. Trees are often grown in a spaced pattern with an open understory, and lawns are typically one species maintained at a continuous, uniform height. Shrubs are grown as spaced individuals or in tight rows that are hedged. These conditions provide habitat to a low diversity of wildlife that are tolerant of human-modified environments.

The southern portion of the project site supports a truck and trailer parking lot, warehouse and office buildings, and 8-foot masonry block walls along eastern and western property lines. There is also chain-link fencing along the northern and southern property lines. This is considered urban/developed land. Additional urban/developed lands occur within 500 feet of the project site and include industrial, commercial, and residential developments.

### Non-native Grassland

An area of non-native grassland was mapped northeast of and within 500 feet of the project site (Exhibit 5). This vegetation community or habitat consists of a mixture of native and non-native annual grasses and herbaceous plants. Plants in this community germinate during winter rains and complete their life cycles by the beginning of the summer dry period. Seeds often remain viable in the soil for many years. This community was dominated by wild oat (*Avena fatua*) and common fiddleneck (*Amsinckia intermedia*) and included other species observed in the ruderal/disturbed habitat on the project site.

## 4.2.2 - Wildlife

The vegetation communities and land cover types on the project site provide habitat for numerous wildlife species. Also, the anthropogenic features on the project site could provide habitat for numerous wildlife species that are tolerant of human disturbances. Wildlife activity during the general biological reconnaissance survey was moderate and consisted primarily of avian species. Evidence of other species was evident in burrows and other signs. The following discussions regarding the wildlife species observed within the project site are organized by taxonomic group. Each discussion contains representative examples of a particular taxonomic group either observed or expected to occur on-site. No special-status wildlife species were observed during the survey.

### Amphibians and Fish

No amphibian or fish species were observed on-site during the general biological reconnaissance surveys. Because of arid climate of the project site, amphibians are uncommon and largely limited to areas where sufficient sources of water are present. There is a small, concrete-lined drainage channel along the southern border of the project site that likely conveys runoff water but does not hold water for substantial periods that would allow amphibians to reproduce there. With no apparent open water sources on-site or in the vicinity, amphibians are not expected to occur on-site.

### Birds

Avian activity was moderate during the field survey. Dr. Tuma identified common native and non-native species, including house finch (*Haemorhous mexicanus*), mourning dove (*Zenaida macroura*), common raven (*Corvus corax*), American crow (*Corvus brachyrhynchos*), American kestrel (*Falco sparverius*), and western kingbird (*Tyrannus verticalis*). Other bird species expected to occur on-site include common species typical of the region and tolerant of anthropogenic activities and features, such as California scrub jay (*Aphelocoma californica*) and northern mockingbird (*Mimus polyglottos*). Birds may find nesting platforms throughout the project site on bare ground, in grasses, shrubs, and trees, and on buildings and materials in storage.

### Invertebrates

No invertebrates were observed on-site, but those that likely occur at the site year-round or during seasonal pulses include several species of beetles, flies, ants, bees, wasps, moths and butterflies, and spiders and tarantulas, among others.

### Mammals

Three mammal species were detected on-site, including striped skunk (*Mephitis*; carcass), California ground squirrel (*Otospermophilus beecheyi*; burrows), and valley pocket gophers (*Thomomys bottae*; burrows).

### Reptiles

One reptile, western side-blotched lizard (*Uta stansburiana*), was observed on the project site. Another common lizard that is expected to occur on-site is the western fence lizard (*Sceloporus occidentalis*).

## 4.2.3 - Wildlife Movement Corridors

The majority of the project site consists of developed lands used for truck and trailer parking. The project site is also surrounded by fencing in the southern lot, roads and highways to the east and north, and urban development to the west that limits wildlife movement to and from the project site in those directions. While wildlife movement within the project site and between adjacent lands is feasible, the surrounding human development is likely to obstruct the movement of terrestrial wildlife. The project site does not function as a wildlife movement corridor.



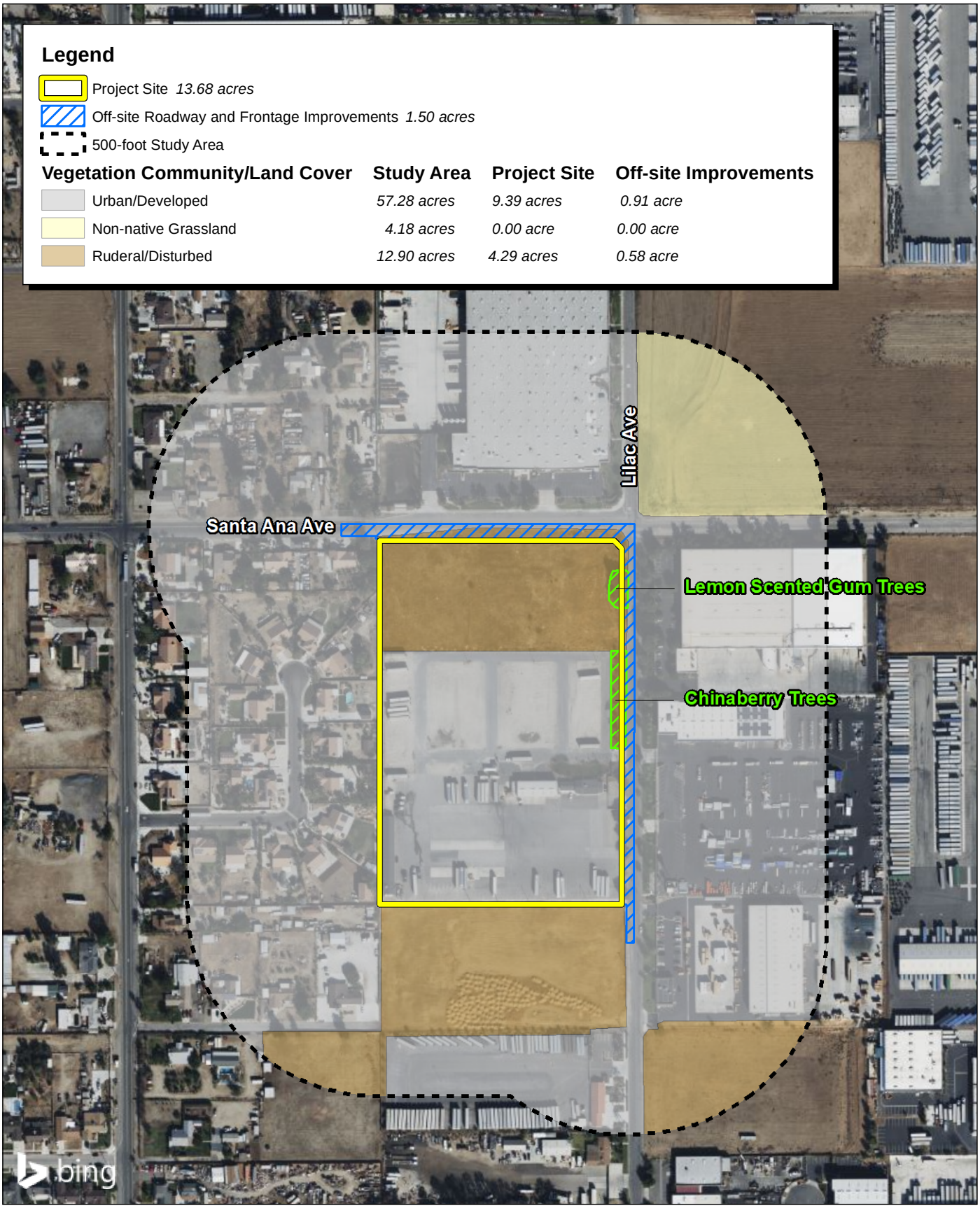

Source: Bing Aerial Imagery. Kimley-Horn 7/13/2022. USDA Soils Data Mart, Southwest San Bernardino.

FIRSTCARBON SOLUTIONS™

200 100 0 200
Feet

# Exhibit 4
# Soils Map

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Source: Bing Aerial Imagery. Kimley-Horn 7/13/2022.

FIRSTCARBON SOLUTIONS™

350 175 0 350 Feet

# Exhibit 5
# Vegetation Community/Land Cover

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SEEFRIED INDUSTRIAL PROPERTIES, INC.
LILAC AVENUE AND SANTA ANA AVENUE WAREHOUSE PROJECT
BIOLOGICAL RESOURCE ASSESSMENT

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# SECTION 5: SENSITIVE BIOLOGICAL RESOURCES DATABASE REVIEWS

The following section discusses the results of the database reviews for sensitive biological resources and an analysis of the potential for these resources to occur within the project site based on existing biological conditions on and adjacent to the site.

## 5.1 - Sensitive Natural Communities

Sensitive natural communities are vegetation communities or special wildlife habitats that are rare or occur in limited distributions or provide specific habitat requirements for special-status plant or wildlife species. The CDFW maintains a list of natural communities which attempts to classify vegetation types found within the State of California and rank them based on rarity. Communities ranked S1-S3 are considered sensitive natural communities.[24] The CNDDB identified two sensitive natural communities that are known to occur within 5 miles of the project site: Riversidian Alluvial Fan Sage Scrub and Southern Cottonwood Willow Riparian Forest. Three sensitive natural communities, including Southern California Arroyo Chub, Southern Riparian Scrub, and Southern Sycamore Alder Riparian Woodland have been recorded in the CNDDB between 5 and 10 miles from the project site.[25] These communities are not present on or adjacent to the project site.

## 5.2 - Special-status Plant Species

Twenty-nine special-status plant species have been recorded within 10 miles of the project site or on the 9-quadrangle search area (Appendix C, Table 1).[26,27,28] Table 1 in Appendix C includes the species' status, required habitat, and a summary analysis of the potential for each of these species to occur on the project site. Special-status plant species that were determined to have no or low potential to occur on-site appear in the table with justification for their exclusion from further discussion. The potential for occurrence of a species was based on presence of suitable habitats, soil types, and occurrences recorded by the CNPSEI and CNDDB.[29,30,31] Previous and significant surface disturbances evident throughout the project site and the presence and abundance of several non-native, invasive, annual plant species have lowered the potential for persistence and occurrence of populations of many special-status plant species.

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[24] California Department of Fish and Wildlife (CDFW). 2022. Natural Communities List, Sacramento: California Department of Fish and Wildlife. Website: https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities#sensitive%20natural%20communities. Accessed July 14, 2022.

