Biological Resources Assessment and MSHCP Consistency Analysis

139-Unit Residential Project

Tentative Tract Map 38955 (PEN24-0058) Plot Plan (PEN24-0059)

City of Moreno Valley

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Acronyms and Abbreviations

AF	Aquatic Feature
APN	assessor's parcel number
BMP	best management practice
BUOW	burrowing owl
CDFW	California Department of Fish and Wildlife
CFGC	California Fish and Game Code
CIRP	Inventory of Rare and Endangered Plants of California
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
FESA	Federal Endangered Species Act
GIS	Geographic Information System
IPaC	Information for Planning and Consultation Project Planning Tool
MBTA	Migratory Bird Treaty Act
project	Moreno Valley Farm Bureau 139 (TTM 38955) Project
RWQCB	Regional Water Quality Control Board
SSC	Species of Special Concern
TTM	Tentative Tract Map
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WL	Watch List
WotS	waters of the State
WotUS	waters of the US

1 Executive Summary

This report contains the findings of MNS habitat assessment and Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) consistency analysis for the proposed Moreno Valley Farm Bureau Project located in the City of Moreno Valley, Riverside County, California. MNS Senior Biologist, Mello Dee Hrdlicka, conducted a field survey/habitat assessment on January 10, 2025. The field survey was conducted to characterize existing site conditions and assess the potential for special-status biological resources to occur within the project site and a 500-foot buffer (survey area) that could pose a constraint to implementation of the proposed project. The survey area is located within a partially developed portion of the City of Moreno Valley, north of Box Springs Road, east of Lewisia Avenue, and west of Morton Road. Natural habitats within the survey area have been heavily disturbed due to routine weed abatement activities (i.e., disking, tilling), resulting in heavily disturbed and compacted surface soils. As such, minimal native vegetation communities occur in only two pockets of the survey area, and the survey area is primarily comprised of disturbed land that is dominated by ruderal/weedy, and ornamental plant species.

According to the Western Riverside County Regional Conservation Authority's (RCA) online MSHCP Information Application, the survey area is located within the Subunit 3; San Timoteo Creek of the Northwest Area Plan. It is, however, not located withing any Criteria Cells, Conservation Areas, Core/Linkages, or Public/Quasi-Public Lands identified by the MSHCP. The survey area is located within a designated survey area for burrowing owl (*Athene cunicularia* [BUOW]) according to the RCA's online MSHCP Information Application.

There were no special-status plant species observed within the survey area during the field survey and all special-status plant species identified during the literature review and records search are not expected to occur within the survey area based on existing site conditions and a review of species-specific habitat preferences, occurrence records, known distributions, and elevation ranges.

There were no special-status wildlife species observed within the survey area during the field survey. Based on the results of the field survey and a review of specific habitat preferences, occurrence records, known distributions, and elevation ranges, it was determined that the survey area has a low potential to support burrowing owl (*Athene cunicularia* [BUOW}; a State Species of Special Concern [SSC]), Cooper's hawk (*Accipiter cooperii*; a California SSC), loggerhead shrike (*Lanius ludovicianus*; a California SSC), California horned lark (*Eremophilia alpestris actia*; a California Watchlist), Western mastiff bat (*Eumops perotis californicus*; a State SSC), and western yellow bat (*Lasiurus xanthinus*; a State SSC), Orange-throated whiptail (*Aspidoscelis hyperythrus*;; a State SSC), red-diamond rattlesnake (*Crotalus ruber*; a State SSC), and Crotch's bumble bee (*Bombus crotchii;* a state Candidate species. All remaining special-status wildlife species identified during the literature review and records search are not expected to occur within the survey area.

An open concrete channel extends along the northern boundary of the site for approximately 400 feet to an existing outlet structure. The channel is a regional stormdrain facility maintained by the City of Moreno Valley. Proposed changes to the concrete channel are limited to connection of the onsite stormdrain for the project with temporary project impacts estimated at 0.10-acres. Any temporary impacts to the concrete channel will be restored to pre-existing grade and condition through replacement of any damaged or removed concrete.

2 Introduction

This report contains the findings of MNS Engineers, Inc.'s (MNS) Biological Resources Assessment for the proposed Moreno Valley Farm Bureau Project (project or project site) located in the City of Moreno Valley, Riverside County, California. MNS biologists conducted a field survey/habitat assessment on January 10, 2025. The field surveys were conducted to characterize existing site conditions and assess the potential for special-status[1] biological resources to occur within the project site and a 500-foot buffer (survey area) that could pose a constraint to implementation of the proposed project. Special attention was given to the suitability of the habitat within the survey area and its potential to support special-status biological resources that were identified by the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database RareFind 5 (CNDDB; CDFW 2025a), the CNDDB Biogeographic Information and Observation System (CDFW 2025b), the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California (CIRP; CNPS 2025), the United State Fish and Wildlife Service (USFWS) Information for Planning and Consultation Project Planning Tool (IPaC; USFWS 2025a), and other databases as potentially occurring in the vicinity of the survey area.

2.1 Project Location

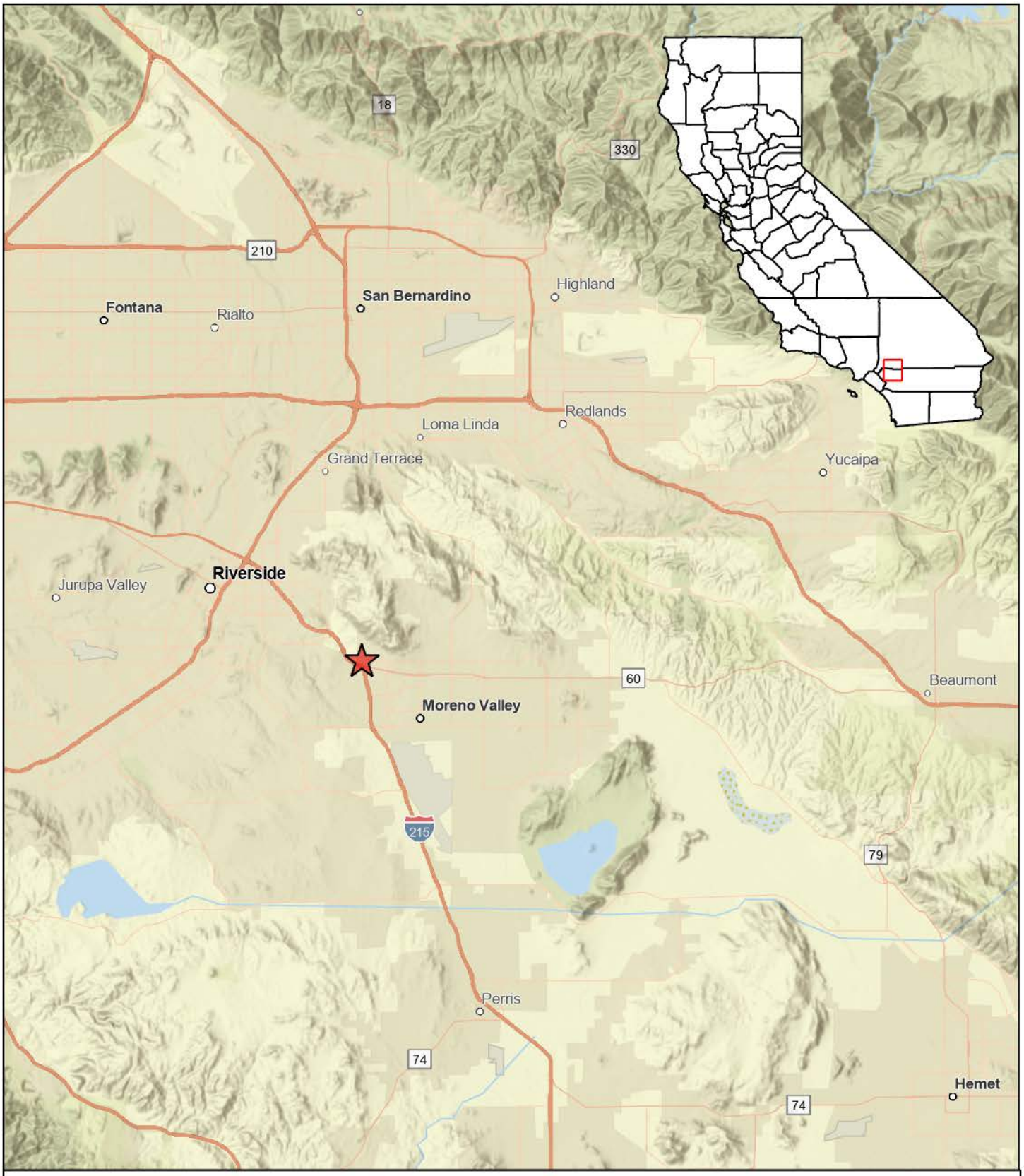
The project site is located at 21160 Box Springs Road, in the City of Moreno Valley, Riverside County, California (project site), and includes Assessor Parcel Numbers (APNs): 256-200-002, 256-200-003, and 256-200-004. Regional access to the project site is provided by Interstate 215 (I-215) and State Route 60 (SR-60); the I-215/SR-60 freeway interchange is located approximately 550 feet south of the project site. Local access to the project site is provided by Box Springs Road, which borders the site to the south. Refer to Figure 1: Regional Vicinity and Figure 2: Project Site.

2.2 Project Description

The City of Moreno Valley is processing an application for a Tentative Tract Map (TTM 38955), for the development of a 139-unit multi-family residential project within three parcels totaling approximately 9.33 gross acres, including all associated access, circulation, infrastructure, utility hardscape/landscape improvements. Proposed open space and recreational amenities within the site would include a clubhouse, pool, and gym, 1.04-acre (4,5302.4 square feet) common open space area, and 21,165 square feet of private outdoor space consisting of decks or patios attached to each unit. The proposed project also includes demolition of the existing structures on-site.

Prior to conducting the field survey, MNS Senior Biologist, Mello Dee Hrdlicka, conducted thorough literature reviews and records searches to determine which special-status biological resources have the potential to occur on or within the general vicinity of the survey area. A general habitat assessment or field survey was conducted to document existing biological conditions and determine the potential for special-status plant and wildlife species to occur within the survey area.

[1] As used in this report, "special-status" refers to species that are either federally-/State-listed, proposed, or candidates; plant species that have been designated a California Rare Plant Rank by the California Native Plant Society; wildlife species that are designated by the California Department of Fish and Wildlife as Fully Protected, Species of Special Concern, or Watch List; or State/locally rare vegetation communities.



Project Site

MORENO VALLEY FARM BUREAU PROJECT
Biological Resources Assessment and MSHCP Consistency Analysis

MNS

0 1 2 3 4
Miles

REGIONAL VICINITY

Figure 1

MNS

0 200 400

Feet

MORENO VALLEY FARM BUREAU PROJECT
Biological Resources Assessment &
MSHCP Consistency Analysis

PROJECT SITE

Figure 2

3 Methodology

3.1 Literature Review

Prior to conducting the field survey, literature reviews and records searches were conducted within a 5-mile radius for special-status biological resources potentially occurring on or within the vicinity of the survey area. Previous special-status plant and wildlife species occurrence records within the USGS *Riverside East, Fontana, San Bernardino South, Steele Peak, Redlands, Riverside West, Sunnymead, Lake Mathews, and Perris, California 7.5*-minute quadrangles were determined through a query of the California Biogeographic Information and Observation System (BIOS) (CDFW 2025a), the California Natural Diversity Database (CNDDB) (CDFW 2025b), and the California Native Plant Society (CNPS) Online Inventory (CNPS 2025). In addition, the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) Project Planning Tool (USFWS 2025a), the USFWS National Wetlands Inventory (USFWS 2025b), the USFWS Threatened and Endangered Species Active Critical Habitat Report (USFWS 2025c), the Western Riverside County Regional Conservation Authority's (RCA) online Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Information Website (RCA 2025), and those species covered under the Western County MSHCP (Dudek 2025) were also reviewed. Standard field guides and texts were reviewed for specific habitat requirements of special-status species, as well as the following resources:

- Calflora Database (Calflora 2025)
- Google Earth Pro Historical Aerial Imagery from 1985 to 2025 (Google, Inc. 2025)
- Cornell Lab of Ornithology's eBird Database (eBird 2025)
- *Custom Soil Resource Report for Western Riverside Area, California* (United States Department of Agriculture [USDA] 2025)

3.2 Field Survey

MNS Senior biologist Mello Dee Hrdlicka inventoried and evaluated the extent and conditions of the vegetation communities found within the boundaries of the survey area and confirmed existing conditions within the survey area on January 10, 2025. MNS biologist did not encounter any access restrictions and were able to survey the entire survey area. Refer to Table 1 below for a summary of the survey date, timing, surveyors, and weather conditions.

Table 1. Survey Date, Time, Surveyors, and Weather Conditions

Date	Time (start/finish)	Surveyors	Temperature	Wind Speed (mph) (start/finish)
January 10, 2025	1110/1402	Mello Dee Hrdlicka	61 sunny / 66 sunny	2-7

According to the RCA's online MSHCP Information Application, the survey area is not located within any Criteria Cells, Conservation Areas, Cores/Linkages, or Public/Quasi-Public Lands identified by the MSHCP. Additionally, the survey area is located within a designated survey area for burrowing owl (*Athene cunicularia* [BUOW]). The site also occurs within the San Timoteo Habitat Management Unit.

Vegetation communities preliminarily identified on aerial photographs during the literature review were verified in the field by walking meandering transects through the vegetation communities and along

boundaries between vegetation communities. Naturally vegetated areas typically have a higher potential to support Special-status plant and wildlife species than areas that are highly disturbed or developed, which usually have lower quality and/or reduced amounts of habitat for wildlife. All plant and wildlife species observed during the habitat assessment, as well as dominant plant species within each vegetation community, were recorded in a field notebook, as described below. In addition, site characteristics such as condition of on-site vegetation communities were recorded.

3.3 Vegetation Communities

Vegetation communities occurring within the survey area were delineated on ariel photograph during the field survey and later digitized to quantify the area of each vegetation community in acres. Vegetation communities were classified in accordance with the vegetation communities provide in *A Manual of California Vegetation* (Sawyer et al. 2009) and cross referenced with the *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986) and the 2012 Western Riverside Vegetation Map for the purposes of evaluation the presence or absence of special-status vegetation communities identified in the CNDDB records search, which uses the Holland vegetation system.

3.4 Plants

Plant species observed during the habitat assessment were identified by visual characteristics and morphology in the field and recorded in a field notebook. Unfamiliar plants were photographed in the field and identified later using taxonomic guides. Plant nomenclature used in this report follows the *Jepson eFlora* (Jepson Flora Project 2022) and scientific names are provided immediately following common names of plant species (first reference only).

3.5 Wildlife

Wildlife species detected during habitat assessment by sight, calls, tracks, scat burrows, nests, or other types of sign were recorded in a field notebook. Field guides used to assist with identification of species during the habitat assessment include *The Sibley Guide to Birds* (Sibley 2014) for birds. *A Field Guide to Western Reptiles and Amphibians* (Stebbins 2003) for herpetofauna, and *A Field Guide to Mammals of North America* (Reid 2006). Although common names of wildlife species are generally well standardized, scientific names are provided immediately following common names of wildlife species in the report. To the extent possible, nomenclature of birds follows the most recent annual supplement of the America Ornithological Union's *Checklist of North American Birds* (Chesser et al. 2019), nomenclature of amphibians and reptiles follows *Scientific and Standardized English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in Our Understanding* (Crother 2017), and nomenclature for mammals follows the *Bats of the United States and Canada* (Harvey et al. 2011) and *Revised Checklist of North American Mammals North of Mexico* (Bradley et al. 2014).

4 Results and Discussion

4.1 Existing Conditions

4.1.1 Topography and Soils

An approximately 1.73-acre area of the project site along the frontage with Box Springs Road is developed with a small, linear strip mall of separate offices and storefronts. There are two paved entrances to the parking lot in front of the strip mall and a graded parking area behind the strip mall. The remainder of the site is vacant and is subject to routine weed abatement activities (i.e., disking, tilling), resulting in heavily disturbed surface soils. The site topography is relatively flat terrain with elevations ranging from approximately 1,533 to 1,564 feet above mean sea level. Based on a review of Google Earth aerial imagery

from 1985 to 2025, the survey area has been routinely cleared as a result of routine weed abatement activities (i.e., disking, tiling), resulting in heavily disturbed surface soils. Refer to Appendix A for representative photographs of the survey area taken during the field survey.

According to the *Custom Soil Resource Report for Western Riverside Area, California* (USDA 2023), the survey area is underlain by the following soil units: Fallbrook fine sandy loam, shallow, 8 to 15 percent slopes eroded (FkD2), Hanford coarse sandy loam, 2 to 8 percent slopes (HcC), Monserate sandy loam, 5 to 8 percent slopes, eroded (MmC2), and Monserate sandy loam, shallow, 5 to 15 percent slopes, eroded (MnD2). Refer to Figure 3, *Soil Map*, for a depiction of soil units that have been mapped within the survey area.

4.1.2 Surrounding Land Uses

Land uses in the immediate vicinity of the survey area include residential, park and commercial land uses. Residential uses are located to the west and north of the survey area, park resources to the northeast, with commercial uses along the south and southeast of the survey area.