[25] California Department of Fish and Wildlife (CDFW). 2022. Biogeographic Information and Observation System (BIOS 5). Website: https://map.dfg.ca.gov/bios/. Accessed July 14, 2022.

[26] California Department of Fish and Wildlife (CDFW). 2022. CNDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed July 14, 2022.

[27] California Department of Fish and Wildlife (CDFW). 2022. Biogeographic Information and Observation System (BIOS 5). Website: https://map.dfg.ca.gov/bios/. Accessed July 14, 2022.

[28] United States Fish and Wildlife Service (USFWS). 2022. Information for Planning and Consultation (IPaC). Website: https://ecos.fws.gov/ipac/. Accessed July 14, 2022.

[29] California Department of Fish and Wildlife (CDFW). 2022. CNDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed July 14, 2022.

[30] California Native Plant Society (CNPS). 2022. California Native Plant Society Rare and Endangered Plant Inventory. Website: http://www.rareplants.cnps.org/. Accessed July 14, 2022.

[31] California Department of Fish and Wildlife (CDFW). 2022. Biogeographic Information and Observation System (BIOS 5). Website: https://map.dfg.ca.gov/bios/. Accessed July 14, 2022.

### 5.2.1 - Potential for Occurrence of Special-status Plants

The project site is significantly disturbed and is surrounded by urbanized development and undeveloped lands that have been repeatedly disturbed (disked). Because of the conditions on and adjacent to the project site, all special-status plants that occur in the region were assessed as having no or low potential to occur on or adjacent to the project site (Appendix C, Table 1). Thus, special-status plants are not expected to occur on the project site and are not discussed further.

## 5.3 - Special-status Wildlife Species

Forty-seven special-status wildlife species were identified as occurring within 10 miles of the project site as recorded in the CNDDB and an additional two species (monarch butterfly and southwestern willow flycatcher) were identified in the IPaC review (Appendix C, Table 2). [32,33,34] Table 2 in Appendix C includes the species' status, required habitat types and features, and potential to occur within the project site. The table also includes special-status wildlife species that have been determined to have no or low potential to occur on-site, primarily based on the absence of suitable habitat and the lack of recorded occurrence in the project vicinity, along with other justification(s) for their exclusion from further discussion. Special-status wildlife species with moderate to high potential to occur on-site are analyzed further below. The potential for wildlife to occur on the project site was based on presence of suitable habitats and occurrences recorded in the CNDDB.

### 5.3.1 - Potential for Occurrence of Special-status Wildlife

The project site contains suitable habitat conditions that provide a moderate potential for the following special-status wildlife species to occur on-site:

- Cooper's hawk (*Accipiter cooperi*)
- burrowing owl (*Athene cunicularia*)

All other wildlife species were assessed as having no or low potential to occur because the project site is outside of their known distributional range or did not support suitable habitat (Appendix C, Table 2). Those species with moderate potential to occur on-site are discussed below.

#### Moderate Potential

##### *Cooper's Hawk*

Cooper's hawk is an accipiter hawk in the family Accipitridae. Cooper's hawk typically occurs in wooded areas but has adapted to foraging and nesting in urban areas with sufficient tree cover. This species typically hunts small birds in broken woodland and habitat edges, and nests in deciduous trees in crotches 6-15 meters above the ground. Breeding numbers have reduced in recent decades, and the species is considered a Watch List species by CDFW. Nests of this species are protected by the MBTA and Fish and Game Codes pertaining to native nesting avian species.

[32] California Department of Fish and Wildlife (CDFW). 2022. CNDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed July 14, 2022.
[33] California Department of Fish and Wildlife (CDFW). 2022. Biogeographic Information and Observation System (BIOS 5). Website: https://map.dfg.ca.gov/bios/. Accessed July 14, 2022.
[34] United States Fish and Wildlife Service (USFWS). 2022. Information for Planning and Consultation (IPaC). Website: https://ecos.fws.gov/ipac/. Accessed July 14, 2022.

The northern portion of the project site supports a small group of lemon-scented gum trees that may provide suitable nesting habitat for Cooper's hawk. There is one recent record of occurrence between 5 and 10 miles from the project site. (Exhibit 6).[35] There is moderate potential for this species to occur on-site as a nester or forager.

### *Burrowing owl*

The burrowing owl is an owl in the family Strigidae. Burrowing owls occur in open, dry, annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. This species utilizes, modifies, and nests in burrows created by other species, most notably those of the California ground squirrel, but also those excavated by coyotes, desert kit foxes, desert tortoises, American badgers, and other burrowing mammals. Burrowing owl populations are threatened by habitat loss, pesticide use, and ground squirrel eradication programs, which limit suitable burrowing habitat. This species is considered a Special Species of Concern (SSC) by the CDFW and a Bird of Conservation Concern (BCC) by the USFWS. Nesting burrows of this species are protected by the MBTA and Fish and Game Codes pertaining to native nesting avian species.

The northern portion of the project site contains suitable habitat with low-growing vegetation and small mammal burrows (California ground squirrels and valley pocket gophers). There are five recent records of occurrence within 5 miles of the project site and nine recent records and two historical records between 5 and 10 miles from the project site (Exhibit 6).[36] Therefore, there is moderate potential for this species to occur on-site as a breeder, winter resident, and/or for post-breeding dispersal.

## 5.3.2 - Nesting Birds

The project site contains numerous surfaces, structures, and vegetation that could provide suitable nesting habitat for bird species protected under the MBTA and the Fish and Game Code. These species include burrowing owls and other native avian species. Construction activities could disturb nesting and breeding birds in trees and shrubs within and around the construction site. Potential impacts on special-status and migratory birds that could result from construction and operation of the proposed project include destruction of eggs or occupied nests, mortality of young, and abandonment of nests with eggs or young birds prior to fledging.

# 5.4 - Potentially Jurisdictional Water and Wetlands

There are no waters or wetland features on the project site that would be considered potentially jurisdictional by USACE, nor any features that would be considered potentially jurisdictional by State regulatory agencies including the RWQCB and CDFW. There is a small, concrete-lined drainage ditch along the southern border of the property that likely conveys surface water runoff. This drainage is in a developed area that does not support natural vegetation, and the feature would not be considered jurisdictional.

[35] California Department of Fish and Wildlife (CDFW). 2022. Biogeographic Information and Observation System (BIOS 5). Website: https://map.dfg.ca.gov/bios/. Accessed July 14, 2022.
[36] Ibid.

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CNDDB version 08/2022. Please Note:
The occurrences shown on this map represent the known locations of the species listed here as of the date of this version. There may be additional occurrences or additional species within this area which have not yet been surveyed and/or mapped. Lack of information in the CNDDB about a species or an area can never be used as proof that no special status species occur in an area.

**Legend**

- Project Site
- 10-Mile Radius
- 5-Mile Radius

**Symbology**

- Plant (circular)
- Multiple (circular)
- Sensitive EO's (Commercial only)

*Lycium parishii*
Parish's desert-thorn

*Charina umbratica*
southern rubber boa

10-Mile Radius

5-Mile Radius

| Scientific Name | Common Name |
|---|---|
| *Nyctinomops femorosaccus* | pocketed free-tailed bat |
| *Malacothamnus parishii* | Parish's bush-mallow |

*Rhaphiomidas terminatus abdominalis*
Delhi Sands flower-loving fly

| Scientific Name | Common Name |
|---|---|
| *Chloropyron maritimum ssp. maritimum* | salt marsh bird's-beak |
| *Arenaria paludicola* | marsh sandwort |

The following species (not shown on map) are also known to occur within this 10-mile radius area:

| Scientific Name | Common Name |
|---|---|
| *Accipiter cooperii* | Cooper's hawk |
| *Agelaius tricolor* | tricolored blackbird |
| *Aimophila ruficeps canescens* | southern California rufous-crowned sparrow |
| *Ambrosia monogyra* | singlewhorl burrobrush |
| *Ambrosia pumila* | San Diego ambrosia |
| *Anniella stebbinsi* | Southern California legless lizard |
| *Arizona elegans occidentalis* | California glossy snake |
| *Artemisiospiza belli belli* | Bell's sage sparrow |
| *Aspidoscelis hyperythra* | orange-throated whiptail |
| *Aspidoscelis tigris stejnegeri* | coastal whiptail |
| *Astragalus hornii var. hornii* | Horn's milk-vetch |
| *Athene cunicularia* | burrowing owl |
| *Berberis nevinii* | Nevin's barberry |
| *Bombus crotchii* | Crotch bumble bee |
| *Buteo swainsoni* | Swainson's hawk |
| *Calochortus palmeri var. palmeri* | Palmer's mariposa-lily |
| *Calochortus plummerae* | Plummer's mariposa-lily |
| *Carex comosa* | bristly sedge |
| *Catostomus santaanae* | Santa Ana sucker |
| *Centromadia pungens ssp. laevis* | smooth tarplant |
| *Ceratochrysis longimala* | Desert cuckoo wasp |
| *Chaetodipus fallax fallax* | northwestern San Diego pocket mouse |
| *Chorizanthe parryi var. parryi* | Parry's spineflower |
| *Cicindela tranquebarica viridissima* | greenest tiger beetle |
| *Coccyzus americanus occidentalis* | western yellow-billed cuckoo |
| *Coleonyx variegatus abbotti* | San Diego banded gecko |
| *Crotalus ruber* | red-diamond rattlesnake |
| *Cuscuta obtusiflora var. glandulosa* | Peruvian dodder |
| *Dipodomys merriami parvus* | San Bernardino kangaroo rat |
| *Dipodomys stephensi* | Stephens' kangaroo rat |
| *Dodecahema leptoceras* | slender-horned spineflower |
| *Eremophila alpestris actia* | California horned lark |
| *Eriastrum densifolium ssp. sanctorum* | Santa Ana River woollystar |
| *Eugnosta busckana* | Busck's gallmoth |
| *Eumops perotis californicus* | western mastiff bat |
| *Euphydryas editha quino* | quino checkerspot butterfly |
| *Falco columbarius* | merlin |
| *Galium californicum ssp. primum* | Alvin Meadow bedstraw |
| *Gila orcuttii* | arroyo chub |
| *Helianthus nuttallii ssp. parishii* | Los Angeles sunflower |
| *Horkelia cuneata var. puberula* | mesa horkelia |
| *Icteria virens* | yellow-breasted chat |
| *Lasiurus xanthinus* | western yellow bat |
| *Laterallus jamaicensis coturniculus* | California black rail |
| *Lepidium virginicum var. robinsonii* | Robinson's pepper-grass |
| *Lepus californicus bennettii* | San Diego black-tailed jackrabbit |
| *Monardella pringlei* | Pringle's monardella |
| *Nasturtium gambelii* | Gambel's water cress |
| *Neolarra alba* | white cuckoo bee |
| *Neotoma lepida intermedia* | San Diego desert woodrat |
| *Oncorhynchus mykiss irideus pop. 10* | steelhead - southern California DPS |
| *Onychomys torridus ramona* | southern grasshopper mouse |
| *Perognathus longimembris brevinasus* | Los Angeles pocket mouse |
| *Phacelia stellaris* | Brand's star phacelia |
| *Phrynosoma blainvillii* | coast horned lizard |
| *Polioptila californica californica* | coastal California gnatcatcher |
| *Pseudognaphalium leucocephalum* | white rabbit-tobacco |
| *Rhinichthys osculus ssp. 8* | Santa Ana speckled dace |
| *Ribes divaricatum var. parishii* | Parish's gooseberry |
| *Riversidian Alluvial Fan Sage Scrub* | Riversidian Alluvial Fan Sage Scrub |
| *Senecio aphanactis* | chaparral ragwort |
| *Setophaga petechia* | yellow warbler |
| *Sidalcea neomexicana* | salt spring checkerbloom |
| *Southern California Arroyo Chub/Santa Ana Sucker Stream* | Southern California Arroyo Chub/Santa Ana Sucker Stream |
| *Southern Cottonwood Willow Riparian Forest* | Southern Cottonwood Willow Riparian Forest |
| *Southern Riparian Scrub* | Southern Riparian Scrub |
| *Southern Sycamore Alder Riparian Woodland* | Southern Sycamore Alder Riparian Woodland |
| *Spea hammondii* | western spadefoot |
| *Sphenopholis obtusata* | prairie wedge grass |
| *Spinus lawrencei* | Lawrence's goldfinch |
| *Symphyotrichum defoliatum* | San Bernardino aster |
| *Taxidea taxus* | American badger |
| *Thamnophis hammondii* | two-striped gartersnake |
| *Vireo bellii pusillus* | least Bell's vireo |

Source: Bing Street Imagery. California Natural Diversity Database (CNDDB), August 2022.

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# Exhibit 6
# CNDDB Special-Status Species Occurrences (10-mile radius)

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# SECTION 6: IMPACT ANALYSIS AND RECOMMENDATIONS

The following discussion addresses potential project impacts on regulated biological resources, including special-status species, and recommends measures to avoid and/or mitigate impacts to a less than significant level under CEQA. These impacts and others are analyzed and addressed with proposed Mitigation Measures (MMs) that would avoid or lessen them.

## 6.1 - Special-status Wildlife Species

### 6.1.1 - Burrowing Owl

Burrowing owl, a California Species of Special Concern, was assessed as having a moderate potential to occur on the project site. To prevent potential project impacts on burrowing owl that may utilize the project site, the following mitigation measures are recommended.

#### Mitigation Measure

**MM BIO-1 Pre-Construction Surveys for Burrowing Owl (including avoidance if found)**

To determine whether burrowing owls have occupied the project site prior to its development, a qualified Biologist shall perform a pre-construction burrowing owl survey to determine burrow locations within 30 days prior to construction activities using California Department of Fish and Wildlife (CDFW) Guidelines.[27] If construction is delayed or suspended for more than 30 days after the survey, the area shall be resurveyed. Survey for occupied burrows shall be completed within all construction areas and within 300 feet from the proposed project impact area (where possible and appropriate based on locations of barren or ruderal habitats). At least 15 days prior to the expected start of any project-related ground disturbance activities, or restart of activities, the City shall provide a burrowing owl survey report with mapping exhibits to the CDFW. If no burrowing owl are detected during the pre-construction survey, no further action is necessary.

If burrowing owl is detected during the pre-construction survey, the project proponent shall retain a qualified Biologist to develop and implement a Burrowing Owl Mitigation Plan. The Burrowing Owl Mitigation Plan shall contain the following elements (as outlined in the California Department of Fish and Wildlife [CDFW] guidelines) at a minimum:

- Avoidance of burrowing owl during construction, including establishment of a 160-foot radius around occupied burrows during the nonbreeding season (September 1 through February 14) or a 300-foot radius around occupied burrows during the breeding season (February 15 through August 31), within which construction activities may not occur until a qualified Biologist has determined that (1) nonbreeding season owl have dispersed from the area; or (2) breeding season owl have fledged their juveniles from the occupied burrows and the

juveniles are foraging independently and are capable of independent survival or have dispersed from the area.
- A plan for implementing a passive relocation program for nonbreeding owls, should it be needed. The passive relocation techniques should be consistent with CDFW guidelines, including installation of artificial burrows at an off-site location and use of one-way exclusion doors to ensure owls have left the burrow(s).

### 6.1.2 - Nesting Birds

The project site contains potential nesting habitat for a variety of bird species. Many common passerine species may nest in suitable habitats on and adjacent to the project site (trees, non-native annual grassland), including mourning dove, Anna's hummingbird, northern mockingbird, and house finch, among others. Cooper's hawk and other common raptor species such as red-tailed hawk and American kestrel may nest in trees on or adjacent to the project site. Burrowing owl (if suitable burrows are present) may nest and forage in barren areas, on and adjacent to the project site. Ground nesting birds that prefer open habitats may nest in the undeveloped area in the northern portion of the project site.

Project activities could directly or indirectly cause impacts to nesting birds on and adjacent to the project site. Project construction activities could cause direct impacts through destruction of nests, eggs, or chicks, or indirect impacts through hazing or harassment of actively nesting birds to a degree that causes them to abandon the nest temporarily or permanently. These impacts would be considered violations of the MBTA and Sections 3800, 3513, and 3503.5 of the Fish and Game Code. A number of avoidance and mitigation measures should be implemented to minimize impacts on nesting birds. These include reasonable and prudent measures to avoid impacts to nesting birds, such as seasonal avoidance, which are described below.

#### Mitigation Measure

**MM BIO-2** **Protection of Active Bird Nests (includes pre-construction survey and avoidance, if found).**

- No action is necessary if no active nests are found or if construction will occur outside of the avian breeding season (typically September 1 through January 31).
- If construction activities are scheduled to occur during the nesting season (February 1 through August 31), mitigation would be necessary to avoid potential impacts to migratory birds and their nests.
- If construction or tree removal is proposed during the breeding/nesting season for migratory birds (typically February 1 through August 31), a qualified Biologist shall conduct pre-construction surveys for migratory birds on the project site, including a 300-foot survey buffer, no more than 3 days prior to the start of ground-disturbing activities. If construction is delayed or suspended for more than 3 days after the survey, the area shall be re-surveyed to re-confirm the presence/absence of any active nests.
- If an active nest is located during pre-construction surveys, the United States Fish and Wildlife Service (USFWS) and/or the California Department of Fish and

Wildlife (CDFW) (as appropriate) will be notified regarding the status of the nest. Furthermore, construction activities will be restricted as necessary to avoid disturbance of the nest until it is abandoned, or the Biologist deems disturbance potential to be minimal. Restrictions may include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius of 300 feet around an active raptor nest and 50-foot radius around an active non-raptor passerine bird nest) or alteration of the construction schedule.

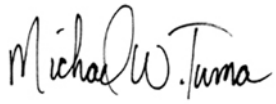
- A qualified Biologist will delineate the buffer using nest buffer signs, environmentally sensitive area fencing, pin flags, and/or flagging tape. The buffer zone will be maintained around the active nest site(s) until the young have fledged and are foraging independently.

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# SECTION 7: CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present data and information required for this Biological Resources Assessment, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Date: November 3, 2022 Signed:



Michael W. Tuma, PhD, Senior Biologist
FirstCarbon Solutions
967 Kendall Drive, #A-537
San Bernardino, CA 92407
714.508.4100

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# Appendix A:
# Personnel Qualifications

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# MICHAEL TUMA, PHD, CWB, RPA—SENIOR BIOLOGIST

## OVERVIEW

- More than 26 years of experience
- Experience leading teams in large data collection and analysis efforts

## Education

- Doctor of Philosophy, Integrative and Evolutionary Biology, University of Southern California, Los Angeles, CA, 2016
- Master of Science, Anthropology, University of Southern Mississippi, Hattiesburg, MS, 1998
- Master of Science, Zoology, Eastern Illinois University, Charleston, IL, 1993
- Bachelor of Science, Zoology, Truman State University, Kirksville, MO, 1991

## Permits, Authorizations, and Certifications

- Certified Wildlife Biologist, The Wildlife Society, 2013–present
- Certified Significant Ecological Areas Technical Advisory Committee (SEATAC) Biota Report Preparer, Los Angeles County Department of Regional Planning, 2008–present
- Qualified Biologist, San Bernardino County, 2007–present
- Authorized Biological Consultant, Riverside County, 2006–present
- Authorized Biologist for Agassiz's desert tortoise activities under 10(a)1(A) Recovery Permits (former) and Biological Opinions, US Fish and Wildlife Service (USFWS), August 2005–present
- California Scientific Collecting Permit/California Endangered Species Act (ESA)-Memorandum of Understanding, California Department of Fish and Wildlife (CDFW), August 2005–present

## Trainings and Workshops

- ArcGIS Training Courses, Esri Academy, 2016–present
- Desert Tortoise Health Assessments for Translocation Projects, Desert Tortoise Council, 2015
- CEQA Workshop, Association of Environmental Professionals, 2008
- Endangered Species: Regulation, Conservation Planning, and Permits for Development, University of California, Los Angeles Extension, 2008
- Desert Tortoise Health Assessment and Phlebotomy Training, US Geographical Survey (USGS), 2007
- Endangered Species Permitting: Strategies and Successful Negotiations Workshop, The Wildlife Society, 2006
- A/E/C Project Management Bootcamp, PSMJ Resources, Inc., 2006
- Introduction to CEQA: A Step-by-Step Approach Workshop, SCWA, 2005
- Western Pond Turtle Workshop: Ecology and Conservation, The Wildlife Society, 2005
- Surveying, Monitoring, and Handling Techniques Workshop, Desert Tortoise Council, 2004