4.2 Vegetation Communities and Other Land Uses

Natural habitats within the survey area have almost exclusively been eliminated due to routine weed abatement activities (i.e., disking, tiling), resulting in heavily disturbed surface soils. As such, native vegetation communities do not occur. The survey area is primarily comprised of disturbed habitat that is dominated by ruderal/weedy and ornamental plant species. In addition, developed areas were also found within the survey area. These land cover types are depicted in Figure 4, *Vegetation Communities*, and described in further detail below. Additionally, refer to Appendix B, *Plant and Wildlife Species Observed List*, for a complete list of plant species observed within the survey area during the field survey.

4.2.1 Disturbed Habitat

Disturbed habitat comprises approximately 7.35 acres of the project site. Disturbed areas within the survey area do not comprise a natural plant community and instead consist of unpaved bare ground or areas that have been previously disked or tilled as part of routine weed abatement activities. Surface soils within these areas have been heavily disturbed/compacted as a result of anthropogenic disturbances and are either devoid of vegetation or support non-native, ruderal plant species or early successional plant species. Plant species observed in the disturbed area include turkey mullein (*Croton setiger*), telegraph weed (*Heterotheca grandiflora*) and short-podded mustard (*Hirschfeldia incana*).

4.2.2 Developed

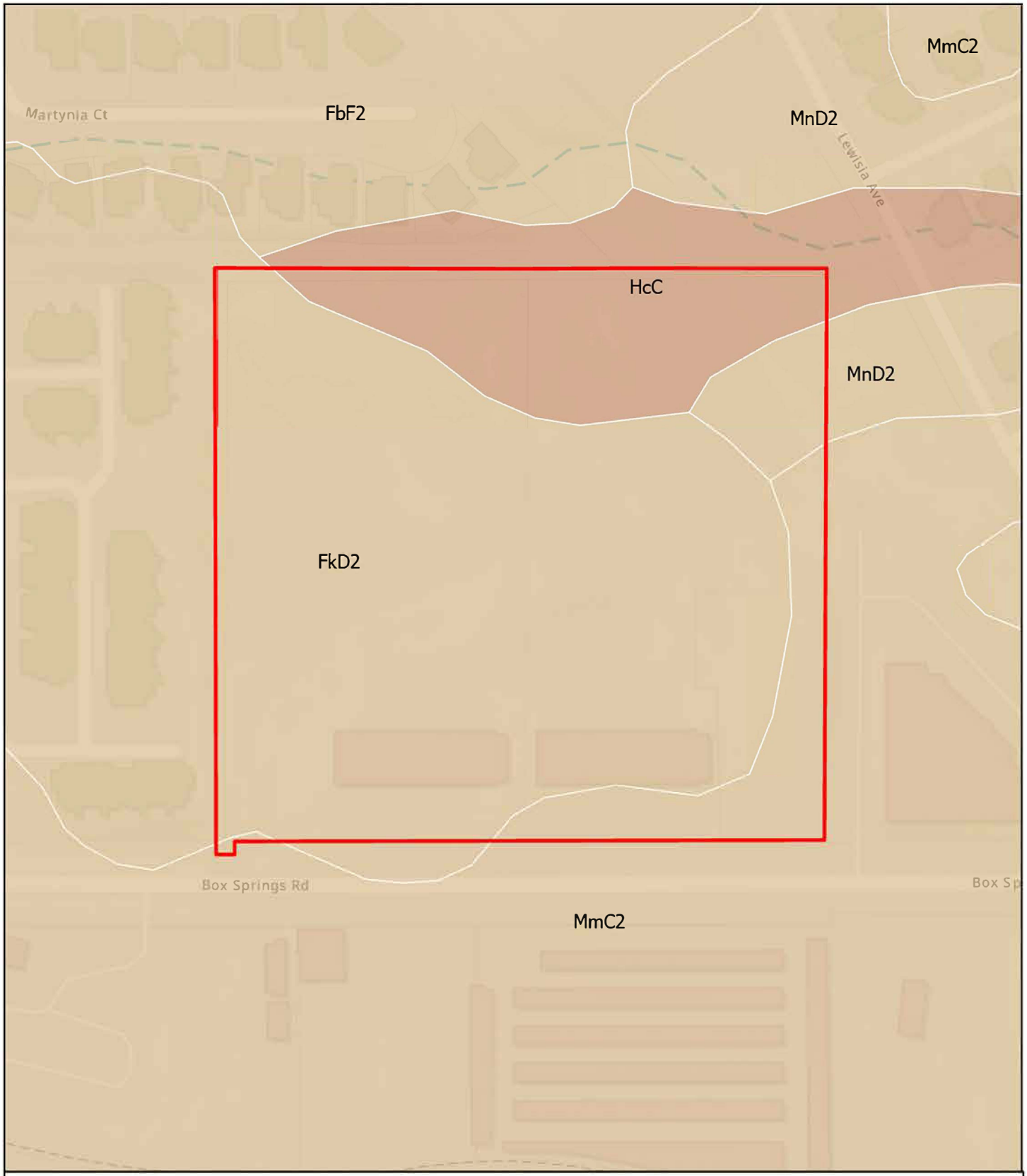
Developed areas make up 1.73 acres of the project site. They consist of the frontage along Box Springs Road with a small, linear strip mall of separate offices and storefronts. There are two paved entrances to the parking lot in front of the strip mall and a graded parking area behind the strip mall.

4.2.3 Buckwheat-willow Scrub

Two small areas make up Buckwheat-willow scrub comprising 0.25 acres of the project site. These areas are comprised of rocky outcroppings preventing the areas from being disked or tiled, as a result of the lack of these activities there are small pockets of plant species including California buckwheat (*Eriogonum fasciculatum*), Goodding's willow (*Salix gooddingii*) and Fremont cottonwood (*Populus fremontii*). However, these small areas do not function as riparian or coastal sage habitat due to the disturbed nature of the surrounding area.

4.3 Wildlife

Natural vegetation communities provide foraging habitat, nesting/denning sites, and shelter from adverse weather or predation. This section provides a general discussion of common wildlife species that were



MNS

0 125 250

Feet

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SOILS MAP

Figure 3

MNS

0 50 100
Feet

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VEGETATION COMMUNITIES

Figure 4

detected during the field survey or that are expected to occur based on existing site conditions. The discussion is to be used as a general reference and is limited by the season, time of day, and weather conditions in which the field survey was conducted. Refer to Appendix B for a complete list of wildlife species observed during the field survey.

4.3.1 Fish

No fish or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would support populations of fish were observed in the survey area during the field survey. Therefore, no fish are expected to occur within the survey area.

4.3.2 Amphibians

No amphibians or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would provide suitable breeding habitat for amphibians were observed in the survey area. Therefore, no amphibian species are expected to occur.

4.3.3 Reptiles

No reptiles were observed during the field survey. However, the survey area is expected to provide suitable habitat for a limited number of reptilian species that are acclimated to edge or urban environments. Reptilian species that may be present within the survey area include Great Basin fence lizard (*Sceloporus occidentalis langipes*) and San Diego alligator lizard (*Elgaria multicarinata webbi*).

4.3.4 Birds

The survey area provides marginal foraging and nesting habitat for a variety of resident and migrant bird species that are adapted to a high degree of disturbance such as traffic, noise, and light pollution associated with the surrounding development. Thirteen (13) bird species were detected during the field survey, some of which included Anna's hummingbird (*Calypte anna*), house finch (*Haemorhous mexicanus*), bushtit (*Parus minimus*), Blue-gray gnatcatcher (*Polioptila caerulea*), and savannah sparrow (*Passerculus sandwichensis*).

Nesting birds are protected pursuant to the federal Migratory Bird Treaty Act (MBTA) of 1918 and the California Fish and Game Code (CFGC). To maintain compliance with the MBTA and CFGC, clearance surveys are typically required prior to any ground disturbance or vegetation removal activities to avoid direct impacts to active bird nests and/or nesting birds. Consequently, if an active bird nest is destroyed or if project activities result in indirect impacts (e.g., nest abandonment, loss of reproductive effort) to nesting birds, it is considered "take" and is potentially punishable by fines and/or imprisonment. The survey area provides marginal nesting habitat for year-round and seasonal avian residents as well as migrating songbirds that could occur in the area. Additionally, the survey area provides nesting habitat for avian species that nest on the open ground (i.e., killdeer [*Charadrius vociferus*], western meadowlark). No nests were observed within the survey area during the field survey.

4.3.5 Mammals

One mammal species was observed during the field survey, desert cottontail (*Sylvilagus audubonii*). The survey area and surrounding area provide suitable habitat for additional mammalian species adapted to living in edge or urban environments. However, weed abatement and surrounding development limits the potential for mammalian species to occur. Other common mammalian species that may occur within the survey area include opossum (*Didelphis virginiana*) and racoon (*Procyon lotor*). Bats occur throughout most of southern California and may use the survey area as foraging habitat although it is heavily disturbed. However, there is no roosting habitat present on the project site or in the 500-foot survey area.

4.3.6 Invertebrates

No special status invertebrates were observed during the field survey. However, the survey area supports suitable habitat for Crotch's bumble bee (CBB), which occurs primarily in southern California. This species is located in grassland and scrub areas. It requires a hotter and drier environment than other bumble bee species and nests underground, often in abandoned rodent dens. It is a nonmigratory species of bumble bee. The bee's food plants include milkweed, lupines, poppies, phacelias, and sages. Due to the wide range of host plants visited by Crotch's bumble bee, it is characterized as a dietary generalist. Suitable habitat occurs throughout the project site, with the exception of the developed areas along the frontage of the property.

4.4 Wildlife Connectivity

Wildlife corridors and linkages are key features for wildlife movement between habitat patches. Wildlife corridors are generally defined as those areas that provide opportunities for individuals or local populations to conduct seasonal migrations, permanent dispersals, or daily commutes, while linkages generally refer to broader areas that provide movement opportunities for multiple keystone/focal species or allow for propagation of ecological processes (e.g., for movement of pollinators), often between areas of conserved land.

The survey area is located within a moderately developed area of Moreno Valley with a small area designated as park open space to the northeast that could function as something of a movement corridor for mammals. However, surrounding roads and residential development have fragmented the connection between the survey area and surrounding open space and naturally occulting vegetation communities. The disturbed landscape of the survey area and limited vegetation for cover most likely precludes the movement of wildlife through the survey area. Further, elevated noise levels, vehicle traffic, lighting, and human presence associated with Box Springs Road, Lewisia Avenue, Morton Road, and surrounding residential development all decrease the suitability of the survey area to be used as a wildlife movement corridor or linkage.

4.5 Special-Status Biological Resources

The CNDDB, CIRP, and IPaC were queried for reported locations of special-status plant and wildlife species as well as special-status natural vegetation communities in the USGS *Riverside East, San Bernardino South, Steele Peak, Redlands, Riverside West, Sunnymead, Lake Mathews,* and *Perris, California* 7.5-minute quadrangles. The field survey was conducted to assess the conditions of the habitat(s) within the boundaries of the survey area to determine if the existing vegetation communities, at the time of the field survey, have the potential to provide suitable habitat(s) for special-status plant and wildlife species. Additionally, the potentials for special-status species to occur within the survey area were determined based on the reported locations in the CNDDB and CIRP and the following:

- Present: the species was observed or detected within the survey area during the field survey.
- High: Occurrence records (within 20 years) indicate that the species has been known to occur on or within one mile of the survey area and the site is within the normal expected range of this species. Intact, suitable habitat preferred by this species occurs within the survey area and/or there is viable landscape connectivity to a local known extant population(s) or sighting(s).
- Moderate: Occurrence records (within 20 years) indicate that the species has been known to occur within one mile of the survey area and the site is within the normal expected range of this species. There is a suitable habitat within the survey area, but the site is ecologically isolated from any local known extant populations or sightings.

- Low: Occurrence records (within 20 years) indicate that the species has been known to occur within five miles of the survey area, but the site is outside of the normal expected range of the species and/or there is poor quality or marginal habitat within the survey area.
- Not Expected: There are no occurrence records of the species occurring within five miles of the survey area, there is no suitable habitat within the survey area, and/or the survey area is outside of the normal expected range for the species.

The CNDDB, CNPS, and IPaC searches identified Forty-three (43) special-status plant species and sixty-four (64) special-status wildlife species as having been previously recorded within the USGS *Riverside East, Fontana, San Bernardino South, Steele Peak, Redlands, Riverside West, Sunnymead, Lake Mathews, and Perris, California* 7.5-minute quadrangles. In addition, seven special-status vegetation communities were identified in the literature search results. Special-status plant and wildlife species were evaluated for their potential to occur within the survey area based on habitat preferences, availability and quality of suitable habitat, and known distributions. Special-status biological resources identified during the literature review as having the potential to occur within the vicinity of the survey area are presented in *Table D-1: Potentially Occurring Special-Status Biological Resources*, provided in Appendix C.

4.5.1 Special-Status Plant Species

Forty-three (43) special-status plant species have been recorded in the USGS *Riverside East, Fontana, San Bernardino South, Steele Peak, Redlands, Riverside West, Sunnymead, Lake Mathews, and Perris, California* 7.5-minute quadrangles by the CNDDB, CNPS, and IPac (refer to Appendix D). No special-status plant species were observed within the survey area during the field survey. The survey is primarily comprised of disturbed/ruderal non-native herbs and disturbance tolerant native wildflowers. Vegetation that is present is primarily consists of common short-pod mustard, turkey mullein and telegraph weed. Additionally, routine weed abatement within the survey area has reduced the potential for the survey area to provide suitable habitat for special-status plant species. Based on existing site conditions and a review of specific habitat preferences, occurrence records, known distributions, and elevation ranges, it was determined that the special-status plant species identified by the CNDDB, CNPS, AND IPaC are not expected to occur within the survey area.

4.5.2 Special-Status Wildlife Species

Sixty-four (64) special-status wildlife species have been recorded in the USGS *Riverside East, Fontana, San Bernardino South, Steele Peak, Redlands, Riverside West, Sunnymead, Lake Mathews, and Perris, California* 7.5-minute quadrangles by the CNDDB and IPac (refer to Appendix D). No special-status wildlife species were observed within the survey area during the field survey. Based on the results of the field survey and a review of specific habitat preferences, occurrence records, known distributions, and elevation ranges, it was determined that the survey area has a low potential to support burrowing owl (*Athene cunicularia* [BUOW}; a State Species of Special Concern [SSC]), Cooper's hawk (*Accipiter cooperii*; a California SSC), loggerhead shrike (*Lanius* ludovicianus; a California SSC), California horned lark (*Eremophilia alpestris actia*; a California Watchlist), western mastiff bat (*Eumops perotis californicus*; a State SSC), and western yellow bat (*Lasiurus xanthinus*; a State SSC), Orange-throated whiptail (*Aspidoscelis hyperythrus*;; a State SSC), and red-diamond rattlesnake (*Crotalus ruber*; a State SSC) and Crotch's bumble bee (*Bombus crotchii);* a state Candidate species. All remaining special-status wildlife species identified during the literature review and records search are not expected to occur within the survey area.

Due to regional significance in western Riverside County, the potential occurrence of Stephens' kangaroo rat (*Dipodomys stephensi* [SKR]) is described in further detail below. In addition, the potential occurrence of BUOW is described further in section 5.6.3.

Stephens' Kangaroo Rat

The SKR is 1 of 19 subspecies of kangaroo rat (genus *Dipodomys*) that comprises a distinct group of rodents from the family Heteromyidae. SKR is federally listed as endangered, and State listed as threatened. SKR occurs in western Riverside County, existing in fragmented populations due to the urban landscape. The northern end of SKR's range in western Riverside County extends into southwestern San Bernardino County and the southern end extends into northern San Diego County. Preferred habitats include open grasslands and sparse coastal sage scrub approximately 180 to 4,101 feet above mean sea level. SKR prefers open habitats with less than 50% protective cover with soft, well-drained sandy substrates for building burrows. This species is nocturnal and solitary, spending little time above ground.

Separate from the MSHCP, USFWS and CDFW issued the Riverside County Habitat Conservation Agency a Section 10(a) Permit and CFGC Section 2081 Management Authorization in 1996 establishing the Long-Tern Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP). Based on a review of the SKR HCP, the survey area is located outside the boundaries of the SKR HCP and associated Core Reserves.

According to the CNDDB, there are sixteen (16) occurrence records for SKR within the USGS *Riverside East, California* 7.5-minute quadrangle (CDFW 2022a). The closest, presumed extant occurrence record was recorded in 1989 in Moreno Valley, approximately 0.25-mile northwest of the survey area.

Suitable sparse coastal sage scrub and open grassland habitats with sandy soils preferred by this species for burrowing are not present within the survey area. The survey area is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring. Further, ongoing weed abatement on-site further reduces the suitability of the survey area to support SKR.

4.5.3 Special-Status Vegetation Communities

Seven special-status vegetation community have been reported in the USGS *Riverside East, Fontana, San Bernardino South, Steele Peak, Redlands, Riverside West, Sunnymead, Lake Mathews, and Perris, California* 7.5-minute quadrangles by the CNDDB: Southern Sycamore Alder Riparian Woodland, Southern Willow Scrub, Southern Riparian Scrub, Southern Riparian Forest, Southern Cottonwood Willow Riparian Forest, Southern Coast Live Oak Forest, and Riversidian Alluvial Fan Sage Scrub. No special-status vegetation communities were observed within the survey area during the field survey.