## Professional Affiliation

- Adjunct Professor, University of Southern California, March 2019–present
- Chair, Board of Directors, Desert Tortoise Council, February 2018–February 2020
- Chair, Media Committee, Desert Tortoise Council, June 2017–present
- Chair, Grants Committee, Desert Tortoise Council, January 2016–present
- Board of Directors Member, Desert Tortoise Council, January 2014–present
- Newsletter Editor, Desert Tortoise Council, January 2014–January 2018

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## MICHAEL TUMA, PHD, CWB, RPA—SENIOR BIOLOGIST

**Michael Tuma, PhD, CWB, RPA**, has more than 26 years of experience as a professional scientist in academic settings, agency positions, and as an environment consultant. He assists clients in complying with laws such as the ESA, the National Historic Preservation Act, CEQA, and NEPA. He has experience in a wide variety of technical biological work, including rare plant surveys and botanical inventories, habitat restoration planning and implementation, field data collection, population and habitat modeling, and technical biological reporting. He is a proficient project and client manager with experience in a diversity of market sectors, including land management, renewable energy, transportation, water infrastructure, gas and mineral extraction, and land development. Dr. Tuma has led teams in the implementation of studies and documentation in support of permitting and compliance with numerous environmental laws, including the Federal Endangered Species Act, California Endangered Species Act, NEPA, CEQA, and Migratory Bird Treaty Act, among many others. Dr. Tuma is an experienced leader and has supervised and mentored groups of biologists. He has directed teams on large and long-term projects and mentored junior staff on issues pertaining to project management, technical studies and documentation, and regulatory processes. He has led and mentored large groups of volunteers and international biologists on learning advanced data collection techniques and has experience leading a non-profit organization with more than 350 members. Dr. Tuma is skilled in project management, statistics, geographic information systems (GIS), and computer modeling. He has a passion for educating the public about science, and has been providing tutoring sessions, workshops, and lectures for more than 20 years.

## RELATED EXPERIENCE AND CLIENT SUMMARY

*Biological, Archaeological, and Paleontological Monitoring and Reporting Services for the Los Angeles Regional Interoperable Communications System, Los Angeles County, CA*

FCS provided monitoring and reporting services during the construction of more than 150 land mobile radio (LMR) facilities at sites located primarily in Los Angeles County. The LMR sites contain the infrastructure and equipment necessary to provide voice communications coverage throughout the County for emergency responders. These locations are widely dispersed across the County in both urban (intensively developed) and rural (less developed) settings and include coastal locations, sites in downtown Los Angeles, remote mountain peaks across the County, and the northern high desert. FCS conducted the biological, archaeological, and paleontological pre-construction and construction monitoring and reporting services in accordance with the Construction Management Requirements outlined in the NEPA Environmental Assessment that FCS prepared for the project.

Dr. Tuma served as Biological Monitor for this project in 2020. His responsibilities included implementing mitigation measures and ensuring project compliance in support of the LA-RICS LMR System in Los Angeles County, California. Dr. Tuma monitored project for compliance for up to 33 mitigation measures, including performing clearance surveys for special status species, pre-construction nesting bird surveys, and several measures pertaining to California condor (*Gymnogyps californianus*) conservation, including condor hazing.

### Other Relevant FCS Projects

- Port of Los Angeles Industrial Project Bird's Nest Survey, City of Los Angeles, CA
- Alton Parkway Logistics Facility Project IS/MND and Technical Studies, City of Irvine, CA
- Quick N Clean Car Wash Project IS/MND and Technical Studies, City of Adelanto, CA
- Bridge Point Peer Review of EIR and Technical Reports, City of Rancho Cucamonga, CA

- Redlands Residential Project Biological and Cultural Due Diligence, City of Redlands, CA
- Lilac Avenue Warehouse Due Diligence Memoranda, City of Rialto, CA
- Barton Road Logistics Center Project EIR, Technical Studies, and Peer Review, City of Colton, CA
- Griswold Residential Project Constraints Analysis, Unincorporated Los Angeles County, CA

## Prior Work Experience

*Santa Susana Field Laboratory, Boeing (through contract with MWH Americas, Inc.), Ventura County, CA*

Dr. Tuma served as the Project Manager for this project between 2006 and 2008. Under one task he designed and conducted field investigations on the extent and size of Braunton's milk-vetch (*Astragalus brauntonii*) population within an area of a USFWS-proposed designated Critical Habitat. He led field efforts, which included conducting vegetation mapping, delineating the Braunton's milk-vetch population within the proposed area, estimating the population size with the use of randomized transects and quadrats, conducting a complete vascular plant inventory within the study area, and authoring a technical report detailing the results of the investigation, which were used by the client in commenting on the proposed area of designated Critical Habitat. Dr. Tuma performed other tasks under this project, including nesting bird surveys, pre-construction surveys for special status species, and a revegetation/mitigation effort for the California Rare Santa Susana tarplant.

*Environmental Generalist Services Task Order Contract, California Department of Transportation District 7, Los Angeles and Ventura Counties, CA*

Dr. Tuma served as a Senior Biologist for this two-year on-call environmental services contract with the California Department of Transportation (Caltrans) District 7 between 2014 and 2015. While serving in this capacity, contributed to two task orders in support of the State Route 138 NW project, which consists of protocol desert tortoise, burrowing owl, and rare plant surveys and an analysis of wildlife crossing and movements on State Route (SR) 138 between SR 14 and Interstate 5. Dr. Tuma led in the field surveys, planned field and desktop analyses, directed a group of biologists and GIS specialists, and served as primary author of the deliverables produced for these task orders.

*Dune Palms Road Crossing Replacement, Caltrans (through contract with Parsons Brinckerhoff), Riverside County, CA*

Dr. Tuma served as the Project Manager for this project in 2014 and 2015. He was responsible for coordinating natural resources studies and agency consultation in support of the preparation of a Caltrans Natural Environment Study (NES). Project tasks included a general biological survey, focused surveys for burrowing owl and rare plants, trapping efforts for Palm Springs round-tailed ground squirrel (*Spermophilus tereticaudus*) and Palm Springs pocket mouse, a jurisdictional waters/habitats determination, agency consultation, preparation of a Biological Assessment in support of Section 7 consultation, documentation of study results, and preparation of the NES.

*Desert Quartzite Solar Energy Project EIR/EIS and Biological Studies, First Solar, Inc., Riverside County, CA*

Dr. Tuma served as the Project Manager for this project in 2015 and 2016, and was responsible for client management, biological studies, technical report preparation, and CEQA/NEPA documentation for a large-scale development in east Riverside County, California. His specific duties included reviewing studies prepared by prior consultants, conducting updated field surveys (vegetation mapping, rare plant, and desert tortoise surveys) and technical studies, and preparing the EIR/EIS Biological Resources

section and appendices (Invasive Weed Management Plan, Raven Management Plan, Desert Tortoise Translocation Plan, Desert Kit Fox and American Badger Management Plan, Rare Plant Management Plan, and Vegetation Restoration Plan).

*Edom Hills Wind Energy Facility, BP Wind Energy North America, Inc., Riverside County, CA*

Dr. Tuma served as the Project Manager and Lead Authorized Biologist for this project in 2016 and was responsible for conducting a habitat assessment, eolian dune characterization study, and biological monitoring of project activities in support of minimizing the potential for take of Coachella Valley fringe-toed lizard (*Uma inornata*) and Coachella Valley milk-vetch (*Astragalus lentiginosus var. coachellae*) during the installation of equipment in two project turbines. He coordinated with the BLM project Biologist to gain approval of biologists to monitor the work, and concurrence for the recommended mitigation measures, which included removing wind-blown sands from portions of the access road and placing the sand in adjacent areas where they could continue transport in the eolian ecosystem. He authored a post-construction memorandum that detailed the restoration of the eolian sand and avoidance of sensitive microhabitats where fringe-toed lizards typically hibernate during the project activities.

*High Desert Solar Project, Middle River Power (through contract with AECOM), San Bernardino County, CA*

Dr. Tuma served as the Lead Authorized Biologist for this project in 2020. He led the implementation of a desert tortoise translocation program in support of the High Desert Solar Project site in Victorville, San Bernardino County, California. The effort consists of performing protocol health assessments, collecting blood samples for disease testing, translocating tortoises from the development area to an off-site location in the Kramer Hills in the Fremont-Kramer Critical Habitat Unit, and monitoring them following translocation. Additional tasks included transplanting western Joshua trees from the project site, and monitoring of Environmentally Sensitive Areas established around active desert kit fox dens and burrowing owl burrows.

*Agassiz's Desert Tortoise Population Modeling and Conservation Planning for the Superior-Cronese and Gold Butte-Pakoon Critical Habitat Units, BLM, San Bernardino County, CA, Clark County, NV, and Mohave County, AZ*

As the Project Manager, Client Manager, and Principal Investigator of this project, Dr. Tuma conducted research into the population biology of Agassiz's desert tortoises on two study areas that comprise federal lands administered by the BLM between 2008 and 2013. He directed a team of more than 40 biologists, statisticians, and GIS specialists who contributed to the project; successfully developed spatially explicit, individual-based population models used to rank the importance of site-specific threats at each of the study areas; and served as the primary author of the technical report deliverables. This project consisted of collecting field data, compiling GIS data, conducting intensive literature reviews and expert interviews, and developing tortoise occurrence models, population models, and threats models for study areas that included the Superior-Cronese Critical Habitat Unit in San Bernardino County, California, and the Gold Butte-Pakoon Critical Habitat Unit in Clark County, Nevada, and Mohave County, Arizona. The modeling effort allowed Dr. Tuma to simulate the effects of site-specific threats on tortoise populations at each study area and develop land management and species conservation strategies that could be implemented by the BLM Field and State Offices on tortoise populations within each Critical Habitat Unit. He presented the research at the annual meetings of the Desert Tortoise Council, The Wildlife Society, and the World Congress of Herpetology, and published a manuscript in the Journal of Wildlife Management in early 2016.

# Appendix B:
# Site Photographs

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Photograph 1: View of row of Chinaberry trees on the eastern boundary of the project site along Lilac Avenue, looking south.



Photograph 2: View of ruderal habitat in the northern portion of the project site, looking northwest toward Santa Ana Avenue from the eastern project boundary.



Photograph 3: View of the ruderal habitat and group of lemon-scented gum trees in the northeastern portion of the project site, looking south from the northeast corner of the site.



Photograph 4: View of the ruderal habitat in the northern portion of the project site, looking southeast from northwest corner of the site.

| | |
|---|---|
|  |  |
| Photograph 5: View of the ruderal habitat in the northwestern portion of the project site, looking south from the northwest corner of the site. | Photograph 6: View of the ruderal habitat and scattered Chinaberry trees in the northern portion of the project site, looking west from eastern boundary of the site |
|  |  |
| Photograph 7: View of the developed area in the southern portion of the project site, looking west from eastern boundary of the site. | Photograph 8: View of the developed area in the southern portion of the project site, looking northwest from eastern boundary of the site. |

# Appendix C:
# Special-status Species Tables

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## Table 1: Special-status Plant Species Potentially Occurring within the Project Site

| *Scientific Name* Common Name | Status | | | Habitat Description[4] | Potential to Occur and Rationale | Included in Impact Analysis |
|---|---|---|---|---|---|---|
| | USFWS[1] | CDFW[2] | CNPS[3] | | | |
| **Dicots** | | | | | | |
| *Ambrosia monogyra* singlewhorl burrobush | — | — | 1B.1 | Perennial shrub found in sandy soils in chaparral and Sonoran desert scrub. Elevation: 10–500 m. Bloom period: August–November | **None:** The project site does not contain suitable natural vegetation communities to support this species. There is one historical record between 5 and 10 miles from the project site. | No |
| *Ambrosia pumila* San Diego Ambrosia | — | — | 1B.1 | Perennial rhizomatous herb found in alkaline, clay, loamy, or sandy soils, often in disturbed areas, in chaparral, coastal scrub, valley and foothill grassland, vernal pools. Elevations: 20–415 m. Bloom period: April–October | **Low:** This species tolerates disturbances and marginal habitat is present in the ruderal vegetation in the northern portion of the project site. However, due to the history of soil disturbance in this portion of the project site and lack of natural vegetation communities, this species is not expected to occur there. There is one historical record between 5 and 10 miles from the project site. | No |
| *Arenaria paludicola* marsh sandwort | FE | SE | 1B.1 | Perennial stoloniferous herb found in marshes and swamps (freshwater or brackish). Elevation: 3–170 m. Bloom period: May–August | **None:** The project site does not contain suitable natural vegetation communities or microhabitat to support this species. There is one historical record within 5 miles of the project site. | No |
| *Astragalus hornii* var. *hornii* Horn's milk-vetch | — | — | 1B.1 | Meadows and seeps, playas, lake margins. Prefers alkaline sites. Elevation: 60-850 m. Blooming period: May–October | **None.** The project site does not contain suitable natural vegetation communities or microhabitat to support this species. There is one historical record within 5 miles of the project site. | No |
| *Berberis nevinii* Nevin's barberry | FE | SE | 1B.1 | Perennial evergreen shrub found in gravelly or sandy soils in chaparral, cismontane woodland, coastal scrub, and riparian scrub. Elevation: 70–825 m. Blooming period: March–June | **None:** The project site does not contain suitable natural vegetation communities to support this species. There are three records between 5 and 10 miles from the project site. | No |

| *Scientific Name* Common Name | Status | | | Habitat Description[4] | Potential to Occur and Rationale | Included in Impact Analysis |
|---|---|---|---|---|---|---|
| | USFWS[1] | CDFW[2] | CNPS[3] | | | |
| *Centromadia pungens* ssp. *laevis* Smooth tarplant | — | — | 1B.1 | Annual herb found in alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodlands, and valley and foothill grasslands. Elevation: 0–640 m. Bloom period: April–September | **None:** The project site does not contain suitable natural vegetation communities or microhabitat to support this species. There are five recent and two historical records between 5 and 10 miles from the project site. | No |
| *Chloropyron maritimum* ssp. *maritimum* salt marsh bird's-beak | FE | SE | 1B.2 | Dicot annual herb found in coastal dunes, marsh and swamp, salt marsh, and wetlands habitats. Limited to the higher zones of the salt marsh habitat. Elevation: 0–30 m. Bloom period: May–October | **None:** The project site does not contain suitable natural vegetation communities or microhabitat to support this species. There is one historical record within 5 miles of the project site. | No |
| *Chorizanthe parryi* var. *parryi* Parry's spineflower | — | — | 1B.1 | Annual herb found in chaparral, coastal scrub, cismontane woodland, valley and foothill grassland. Elevation: 275–1,220 m. Bloom period: April–June | **None:** The project site does not contain suitable natural vegetation communities to support this species. There are two historical records within 5 miles of the project site, and five recent and nine historical records between 5 and 10 miles from the project site. | No |
| *Cuscuta obtusiflora* var. *glandulosa* Peruvian dodder | — | — | 2B.2 | Annual parasitic vine found in freshwater swamps and marshes. Elevation: 15–280 m. Bloom period: July–October | **None:** The project site does not contain suitable natural vegetation communities or microhabitat to support this species. There is one historical record within 5 miles of the project site. | No |
| *Dodecahema leptoceras* Slender-horned spineflower | FE | SE | 1B.1 | Annual herb found in chaparral, coastal scrub, and cismontane woodlands. Elevation: 200–760 m. Bloom period: April–June | **None:** The project site does not contain suitable natural vegetation communities to support this species. There is one historical record within 5 miles of the project site and two historical records between 5 and 10 miles from the project site. | No |

| *Scientific Name* Common Name | Status | | | Habitat Description[4] | Potential to Occur and Rationale | Included in Impact Analysis |
|---|---|---|---|---|---|---|
| | USFWS[1] | CDFW[2] | CNPS[3] | | | |
| *Eriastrum densifolium* ssp. *sanctorum* Santa Ana River woolystar | FE | SE | 1B.1 | Dicot perennial herb found in chaparral and coastal scrub habitat. Prefers sandy soils on river floodplains or terraced fluvial deposits. Elevation: 180–700 m. Bloom period: May–September | **None:** The project site does not contain suitable natural vegetation communities or microhabitat to support this species. There are seven recent records and four historical records within 5 miles, and seven recent and two historical records between 5 and 10 miles from the project site. | No |
| *Galium californicum* ssp. *primum* Alvin Meadow bedstraw | — | — | 1B.2 | Perennial herb found in chaparral and lower montane coniferous forest. Elevation: 1,350–1,700 m. Bloom period: May–July | **None:** The project site does not contain suitable natural vegetation communities to support this species, and the project site is outside of the known elevation range of the species. There is one historical record within 5 miles of the project site. | No |
| *Helianthus nuttallii* ssp. *parishii* Los Angeles sunflower | — | — | 1A | Dicot perennial (*rhizomatous*) herb found in marshes and swamps, including coastal salt and freshwater marshes. Elevation: 10–1,675 m. Bloom period: August–October | **None:** The project site does not contain suitable natural vegetation communities or microhabitat to support this species. There is one historical record within 5 miles of the project site. | No |
| *Horkelia cuneata* var. *puberula* mesa horkelia | — | — | 1B.1 | Perennial herb found in chaparral, coastal scrub, and cismontane woodlands. Elevation: 70–810 m. Bloom period: February–July | **None:** The project site does not contain suitable natural vegetation communities to support this species. There are four historical records within 5 miles of the project site. | No |
| *Lepidium virginicum* var. *robinsonii* Robinson's pepper-grass | — | — | 4.3 | Annual herb found in dry soils in chaparral and coastal scrub. Elevation: 1–855 m. Bloom period: January–July | **None:** The project site does not contain suitable natural vegetation communities to support this species. There are two historical records within 5 miles, and two historical records between 5 and 10 miles from the project site. | No |
| *Lycium parishii* Parish's desert thorn | — | — | 2B.3 | Perennial shrub found in coastal scrub and Sonoran Desert scrub. Elevation: 135–1,000 m. Blooming period: March–April | **None:** The project site does not contain suitable natural vegetation communities to support this species. Presumed extirpated in local area. There is one historical record within 5 miles of the project site. | No |

| *Scientific Name* Common Name | Status | | | Habitat Description[4] | Potential to Occur and Rationale | Included in Impact Analysis |
|---|---|---|---|---|---|---|
| | USFWS[1] | CDFW[2] | CNPS[3] | | | |
| *Malacothamnus parishii* Parish's bush-mallow | — | — | 1A | Perennial, deciduous shrub found in chaparral and coastal scrub. Elevation: 305–455 m. Bloom period: June–July | **None:** The project site does not contain suitable natural vegetation communities to support this species. There is one historical record within 5 miles of the project site. | No |
| *Monardella pringlei* Pringle's monardella | — | — | 1A | Annual herb found in sandy soils in coastal scrub. Elevation: 300–400 m. Bloom period: May–June | **None:** The project site does not contain suitable natural vegetation communities to support this species. There are two historical records within 5 miles of the project site. | No |
| *Nasturtium gambelii* Gambel's water cress | FE | ST | 1B.1 | Perennial, rhizomatous herb found in marshes and swamps (freshwater or brackish). Elevation: 5–330 m. Bloom period: April–October | **None:** The project site does not contain suitable natural vegetation communities or microhabitat to support this species. There is one historical record within 5 miles of the project site. | No |
| *Phacelia stellaris* Brand's star phacelia | — | — | 1B.1 | Annual herb found in coastal dunes and coastal scrub. Elevation: 1–400 m. Bloom period: March–June | **None:** The project site does not contain suitable natural vegetation communities to support this species. There are four historical records within 5 miles, and one recent and one historical record between 5 and 10 miles from the project site. | No |
| *Pseudognaphalium leucocephalum* white-rabbit tobacco | — | — | 2B.2 | Annual herb that occurs on rocky or sandy benches, dry stream bottoms, and canyon bottoms in chaparral, cismontane woodland, coastal scrub, and riparian woodland. Elevation: 0–2,100 meters Blooming period: April–August | **None:** The project site does not contain suitable natural vegetation communities or microhabitat to support this species. There is one historical record between 5 and 10 miles from the project site. | No |
| *Ribes divaricatum* var. *parishii* | — | — | 1A | Perennial, deciduous shrub found in riparian woodlands. Elevation: 65–300 m. Bloom period: February–April | **None:** The project site does not contain suitable natural vegetation communities to support this species. There is one historical record between 5 and 10 miles from the project site. | No |