4.6 Critical Habitat

Under the definition used by the FESA, "Critical Habitat" refers to specific areas within the geographical range of a species that were occupied at the time it was listed that contain the physical or biological features that are essential to the survival and eventual recovery of that species and that may require special management considerations or protection, regardless of whether the species is still extant in the area. Areas that were not known to be occupied at the time a species was listed can also be designated as Critical Habitat if they contain one or more of the physical or biological features that are essential to that species' conservation and if the occupied areas are inadequate to ensure the species' recovery. If a project may result in take or adverse modification to a species' designated Critical Habitat and the project has a federal nexus, the project proponent may be required to provide suitable mitigation. Projects with a federal nexus include those that occur on federal lands, require federal permits (e.g., federal Clean Water Act [CWA] Section 404 permit), or receive any federal oversight or funding. If there is a federal nexus, then the federal agency that is responsible for providing funds or permits would be required to consult with the USFWS under the FESA. The survey area is not located within any federally designated Critical Habitat (refer to Figure 5, Critical Habitat for Threatened & Endangered Species).

Project Site

MNS

0 50 100
Feet

MORENO VALLEY FARM BUREAU PROJECT
Biological Resources Assessment & MSHCP Consistency Analysis
CRITICAL HABITAT for THREATENED & ENDANGERED SPECIES
Figure 5

4.7 State and Federal Jurisdictional Areas

There are three agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The United States Army Corps of Engineers (USACE) Regulatory Branch regulates discharge of dredge or fill material into waters of the U.S. (WoUS) pursuant to Section 404 of the CWA and Section 10 of the Rivers and Harbors Act. Of the State Agencies, the Regional Water Quality Control Board (RWQCB) regulates discharges to waters of the State WotS), including wetlands, pursuant to Section 401 of the CWA, Section 13263 of the California Porter-Cologne Water Quality Control Act (Porter-Cologne Act), and *State Wetland Definition and Procedures for Discharge of Dredged or Fill Material to Waters of the State*; and the CDFW regulates alterations to lakes, streambeds, and riparian habitats pursuant to Section 1600 *et seq*. of the CFGC.

An open concrete channel extends along the northern boundary of the site for approximately 400 feet to an existing outlet structure. The channel is a regional stormdrain facility maintained by the City of Moreno Valley. Proposed changes to the concrete channel are limited to connection of the stormdrain for the project (approximately 0.10-acres). Any temporary impacts to the concrete channel will be restored to pre-existing conditions through replacement of any damaged or removed concrete.

4.7.1 United States Army Corps of Engineers

USACE regulates discharge of dredge or fill material into WoUS pursuant to Section 404 of the CWA and Section 10 of the Rivers and Harbors Act. The concrete channel is expected to be considered a Waters of the US that would require issuance of a 404 authorization. Mitigation is anticipated to be limited to replacement of the concrete at a 1:1 ratio.

4.7.2 Regional Water Quality Control Board

RWQCB regulates discharges to surface waters pursuant to Section 401 of the CWA and Section 13263 of the Porter-Cologne Act. The concrete channel would be considered a Waters of the US that would require issuance of a 401 Water Quality Certification. Mitigation is anticipated to be limited to replacement of the concrete at a 1:1 ratio.

4.7.3 California Department of Fish and Wildlife

CDFW regulates alterations to lakes, streambeds, and riparian habitats pursuant to Section 1600 *et seq.* of the CFGC, which would include the onsite concrete lined channel. Mitigation is anticipated to be limited to replacement of the concrete at a 1:1 ratio.

5 MSHCP Consistency Analysis

This section contains the findings of MNS' MSHCP consistency analysis for the proposed project. The purpose of this consistency analysis is to summarize the biological data for the proposed project and to document the project's consistency with the goals and objectives of the MSHCP. This analysis is focused on the project site. According to the RCA's online MSHCP Information Application, the project site is not located within any Criteria Cells, Conservation Areas, Cores/Linkages, or Public/Quasi-public lands

Project Site
Habitat Management Unit
Parcel Boundaries

MORENO VALLEY FARM BUREAU PROJECT
Biological Resources Assessment & MSHCP Consistency Analysis

MNS

0 50 100
Feet

MSHCP CONSERVATION AREAS

Figure 6

identified by the MSHCP (refer to Figure 6, *MSHCP Conservation Areas*). According to the Western Riverside County Regional Conservation Authority's online MSHCP Information Tool query, the Subject Parcel is within the San Timoteo Habitat Management Unit (HMU) but is not mapped within or adjacent to a Criteria Cell or Cell Group, and therefore not targeted for conservation. The project site is within a designated survey area for BUOW according to the RCA's online MSHCP Information Application.

5.1.1 Project Area

The project site is located at 21160 Box Springs Road, in the City of Moreno Valley, Riverside County, California (project site), and includes Assessor Parcel Numbers (APNs): 256-200-002, 256-200-003, and 256-200-004. As previously stated, according to the RCA's online MSHCP Information Application, the project site is located within a designated survey area for BUOW and the San Timoteo Habitat Management Unit. The project site is not located within any Criteria Cells, Conservation Areas, Cores/Linkages, or Public/Quasi-Public lands identified by the MSHCP.

5.1.2 Project Description

The proposed project includes the construction of a townhome residential development within three parcels totaling 9.33 acres.

5.1.3 Covered Roads

The project does not include the construction of, or improvements to, any Covered Roads referred in Section 7 of the MSHCP. Therefore, a discussion related to the proposed project and Covered roads is not warranted.

5.1.4 General Setting

The project site is located within a moderately developed portion of the City of Moreno Valley, north of Box Springs Road, west of Lewisia Avenue, and east of Morton Road. Natural habitats within the project site have been mostly eliminated due to routine weed abatement activities (i.e., disking, tiling), resulting in heavily disturbed and compacted surface soils. The topography of the project site is generally flat. Land uses in the immediate vicinity of the project site include residential, commercial and park land uses. Residential uses surround the project to the west, north and east boundaries of the site, along with park uses to the east boundary. Additionally, commercial uses are located to the southern boundary of the site.

5.2 Reserve Assembly Analysis

According to the RCA's online MSHCP Information Application, the project site is not located within any Criteria Cells, Conservation Areas, Cores/Linkages, or Public/Quasi-Public lands identified by the MSHCP. As previously stated, according to the Western Riverside County Regional Conservation Authority's online MSHCP Information Tool query, the Subject Parcel is within the San Timoteo Habitat Management Unit (HMU) but is not mapped within or adjacent to a Criteria Cell or Cell Group, and therefore not targeted for conservation.

5.3 Vegetation Mapping

As stated in Section 6.3.1 of the MSHCP, project-level vegetation mapping may be required for projects that meet certain criteria to assess whether conservation is required. MNS conducted a review of the 2012 vegetation layer presented in the RCA's online MSHCP Information Application and aerial photography to understand existing site conditions and extent of any disturbances that have occurred on the project site. In addition, a field survey was conducted in order to document the extent and condition of the vegetation communities occurring within the boundaries of the project site.

Vegetation communities occurring within the project site were delineated on an aerial photograph during field surveys and later digitized to quantify the area of each vegetation community in acres.

Based on the results of the field survey, natural habitats within the project site have been eliminated due to routine weed abatement activities (i.e., disking, tiling), resulting in heavily disturbed and compacted surface soils. As such, minimal native vegetation communities occur in only two pockets of the survey area, and the survey area is primarily comprised of disturbed land that is dominated by ruderal/weedy, low-growing plant species and ornamental plant species (refer to Figure 4, *Vegetation Communities*). Refer to Table 2 below for a summary of the vegetation communities and land cover types within the project site.

Table 2: Vegetation Communities and Land Cover Types

Vegetation Community/Land Cover	Project Site
Buckwheat-willow scrub	0.25 acres
Disturbed Habitat	7.35 acres
Developed	1.73 acres
Total Acreage*	**9.33 acres**

*Total may not equal to sum due to rounding.

5.4 Protection of Species Associated with Riparian/Riverine Resources and Vernal Pools

5.4.1 Riparian/Riverine

As defined under Section 6.1.2 of the MSHCP, riparian/riverine resources are areas dominated by trees, shrubs, persistent emergent plants, or emergent mosses and lichens which occur close to or are dependent upon nearby freshwater, or areas with freshwater flowing during all or a portion of the year. Conservation of these areas is intended to protect habitat that is essential to a wide variety of listed or special-status water-dependent fish, amphibian, avian, and plat species.

As documented during the site visit, an open concrete channel extends along the northern site boundary to an existing outlet structure. Mitigation is anticipated to be limited to replacement of any concrete removed or damaged at a 1:1 ratio during construction of the stormdrain connection. The concrete channel does support stormwater flowing during all or a portion of the year, however, it does not support vegetation, wetlands or provide any biological function, other than flood control. As a result, this feature would not require a Determination of Biologically Equivalent or Superior Preservation (DBESP) since mitigation would be limited to replacement of any concrete removed or damaged.

5.4.2 Vernal Pools

One of the factors for determining the presence of vernal pools would be demonstrable evidence of seasonal ponding in an area of topographic depression that is not subject to flowing waters. Prior to conducting the habitat assessment, a review of historical aerial photographs using Google Earth was conducted. In addition, a review of the USDA Custom Soil Resource Report for Western Riverside Area, California, was also

conducted to determine the soil associations within the project site. The MSHCP lists two general classes of soils known to be associated with special-status plant species and presence of vernal pool habitat: clay soils and Traver-Domino Willow association soils. The specific clay soils known to be associated with special-status species/vernal pool habitat within the MSHCP Plan Area include Bosanko, Auld, Altamont, and Porterville series soils, whereas Traver-Domino Willows association includes saline-alkali soils largely located along floodplain areas of the San Jacinto River and the Salt Creek flood control channel.

Based on a review of the *Custom Soil Resource Report for Western Riverside Area, California* (USDA 2025), none of soil classes (e.g., Bosanko, Auld, Altamont, and Porterville series and Traver-Domino Willows association) known to be associated with vernal pool habitat occur within the project site. The mapped soils throughout the project site primarily consist of sandy loam textures and not the clay soil textures which are needed to form the impermeable restrictive duripan layer below the soils surface.

No evidence of hydrology or vernal pool indicator plant species were observed during the field survey. Based on a review of the *Custom Soil Resource Report for Western Riverside Area, California* (USDA 2025), none of the soil classes (e.g., Bosanko, Auld, Altamont, and Porterville series and Traver-Domino Willows association) known to be associated with vernal pool habitat occur within the survey area. The mapped soils throughout the survey area primarily consist of sandy loam textures and not the clay soil textures which are needed to form the impermeable restrictive duripan layer below the soils surface. Therefore, no direct or indirect impacts are expected to occur to vernal pools.

Based on the results of the vernal pool habitat assessment, no vernal pools are expected to occur within the survey area. In addition, the survey area is separated from extant populations of Riverside fairy shrimp. Therefore, no direct or indirect impacts area expected to occur to Riverside fairy shrimp.

5.4.3 Fairy Shrimp

One species of fairy shrimp has been recorded in the USGS *Riverside East, California* 7.5-minute quadrangle: Riverside fairy shrimp (*Streptocephalus woottoni*). Riverside fairy shrimp are restricted to deep seasonal vernal pools, vernal pool like ephemeral ponds, stock ponds, and other human modified depressions that are atypically dry a portion of the rear, but usually are filled by late fall, winter or spring rains, and may persist through May. In Riverside County, the species has been found in pools formed over the following soils: Murrieta stony clay loams, Las Posas series, Wyman clay loam, and Willows soils. According to the CNDDB, there are two (2) occurrence records for Riverside fairy shrimp with the USGS *Riverside East, California* 7.5-minute quadrangle. The closest occurrence (Occurrence Number 28) was recorded in 1998, approximately 4-miles southeast of the project site in a complex of pools on March Airforce Base; Riverside fairy shrimp cysts were found in pool during dry season sampling and no mature Riverside fairy shrimp were detected during the wet season. However, this occurrence is considered possibly extirpated since 2009 (CDFW 2025a).

Based on the results of the vernal pool habitat assessment in the previous section 5.4.2, no vernal pools occur withing the project site. In addition, the project site is separated from the closest possibly extirpated occurrence record for Riverside fairy shrimp (Occurrence Number 28) by residential and commercial development, and highly trafficked roadways. Based on this information, it was determined that there is no suitable habitat for fairy shrimp within or adjacent to the project site and that fairy shrimp are not known to occur within in close proximity to the site. Therefore, no direct or indirect impacts are expected to occur, and no further discussion related to the proposed project and fairy shrimp is warranted.

5.4.4 Riparian Birds

Based on the field survey, riparian/riverine resources were not observed within the project site. Therefore, a discussion related to riparian birds (i.e., western-billed cuckoo [*Coccyzus americanus occidentalis],*

southwestern willow flycatcher [*Empidonax traillii extimus*], least Bell's vireo [*Vireo bellii pusillus*] and the proposed project is not warranted.

5.5 Protection of Narrow Endemic Plant Species

According to the RCA's online MSHCP Information Application and Figure 6-1 of the MSHCP, the proposed project is not located within a designated survey area for Narrow Endemic Plant Species. Therefore, a discussion related to Narrow Endemic Plant Species and the proposed project is not warranted.

5.6 Additional Survey Needs and Procedures

5.6.1 Criteria Area Plant Species

Based on a desktop review of the RCA's online MSHCP Information Application and Figure 6-2 of the MSHCP, the proposed project is not located within a designated survey area for Criteria Area plant species. Therefore, a discussion related to the proposed project and any associated Criteria Area plant species is not warranted.

5.6.2 Amphibians

Based on a desktop review of the RCA's online MSHCP Information Application and Figure 6-3 of the MSHCP, the proposed project is not located within a designated survey area for amphibians. Therefore, a discussion related to the proposed project and MSHCP amphibian species is not warranted.

5.6.3 Burrowing Owl

According to the RCA's online MSHCP Information Application and Figure 6-4 of the MSHCP, the proposed project is located within the mapped survey area for BUOW. Based on the results of the January 2025 field survey, the project site provides suitable foraging habitat for burrowing owls. No burrows suitable to support burrowing owl were observed due to disking and other ground disturbance. However, there are small areas along the north and eastern site boundaries that could provide habitat. Due to the presence of suitable habitat for burrowing owls, focused surveys are required to confirm the presence/absence of burrowing owl within the project site and 500-foot buffer to satisfy the requirements of the Western Riverside County MSHCP.

5.6.4 Mammals

The proposed project site is not located within a mapped survey area for mammal species according to the RCA's online MSHCP Information Application and Figure 6-6 of the MSHCP. Therefore, a discussion related to the proposed project and MSHCP mammal species is not warranted.

5.7 Information on Other Species

5.7.1 Delhi Sands Flower-Loving Fly

According to the RCA'S online MSHCP Information Application and the *Custom Soil Report for Western Riverside Area, California* (USDA 2025), the project site is not underlain by and does not fall within an area containing Delhi Sand soils. Therefore, no direct or indirect impacts are expected to occur, and no further discussion related to the proposed project and the Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*) is warranted.

5.7.2 Species not adequately Conserved

As described in Section 2.1.4 of the MSHCP, of the one hundred and forty-six (146) Covered Species addressed in the MSHCP, one hundred and eighteen (118) species are considered to be adequately

conserved. The remaining twenty-eight (28) Covered Species will be considered to be adequately conserved when certain conservation requirements are met as identified in the species-specific conservation objectives listed in Table 9-3 of the MSHCP. Based on the current status of covered species not adequately conserved presented in Table 9-3, the Monitoring Program has collected sufficient data in 2019 to confirm that beautiful hulsea (*Hulsea vestita ssp. callicarpha*), Coulter's matilija poppy (*Romneya coulteri*), Fish's milkwort (*Polygala cornuta var. fishiae*), graceful tarplant (*Holocarpha virgata ssp. elongata*), Parry's spineflower (*Chorizanthe parryi var. parryi*), peninsular spine flower (*Chorizanthe leptotheca*), Plummer's mariposa lily (*Calochortus plummerae*), rainbow manzanita (*Arctostaphylos rainbowensis*), and small-flowered microseris (*Microseris douglasii var. platycarpha*) met the requirements listed in Table 9-3 of the MSHCP.

None of the species listed in Table 9-3 of the MSHCP were observed within the project site during the field survey. All remaining species listed in Table 9-3 of the MSHCP are not expected to occur within the project site based on existing conditions and a review of specific habitat requirements, occurrence records, and known distributions.

5.8 Guidelines Pertaining to the Urban/Wildlands Interface

The urban/wildlands interface guidelines presented in Section 6.1.4 of the MSHCP are intended to address indirect effects associated with new development in proximity to MSHCP Conservation Areas. The project site is not located adjacent to any Criteria Cells, Cores/Linkages, or Public/Quasi-Public lands identified by the MSHCP. Therefore, a discussion related to the proposed project and the urban/wildlands interface guidelines presented in Section 6.1.4 of the MSHCP is not warranted.