| *Scientific Name* Common Name | Status | | | Habitat Description[4] | Potential to Occur and Rationale | Included in Impact Analysis |
|---|---|---|---|---|---|---|
| | USFWS[1] | CDFW[2] | CNPS[3] | | | |
| *Senecio aphanactis* chaparral ragwort | — | — | 2B.2 | Annual herb found in drying alkaline flats in chaparral, cismontane woodland, and coastal scrub.<br>Elevation: 15–800 m.<br>Bloom period: January–April | **None:** The project site does not contain suitable natural vegetation communities or microhabitat to support this species. There is one recent record and one historical record within 5 miles, and one recent record between 5 and 10 miles from the project site. | No |
| *Sidalcea neomexicana* salt spring checkerbloom | — | — | 2B.2 | Perennial herb found in alkaline and mesic soils in chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, and playas.<br>Elevation: 15–1,530 m.<br>Bloom period: March–June | **None:** The project site does not contain suitable natural vegetation communities or microhabitat to support this species. There is one historical record between 5 and 10 miles from the project site. | No |
| *Symphyotrichum defoliatum* San Bernardino aster | — | — | 1B.2 | Perennial, rhizomatous herb found in banks of ditches, streams, and springs in cismontane woodlands, coastal scrub, lower montane coniferous forests, meadows and seeps, marshes and swamps, and vernally mesic valley and foothill grasslands.<br>Elevation: 2–2,040 m.<br>Bloom period: July–November | **None:** The project site does not contain suitable natural vegetation communities or microhabitat to support this species. There are two historical records between 5 and 10 miles from the project site. | No |
| **Monocots** | | | | | | |
| *Calochortus palmeri* var. *palmeri* | — | — | 1B.2 | Perennial, bulbiferous herb that occurs in mesic sites in chaparral, lower montane coniferous forest, and meadows and seeps.<br>Elevation: 710–2,390 meters<br>Blooming period: April–July | **None:** The project site does not contain suitable natural vegetation communities or microhabitat to support this species. There is one historical record between 5 and 10 miles from the project site. | No |

| *Scientific Name* Common Name | Status | | | Habitat Description[4] | Potential to Occur and Rationale | Included in Impact Analysis |
|---|---|---|---|---|---|---|
| | USFWS[1] | CDFW[2] | CNPS[3] | | | |
| *Calochortus plummerae* Plummer's mariposa-lily | — | — | 4.2 | Perennial, bulbiferous herb that occurs on rocky and sandy sites, usually on granitic or alluvial material, in coastal scrub, chaparral, valley and foothill grasslands, cismontane woodland, and lower montane coniferous forest, commonly after fire. Elevation: 100–1,700 meters Blooming period: May–July | **None:** The project site does not contain suitable natural vegetation communities or microhabitat to support this species. There are seven recent records and four historical records between 5 and 10 miles from the project site. | No |
| *Carex comosa* bristly sedge | — | — | 2B.1 | Perennial, rhizomatous herb found in coastal prairie, lake margins of marshes and swamps, and valley and foothill grasslands. Elevation: 0–625 m. Bloom period: May–September | **None:** The project site does not contain suitable natural vegetation communities or microhabitat to support this species. There is one historical record within 5 miles of the project site. | No |
| *Sphenopholis obtusata* prairie wedge grass | — | — | 2B.2 | Perennial herb found in cismontane woodlands, and meadows and seeps. Elevation: 300–2,000 m. Bloom period: April–July | **None:** The project site does not contain suitable natural vegetation communities to support this species. There is one historical record within 5 miles of the project site. | No |

**Code Designations**

**[1] Federal Status: 2020 USFWS Listing**

- **ESU** = Evolutionary Significant Unit is a distinctive population.
- **FE** = Listed as endangered under Federal Endangered Species Act (FESA).
- **FT** = Listed as threatened under FESA.
- **FC** = Candidate for listing (threatened or endangered) under FESA.
- **FD** = Delisted in accordance with FESA.
- **FPD** = Federally Proposed to be Delisted.
- **MBTA** = protected by the Migratory Bird Treaty Act
- **—** = Not federally listed

**[2] State Status: 2020 CDFW Listing**

- **SE** = Listed as endangered under California Endangered Species Act (CESA).
- **ST** = Listed as threatened under CESA.
- **SSC** = Species of Special Concern as identified by the CDFW.
- **FP** = Listed as fully protected under the Fish and Game Code.
- **CFG** = Fish and Game Code =protected by Fish and Game Code 3503.5
- **CR** = Rare in California.
- **—** = Not State listed

**[3] CNPS: 2020 CNPS Listing**

- **Rank 1A** = Plants species that presumed extinct in California.
- **Rank 1B** = Plant species that are rare, threatened, or endangered in California and elsewhere.
- **Rank 2** = Plant species that are rare, threatened, or endangered in California, but more common elsewhere.
- **Rank 3** = Plants about which we need more information—A Review List
- **Rank 4** = Plants of limited distribution—A Watch List

**Blooming period:** Months in parentheses are uncommon.

[3] **Habitat description**: Habitat description adapted from CNDDB (CDFW 2020) and CNPS online inventory (CNPS 2020).

## Table 2: Special-status Wildlife Species Potentially Occurring within the Project

| Scientific Name<br>Common Name | Status | | Habitat Description[3] | Potential to Occur and Rationale[4] | Included in Impact Analysis |
|---|---|---|---|---|---|
| | USFWS[1] | CDFW[2] | | | |
| **Amphibians** | | | | | |
| *Spea hammondii*<br>western spadefoot | —<br> | —<br>SSC | Occurs primarily in grassland habitats but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying. | **None:** The project site does not contain suitable foraging or breeding habitat to support this species. There is one recent record within 5 miles of the project site, and nine recent and one historical record between 5 and 10 miles from the project site. | No |
| **Birds** | | | | | |
| *Accipiter cooperii*<br>Cooper's hawk | —<br>MTBA | —<br>WL; FGC | Occurs and nests in deciduous and mixed forests and open woodland habitats. Year-round resident in southern California. | **Moderate:** There is limited foraging habitat in the project vicinity and marginal nesting habitat in the lemon-scented gum trees on-site. There is one recent record between 5 and 10 miles from the project site. | Yes |
| *Agelaius tricolor*<br>tricolored blackbird | —<br>MBTA | ST<br>SSC; FGC | Highly colonial species, most numerous in Central Valley and its vicinity.<br>Requires open water, protected nesting substrate, and foraging area with insect prey in the vicinity of the colony. | **None:** The project site does not contain suitable habitat due to the lack of wetlands present on-site. This species is believed to be extirpated from local area. There is one recent record within 5 miles of the project site, and two recent and one historical records between 5 and 10 miles from the project site. | No |
| *Aimophila ruficeps canescens*<br>Southern California rufous-crowned sparrow | —<br>MBTA | —<br>WL; FGC | Resident in southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches. | **None:** The project site does not suitable habitat to support this species due to the lack of sage scrub and chaparral vegetation. There is one recent record within 5 miles of the project site, and four recent records between 5 and 10 miles from the project site. | No |

| Scientific Name<br>Common Name | Status | | Habitat Description[3] | Potential to Occur and Rationale[4] | Included in Impact Analysis |
|---|---|---|---|---|---|
| | USFWS[1] | CDFW[2] | | | |
| *Artemisiospiza belli belli*<br>Bell's sage sparrow | —<br>MBTA | —<br>WL; FGC | Breeds in coastal sagebrush, chaparral, and other open, scrubby habitats in Southern California mountains, deserts and valleys. | **None:** The project site does not contain suitable habitat to support this species due to the lack of sage scrub and chaparral vegetation. There is one recent record within 5 miles of the project site, and one historical record between 5 and 10 miles from the project site. | No |
| *Athene cunicularia*<br>Burrowing owl | —<br>BCC;<br>MBTA | —<br>SSC; FGC | Found in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. A subterranean nester, dependent upon burrowing mammals, most notably the California ground squirrel. | **Moderate:** Suitable foraging and breeding habitat is present within the project site. Many small mammal burrows are present on-site. There are five recent records within 5 miles of the project site, and nine recent and two historical records between 5 and 10 miles from the project site. | Yes |
| *Buteo swainsoni*<br>Swainson's hawk | —<br>MTBA | ST<br>FGC | Occurs and nests in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees.<br>Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations. Long-distance migrant. | **None:** Suitable habitat for this species is not present on or adjacent to the Study Area. There are two historical records between 5 and 10 miles from the project site and is likely extirpated. | No |
| *Coccyzus americanus occidentalis*<br>Western yellow-billed cuckoo | FT<br>MBTA | SE<br>FGC | Nests in riparian forest along the broad lower flood-bottoms of larger river systems.<br>Found in riparian jungles of willow, often mixed with cottonwoods; understory consists of blackberry, nettles, and wild grape. | **None:** The project site does not contain suitable habitat to support this species due to the lack of riparian woodlands present on-site. There are two historical records within 5 miles of the project site, and two historical records between 5 and 10 miles from the project site. | No |