5.9 Standard Best Management Practices

In accordance with Appendix C of the MSHCP, the following standard best management practices (BMPs) should be implemented to reduce project-related impacts:

- A qualified biologist should be present to project personnel (including temporary, contractors, and subcontractors) a worker environmental awareness program prior to the initiation of grading activities. Project personnel should be advised on any special-status wildlife species of concern, the steps to avoid impacts to the species and the potential penalties for taking such species. At a minimum, the program should include the following topics: occurrence of the listed and sensitive species in the area, their general ecology, sensitivity of the species to human activities, legal protection afforded to these species, penalties for violations of federal and State laws, reporting requirements, and project features designed to reduce the impacts to these species and promote continued successful occupation of the project area. Color photographs of the listed species should be included in the program and be shown to personnel. Following the program, the photographs should be posted in the contractor and resident engineer office and remain through the duration of the project. The contractor, resident engineer, and the qualified biologist should be responsible for ensuring that personnel are aware of the listed species. If additional personnel are added to the project after initiation, they should receive instruction prior to working on the project.
- To avoid or minimize impacts to water quality, a construction Storm Water Pollution Prevention Plan and Soil Erosion and Sediment Plan should be developed to minimize erosion and identify specific pollution prevention measures that would eliminate or control potential point and non-point pollution sources on-site during and following the project's construction phase. The project design should incorporate permanent erosion control elements to ensure that storm water runoff does not cause soil erosion. In addition, erosion control measures should be applied to all exposed areas during construction. Erosion control measures may include the trapping of sediments within the construction

area by placing barriers, such as straw bales, at the perimeter of downstream drainage points or by construction of temporary detention basins. Other methods of minimizing erosion impacts include hydromulching and limiting the amount and length of exposure of graded soil.

- Disturbance related to the project should be minimized to the maximum extent possible. Project site access should be limited to existing disturbed roads and access routes.
- Prior to construction, highly visible barriers (e.g., orange construction fencing) should be clearly defined and installed around the perimeter of the project impact area and access routes.
- To avoid impacts to nesting birds, any native vegetation removal or tree (native or exotic) trimming activities should occur outside of the nesting bird season (February 1 – August 31). If avoidance of the nesting bird season is not feasible, a pre-construction nesting bird clearance survey should be conducted by a qualified biologist no more than three days prior to the start of any vegetation removal or ground disturbing activities to maintain compliance with the MBTA and CFGC and ensure that impacts to nesting birds do not occur. The qualified biologist should survey all suitable nesting habitat within the project impact area, including areas within a biologically defensible buffer distance surrounding the project impact area, for the presence of nesting birds and should provide documentation of the surveys and findings to the City of Moreno Baller for review prior to initiating project activities. If no active bird nests are detected, project-related activities may begin. If an active nest is found, the bird should be identified to species and the approximate distance from the closest work site to the active nest should be estimated and the qualified biologist should establish a “no disturbance” buffer around the active nest. The distance of the “no-disturbance” buffer may be increased or decreased according to the judgement of the qualified biologist depending on the level of activity and species (i.e., listed, sensitive). In addition, the qualified biologist should periodically monitor any active bird nests to determine if project-related activities occurring outside the ‘no-disturbance” buffer disturb the birds and if the buffer should be increased. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, project-related activities within the ‘no-disturbance’ buffer may occur.
- All equipment maintenance, staging, and dispensing of fuel, oil, or any other such activities should occur in developed or previously disturbed upland areas to prevent the runoff from any spills from entering waters of the U.S., waters of the State, or riparian/riverine resources. All construction equipment should be operated in a manner to prevent accidental damage to nearby preserved areas and any project-related spills of hazardous materials should be immediately reported to appropriate entities.
- Silt fence barriers should be installed around water courses to prevent accidental deposition of fill material in these areas. And brush, loose soils, or other similar debris materials should be stockpiled in developed or disturbed upland areas.
- A qualified biologist should monitor construction for the duration of the project to ensure that BMPs and other avoidance and minimization measures are properly implemented.
- Removal of native vegetation should be minimized to the maximum extent possible.
- Removal of exotic species that prey upon or displace target species of concern should be removed from the project work area, if possible.
- Trash, construction refuse (e.g., broken equipment parts, cables, etc.), and food items should be contained in closed containers and removed daily.

6 Conclusions and Recommendations

Natural habitats within the survey area have been eliminated due to routine weed abatement activities (i.e., disking, tiling), resulting in heavily disturbed and compacted surface soils. As such, minimal native vegetation communities occur in only two pockets of the survey area, and the survey area is primarily comprised of disturbed land that is dominated by ruderal/weedy, and ornamental plant species. No special-status plant species were observed within the survey area during the field survey. Based on the results of the field survey and a review of specific habitat preferences, distributions, and elevation ranges, MNS biologists determined that all special-status plant species identified by the CNDDB, CIRP, and IPaC either have a low potential or are not expected to occur within the survey area.

No special-status wildlife species were observed within the survey area during the field survey. Based on the results of the field survey and a review of specific habitat preferences, occurrence records, known distributions, and elevation ranges, it was determined that the survey area has a low potential to support burrowing owl (*Athene cunicularia* [BUOW}; a State Species of Special Concern [SSC]), Cooper's hawk (*Accipiter cooperii*; a California SSC), loggerhead shrike (*Lanius* ludovicianus; a California SSC), California horned lark (*Eremophilia alpestris actia*; a California Watchlist), western mastiff bat (*Eumops perotis californicus*; a State SSC), and western yellow bat (*Lasiurus xanthinus*; a State SSC), Orange-throated whiptail (*Aspidoscelis hyperythrus*;; a State SSC), and red-diamond rattlesnake (*Crotalus ruber*; a State SSC), and Crotch's bumble bee (*Bombus crotchii,* a State proposed threatened species*).* Additionally, although not observed or expected to occur, because the survey area is an undeveloped open space, bats may still forage over it if an insect prey base is present and there are some potential roosting trees in the park to the east of the survey area. All remaining special-status wildlife species identified during the literature review and records search are not expected to occur within the survey area.

A focused survey for burrowing owl was conducted by MNS senior biologists in accordance with the 2006 *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area* in Spring 2025. The results of the survey visits are negative for burrowing owl. Pre-construction burrowing owl surveys should be conducted within 30-days of construction in accordance with MM-BIO-2. Similarly, a focused survey for Crotch's bumblebee (CBB) was conducted by CDFW permitted biologist Marshall Paymard, Osprey Environmental in Spring 2025 with negative results. Updated protocol CBB surveys should be conducted in accordance with MM-BIO-3, below, if grading and construction does not commence by Spring 2027.

In addition to the standard BMPs identified in Section 5.9 above, it is recommended that the following Avoidance and Minimization Measures (AMMs) be implemented to avoid and/or minimize potential impacts to special-status biological resources:

MM BIO-1: **Nesting Birds.** If project-related activities are to be initiated during the nesting season (February 1 to August 31), a pre-construction nesting bird clearance survey shall be conducted by a qualified biologist no more than three (3) days prior to the start of any vegetation removal of ground disturbing activities, the qualified biologist shall survey all suitable nesting habitat within the project impact area, and areas within a biologically defensible buffer zone surrounding the project impact area. If no active bird nests are detected during the clearance survey, project activities may begin, and no additional avoidance and minimization measures shall be required. If an active bird nest is found, the species shall be identified, and a "no-disturbance" buffer shall be established around the active nest. The size of the "no-disturbance" buffer shall be increased or decreased based on the judgment of the qualified biologist and level of activity and sensitivity of the species. The qualified biologist shall periodically monitor any active bird nests to determine if project-

related activities occurring outside the "no-disturbance" buffer disturb the birds and if the buffer should be increased. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, project activities within the "no-disturbance" buffer may occur following an additional survey by the qualified biologist to search for any new bird nests in the restricted area.

MM BIO-2: **Burrowing Owl.** A pre-construction clearance survey would be required to reconfirm the absence of BUOW within the project impact area and maintain compliance with the MSHCP, MBTA, and CFGC. In accordance with the MSHCP, the pre-construction clearance survey would need to be conducted by a qualified biologist no more than 30 days prior to initiating any ground disturbing activities to avoid direct take of BUOWs. Once the survey is completed, the qualified biologist should prepare and submit a final report documenting the results of the clearance survey to the City of Moreno Valley for review and file. If no BUOWs or occupied burrows are detected, project activities may begin, and no additional avoidance or minimization measures would be required. However, if an occupied burrow is found within the project impact area during the clearance survey, a DBESP report outlining specific avoidance, minimization, and compensatory mitigation methods that will be implemented to avoid impacts to BUOW would need to be prepared and submitted to the Wildlife Agencies (CDFW and USFWS) for approval prior to initiating project activities.

MM BIO-3: **Focused Crotch's Bumblebee Surveys**. If the Crotch bumble bee is no longer a candidate or listed species under the California ESA at the time ground disturbing activities, then no additional protection measures are proposed for this species.

If the Crotch bumble bee is legally protected under the California ESA as a candidate or listed species at the time of Project construction, focused surveys shall be conducted in accordance with CDFW's Survey Considerations for CESA Candidate Bumble Bee Species (CDFW 2023d) the season immediately prior to ground disturbing activities are scheduled to occur. A minimum of three Crotch bumble bee focused surveys shall be conducted at 2 to 4 week intervals (ideally monthly) during the colony active period (April through August) when Crotch bumble bees are most likely to be detected. Non-lethal, photo voucher surveys shall be completed by a biologist who holds a Memorandum of Understanding to capture and handle Crotch bumble bee (if nesting and chilling protocol is to be utilized) or by a CDFW approved biologist experienced in identifying native bumble bee species (if surveys are restricted to visual surveys that will provide high-resolution photo documentation for species verification).

If an active Crotch bumble bee nest is detected, an appropriate no disturbance buffer zone (including foraging resources and flight corridors essential for supporting the colony) shall be established around the nest to reduce the risk of disturbance or accidental take and the designated biologist shall coordinate with CDFW to determine if an Incidental Take Permit under Section 2081 of the California ESA will be required. Nest avoidance buffers may be removed at the completion of the flight season and/or once the qualified biologist deems the nesting colony is no longer active and CDFW has provided concurrence of that determination. If no nests are found but the species is present, a full-time qualified biological monitor shall be present during vegetation removal or ground disturbing activities that are scheduled to occur during the queen flight period (February through March), colony active period (March through September), and/or gyne flight period (September through October). Because bumble bees move nest sites each year, three preconstruction nesting surveys shall be required during each subsequent year of construction, regardless of the previous year's

findings, whenever vegetation removal and ground disturbing activities are scheduled to occur during the flight season (February through October).

The following mitigation measure is recommended to address the temporary impacts to state and federal jurisdictional waters associated with the concrete lined channel located at the northern site boundary:

MM BIO-4: **State and Federal Jurisdictional Waters.** Prior to ground-disturbing activities in waters potentially regulated by state and federal agencies, the Project Applicant shall confer with U.S. Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW) and the Regional Water Quality Control Board (RWQCB) and, if required, obtain appropriate authorization. The Applicant shall implement all conditions associated with regulatory agency agreements and authorizations including compensatory mitigation (at a minimum 1:1 ratio) and, unless otherwise specified by the USACE, CDFW and/or the RWQCB, shall implement best management practices specified by the USACE, CDFW and/or the RWQCB to minimize adverse impacts to streams and watersheds.

7 References

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Appendix A

Site Photographs

Photograph 1: Southwest corner facing north showing disturbed habitat.

Photograph 2: West side of project site facing East showing disked field.

Photograph 3: Northwest portion of project site showing one of two areas with rocky outcroppings and vegetation.

Photograph 4: North end of project site facing west showing stromdrain channel with cottonwood, willow, buckwheat and rocky outcropping.

Photograph 5: North end of project site facing south showing disturbed habitat and recent disking.

Photograph 6: East facing showing stromdrain channel and headwall along the northern boundary of the project site.

Photograph 7: Northeast corner facing west.

Photograph 8: Northeast corner facing south.

Photograph 9: East side of project site facing west showing disturbed habitat.

Photograph 10: Northwest facing from east side of project site, showing residential land uses to the north.

Photograph 11: Facing west from east side of project site showing retail/office development along Box Springs Road.

Photograph 12: Center of project site facing north.

Photograph 13: Center of project site facing east showing developed office space and park to the east of project site.

Photograph 14: Center of project site facing south showing retail/office development along Box Springs Road.

Photograph 15: Center of project site facing west showing multiunit residential development.

Appendix B

Plant and Wildlife Species Observed List

Appendix B: Plant and Wildlife Species Observed List

*Scientific Name**	Common Name	Cal-IPC Rating**	Special-Status Rank***
Plants			
Schinus terebinthifolia	Brazilian pepper	Moderate	
Hedera helix	Common Ivy	High	
Washingtonia filifera	California fan palm		
Sonchus asper	Prickly sow thistle		
Melilotus indicus	Small melilot		
Nerium oleander	Oleander		
Eucalyptus camaldulensis	River redgum	Limited	
Tamarix ramosissima	Salt cedar	High	
Croton setiger	Turkish mullein		
Hirschfeldia incana	Short-pod mustard	Moderate	
Encelia farinose	Brittlebush		
Schinus molle	Peruvian pepper tree	Limited	
Populus fremontii	Fremont cottonwood		
Salix gooddingii	Goodding's willow		
Datura wrightii	Sacred datura		
Heterotheca grandiflora	Telegraphweed		
Pennisetum alopecuroides	Fountain grass		
Parkinsonia aculeata	Palo verde sp.		
Eriogonum fasciculatum	California buckwheat		
Birds			
Tyrannus vociferans	Cassin's kingbird		
Calypte anna	Anna's hummingbird		
Zonotrichia leucophrys	White-crowned sparrow		
Corvus brachyrhynchos	American crow		
Setophaga coronata	Yellow-rumped warbler		
Haemorhous mexicanus	House finch		
Passer domesticus	House sparrow		
Psaltriparus minimus	Bushtit		
Sayornis nigricans	Black phoebe		
Corthylio calendula	Ruby-crowned kinglet		
Chamaea fasciata	Wrentit		
Polioptila caerulea	Blue-gray gnatcatcher		
Passerculus sandwichensis	Savannah sparrow		
Mammals			
Sylvilagus audubonii	Desert cottontail		

*** Non-native species**

**** California Invasive Plant Council (Cal-IPC) Ratings**

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

Moderate — These species have substantial and apparent-but generally not severe-ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, though establishment is generally

dependent upon ecological disturbance. Ecological amplitude and distribution may range from limited to widespread.

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

***** Special-Status Rank**

California Department of Fish and Wildlife (CDFW)

WL — Watch List - taxa that were previously designated as “Species of Special Concern” but no longer merit that status, or which do not yet meet SSC criteria, but for which there is concern and a need for additional information to clarify status.

Appendix C

Potentially Occurring Special-Status Biological Resources

Potentially Occurring Special-Status Biological Species

Scientific Name Common Name	**Special-Status Rank***	**Habitat Preferences and Distribution Affinities**	**Covered By MSHCP****	**Observed On-site**	**Potential to Occur**
SPECIAL-STATUS WILDLIFE SPECIES					
Accipiter cooperii Cooper's hawk	WL G5 S4	Yearlong resident of California. Generally, found in forested areas up to 3,000 feet above mean sea level (amsl) in elevation, especially near edges and rivers. Prefers hardwood stands and mature forests but can be found in urban and suburban areas where there are tall trees for nesting. Common in open areas during nesting season.	Yes	Yes	**Moderate:** There are suitable trees to support nesting on the project site and on adjacent lands.
Actinemy's pallida Southwestern pond turtle	FPT G2G3 SNR SSC	Habitat includes rivers, lakes, ponds, streams, other water sources as well as terrestrial habitats.	Yes	No	**Not Expected:** There is no suitable habitat preferred by this species within the project site.
Agelaius tricolor Tricolored blackbird	CT G1G2 S2 SSC	Range is limited to the coastal areas of the Pacific coast of North America, from Northern California to upper Baja California. Can be found in a wide variety of habitat including annual grasslands, wet and dry vernal pools and other seasonal wetlands, agricultural fields, cattle feedlots, and dairies. Occasionally forage in riparian scrub habitats along marsh borders. Basic habitat requirements for breeding include open accessible water, protected nesting substrate freshwater marsh dominated by cattails (Typha spp.), willows (Salix spp.), and bulrushes (Schoenoplectus spp.), and either flooded or thorny/spiny vegetation and suitable foraging space providing adequate insect prey.	Yes	No	**Not expected:** There is minimal to no suitable habitat preferred by this species within the project site.
Aimophila ruficeps canescens Southern California rufous-crowned sparrow	G5T3 S4 WL	Yearlong resident that is typically found between 3,000 and 6,000 feet amsl. Breed in sparsely vegetated scrubland on hillsides and canyons. Prefers coastal sage scrub dominated by California sagebrush (Artemisia californica), but they can also be found breeding in coastal bluff scrub, low-growing serpentine chaparral, and along the edges of tall chaparral habitats.	Yes	No	**Not Expected:** Suitable coastal sage scrub and chaparral habitats preferred by this species for foraging and nesting are not present within the project site. Further, the project site is outside of known elevation ranges for this species.
Anniella Stebbinsi Southern California legless lizard	G3 S3 SSC	Locally abundant specimens are found in coastal sand dunes and a variety of interior habitats, including sandy washes and alluvial fans. A large, protected	No	No	**Not Expected:** Suitable habitats consisting of coastal sand dunes, sandy wash and alluvial fans are not present within the

Scientific Name Common Name	**Special-Status Rank***	**Habitat Preferences and Distribution Affinities**	**Covered By MSHCP****	**Observed On-site**	**Potential to Occur**
		population persists in the remnant of the once extensive El Segundo Dunes at Los Angeles International Airport.			project site. The project site primarily consists of disturbed habitat due to past agricultural operations and continual weed abatement activities resulting in heavily disturbed and compacted surface soils.
Antrozous pallidus Pallid bat	G4 S3 SSC	Chaparral, Coastal scrub, Desert wash, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, Riparian woodland, Upper montane coniferous forest, Valley and foothill grassland.	No	No	**Not Expected:** Suitable habitat for foraging or roosting are not present within the project site. The project site is mostly comprised of disturbed habitat.
Arizona elegans occidentalis California glassy snake	G5T2 S2 SSC	Inhabits arid scrub, rocky washes, grasslands, and chaparral habitats. Appears to prefer microhabitats of open areas and areas with soil loose enough for easy burrowing.	No	No	**Not Expected:** Suitable arid scrub, rocky wash, grassland, and chaparral habitats preferred by this species are not present within the project site. The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that are likely to preclude this species from occurring.
Artemisiospiza belli belli Bell's sparrow	G5T2T3 S3 WL	Distribution in western Riverside County, specifically within the "Riverside lowlands, San Jacinto Foothills, Santa Ana Mountains, and Desert Transition Bioregions. Yearlong resident on the coastal side of southern California mountains. Breeds in coastal sage scrub and chaparral habitats from February to August. They require semi-open habitats with evenly spaced shrubs one to two meters high. Occurs in chaparral dominated by fairly dense stands of chamise (*Adenostoma fasciculatum*).	No	No	**Not Expected:** Suitable coastal sage scrub and chaparral habitats preferred by this species for foraging and nesting are not present within the project site.
Asio otus Long-eared owl	G5 S3 SSC	Nests in conifer, oak, riparian, pinyon-juniper, and desert woodlands that are either open or are adjacent to grasslands, meadows, or shrublands. Key habitat components are some dense cover for nesting and roosting, suitable nest platforms, and open foraging areas.	No	No	**Not expected:** Suitable woodland habitats preferred by this species for nesting are not present within the project site.
Aspidoscelis hyperythra Orange-throated whiptail	G5 S2S3 WL	Uncommon to fairly common over much of its rand in Orange, Riverside, and San Diego counties. Also occurs in southwestern San Bernardino County near Colton. Semi-arid brushy areas typically with loose soil and rocks, including washes, streamsides, rocky hillsides, and coastal chaparral.	Yes	No	**Low:** Despite observed sightings within 0.25-mile radius (CDFW 2024) of project site, there is minimal suitable coastal chaparral/semi-arid brushy habitats within the project site. The project site is comprised of disturbed habitat that is subject to

Scientific Name Common Name	**Special-Status Rank***	**Habitat Preferences and Distribution Affinities**	**Covered By MSHCP****	**Observed On-site**	**Potential to Occur**
					routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Aspidoscelis tigris stejnegeri Coastal whiptail	G5T5 S3 SSC	This subspecies is found in coastal southern California, mostly west of the Peninsula Ranges and south of the Transverse Ranges, and north into Ventura County. Ranges south into Baja California. Found in a variety of ecosystems, primarily hot and dry open areas with sparse vegetation in chaparral, woodland, and riparia areas. Associated with rocky areas with little vegetation or sunny microhabitats within shrub or grassland associations.	Yes	No	**Not Expected:** Suitable, sparsely vegetated chaparral, woodland, riparian habitats preferred by this species are not present within the project site. The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Athene cunicularia Burrowing owl	CCE G4 S2 SSC	Primarily a grassland species, but it persists and even thrives in some landscapes highly altered by human activity. Occurs in open, annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. The overriding characteristics of suitable habitat appear to be burrows for roosting and nesting and relatively short vegetation with only sparse shrubs and taller vegetation.	Yes	No	**Low (Foraging):** The project site provides marginal foraging habitat for this species. The closest extant occurrence (Occurrence Number 439) was recorded in 2007, approximately 3.25 mi southeast of the project site; there were 6 adults observed and 2 juveniles on March Air Force Base (CDFW 2024).
Bombus crotchii Crotch's bumble bee	CCE G2 S2	Found between San Diego and Redding in a variety of habitats including open grasslands, shrublands, chaparral, desert margins including Joshua tree and creosote scrub, and semi-urban settings.	No	No	**Low Potential:** The project site supports marginal disturbed grassland habitat..
Bombus pensylvanicus American bumble bee	G3G4 S2	Coastal prairie, Great Basin grassland, Valley and foothill grassland.	No	No	**Not expected:** Suitable habitats required by this species are not present within the project site.
Buteo regalis Ferruginous hawk	G4 S3S4 WL	Common winter resident of grasslands and agricultural areas in southwestern California. Frequents open grasslands, sagebrush flats, desert scrub, low foothills surrounding valleys, and fringes of pinyon-juniper habitats. This species does not breed in California.	Yes	No	**Not Expected:** Suitable grassland habitats and agricultural areas required by this species for foraging are not present within the project site.
Buteo swainsoni Swainson's hawk	CT G5 S4	This species favors open grasslands for foraging but also occurs in agricultural settings. It relies on scattered stands of trees near agricultural fields and grasslands for nesting sites. Its habitats include great basin grassland, riparian forest, riparian woodland, and valley and foothill grassland.	Yes	No	**Not expected:** Suitable habitats required by this species are not present within the project site.

Scientific Name Common Name	**Special-Status Rank***	**Habitat Preferences and Distribution Affinities**	**Covered By MSHCP****	**Observed On-site**	**Potential to Occur**
Catostomus santaanae Santa Ana sucker	FT G1 S1 SSC	Its habitat includes aquatic and south coast flowing waters. This species prefers sand-rubble-boulder bottoms, cool and clear water, and algae	Yes	No	**Not Expected:** Suitable habitats required by this species are not present within the project site.
Ceratochrysis longimala Desert cuckoo wasp	G1 S1	Solitary insects that inhabit dry areas, sandy soil and hot desert regions.	No	No	**Not Expected:** Suitable habitats required by this species are not present within the project site.
Chaetodipus fallax fallax Northwestern San Diego pocket mouse	G5T3T4 S3S4	Found terrestrially in a wide variety of temperate habitats ranging from chaparral and grasslands to scrub forests and deserts. Open habitat on the Pacific slope from southwestern San Bernardino County to northwestern Baja California. Habitat types include coastal sage scrub, sage scrub/grassland ecotones, and chaparral communities. Major habitat requirement is the presence of low growing vegetation or rocky outcroppings, as well as sandy soil to dig burrows.	Yes	No	**Not Expected:** Suitable chaparral and coastal sage scrub habitats preferred by this species are not present within the project site. The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Cicindela tranquebarica viridissima Greenest tiger beetle	G5T1 S1	Riparian Woodland	No	No	**Not Expected:** Suitable habitats required by this species are not present within the project site.
Coccyzus americanus occidentalis Western yellow-billed cuckoo	FT CE G5T2T3 S1	Uncommon summer resident where its breeding distributions is restricted to isolated sites in the Sacramento, Armargosa, Kern, Santa Ana, and Colorado River Valleys. The species requires large patches of multilayered riparian forest, with cottonwoods and willows. The presence of standing or flowing surbase water under the riparian canopy is also preferred. Mesquite (Prosopis spp.) groves may also be used, but usually only when cottonwood-willow habitat is unavailable.	Yes	No	**Not Expected:** Suitable extensive riparian habitat preferred by this species is not present within the project site.
Coleonyx variegatus abbotti San Diego banded gecko	G5T5 S1S2 SSC	Chaparral and Coastal scrub	No	No	**Not Expected:** Suitable habitats required by this species are not present within the project site.
Coturnicops noveboracensis Yellow rail	G4 S2 SSC	Freshwater marsh, meadow and seep	No	No	**Not Expected:** Suitable habitats required by this species are not present within the project site.
Crotalus ruber Red-diamond rattlesnake	G4 S3 SSC	Found in southwestern California, from the Morongo Valley west to the coast and south along the peninsular ranges to mid Baja California. It can be found from the desert, through dense chaparral in the foothills (it avoids the mountains above around 4,000 feet amsl), to warm inland mesas and valleys, all the way to the cool ocean shore. It is most	Yes	No	**Low:** There are rocky outcroppings within the project site, however, there are no suitable habitats with heavy brush within the project site. The project site is comprised of mostly disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils.

Scientific Name Common Name	**Special-Status Rank***	**Habitat Preferences and Distribution Affinities**	**Covered By MSHCP****	**Observed On-site**	**Potential to Occur**
		commonly associated with heavy brush with large rocks or boulders. Dense chaparral in the foothills, boulders associated coastal sage scrub, oak/pine woodlands, and desert slope scrub associations; however, chamise and red shank (Adenostoma sparsifolium) associations may offer better structural habitat for refuges and food resources for this species than other habitats.			
Diadophis punctatus modestus San Bernardino ringneck snake	G5T2T3 S2	Prefers moist habitats, including wet meadows, rocky hillsides, gardens, farmland, grassland, chaparral, mixed coniferous forests, and woodlands.	No	No	**Not Expected:** Suitable habitats required by this species are not present within the project site.
Dipodomys merriami parvus San Bernardino kangaroo rat	FE CE G5T1 S1 SSC	Primarily found in Riversidean alluvial fan sage scrub and sandy loam soils, alluvial fans and flood plains, and along washes with nearby sage scrub. May occur at lower densities in Riversidean upland sage scrub, chaparral and grassland in uplands and tributaries in proximity to Riversidean alluvial fan sage scrub habitats. Tend to avoid rocky substrates and prefer sandy loam substrates for digging of shallow burrows.	Yes (a)	No	**Not Expected:** Suitable RAFSS habitat preferred by this species is not present within the project site. The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Dipodomys stephensi Stephens' kangaroo rat	FT CT G2 S3	Occur in arid and semi-arid habitats with some grass or brush. Prefer open habitats with less than 50% protective cover. Require soft, well-drained substrate for building burrows and are typically found in areas with sandy soil.	Yes	No	**Not Expected:** The project site has open habitats with less than 50% cover but is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Elanus leucurus White-tailed kite	G5 S3S4 FP	Yearlong resident along the coastal ranges and valleys of California. Occurs in low elevation, open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Uses trees with dense canopies for cover. Important prey item is the California vole (Microtus californicus). Nests in tall (20 to 50 feet) coast live oaks (Quercus agrifolia).	Yes	No	**Not Expected:** Suitable open grassland, wetland, oak woodland, and savannah-like habitats preferred by this species for foraging and nesting are not present within the project site.
Empidonax traillii extimus Southwestern willow flycatcher	TE CE G5T2 S3	Uncommon summer resident in southern California primarily found in lower elevation riparian habitats occurring along streams or in meadows. The structure of suitable breeding habitat typically consists of a dense mid-story and understory and can also include a dense canopy.	Yes	No	**Not expected:** Suitable riparian habitat consisting of thickets or willows along a stream course preferred by this species for foraging and nesting is not present within the project site.

Scientific Name Common Name	**Special-Status Rank***	**Habitat Preferences and Distribution Affinities**	**Covered By MSHCP****	**Observed On-site**	**Potential to Occur**
		Nest sites are generally located near surface water or saturated soils. The presence of surface water, swampy conditions, standing or flowing water under the riparian canopy are preferred.			
Eremophila alpestris actia California horned lark	G5T4Q S4 WL	Yearlong resident of California. This subspecies is typically found in coastal regions. Breed in level or gently sloping shortgrass prairie, montane meadows, "bald" hills, open coastal plains, fallow grain fields, and alkali flats. Within southern California, California horned larks breed primarily in open fields, (short) grasslands, and rangelands. Nests on the open ground.	Yes	No	**Low (Foraging and Nesting):** The project site provides marginal foraging and nesting habitat for this species.
Eugnosta busckana Busck's gallmoth	G1G3 S2S3	Coastal dunes, coastal scrubs	No	No	**Not Expected:** Suitable habitats required by this species are not present within the project site.
Eumops perotis californicus Western mastiff bat	G4G5T4 S3SR SSC	Primarily a cliff-dwelling species, roost generally under exfoliating rock slabs. Roosts are generally high above the ground, usually allowing a clear vertical drop of at least 3 meters below the entrance for flight. In California, it is most frequently encountered in broad open areas. Its foraging habitat includes dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland, and agricultural areas.	No	No	**Not Expected:** Suitable habitats preferred by this species for foraging and roosting are not present within the project site.
Euphydryas Editha quino Quino checkerspot butterfly	FE G4G5T1T2 S1S2	Occupies a variety of habitat types that support California plantain (Plantago erecta), the species primary larval host plant, including grasslands, coastal sage scrub, chamise chaparral, red shank chaparral, juniper woodland, and semi-desert scrub. Can also be found in desert canyons and washes at the lower edge of chaparral habitats.	Yes	No	**Not Expected:** The species primary larval host plant California plantain was not observed within the project site during the field survey. Additionally, suitable habitats preferred by this species are not present within the project site.
Falco columbarius Merlin	G5 S3S4 WL	Estuary, Great Basin grassland, valley and foothill grassland	No	No	**Not Expected:** Suitable habitats required by this species are not present within the project site.
Gila orcuttii Arroyo chub	G1 S2 SSC	Aquatic, South coast flowing waters.	Yes	No	**Not Expected:** Suitable habitats required by this species are not present within the project site.
Haliaeetus leucocephalus Bald eagle	FD CE G5 S3 FP	Locally uncommon yearlong resident of southern California. Typically prefer areas near large water bodies such as sea coasts, coastal estuaries and inland lakes and rivers, in many areas, these birds are found within two miles of a water source. Most	Yes	No	**Not Expected:** Suitable habitats preferred by this species for foraging and nesting are not present within the project site.

Scientific Name Common Name	**Special-Status Rank***	**Habitat Preferences and Distribution Affinities**	**Covered By MSHCP****	**Observed On-site**	**Potential to Occur**
		populations, specifically those in northern regions, migrate to southern, milder climates annually. Generally, these birds nest in the canopy of tall, coniferous trees, surrounded by smaller trees. They have been reported nesting on the ground, on cliffs, on cellular phone towers, on electrical poles and in artificial nesting towers.			
Icteria virens Yellow-breasted chat	G5 S4 SSC	Summer resident of California. Primarily found in tall, dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well- developed understories. Breeding habitat within southern California primarily consists of dense, wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories. Nesting areas are associated with streams, swampy ground, and the borders of small ponds. It winters south the Central America. Found at elevations ranging from 820 to 2,625 feet amsl.	Yes	No	**Not Expected:** Suitable dense riparian woodland habitats preferred by this species for foraging and nesting are not present within the project site.
Lanius ludovicianus Loggerhead shrike	G4 S4 SSC	Yearlong resident of California. Prefers open habitats with bare ground, scattered shrubs, and areas with low or sparse herbaceous cover including open-canopied valley foothill hardwood, riparian, pinyon-juniper desert riparian, creosote bush scrub, and Joshua tree woodland. Requires suitable perches including trees, posts, fences, utility lines, or other perches. Nests in branches up to 14 feet above the ground frequently in a shrub with thorns or with tangled branching habitats.	Yes	No	**Low:** The project provides marginal foraging and nesting habitat for this species.
Lasiurus xanthinus Western yellow bat	G4G5 S3 SSC	Roosts in palm trees in foothill riparian, desert wash, and palm oasis habitats with access to water for foraging.	No	No	**Low (Foraging):** Although there are palm trees to the south of the project boundary where the species could roost, there is minimal suitable habitat for foraging due to the lack of water.
Laterallus jamaicensis coturniculus California black rail	CT G3T1 S2 FP	Suitable habitats generally include salt marshes, freshwater marshes, and wet meadows. Typical associated vegetation includes pickle weed (Salicornia virginica) in salt marshes and bulrushes in less saline habitats.	No	No	**Not Expected:** The project site does not contain any of the water features this species prefers.
Lepus californicus bennettii San Diego black-tailed jackrabbit	G5T3T4 S3S4	Coastal scrub	No	No	**Not Expected:** Suitable habitats required by this species are not present within the project site.