| Scientific Name<br>Common Name | Status<br>USFWS[1] | <br>CDFW[2] | Habitat Description[3] | Potential to Occur and Rationale[4] | Included in Impact Analysis |
|---|---|---|---|---|---|
| *Empidonax traillii extimus*<br>Southwestern Willow Flycatcher | FE<br>MTBA | SE<br>FGC | Occurs in riparian woodlands in Southern California. Breeds in relatively dense riparian tree and shrub communities associated with rivers, swamps, and other wetlands including lakes and reservoirs. Habitat patches must be at least 0.25 ac in size and at least 30 feet wide. Nests in native vegetation including willows, seepwillow, boxelder, buttonbush, and cottonwood but also uses thickets dominated by non-native tamarisk and Russian olive, or in mixed native non-native stands. | **None:** The project site does not contain suitable habitat to support this species due to the lack of riparian woodlands present on-site. There are no records for this species within 10 miles of the project site. | No |
| *Eremophila alpestris actia*<br>California horned lark | —<br>MTBA | —<br>WL; FGC | Occurs and nests in open areas with sparse vegetation. Year-round resident in southern California. | **None:** Suitable habitat for this species is not present on or adjacent to the Study Area. There are one recent and one historical records between 5 and 10 miles from the project site. | Yes |
| *Falco columbarius*<br>Merlin | —<br>MBTA | —<br>WL; FGC | Nests in open and semi-open areas such as grasslands, open forests, and coastal areas as well as in towns and cities. Merlins often take over crow nests in conifers planted in residential areas, schoolyards, parks, and cemeteries. Merlins winter across the western and southern United States, along the Pacific Coast up to Alaska, where it typically forages in open habitats supporting natural vegetation communities. | **Low:** The project site does not contain marginal foraging habitat (open, disturbed annual grassland). This species breeds outside of California and is not expected to nest on the project site. This species may occur on the project site as a forager, and likely only as a transient. There is one recent record within 5 miles of the project site, and one recent record between 5 and 10 miles from the project site. | No |
| *Icteria virens*<br>yellow-breasted chat | —<br>MTBA | —<br>SSC; FGC | Occurs and nests in riparian thickets of willow and other bushy tangles near watercourses. Long-distance migrant. | **None:** Suitable habitat for this species is not present on or adjacent to the Study Area. There are one recent and one historical records between 5 and 10 miles from the project site. | No |
| *Laterallus jamaicensis coturniculus*<br>California black rail | —<br>MBTA | ST<br>FP; FGC | Inhabits freshwater marshes, wet meadows, and shallow margins of saltwater marshes bordering larger bays. Requires water depth of about 1 inch that does not fluctuate during the year, and dense vegetation for nesting. | **None:** The project site does not contain suitable wetlands habitat to support this species. This species is believed to be locally extirpated. There are two historical records within 5 miles of the project site. | No |

| Scientific Name<br>Common Name | Status | | Habitat Description[3] | Potential to Occur and Rationale[4] | Included in Impact Analysis |
|---|---|---|---|---|---|
| | USFWS[1] | CDFW[2] | | | |
| *Polioptila californica californica*<br>coastal California gnatcatcher | FT<br>MBTA | —<br>SSC; FGC | An obligate, permanent resident of coastal sage scrub below 2,500 feet in Southern California. Requires low, coastal sage scrub in arid washes, on mesas, and slopes. | **None:** The project site does not contain suitable habitat to support this species due to the lack of coastal sage scrub vegetation. There are five historical records within 5 miles of the project site, and one recent and thirteen historical records between 5 and 10 miles from the project site. | No |
| *Setophaga petechia*<br>yellow warbler | —<br>MTBA | —<br>SSC; FGC | Occurs and nests in willow shrubs and thickets, cottonwoods, sycamores, ash, and alders, predominantly in riparian habitats. Long-distance migrant. | **None:** Suitable habitat for this species is not present on or adjacent to the Study Area. There is one recent record between 5 and 10 miles from the project site. | No |
| *Spinus lawrencei*<br>Lawrence's goldfinch | —<br>BCC;<br>MBTA | —<br>FGC | Inhabits and nests in arid, open woodlands and oak trees in chaparral. | **None:** Suitable habitat for this species is not present on or adjacent to the Study Area. There are one recent and one historical records between 5 and 10 miles from the project site. | No |
| *Vireo bellii pusillus*<br>Least Bell's vireo | FE<br>MBTA | SE<br>FGC | A summer resident of Southern California. Nests in low riparian habitat in the vicinity of water or in dry river bottoms. Nests placed along margins of bushes or in twigs projecting into pathways, usually willows, coyote bush, mule fat, or mesquite. Occurs below 2,000 feet. | **None:** No suitable riparian habitat is present within the project. There is one recent record and one historical record within 5 miles of the project site, and eleven recent and two historical records between 5 and 10 miles from the project site. | No |
| **Fish** | | | | | |
| *Catostomus santaanae*<br>Santa Ana sucker | FT | — | Endemic to Los Angeles basin south coastal streams. Are habitat generalists, but prefer sand-rubble-boulder bottoms, cool, clear water, and algae. | **None:** There are no streams or rivers present within the project to support this species. There are four recent records within 5 miles of the project site, and two recent records between 5 and 10 miles from the project site. | No |

| Scientific Name<br>Common Name | Status | | Habitat Description[3] | Potential to Occur and Rationale[4] | Included in Impact Analysis |
|---|---|---|---|---|---|
| | USFWS[1] | CDFW[2] | | | |
| *Gila orcuttii*<br>Arroyo chub | — | —<br>SSC | Native to the streams and rivers of the Los Angeles plain in Southern California. Arroyo chub are adapted to survive in streams that fluctuate between large winter storm flows, and low summer flows, and the low dissolved oxygen and wide temperature fluctuations. Feeds on plants such as algae and water fern, as well as insects and mollusks. | **None:** There are no streams or rivers present within the project site to support this species. There are four historical records within 5 miles of the project site, and one historical record between 5 and 10 miles from the project site. | No |
| *Oncorhynchus mykiss irideus* (pop. 10)<br>steelhead (southern CA DPS) | FE | SC | Habitat needs vary depending on the time in the life cycle. In the freshwater phase, freely flowing, cool, clean, highly oxygenated water is essential. In Southern California there is a winter run occurring January through March. Eggs are hatched in streams with gravel bottoms. Juvenile fish prefer pools with protective debris and a variety of hiding areas. Juveniles ultimately make their way to estuarine waters and to the ocean where they reach maturity. | **None:** There are no streams or rivers present within the project site to support this species. This species is believed to be largely extirpated from Santa Ana watershed. There is one historical record within 5 miles of the project site. | No |
| *Rhinichthys osculus ssp. 8*<br>Santa Ana speckled dace | — | SSC | Occurs in small springs, streams, large rivers, and deep lakes, including headwaters of the Santa Ana and San Gabriel Rivers. | **None:** There are no streams or rivers present within the project site to support this species. There is one historical record between 5 and 10 miles from the project site. | No |
| **Invertebrates** | | | | | |
| *Bombus crotchii*<br>Crotch's bumble bee | — | — | Inhabits grassland and scrub areas, requiring a hotter and drier environment than other bumblebee species, and can only tolerate a very narrow range of climatic conditions. Nests underground, often in abandoned rodent dens. | **None:** No suitable habitat is present within the project site due to frequent level of disturbance and lack of scrub vegetation. There are three historical records within 5 miles of the project site, and four recent and three historical records between 5 and 10 miles from the project site. | No |
| *Ceratochrysis longimala*<br>Desert cuckoo wasp | — | — | Unknown habitat requirements but appears to prefer dry areas and sandy soils. | **None:** No suitable habitat is present within the project site due to frequent level of disturbance. There is one historical record within 5 miles of the project site. | No |

| Scientific Name<br>Common Name | Status | | Habitat Description[3] | Potential to Occur and Rationale[4] | Included in Impact Analysis |
|---|---|---|---|---|---|
| | USFWS[1] | CDFW[2] | | | |
| *Cicindela tranquebarica viridissima*<br>greenest tiger beetle | — | — | Inhabits the woodlands adjacent to the Santa Ana River basin and usually is found in open spots between trees in riparian woodlands. | **None:** No suitable habitat is present within the project site due to frequent level of disturbance. There is one historical record within 5 miles of the project site. | No |
| *Danaus plexippus*<br>Monarch Butterfly | — | — | Occurs in temperate climates, such as eastern and western North America and undergoes long-distance migration. Lays eggs on obligate milkweed host plant (primarily Asclepias spp.) | **Low:** No milkweed is present on project site therefore species would only occur as a transient. | No |
| *Eugnosta busckana*<br>Busck's gallmoth | — | — | Unknown habitat requirements, but probably inhabits a variety of grassland and scrub habitats. | **None:** No suitable habitat is present within the project site due to frequent level of disturbance. There are two historical records between 5 and 10 miles from the project site, and is believed to be locally extirpated. | No |
| *Euphydryas editha quino*<br>quino checkerspot butterfly | FE | — | Occurs in grasslands, coastal sage scrub, chamise chaparral, red shank chaparral, juniper woodland, and semi-desert scrub habitats. Larval host plants are native species of plantain. | **None:** No suitable habitat is present within the project site due to frequent level of disturbance. There is one historical record between 5 and 10 miles from the project site, and is believed to be locally extirpated. | No |
| *Neolarra alba*<br>white cuckoo bee | — | — | Unknown habitat requirements, but probably inhabits a variety of grassland and scrub habitats. Parasitizes nests of other bees. | **None:** No suitable habitat is present within the project site due to frequent level of disturbance. There is one historical record within 5 miles of the project site, and two historical records between 5 and 10 miles from the project site. | No |
| *Rhaphiomidas terminatus abdominalis*<br>Delhi Sands flower-loving fly | FE | — | Found only in small parts of San Bernardino and Riverside counties, in areas of fine sandy soil, known as Delhi series sands. While formerly widespread, this habitat has been intensively developed in the past century, primarily for agriculture, though more recently for industry and housing. Only an estimated 2-3 percent of the original habitat remains undeveloped. | **Low:** No suitable habitat is present within the project site due to lack of Delhi series soils and its associated vegetation communities. This species may appear as a transient due to the high number of occurrences within close proximity. There are twenty-one recent and nine historical records within 5 miles of the project site, and six historical records between 5 and 10 miles from the project site. | No |

| Scientific Name<br>Common Name | Status<br>USFWS[1] | <br>CDFW[2] | Habitat Description[3] | Potential to Occur and Rationale[4] | Included in Impact Analysis |
|---|---|---|---|---|---|
| **Mammals** | | | | | |
| *Chaetodipus fallax fallax*<br>northwestern San Diego pocket mouse | — | SSC | Occurs mainly in arid coastal and desert borders in southwestern California. Habitats tend to be stony soils above sandy desert fans and rocky areas within shrub communities such as coastal sage scrub, chamise-redshank chaparral, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent scrub, pinyon-juniper, and annual grassland. | **None:** No suitable habitat is present within the project site due to frequent disturbances and the lack of scrub, chaparral, or desert habitat. There is one historical record within 5 miles of the project site, and one recent and ten historical records between 5 and 10 miles from the project site. | No |
| *Dipodomys merriami parvus*<br>San Bernardino kangaroo rat | FE | SC<br>SSC | Found on the gentle slopes of alluvial fans, on flood plains, along washes, and on adjacent upland areas with soft soils in which to dig shallow burrows. SBKR habitat is often is often dominated by alluvial sage scrub, coastal sage scrub or chaparral vegetation. | **None:** No suitable habitat is present within the project site due to frequent disturbances and lack of scrub vegetation preferred by this species. There are three recent records and one historical record within 5 miles of the project site, and twenty recent and fourteen historical records between 5 and 10 miles from the project site. | No |
| *Dipodomys stephensi*<br>Stephens' kangaroo rat | FE | ST | Occurs primarily in annual and perennial grasslands, but also occurs in coastal sage scrub with sparse canopy cover. Can burrow into firm soil. | **None:** No suitable habitat is present within the project site due to the lack of soils and scrub vegetation preferred by this species. There are one recent and twelve historical records between 5 and 10 miles from the project site. | No |
| *Eumops perotis californicus*<br>western mastiff bat | — | —<br>SSC | Found in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral. Roosts in crevices in cliff faces, high buildings, trees, and tunnels. | **None:** There is no suitable roosting habitat and poor foraging habitat present within the project site. There is one historical record within 5 miles of the project site, and three historical records between 5 and 10 miles from the project site. | No |
| *Lasiurus xanthinus*<br>western yellow bat | — | —<br>SSC | Prefers open habitats or habitat mosaics, with access to trees for cover, and open areas or habitat edges for feeding. Roosts in dense foliage of medium-to-large trees. Feeds primarily on moths. Requires a water source nearby. | **None:** There is no suitable roosting habitat and poor foraging habitat present within the project site.. There are two historical records within 5 miles of the project site, and three historical records between 5 and 10 miles from the project site. | No |