Scientific Name Common Name	**Special-Status Rank***	**Habitat Preferences and Distribution Affinities**	**Covered By MSHCP****	**Observed On-site**	**Potential to Occur**
Myotis yumanensis Yuma myotis	G5 S4	Lower montane coniferous forest, Riparian forest, Riparian woodland, Upper montane coniferous forest	No	No	**Not Expected:** Suitable habitats required by this species are not present within the project site.
Neolarra alba White cuckoo bee	GH SH	Null	No	No	**Not Expected:** Suitable habitats required by this species are not present within the project site.
Neotoma lepida intermedia San Diego woodrat	G5T3T4 S3S4 SSC	Occurs in coastal scrub communities between San Luis Obispo and San Diego Counties. Found in a variety of shrub and desert habitats, primarily associated with rock outcroppings, boulders, cacti, or areas of dense undergrowth. Woodrats often are associated with cholla cactus which they use for water and dens or boulders and boulder piles. The most common natural habitats for records are chaparral, coastal sage scrub (including RSS and Diegan coastal sage scrub) and grassland.	Yes	No	**Not Expected:** Suitable chaparral, coastal sage scrub, and grassland habitats with rock outcroppings, boulders, cacti preferred by this species are not present within the project site.
Nyctinomops femorosaccus Pocketed free-tailed bat	G5 S3 SSC	Often found in pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree woodland, and palm oasis habitats. Prefers rocky desert areas with high cliffs or rock outcrops, which are used as roosting sites.	No	No	**Not Expected:** Suitable habitats preferred by this species for foraging and nesting are not present within the project site.
Oncorhynchus mykess irideus pop. 10 Steelhead-southern California DPS	FE CCE G5T1Q S1	Aquatic south coast flowing waters	No	No	**Not Expected:** Suitable habitats required by this species are not present within the project site.
Onychomys torridus ramona Southern grasshopper mouse	G5T3 S3 SSC	Common in arid desert habitats of the Mojave and southern Central Valley of California. Known elevation range is generally below 3,000 feet amsl. Little is known about habitat requirements; however, it is commonly found in scrub habitats with friable soils for digging in desert areas. It is believed that alkali desert scrub and desert scrub habitats are preferred, with somewhat lower densities expected in other desert habitats, including succulent shrub, wash, and riparian areas. Also occurs in coastal scrub, mixed chaparral, sagebrush, low sage, and bitterbrush habitats.	No	No	**Not Expected:** Suitable scrub habitats with friable soils preferred by this species are not present within the project site. The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Pandion haliaetus Osprey	G5 S4 WL	Riparian Forest	Yes	No	**Not Expected:** Suitable habitats required by this species are not present within the project site.
Perognathus longimembris previnasus	G5T2 S1S2 SSC	Occurs in lower elevation grasslands and coastal sage scrub communities in and around	Yes	No	**Not Expected:** Suitable grassland and coastal scrub habitats with fine,

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Los Angeles pocket mouse		the Los Angeles Basin. Prefers open ground with fine sandy soils. May not dig extensive burrows, but instead will seek refuge under weeds and dead leaves instead.			sandy soils preferred by this species are not present within the project site. The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Phrynosoma blainvillii Coastal horned lizard	G4 S4 SSC	Occurs in a wide variety of vegetation types including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland and coniferous forest. Its elevational range extends up to 4,000 feet in the Sierra Nevada foothills and up to 6,000 feet in the mountains of southern California. In inland areas, this species is restricted to areas with pockets of open microhabitat, created by disturbance (e.g. fire, floods, unimproved roads, grazing lands, and fire breaks). The key elements of such habitats are loose, fine soils with a high sand fraction; an abundance of native ants or other insects; and open areas with limited overstory for basking and low, but relatively dense shrubs for refuge.	Yes	No	**Not Expected**: Suitable annual grassland, coastal scrub habitats, chaparral, oak woodland, riparian woodland, and coniferous forest habitats with fine, sandy soils preferred by this species are not present within the project site. The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Polioptila californica californica Coastal California gnatcatcher	FT G4G5T3Q S2 SSC	Yearlong resident of sage scrub habitats that are dominated by California sagebrush. This speciesge nerally occurs below 750 feet amsl in coastal regions and below 1,500 feet amsl inland. Ranges from the Ventura County, south to San Diego County and northern Baja California and it is less common in sage scrub with a high percentage of tall shrubs. Prefers habitat with more low-growing vegetation.	Yes	No	**Not Expected:** Suitable coastal sage scrub habitats preferred by this species for foraging and nesting are not present within the project site.
Rana muscosa Southern mountain yellow-legged frog	FE CE G1 S2 WL	Aquatic	Yes	No	**Not Expected:** Suitable habitats required by this species are not present within the project site.
Rhaphiomidas terminatus abdominalis Delhi Sands flower-loving fly	FE G1T1 S1	Interior dunes with Delhi sands complex	Yes	No	**Not Expected:** Suitable habitats required by this species are not present within the project site.
Rhinichthys Gabrielino Santa Ana speckled dace	FPT G5T1 S1 SSC	Aquatic, south coast flowing waters	No	No	**Not Expected:** Suitable habitats required by this species are not present within the project site.
Salvadora hexalepis virgultea Coast patch-nosed snake	G5T4 S3 SSC	Occurs in brushy vegetation including coastal scrub and chaparral from the coast to the	No	No	**Not Expected:** Suitable coastal scrub and chaparral habitats

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		mountains. Takes refuge in existing small mammal burrows.			preferred by this species for foraging and nesting are not present within the project site.
Setophaga petechia Yellow warbler	G5 S3 SSC	Present in California from April through September. Nests in riparian areas dominated by willows, cottonwoods, California sycamores, or alders (Alnus spp.) or in mature chaparral. May also use oaks, conifers, and urban areas near stream course.	Yes	No	**Not Expected:** Suitable riparian habitats preferred by this species for foraging and nesting are not present within or adjacent to the project site. The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Spea hammondii Western spadefoot	FPT G2G3 S3S4 SSC	Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Rain pools which do not contain American bullfrogs (Lithobates catesbeianus), predatory fish, or crayfish are necessary for breeding. Estivates in upland habitats adjacent to potential breeding sites in burrows approximating 3 feet in depth.	Yes	No	**Not Expected:** Suitable habitats preferred by this species are not present within the project site. The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Strptocephalus woottoni Riverside fairy shrimp	FE G1G2 S2	Restricted to deep seasonal vernal pools, vernal pool like ephemeral ponds, and stock ponds and other human modified depressions. Basins that support Riverside fairy shrimp are typically dry a portion of the year, but usually are filled by late fall, winter, or spring rains, and may persist through May. Endemic to western Riverside, Orange, and San Diego Counties in tectonic swales/earth slump basins in grassland and coastal sage scrub. In Riverside County, the species been found in pools formed over the following soils: Murrieta stony clay loams, Las Posas series, Wyman clay loam, and Willows soils. All known habitat lies within annual grasslands, which may be interspersed through chaparral or coastal sage scrub vegetation.	Yes	No	**Not Expected**: Suitable vernal pool habitats preferred by this species are not present within the project site. The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Taxidea taxus American badger	G5 S3 SSC	Occupies a wide variety of habitats including dry, open grassland, sagebrush, and woodland habitats. Require dry, friable, often sandy soil to dig burrows for cover, food storage, and giving birth. Occasionally	No	No	**Not Expected:** Suitable habitats and friable sandy soils preferred by this species are not present within the project site. The project site primarily consists of

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		found in riparian zones and open chaparral with less than 50% plant cover.			disturbed habitat due to continual weed abatement activities resulting in heavily disturbed and compacted surface soils.
Thamnophis hammondii Two-striped gartersnake	G4 S3S4 SSC	Marsh and swamp, Riparian scrub, Riparian woodland, wetland.	No	No	**Not Expected:** Suitable habitats required by this species are not present within the project site.
Vireo bellii pusillus Least Bell's vireo	FE CE G5T2 S3	Summer resident in southern California. Breeding habitat generally consists of dense, low, shrubby vegetation in riparian areas, and mesquite brushlands, often near water in arid regions. Early successional cottonwood-willow riparian groves are preferred for nesting. The most critical structural component of nesting habitat in California is a dense shrub layer that is 2 to 10 feet (0.6 to 3.0 meters) above ground. The presence of water, including ponded surface water or moist soil conditions, may also be a key component for nesting habitat.	Yes	No	**Not Expected:** Suitable riparian habitat along a stream course/water preferred by this species for foraging and nesting is not present within the project site.
SPECIAL-STATUS PLANT SPECIES					
Abronia villosa var. aurita Chaparral sand-verbena	G5T2? S2 1B.1	Annual herb. Grows in sandy soils within chaparral, coastal scrub, and desert dune habitats. Found in elevations ranging from 245 to 5250 feet amsl. Blooming period is (January) March through September.	No	No	**Not Expected**: The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Allium marvinii yucaipa onion	G1 S1 1B.2	Perennial bulbiferous herb. Grows in clay and openings within chaparral habitats. Found in elevations ranging from 2495 to 3495 feet amsl. Blooming period is April through May.	Yes	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring Further, the project site is outside of known elevation ranges for this species.
Allium munzii Munz's onion	FE CT G1 S1 1B.1	Perennial bulbiferous herb. Grows in mesic, clay soils within chaparral, cismontane woodland, coastal scrub, pinyon and juniper woodland, and valley and foothill grassland habitats. Found at elevations ranging from 974 to 3,510 feet amsl. Blooming period is March through May	Yes	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that are likely to preclude this species from occurring. Additionally, federally designated Critical Habitat for this species is not present within the project site.
Ambrosia pumila San Diego ambrosia	FE G1 S1	Perennial rhizomatous herb. Occurs on sandy loam or clay soils (often in disturbed areas)	Yes	No	**Not Expected:** The project site is comprised of disturbed habitat that is

Scientific Name Common Name	**Special-Status Rank***	**Habitat Preferences and Distribution Affinities**	**Covered By MSHCP****	**Observed On-site**	**Potential to Occur**
	1B.1	and sometimes alkaline soils. Habitats include chaparral, coastal scrub, valley and foothill grassland, and vernal pools. Grows in elevation ranging from 66 to 1,362 feet amsl. Blooming period is from April to October.			subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Arenaria paludicola marsh sandwort	FE CE G1 S1 1B.1	Perennial stoloniferous herb. Found on sandy, openings within marshes and swamps (freshwater or brackish). Found at elevations ranging from 12 to 558 feet amsl. Blooming period is May thruogh August	No	No	**Not Expected**: The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Astragalus hornii var. hornii Horn's milk-vetch	GUT1 S1 1B.1	Alkali playa, meadow and seep, wetland	No	No	**Not Expected:** Suitable habitats required by this species are not present within the project site.
Atriplex corona9ta var. notatior San Jacinto Valley crownscale	FE G4T1 S1 1B.1	Annual herb. Occurs on alkaline soils within playas, valley and foothill grassland (mesic), and vernal pool habitats. Grows in elevations ranging from 456 to 1,640 feet amsl. Blooming period is from April to August.	Yes	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring due to lack of preferred habitat.
Atriplex parishii Parish's brittlescale	G5T1 S1 1B.2	Annual herb. Blooms June through October. Usually found on drying alkali flats with fine soils in vernal pools, chenopod scrub, wet meadows, and playas. Known elevations range from 15 to 4,660 feet amsl.	Yes	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring due to lack of preferred habitat.
Atriplex serenana var. davidsonii Davidson's saltscale	G5T1 S1 1B.2	Annual herb. Occurs on alkaline soils within coastal bluff scrub and coastal scrub habitats. Grows in elevations ranging from 33 to 656 feet amsl. Blooming period is from April to October.	Yes	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring Further, the project site is outside of known elevation ranges for this species.
erberis nevinii Nevin's barberry	FE CE G1 S1 1B.1	Perennial evergreen shrub. Occurs on sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian scrub. Found at elevations ranging from 899 to 2,707 feet amsl. Blooming period is (February) March through June.	Yes	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Brodiaea filifolia thread-leaved brodiaea	FT CE G2 S2 1B.1	Perennial bulbiferous herb. Often found on clay soils within chaparral (openings), cismontane woodland, coastal scrub, playas, valley and foothill	Yes	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in

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		grassland, and vernal pools. Found at elevations ranging from 82 to 3,675 feet amsl. Blooming period is March through June.			heavily disturbed and compacted surface soils that likely preclude this species from occurring. Additionally, federally designated Critical Habitat for this species is not present within the project site.
Calochortus plummerae Plummer's mariposa-lily	G5 S2 2B.1	Perennial bulbiferous herb. Occurs in mesic soils within chaparral, lower montane coniferous forest, and meadows and seeps. Grows in elevations ranging from 2,329 to 7,841 feet amsl. Blooming period is April through July.	Yes	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Carex comosa Bristly sedge	G5 S2 2B.1	Coastal prairie, freshwater marsh, marsh and swamp, valley and foothill grassland, wetland.	No	No	**Not Expected:** Suitable habitats required by this species are not present within the project site.
Caulanthus simulans Payson's jewelflower	G4 S4 4.2	Annual herb. Occurs on sandy, granitic soils in chaparral and coastal scrub habitats. Found at elevations ranging from 295 to 7,218 feet amsl. Blooming period is (February) March through May (June).	Yes	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Centromadia pungens ssp. laevis smooth tarplant	G3G4T2 S2 1B.1	Annual herb. Occurs in alkaline soils within chenopod scrub, meadows and seeps, playas, riparian woodland, and valley/foothill grassland habitats. Grows in elevation from 0 to 2,100 feet amsl. Blooming period is April through September.	Yes	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Chloropyron maritimum ssp. maritimum salt marsh bird's-beak	FE CE G4?T1 S1 1B.2	Annual herb (hemiparasitic). Occurs on coastal dunes and marshes and swamps (coastal salt). Found at elevations ranging from 0 to 98 feet amsl. Blooming period is May through October (November).	No	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Chorizanthe parryi var. parryi Parry's spineflower	G3T2 S2 1B.1`	Annual herb. Occurs on sandy and/or rocky soils in chaparral, coastal sage scrub, and sandy openings within alluvial washes and margins. Found at elevations ranging from 951 to 3,773 feet amsl. Blooming period is April through June.	Yes	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Chorizanthe polygonoides var. longispina long-spined spineflower	G5T3 S3 1B.2	Annual herb. Occurs on clay soils within chaparral, coastal scrub, meadows and seeps, valley and foothill grassland, and vernal pools. Found at elevations ranging from 98 to 5,020 feet amsl. Blooming period is April through July.	Yes	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils

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					that likely preclude this species from occurring.
Cuscuta obtusiflora var. glandulosa Peruvian dodder	G5T4? SH 2B.2	Marsh, swamp and wetland.	No	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Dodecahema leptoceras Slender-horned spineflower	FE CE G1 S1 1B.1	Chaparral, cismontane woodland, coastal scrub.	Yes	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Dudleya multicaulis Many-stemmed dudleya	G2 S2 1B.2	Chaparral, coastal scrub, valley and foothill grassland.	Yes	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Eriastrum densifolium ssp. sanctorum Santa Ana River Woolly-star	FE CE G4T1 S1 1B.1	Perennial herb. Grows on sandy or gravelly soils within chaparral and coastal scrub (alluvial fan) habitats. Found at elevations ranging from 298 to 2,001 feet amsl. Blooming period is from April to September.	Yes	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Galium californicum ssp. primum Alvin Meadow bedstraw	G5T2 S2 1B.2	Chaparral, lower montane coniferous forest.	No	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Harpagonella palmeri Palmer's grapplinghook	G4 S3 4.2	Annual herb. Occurs on clay soils within open grassy areas within chaparral, coastal scrub, and valley and foothill grassland habitats. Found at elevations ranging from 66 to 3,133 feet amsl. Blooming period is March through May	Yes	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Helianthus nuttallii ssp. Parishii Los Angeles sunflower	G5TX SX 1A	Freshwater marsh, marsh and swamp, salt marsh, wetland.	No	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.

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Horkelia cuneata var. puberula Mesa horkelia	G4T1 S1 1B.1	Chaparral, cismontane woodland, coastal scrub.	No	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Imperata brevifolia California satintail	G3 S3 2B.1	Chaparral, coastal scrub, meadow and seep, Mojavean desert scrub, Riparian scrub, wetland.	No	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Lasthenia glabrata ssp. coulteri Coulter's goldfields	G4T2 S2 1B.1	Annual herb. Prefers playas, vernal pools, and coastal salt marshes and swamps. Found at elevations ranging from 3 to 4,003 feet amsl. Blooming period is February through June.	Yes	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Lepidium virginicum var. robinsonii Robinson's pepper-grass	G5T3 S3 4.3	Annual herb. Dry soils on chaparral and coastal sage scrub. Found at elevations ranging from 66 to 4,396 feet amsl. Blooming period is January through July.	No	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Lycium parishii Parish's desert-thorn	G4 S1 2B.3	Coastal scrub, Sonoran desert scrub.	No	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Malacothamnus parishii Parish's bushmallow	GXQ SX 1A	Chaparral, coastal scrub.	No	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Monardella pringlei Pringle's monardella	GX SX 1A	Coastal scrub.	No	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Myosurus minimus ssp. Apus little mousetail	G5T2Q S2 3.1	Annual herb. Occurs on valley and foothill grassland and vernal pools (alkaline). Found at	Yes	No	**Not Expected:** The project site is comprised of disturbed habitat that is

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		elevations ranging from 66 to 2,100 feet amsl. Blooming period is March through June.			subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Nasturtium gambelii Gambel's water cress	FE CE G1 S1 1B.1	Brackish marsh, freshwater marsh, marsh and swamp, wetland.	No	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Navarretia fossalis spreading navarretia	FT G2 S2 1B.1	Annual herb. Habitats include chenopod scrub, marshes and swamps (assorted shallow freshwater), playas, and vernal pools. Grows in elevation ranging from 98 to 2,149 feet amsl. Blooming period is April through June.	Yes	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Phacelia stellaris Brand's star phacelia	G1 S1 1B.1	Annual herb. Grows in coastal dune and coastal scrub habitats. Found at elevations ranging from 5 to 1,310 feet amsl. Blooming period is March through June.	Yes	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Pseudognaphalium leucocephalum White rabbit-tobacco	G4 S2 2B.2	Chaparral, cismontatne woodland, coastal scrub, riparian woodland.	No	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Ribes divaricatum var. parishii Parish's gooseberry	G5TX SX 1A	Riparian woodland.	No	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Senecio aphanactis Chaparral ragwort	G3 S2 2B.2	Annual herb. Chaparral, cismontane woodland, coastal scrub.	No	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Sidalcea Neomexicana Salt spring checkerbloom	G4 S2 2B.2	Alkali playa, chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, wetland.	no		**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and

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					compacted surface soils that likely preclude this species from occurring.
Sphenopholis obtusata Prairie wedge grass	G5 S2 2B.2	Cismontane woodland, meadow and seep, wetland.	No	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Symphyotrichem defoliatum San Bernardino aster	G2 S2 1B.2	Cismontane woodland, coastal scrub, lower montane coniferous forest, marsh and swamp, meadow and seep, valley and foothill grassland.	No	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
Trichocoronis wrightii var. wrightii Wright's trichocoronis	G4T3 S1 2B.1	Marsh and swamp, meadow and seep, riparian forest, vernal pool, wetland.	Yes	No	**Not Expected:** The project site is comprised of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils that likely preclude this species from occurring.
SPECIAL-STATUS LICHENS					
Texosporium sancti-jacobi Woven-spored lichen	G3 S2 3	Chaparral	No	No	**Not Expected:** Suitable habitats required by this species are not present within the project site.
SPECIAL-STATUS VEGETATION COMMUNITIES					
Riversidian Alluvial Fan Sage Scrub	G1 S1.1	Coastal Scrub	-	No	**Absent:** This vegetation community does not occur within the project site
Southern Coast Live Oak Riparian Forest	G4 S4	Riparian forest	-	No	**Absent:** This vegetation community does not occur within the project site.
Southern Cottonwood Willow Riparian Forest	G3 S3.2	Riparian forest	-	No	**Absent:** This vegetation community does not occur within the project site.
Southern Riparian Forest	G4 S4	Riparian forest	-	No	**Absent:** This vegetation community does not occur within the project site.
Southern Riparian Scrub	G3 S3.2	Riparian scrub	-	No	**Absent:** This vegetation community does not occur within the project site.
Southern Sycamore Alder Riparian Woodland	G4 S4	Riparian woodland	-	No	**Absent:** This vegetation community does not occur within the project site.
Southern Willow Scrub	G3 S2.1	Riparian scrub	-	No	**Absent:** This vegetation community does not occur within the project site.

*** U.S. Fish and Wildlife Service (USFWS)**

FE Endangered – any species which is in danger of extinction throughout all or a significant portion of its range.

FT Threatened – any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its
range.

California Department of Fish and Wildlife (CDFW)

SE Endangered – any native species or subspecies of bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.

ST Threatened – any native species or subspecies of bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required under the California Endangered Species Act.

CSE Candidate State Endangered – The classification provided to a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Fish and Game Commission has formally noticed as being under review by the Department of Fish and Wildlife for addition to the list of endangered species, or a species for which the commission has published a notice of proposed regulation to add the species to the list of endangered species.

FP Fully Protected – any native species or subspecies of bird, mammal, fish, amphibian, or reptile that were determined by the State of California to be rare or face possible extinction.

SSC Species of Special Concern – any species, subspecies, or distinct population of fish, amphibian, reptile, bird, or mammal native to California that currently satisfies one or more of the following criteria: is extirpated from California or, in the case of birds, in its primary seasonal or breeding role; is listed as Federally-, but not State-, threatened or endangered; meets the State definition of threatened or endangered but has not formally been listed; is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status; or has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for State threatened or endangered status.

WL Watch List - taxa that were previously designated as “Species of Special Concern” but no longer merit that status, or which do not yet meet SSC criteria, but for which there is concern and a need for additional information to clarify status.

California Native Plant Society (CNPS) California Rare Plant Rank

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

3 Plant that lack the necessary information to assign them to one of the other ranks or to reject them.

4 Plants of limited distribution – Watch List.

Threat Ranks

.1 Seriously threatened in California (over 80% of occurrences threatened/high degree any immediacy of threat).

.2 Moderately threatened in California (20 to 80 percent of occurrences threatened/moderate degree and immediacy of threat).

.3 Not very threatened in California (less than 20 percent of occurrences threatened/low degree and immediacy of threat or no current threat known).

NatureServe Conservation Status Rank

The Global Rank (G#) reflects the overall condition and imperilment of a species throughout its global range. The Infraspecific Taxon Rank (T#) reflects the global situation of just the subspecies or variety. The State Rank (S#) reflects the condition and imperilment of an element throughout its range within California. (G#Q) reflects that the element is very rare but there are taxonomic questions associated with it; the calculated G rank is qualified by adding a Q after the G#). Adding a ? to a rank expresses uncertainty about the rank.

G1/T1 Critically Imperiled – At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.

G2/T2 Imperiled— At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.

G3/T3 Vulnerable— At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.

G4/T4 Apparently Secure— Uncommon but not rare; some cause for long-term concern due to declines or other factors.

G5/T5 Secure – Common; widespread and abundant.

S1 Critically Imperiled – Critically imperiled in the state because of extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the State.

S2 Imperiled – Imperiled in the State because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the nation or State.

S3 Vulnerable – Vulnerable in the State due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.

S4 Apparently Secure – Uncommon but not rare; some cause for long-term concern due to declines or other factors.

** **Western Riverside County Multiple Species Habitat Conservation Plan**
Yes – Covered.

No – Not Covered.

Appendix D

Records Search

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Fontana (3411714) OR Riverside East (3311783) OR Riverside West (3311784) OR San Bernardino South (3411713) OR Redlands (3411712) OR Sunnymead (3311782) OR Lake Mathews (3311774) OR Perris (3311772) OR Steele Peak (3311773))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Abronia villosa var. aurita chaparral sand-verbena	PDNYC010P1	None	None	G5T2?	S2	1B.1
Accipiter cooperii Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
Actinemys pallida southwestern pond turtle	ARAAD02032	Proposed Threatened	None	G2G3	SNR	SSC
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S2	SSC
Aimophila ruficeps canescens southern California rufous-crowned sparrow	ABPBX91091	None	None	G5T3	S4	WL
Allium marvinii Yucaipa onion	PMLIL02330	None	None	G1	S1	1B.2
Allium munzii Munz's onion	PMLIL022Z0	Endangered	Threatened	G1	S1	1B.1
Ambrosia pumila San Diego ambrosia	PDAST0C0M0	Endangered	None	G1	S1	1B.1
Anniella stebbinsi Southern California legless lizard	ARACC01060	None	None	G3	S3	SSC
Antrozous pallidus pallid bat	AMACC10010	None	None	G4	S3	SSC
Arenaria paludicola marsh sandwort	PDCAR040L0	Endangered	Endangered	G1	S1	1B.1
Arizona elegans occidentalis California glossy snake	ARADB01017	None	None	G5T2	S2	SSC
Artemisiospiza belli belli Bell's sparrow	ABPBX97021	None	None	G5T2T3	S3	WL
Asio otus long-eared owl	ABNSB13010	None	None	G5	S3?	SSC
Aspidoscelis hyperythra orange-throated whiptail	ARACJ02060	None	None	G5	S2S3	WL
Aspidoscelis tigris stejnegeri coastal whiptail	ARACJ02143	None	None	G5T5	S3	SSC
Astragalus hornii var. hornii Horn's milk-vetch	PDFAB0F421	None	None	GUT1	S1	1B.1
Athene cunicularia burrowing owl	ABNSB10010	None	Candidate Endangered	G4	S2	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Atriplex coronata var. notatior San Jacinto Valley crownscale	PDCHE040C2	Endangered	None	G4T1	S1	1B.1
Atriplex parishii Parish's brittlescale	PDCHE041D0	None	None	G1G2	S1	1B.1
Atriplex serenana var. davidsonii Davidson's saltscale	PDCHE041T1	None	None	G5T1	S1	1B.2
Berberis nevinii Nevin's barberry	PDBER060A0	Endangered	Endangered	G1	S1	1B.1
Bombus crotchii Crotch's bumble bee	IIHYM24480	None	Candidate Endangered	G2	S2	
Bombus pensylvanicus American bumble bee	IIHYM24260	None	None	G3G4	S2	
Brodiaea filifolia thread-leaved brodiaea	PMLIL0C050	Threatened	Endangered	G2	S2	1B.1
Buteo regalis ferruginous hawk	ABNKC19120	None	None	G4	S3S4	WL
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S4	
Calochortus plummerae Plummer's mariposa-lily	PMLIL0D150	None	None	G4	S4	4.2
Carex comosa bristly sedge	PMCYP032Y0	None	None	G5	S2	2B.1
Catostomus santaanae Santa Ana sucker	AFCJC02190	Threatened	None	G1	S1	SSC
Caulanthus simulans Payson's jewelflower	PDBRA0M0H0	None	None	G4	S4	4.2
Centromadia pungens ssp. laevis smooth tarplant	PDAST4R0R4	None	None	G3G4T2	S2	1B.1
Ceratochrysis longimala Desert cuckoo wasp	IIHYM71040	None	None	G1	S1	
Chaetodipus fallax fallax northwestern San Diego pocket mouse	AMAFD05031	None	None	G5T3T4	S3S4	
Chloropyron maritimum ssp. maritimum salt marsh bird's-beak	PDSCR0J0C2	Endangered	Endangered	G4?T1	S1	1B.2
Chorizanthe parryi var. parryi Parry's spineflower	PDPGN040J2	None	None	G3T2	S2	1B.1
Chorizanthe polygonoides var. longispina long-spined spineflower	PDPGN040K1	None	None	G5T3	S3	1B.2
Cicindela tranquebarica viridissima greenest tiger beetle	IICOL02201	None	None	G5T1	S1	
Coccyzus americanus occidentalis western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Coleonyx variegatus abbotti San Diego banded gecko	ARACD01031	None	None	G5T5	S1S2	SSC
Coturnicops noveboracensis yellow rail	ABNME01010	None	None	G4	S2	SSC
Crotalus ruber red-diamond rattlesnake	ARADE02090	None	None	G4	S3	SSC
Cuscuta obtusiflora var. glandulosa Peruvian dodder	PDCUS01111	None	None	G5T4?	SH	2B.2
Diadophis punctatus modestus San Bernardino ringneck snake	ARADB10015	None	None	G5T2T3	S2?	
Dipodomys merriami parvus San Bernardino kangaroo rat	AMAFD03143	Endangered	Endangered	G5T1	S1	SSC
Dipodomys stephensi Stephens' kangaroo rat	AMAFD03100	Threatened	Threatened	G2	S3	
Dodecahema leptoceras slender-horned spineflower	PDPGN0V010	Endangered	Endangered	G1	S1	1B.1
Dudleya multicaulis many-stemmed dudleya	PDCRA040H0	None	None	G2	S2	1B.2
Elanus leucurus white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
Empidonax traillii extimus southwestern willow flycatcher	ABPAE33043	Endangered	Endangered	G5T2	S3	
Eremophila alpestris actia California horned lark	ABPAT02011	None	None	G5T4Q	S4	WL
Eriastrum densifolium ssp. sanctorum Santa Ana River woollystar	PDPLM03035	Endangered	Endangered	G4T1	S1	1B.1
Eugnosta busckana Busck's gallmoth	IILEM2X090	None	None	G1G3	S2S3	
Eumops perotis californicus western mastiff bat	AMACD02011	None	None	G4G5T4	S3S4	SSC
Euphydryas editha quino quino checkerspot butterfly	IILEPK405L	Endangered	None	G4G5T1T2	S1S2	
Falco columbarius merlin	ABNKD06030	None	None	G5	S3S4	WL
Galium californicum ssp. primum Alvin Meadow bedstraw	PDRUB0N0E6	None	None	G5T2	S2	1B.2
Gila orcuttii arroyo chub	AFCJB13120	None	None	G1	S2	SSC
Haliaeetus leucocephalus bald eagle	ABNKC10010	Delisted	Endangered	G5	S3	FP
Harpagonella palmeri Palmer's grapplinghook	PDBOR0H010	None	None	G4	S3	4.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Helianthus nuttallii ssp. parishii Los Angeles sunflower	PDAST4N102	None	None	G5TX	SX	1A
Horkelia cuneata var. puberula mesa horkelia	PDROS0W045	None	None	G4T1	S1	1B.1
Icteria virens yellow-breasted chat	ABPBX24010	None	None	G5	S4	SSC
Imperata brevifolia California satintail	PMPOA3D020	None	None	G3	S3	2B.1
Lanius ludovicianus loggerhead shrike	ABPBR01030	None	None	G4	S4	SSC
Lasiurus xanthinus western yellow bat	AMACC05070	None	None	G4G5	S3	SSC
Lasthenia glabrata ssp. coulteri Coulter's goldfields	PDAST5L0A1	None	None	G4T2	S2	1B.1
Laterallus jamaicensis coturniculus California black rail	ABNME03041	None	Threatened	G3T1	S2	FP
Lepidium virginicum var. robinsonii Robinson's pepper-grass	PDBRA1M114	None	None	G5T3	S3	4.3
Lepus californicus bennettii San Diego black-tailed jackrabbit	AMAEB03051	None	None	G5T3T4	S3S4	
Lycium parishii Parish's desert-thorn	PDSOL0G0D0	None	None	G4	S1	2B.3
Malacothamnus parishii Parish's bushmallow	PDMAL0Q0C0	None	None	GXQ	SX	1A
Monardella pringlei Pringle's monardella	PDLAM180J0	None	None	GX	SX	1A
Myosurus minimus ssp. apus little mousetail	PDRAN0H031	None	None	G5T2Q	S2	3.1
Myotis yumanensis Yuma myotis	AMACC01020	None	None	G5	S4	
Nasturtium gambelii Gambel's water cress	PDBRA270V0	Endangered	Threatened	G1	S1	1B.1
Navarretia fossalis spreading navarretia	PDPLM0C080	Threatened	None	G2	S2	1B.1
Neolarra alba white cuckoo bee	IIHYM81010	None	None	GH	SH	
Neotoma lepida intermedia San Diego desert woodrat	AMAFF08041	None	None	G5T3T4	S3S4	SSC
Nyctinomops femorosaccus pocketed free-tailed bat	AMACD04010	None	None	G5	S3	SSC
Oncorhynchus mykiss irideus pop. 10 steelhead - southern California DPS	AFCHA0209J	Endangered	Candidate Endangered	G5T1Q	S1	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Onychomys torridus ramona southern grasshopper mouse	AMAFF06022	None	None	G5T3	S3	SSC
Pandion haliaetus osprey	ABNKC01010	None	None	G5	S4	WL
Perognathus longimembris brevinasus Los Angeles pocket mouse	AMAFD01041	None	None	G5T2	S1S2	SSC
Phacelia stellaris Brand's star phacelia	PDHYD0C510	None	None	G1	S1	1B.1
Phrynosoma blainvillii coast horned lizard	ARACF12100	None	None	G4	S4	SSC
Polioptila californica californica coastal California gnatcatcher	ABPBJ08081	Threatened	None	G4G5T3Q	S2	SSC
Pseudognaphalium leucocephalum white rabbit-tobacco	PDAST440C0	None	None	G4	S2	2B.2
Rana muscosa southern mountain yellow-legged frog	AAABH01330	Endangered	Endangered	G1	S2	WL
Rhaphiomidas terminatus abdominalis Delhi Sands flower-loving fly	IIDIP05021	Endangered	None	G1T1	S1	
Rhinichthys gabrielino Santa Ana speckled dace	AFCJB3705K	Proposed Threatened	None	G5T1	S1	SSC
Ribes divaricatum var. parishii Parish's gooseberry	PDGRO020F3	None	None	G5TX	SX	1A
Riversidian Alluvial Fan Sage Scrub Riversidian Alluvial Fan Sage Scrub	CTT32720CA	None	None	G1	S1.1	
Salvadora hexalepis virgultea coast patch-nosed snake	ARADB30033	None	None	G5T4	S3	SSC
Senecio aphanactis chaparral ragwort	PDAST8H060	None	None	G3	S2	2B.2
Setophaga petechia yellow warbler	ABPBX03010	None	None	G5	S3	SSC
Sidalcea neomexicana salt spring checkerbloom	PDMAL110J0	None	None	G4	S2	2B.2
Southern California Arroyo Chub/Santa Ana Sucker Stream Southern California Arroyo Chub/Santa Ana Sucker Stream	CARE2330CA	None	None	GNR	SNR	
Southern Coast Live Oak Riparian Forest Southern Coast Live Oak Riparian Forest	CTT61310CA	None	None	G4	S4	
Southern Cottonwood Willow Riparian Forest Southern Cottonwood Willow Riparian Forest	CTT61330CA	None	None	G3	S3.2	
Southern Riparian Forest Southern Riparian Forest	CTT61300CA	None	None	G4	S4	
Southern Riparian Scrub Southern Riparian Scrub	CTT63300CA	None	None	G3	S3.2	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Southern Sycamore Alder Riparian Woodland Southern Sycamore Alder Riparian Woodland	CTT62400CA	None	None	G4	S4	
Southern Willow Scrub Southern Willow Scrub	CTT63320CA	None	None	G3	S2.1	
Spea hammondii western spadefoot	AAABF02020	Proposed Threatened	None	G2G3	S3S4	SSC
Sphenopholis obtusata prairie wedge grass	PMPOA5T030	None	None	G5	S2	2B.2
Spinus lawrencei Lawrence's goldfinch	ABPBY06100	None	None	G3G4	S4	
Streptocephalus woottoni Riverside fairy shrimp	ICBRA07010	Endangered	None	G1G2	S2	
Symphyotrichum defoliatum San Bernardino aster	PDASTE80C0	None	None	G2	S2	1B.2
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC
Texosporium sancti-jacobi woven-spored lichen	NLTEST7980	None	None	G3	S2	3
Thamnophis hammondii two-striped gartersnake	ARADB36160	None	None	G4	S3S4	SSC
Thamnophis sirtalis pop. 1 south coast gartersnake	ARADB3613F	None	None	G5T1T2	S1S2	SSC
Trichocoronis wrightii var. wrightii Wright's trichocoronis	PDAST9F031	None	None	G4T3	S1	2B.1
Vireo bellii pusillus least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S3	

Record Count: 115

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Riverside County, California

Local office

Carlsbad Fish And Wildlife Office

(760) 431-9440
(760) 431-5901

2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

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

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Stephens' Kangaroo Rat Dipodomys stephensi (incl. D. cascus) Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/3495	Threatened

Birds

NAME	STATUS
Coastal California Gnatcatcher Polioptila californica californica Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo Vireo bellii pusillus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/5945	Endangered

Reptiles

NAME	STATUS
Southwestern Pond Turtle Actinemys pallida Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4768	Proposed Threatened

Amphibians

NAME	STATUS

Western Spadefoot Spea hammondii Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/5425	Proposed Threatened

Fishes

NAME	STATUS
Santa Ana Sucker Catostomus santaanae There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/3785	Threatened

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

Crustaceans

NAME	STATUS
Riverside Fairy Shrimp Streptocephalus woottoni Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8148	Endangered
Vernal Pool Fairy Shrimp Branchinecta lynchi Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/498	Threatened

Flowering Plants

NAME	STATUS

Nevin's Barberry Berberis nevinii — Endangered
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/8025

San Diego Ambrosia Ambrosia pumila — Endangered
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/8287

Slender-horned Spineflower Dodecahema leptoceras — Endangered
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/4007

Spreading Navarretia Navarretia fossalis — Threatened
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/1334

Thread-leaved Brodiaea Brodiaea filifolia — Threatened
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/6087

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act [2] and the Migratory Bird Treaty Act (MBTA) [1]. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

There are Bald Eagles and/or Golden Eagles in your project area.