| Scientific Name<br>Common Name | Status | | Habitat Description[3] | Potential to Occur and Rationale[4] | Included in Impact Analysis |
|---|---|---|---|---|---|
| | USFWS[1] | CDFW[2] | | | |
| *Lepus californicus bennettii*<br>San Diego black-tailed jackrabbit | — | —<br>SSC | Occurs primarily in arid regions with short grass including open grasslands, agricultural fields, and sparse coastal scrub. Nests under bushes or shrubs that have shallow depressions. | **None:** The project site is isolated and the high level of disturbance and man-made barriers preclude this species from occurring on-site. There are two historical records within 5 miles of the project site, and one recent and two historical records between 5 and 10 miles from the project site. | No |
| *Neotoma lepida intermedia*<br>San Diego desert woodrat | — | —<br>SSC | Occurs in rock outcrops, rocky cliffs, and slopes in coastal sage and Riversidean alluvial fan sage scrub with moderate to dense canopies. | **None:** The project site does not support suitable grassland or scrub habitat and the high level of disturbance and man-made barriers preclude this species from occurring on-site. There are two recent and two historical records between 5 and 10 miles from the project site. | No |
| *Nyctinomops femorosaccus*<br>Pocketed free-tailed bat | — | —<br>SSC | Found in a variety of arid areas in Southern California; pine-juniper woodlands, desert scrub, palm oasis, desert wash, or desert riparian habitat. Prefers rocky areas with high cliffs. | **None:** No suitable roosting habitat in the form of cliffs or suitable foraging habitat for this species is present within the project site. There is one historical record within 5 miles of the project site, and one historical record between 5 and 10 miles from the project site. | No |
| *Onychomys torridus ramona*<br>southern grasshopper mouse | — | —<br>SSC | Nest in small burrows dug into the ground, often occupying deserted burrows other rodents. Grasshopper mice are found in low elevation shortgrass prairies, and desert scrub. They maintain a home range of two-three hectares and are found in low densities. | **None:** The project site does not support suitable grassland or scrub habitat and the high level of disturbance and man-made barriers preclude this species from occurring on-site. There is one historical record within 5 miles of the project site. | No |
| *Perognathus longimembris brevinasus*<br>Los Angeles pocket mouse | — | —<br>SSC | Suitable habitat for the Los Angeles pocket mouse includes Riversidean sage scrub, coastal sage scrub, Riversidean alluvial fan sage scrub, desert scrub, chaparral and grasslands, often adjacent to playas, vernal pools and sandy washes. | **None:** The project site does not support suitable grassland or scrub habitat and the high level of disturbance and man-made barriers preclude this species from occurring on-site. There are two recent records and three historical records within 5 miles of the project site, and three recent and six historical records between 5 and 10 miles from the project site. | No |

| Scientific Name<br>Common Name | Status | | Habitat Description[3] | Potential to Occur and Rationale[4] | Included in Impact Analysis |
|---|---|---|---|---|---|
| | USFWS[1] | CDFW[2] | | | |
| *Taxidea taxus*<br>American badger | — | —<br>SSC | Occurs in drier open stages of most shrub, forest, and herbaceous habitats with friable soils. Requires sufficient food sources (rodents), friable soils, and open, uncultivated ground. Digs large burrows. | **Low:** The project site does not support suitable grassland or scrub habitat and the high level of disturbance and man-made barriers preclude this species from occurring on-site. There is one historical record within 5 miles of the project site. | No |
| **Reptiles** | | | | | |
| *Anniella stebbinsi*<br>southern California legless lizard | — | —<br>SSC | Found in coastal sand dunes and a variety of interior habitats, including sandy washes and alluvial fans. | **None:** The project site does not support suitable grassland or scrub habitat and the high level of disturbance and man-made barriers preclude this species from occurring on-site. There are nine recent records and four historical records within 5 miles of the project site, and thirteen recent and seven historical records between 5 and 10 miles from the project site. | No |
| *Arizona elegans occidentalis*<br>California glossy snake | — | —<br>SSC | Inhabits arid scrub, rocky washes, grasslands, chaparral preferably open areas with loose soil for easy burrowing. | **None:** The project site does not support suitable grassland or scrub habitat and the high level of disturbance and man-made barriers preclude this species from occurring on-site. There are five historical records within 5 miles of the project site, and five recent and three historical records between 5 and 10 miles from the project site. | No |
| *Aspidoscelis hyperythra*<br>Orange-throated whiptail | — | —<br>WL | Inhabits low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats. Prefers washes and other sandy areas with patches of brush and rocks. Perennial plants necessary for its primary food: termites. | **None:** The project site does not contain suitable habitat to support this species due to the lack of preferred soils and scrub and chaparral vegetation. There is one recent record and one historical record within 5 miles of the project site, and four recent and five historical records between 5 and 10 miles from the project site. | No |

| Scientific Name<br>Common Name | Status | | Habitat Description[3] | Potential to Occur and Rationale[4] | Included in Impact Analysis |
|---|---|---|---|---|---|
| | USFWS[1] | CDFW[2] | | | |
| *Aspidoscelis tigris stejnegeri*<br>Coastal whiptail | — | —<br>SSC | Found in deserts and semiarid areas with sparse vegetation and open areas. Also found in woodland and riparian areas. Ground may be firm soil, sandy, or rocky. | **None:** The project site does not support suitable grassland or scrub habitat and the high level of disturbance and man-made barriers preclude this species from occurring on-site. There is one historical record within 5 miles of the project site, and four recent records between 5 and 10 miles from the project site. | No |
| *Charina umbratical*<br>southern rubber boa | — | ST | Inhabits Oak-conifer and mixed-conifer forests at elevations between roughly 5,000 to 8,200 ft. where rocks and logs or other debris provide shelter. It is definitely found in a few disjunct areas in montane Southern California in the San Bernardino and San Jacinto Mountains. | **None:** The project site does not contain suitable mixed conifer habitat for this species and is located outside the species known geographical range and is at too low of an elevation. There are two historical records within 5 miles of the project site, and four recent and six historical records between 5 and 10 miles from the project site. | No |
| *Coleonyx variegatus abbotti*<br>San Diego banded gecko | — | —<br>SSC | Prefers rocky areas in coastal sage and chaparral. | **None:** The project site does not contain suitable habitat is due to the lack of rocky habitat and scrub and chaparral vegetation. There is one recent record within 5 miles of the project site. | No |
| *Crotalus ruber*<br>Red-diamond rattlesnake | — | —<br>SSC | Found in chaparral, woodland, grassland, and desert areas from coastal San Diego County to the eastern slopes of the mountains. Occurs in rocky areas with dense vegetation. Requires rodent burrows, cracks in rocks, or surface cover objects. Often found in disturbed areas. | **None:** The project site does not contain suitable habitat is due to the lack of rocky habitat with dense vegetation. There is one historical record within 5 miles of the project site, and four historical records between 5 and 10 miles from the project site. | No |
| *Phrynosoma blainvillii*<br>Coast horned lizard | — | —<br>SSC | Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Requires open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects. | **None:** The project site lacks sandy washes and scattered bushes for cover, which the species prefers. There is three historical records within 5 miles of the project site, and one recent and nine historical records between 5 and 10 miles from the project site. | No |

| Scientific Name<br>Common Name | Status<br>USFWS[1] | Status<br>CDFW[2] | Habitat Description[3] | Potential to Occur and Rationale[4] | Included in Impact Analysis |
|---|---|---|---|---|---|
| *Thamnophis hammondii*<br>two-striped gartersnake | — | —<br>SSC | Occurs in rocky areas near water sources such as pools and streams in oak woodland, willow, coastal sage and Riversidean alluvial fan sage scrub, scrub oak, sparse pine, chaparral, and brushland habitats. | **None:** The project site does not contain suitable habitat is due to the lack of rocky habitat and scrub and chaparral vegetation. There is one recent between 5 and 10 miles from the project site. | No |

**Code Designations**

**[1] Federal Status: 2020 USFWS Listing**

- **ESU** = Evolutionary Significant Unit is a distinctive population.
- **FE** = Listed as endangered under the Federal Endangered Species Act (FESA).
- **FT** = Listed as threatened under FESA.
- **FC** = Candidate for listing (threatened or endangered) under FESA.
- **FD** = Delisted in accordance with FESA.
- **FPD** = Federally Proposed to be Delisted.
- **MBTA** = protected by the Migratory Bird Treaty Act
- **BCC** = Bird of Conservation Concern
- **—** = Not federally listed

**[2] State Status: 2020 CDFW Listing**

- **SE** = Listed as endangered under the California Endangered Species Act (CESA).
- **ST** = Listed as threatened under CESA.
- **SC** = Candidate for listing (threatened or endangered) under CESA.
- **SSC** = Species of Special Concern as identified by the CDFW.
- **FP** = Listed as fully protected under the Fish and Game Code.
- **FGC** = Fish and Game Code = protected by Fish and Game Code 3503.5
- **CR** = Rare in California.
- **—** = Not State listed

[3] **Habitat description**: Habitat description adapted from CNDDB (CDFW 2020).

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