Measures for Proactively Minimizing Eagle Impacts
For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the National Bald Eagle Management Guidelines. You may employ the timing and activity-specific distance recommendations in this document when designing your project/activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to Bald Eagle Nesting and Sensitivity to Human Activity.

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

If disturbance or take of eagles cannot be avoided, an incidental take permit may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the Do I Need A Permit Tool. For assistance making this determination for golden eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

Ensure Your Eagle List is Accurate and Complete

If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

Review the FAQs
The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Golden Eagle Aquila chrysaetos This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey

effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

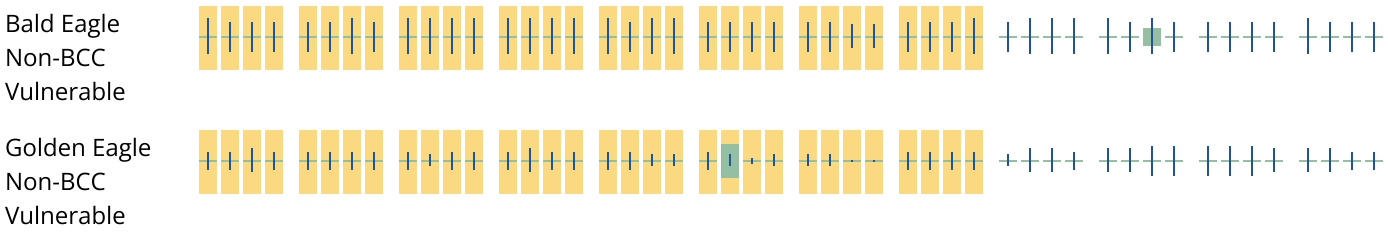
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

■ probability of presence ■ breeding season | survey effort – no data

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC



Bald & Golden Eagles FAQs

What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are an eagle (Bald and Golden Eagle Protection Act requirements may apply).

Proper interpretation and use of your eagle report
On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort line or no data line (red horizontal) means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide you in knowing when to implement avoidance and minimization measures to eliminate or reduce potential impacts from your project activities or get the appropriate permits should presence be confirmed.

How do I know if eagles are breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If an eagle on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your “IPaC PROBABILITY OF PRESENCE SUMMARY” at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

Interpreting the Probability of Presence Graphs

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:
The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of

presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Migratory birds

The Migratory Bird Treaty Act (MBTA) [1] prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service). The incidental take of migratory birds is the injury or death of birds that results from, but is not the purpose, of an activity. The Service interprets the MBTA to prohibit incidental take.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-

golden-eagles-may-occur-project-action

Measures for Proactively Minimizing Migratory Bird Impacts

Your IPaC Migratory Bird list showcases birds of concern, including Birds of Conservation Concern (BCC), in your project location. This is not a comprehensive list of all birds found in your project area. However, you can help proactively minimize significant impacts to all birds at your project location by implementing the measures in the Nationwide avoidance and minimization measures for birds document, and any other project-specific avoidance and minimization measures suggested at the link Measures for avoiding and minimizing impacts to birds for the birds of concern on your list below.

Ensure Your Migratory Bird List is Accurate and Complete

If your project area is in a poorly surveyed area, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles document, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

Review the FAQs

The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
Allen's Hummingbird Selasphorus sasin This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31

Belding's Savannah Sparrow *Passerculus sandwichensis beldingi* — Breeds Apr 1 to Aug 15

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/8

Black Swift *Cypseloides niger* — Breeds Jun 15 to Sep 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8878

Black-chinned Sparrow *Spizella atrogularis* — Breeds Apr 15 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9447

Bullock's Oriole *Icterus bullockii* — Breeds Mar 21 to Jul 25

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

California Gull *Larus californicus* — Breeds Mar 1 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

California Thrasher *Toxostoma redivivum* — Breeds Jan 1 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Common Yellowthroat *Geothlypis trichas sinuosa* — Breeds May 20 to Jul 31

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/2084

Golden Eagle *Aquila chrysaetos* — Breeds Jan 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Lawrence's Goldfinch Spinus lawrencei — Breeds Mar 20 to Sep 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Northern Harrier Circus hudsonius — Breeds Apr 1 to Sep 15
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/8350

Nuttall's Woodpecker Dryobates nuttallii — Breeds Apr 1 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9410

Olive-sided Flycatcher Contopus cooperi — Breeds May 20 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3914

Santa Barbara Song Sparrow Melospiza melodia graminea — Breeds Mar 1 to Sep 5
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/5513

Tricolored Blackbird Agelaius tricolor — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3910

Western Screech-owl Megascops kennicottii cardonensis — Breeds Mar 1 to Jun 30
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Wrentit Chamaea fasciata — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read

"Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (▪)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

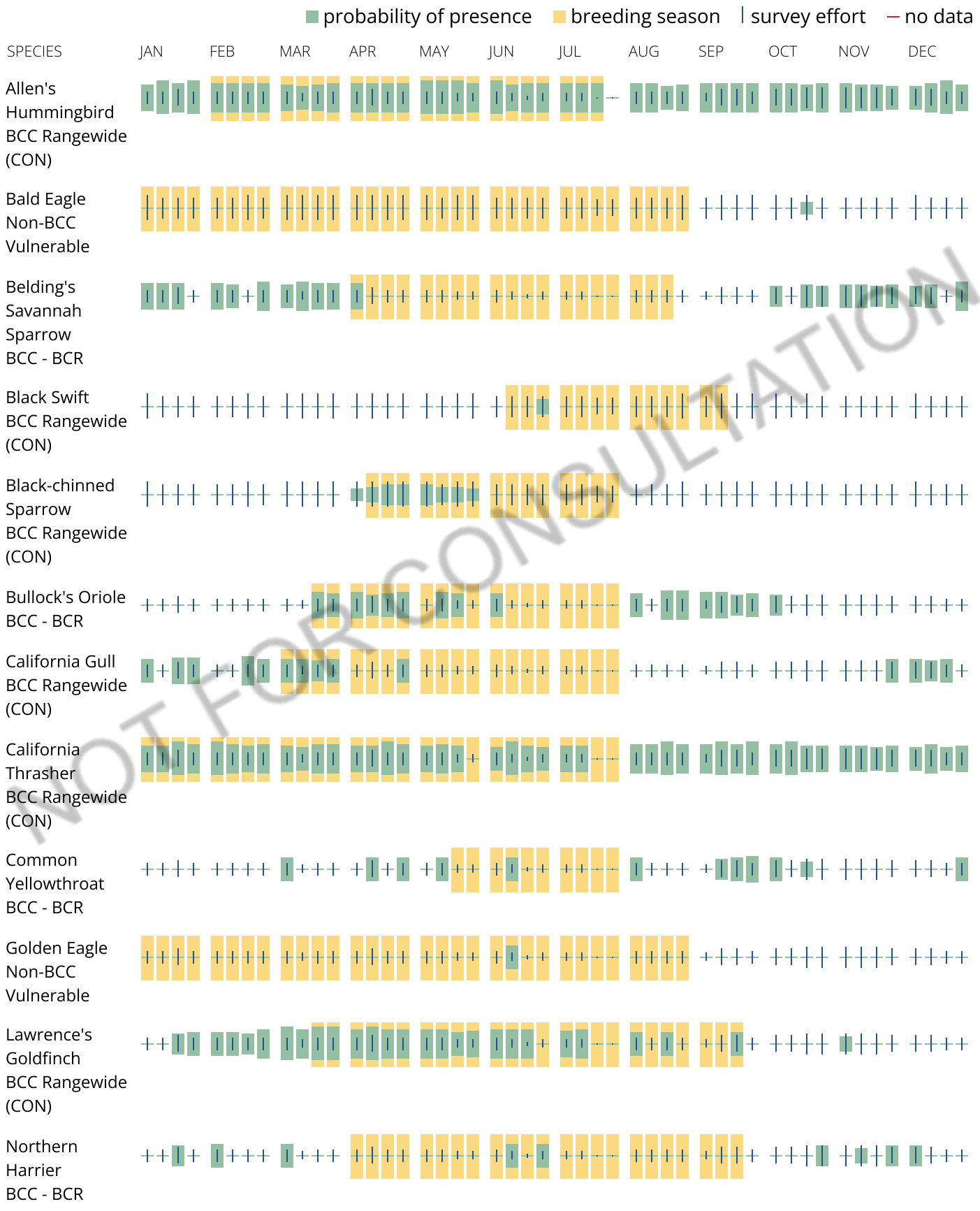
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

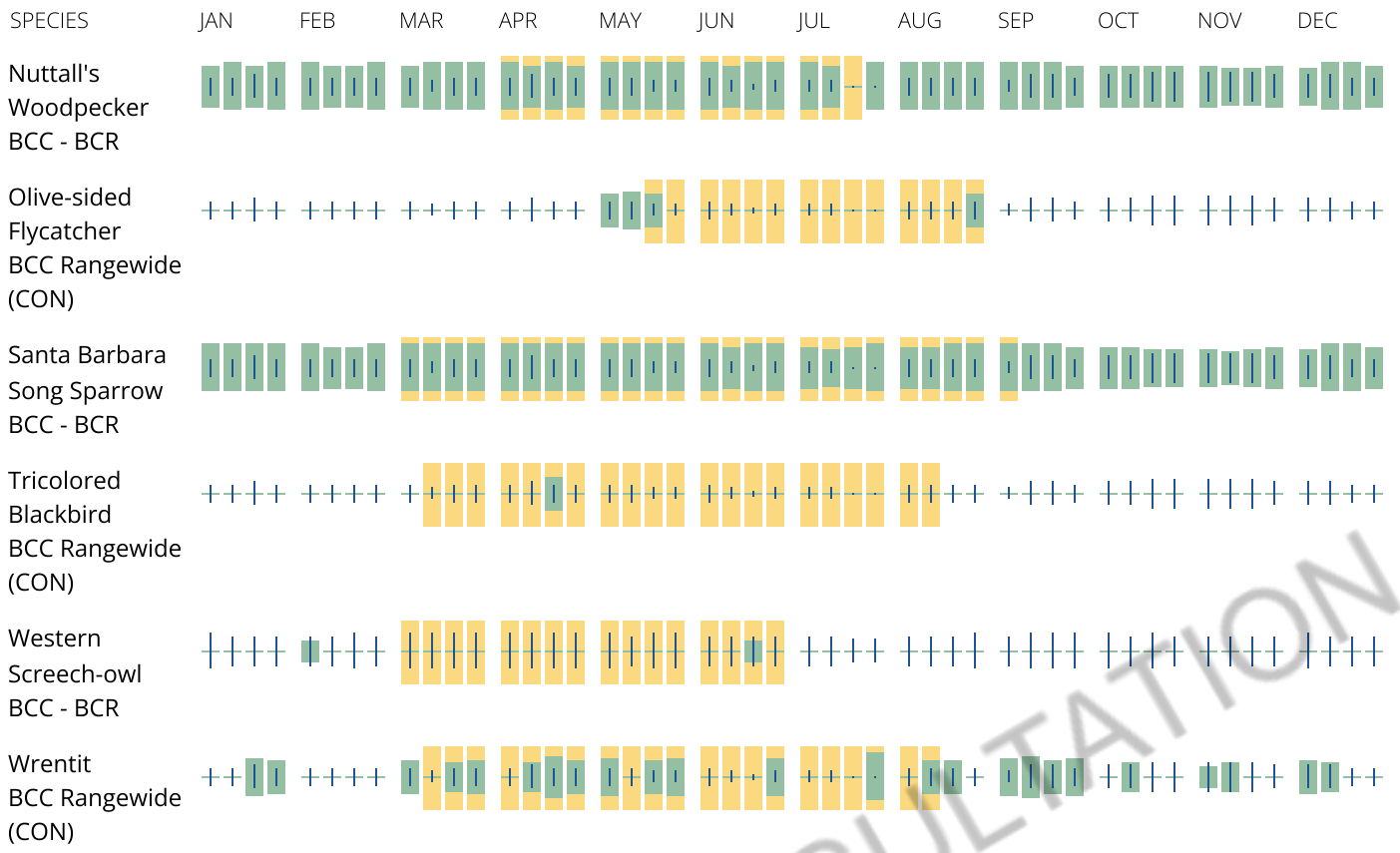
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Migratory Bird FAQs

Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Avoidance & Minimization Measures for Birds describes measures that can help avoid and minimize impacts to all birds at any location year-round. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is one of the most effective ways to minimize impacts. To see when birds are most likely to occur and breed in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location, such as those listed under the Endangered Species Act or the Bald and Golden Eagle Protection Act and those species marked as "Vulnerable". See the FAQ "What are the levels of concern for migratory birds?" for more information on the levels of concern covered in the IPaC migratory bird species list.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) with which your project intersects. These species have been identified as warranting special attention because they are BCC species in that area, an eagle (Bald and Golden Eagle Protection Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, and to verify survey effort when no results present, please visit the Rapid Avian Information Locator (RAIL) Tool.

Why are subspecies showing up on my list?

Subspecies profiles are included on the list of species present in your project area because observations in the AKN for **the species** are being detected. If the species are present, that means that the subspecies may also be present. If a subspecies shows up on your list, you may need to rely on other resources to determine if that subspecies may be present (e.g. your local FWS field office, state surveys, your own surveys).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your “IPaC PROBABILITY OF PRESENCE SUMMARY” at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Bald and Golden Eagle Protection Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially BCC species. For more information on avoidance and minimization measures you can implement to help avoid and minimize migratory bird

impacts, please see the FAQ “Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds”.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Proper interpretation and use of your migratory bird report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list does not represent all birds present in your project area. It is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide implementation of avoidance and minimization measures to eliminate or reduce potential impacts from your project activities, should presence be confirmed. To learn more about avoidance and minimization measures, visit the FAQ "Tell me about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

Interpreting the Probability of Presence Graphs
Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:
The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

RIVERINE

R4SBC

A full description for each wetland code can be found at the National Wetlands Inventory website

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should

seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

CNPS Rare Plant Inventory

Search Results

12 matches found. Click on scientific name for details

Search Criteria: , 9-Quad include [3311783]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
Arenaria paludicola	marsh sandwort	Caryophyllaceae	perennial stoloniferous herb	May-Aug	FE	CE	G1	S1	1B.1		1984-01-01	No Photo Available
Berberis nevinii	Nevin's barberry	Berberidaceae	perennial evergreen shrub	(Feb)Mar-Jun	FE	CE	G1	S1	1B.1	Yes	1980-01-01	No Photo Available
Calochortus plummerae	Plummer's mariposa-lily	Liliaceae	perennial bulbiferous herb	May-Jul	None	None	G4	S4	4.2	Yes	1994-01-01	No Photo Available
Centromadia pungens ssp. *laevis*	smooth tarplant	Asteraceae	annual herb	Apr-Sep	None	None	G3G4T2	S2	1B.1	Yes	1994-01-01	No Photo Available
Chloropyron maritimum ssp. *maritimum*	salt marsh bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	May-Oct(Nov)	FE	CE	G4?T1	S1	1B.2		1974-01-01	No Photo Available
Chorizanthe parryi var. *parryi*	Parry's spineflower	Polygonaceae	annual herb	Apr-Jun	None	None	G3T2	S2	1B.1	Yes	1994-01-01	 © 2012 Keir Morse

Deinandra paniculata	paniculate tarplant	Asteraceae	annual herb	(Mar)Apr-Nov	None	None	G4	S4	4.2		2001-01-01	No Photo Available
Hordeum intercedens	vernal barley	Poaceae	annual herb	Mar-Jun	None	None	G3G4	S3S4	3.2		1994-01-01	No Photo Available
Juglans californica	Southern California black walnut	Juglandaceae	perennial deciduous tree	Mar-Aug	None	None	G4	S4	4.2	Yes	1994-01-01	 © 2020 Zoya Akulova
Lepidium virginicum var. *robinsonii*	Robinson's pepper-grass	Brassicaceae	annual herb	Jan-Jul	None	None	G5T3	S3	4.3		1994-01-01	 © 2015 Keir Morse
Romneya coulteri	Coulter's matilija poppy	Papaveraceae	perennial rhizomatous herb	Mar-Jul(Aug)	None	None	G4	S4	4.2		1974-01-01	No Photo Available
Senecio aphanactis	chaparral ragwort	Asteraceae	annual herb	Jan-Apr(May)	None	None	G3	S2	1B.2		1994-01-01	 Neal Kramer

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