

**Appendix 2A**  
**Habitat Assessment and MSHCP**  
**Consistency Analysis**

**Sunset Crossings Residential Project**  
**Initial Study**

# **SUNSET CROSSING**

## **TENTATIVE TRACT MAP 38442**

CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, CALIFORNIA

### **HABITAT ASSESSMENT AND WESTERN RIVERSIDE COUNTY MULTIPLE SPECIES HABITAT CONSERVATION PLAN CONSISTENCY ANALYSIS**

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November 2022

JN 184659

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The undersigned certify that the statements furnished in this report and exhibits present data and information required for this biological evaluation, and the facts, statements, and information presented is a complete and accurate account of the findings and conclusions to the best of our knowledge and beliefs.



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November 2022  
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# Executive Summary

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This report contains the findings of Michael Baker International’s (Michael Baker) habitat assessment and Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) consistency analysis for the proposed Sunset Crossing Tentative Tract Map (TTM) 38442 (project or project site) located in the City of Moreno Valley, Riverside County, California. Michael Baker biologists conducted a field survey/habitat assessment on April 12, 2022. The field survey was conducted to characterize existing site conditions and assess the potential for special-status<sup>1</sup> biological resources to occur within the project site and a 50-foot buffer (survey area) that could pose a constraint to implementation of the proposed project.

According to the Western Riverside County Regional Conservation Authority’s (RCA) online MSHCP Information Application, the survey area is not located within any Subunits, Criteria Cells, Conservation Areas, Cores/Linkages, or Public/Quasi-Public Lands identified by the MSHCP. However, 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.

The survey area is located within a partially developed portion of the City of Moreno Valley, east of Nason Street and north of Alessandro Boulevard. Natural habitats within the survey area have been eliminated due to routine weed abatement activities (i.e., disking, tilling), resulting in heavily disturbed and compacted surface soils. As such, native vegetation communities do not occur, and the survey area is primarily comprised of disturbed land that is dominated by ruderal/weedy, and ornamental plant species.

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 specific-specific habitat preferences, occurrence records, known distributions, and elevation ranges.

One (1) special-status wildlife species that was observed during the field survey included: Cooper’s hawk (*Accipiter cooperii*; a State Watch List [WL] species). 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]), California horned lark (*Eremophila alpestris actia*; a State WL species), western mastiff bat (*Eumops perotis californicus*; a State SSC), and western yellow bat (*Lasiurus xanthinus*; a State SSC). All remaining special-status wildlife species identified during the literature review and records search are not expected to occur within the survey area.

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<sup>1</sup> 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; State/locally rare vegetation communities; or species covered under the Western Riverside County Multiple Species Habitat Conservation Plan.

Due to the presence of suitable foraging habitat for BUOW, focused surveys were conducted to confirm the presence/absence of BUOW within the project site and a species-specific 500-foot buffer and analyze potential impacts that could occur as a result of the proposed project. Focused surveys were conducted by a qualified biologist during the 2022 breeding season (March 1 to August 31) in accordance with *Burrowing Owl Survey Instructions for the Western Riverside County Multiple Species Habitat Conservation Plan* (RCA 2006). No BUOWs or sign were found during the focused surveys and the species is presumed absent.

Two (2) drainage features (Aquatic Feature 1 [AF-1] and Aquatic Feature 2 [AF-2]) occur within the survey area and fall under the regulatory authority of the Regional Water Quality Control Board (RWQCB) and the California Department of Fish and Wildlife (CDFW). Based on a review of the conceptual site plan, approximately 0.22 acre of impacts to RWQCB jurisdiction (non-wetland waters of the State) are anticipated, comprised of 0.17 acre of permanent impacts within the project site and 0.05 acre of temporary impacts within the survey area, as well as a total of 0.22 acre of impacts to CDFW jurisdiction, consisting of 0.17 acre of permanent impacts and 0.05 acre of temporary impacts to vegetated streambed, and no impacts to associated riparian habitat. Therefore, it is anticipated that the project applicant would need to obtain the following regulatory permits prior to impacts occurring within jurisdictional areas: 1) Waste Discharge Requirement from the RWQCB, and 2) Section 1602 Streambed Alteration Agreement from CDFW.

AF-1 and AF-2 would qualify as riparian/riverine resources pursuant to Section 6.1.2 of the MSHCP; a total of approximately 0.22 acre of riverine habitat occurs within the project site. There is no riparian habitat present. Riverine resources within the survey area do not provide suitable habitat for western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), southwestern willow flycatcher (*Empidonax traillii extimus*), least Bell's vireo (*Vireo bellii pusillus*), or fairy shrimp, nor is vernal pool habitat present.

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**ACRONYMS AND ABBREVIATIONS**

AF	Aquatic Feature
AMM	Avoidance and Minimization Measure
APN	assessor’s parcel number
BMPs	best management practices
BUOW	burrowing owl
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CFGC	California Fish and Game Code
CIRP	Inventory of Rare and Endangered Plants of California
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CWA	federal Clean Water Act
DBESP	Determination of Biologically Equivalent or Superior Preservation
FESA	federal Endangered Species Act
GIS	Geographic Information System
I	Interstate
IPaC	Information for Planning and Consultation Project Planning Tool
MBTA	Migratory Bird Treaty Act
Michael Baker	Michael Baker International
MSHCP	Western Riverside County Multiple Species Habitat Conservation Plan
P/QP	Public/Quasi-Public Lands
project	Sunset Crossing Tentative Tract Map 38442
RCA	Western Riverside County Regional Conservation Authority
RWQCB	Regional Water Quality Control Board
SKR	Stephens’ Kangaroo Rat
SKR HCP	Stephens’ Kangaroo Rat Habitat Conservation Plan
SR	State Route
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
WoUS	waters of the U.S.

# Section 1 Introduction

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This report contains the findings of Michael Baker International’s (Michael Baker) habitat assessment and Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) consistency analysis for the proposed Sunset Crossing Tentative Tract Map (TTM) 38442 (project or project site) located in the City of Moreno Valley, Riverside County, California. Michael Baker biologists conducted a field survey/habitat assessment on April 12, 2022. The field surveys were conducted to characterize existing site conditions and assess the potential for special-status<sup>2</sup> biological resources to occur within the project site and a 50-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 project site 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 (CNDDDB; CDFW 2022a), the CNDDDB Biogeographic Information and Observation System (CDFW 2022b), the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California (CIRP; CNPS 2022), the United State Fish and Wildlife Service (USFWS) Information for Planning and Consultation Project Planning Tool (IPaC; USFWS 2022a), the Western Riverside County Regional Conservation Authority’s (RCA) online MSHCP Information Application, and other databases as potentially occurring in the vicinity of the project site.

## 1.1 PROJECT LOCATION

The project site is located within the City of Moreno Valley, generally to the north of Perris Reservoir, east of Interstate 215 (I-215), south of State Route 60 (SR-60), and west of SR-79 (refer to Figure 1, *Regional and Project Vicinity*). The project site is depicted in Section 10, Township 3 South, Range 3 West, on the United States Geological Survey’s (USGS) *Sunnymead, California* 7.5-minute quadrangle. Specifically, the project site is located north of Alessandro Boulevard, south of Bay Avenue, west of Marion Road, and east of Nason Street on assessor’s parcel numbers (APN) 488-210-020 and 488-210-006 (refer to Figure 2, *Project Site*).

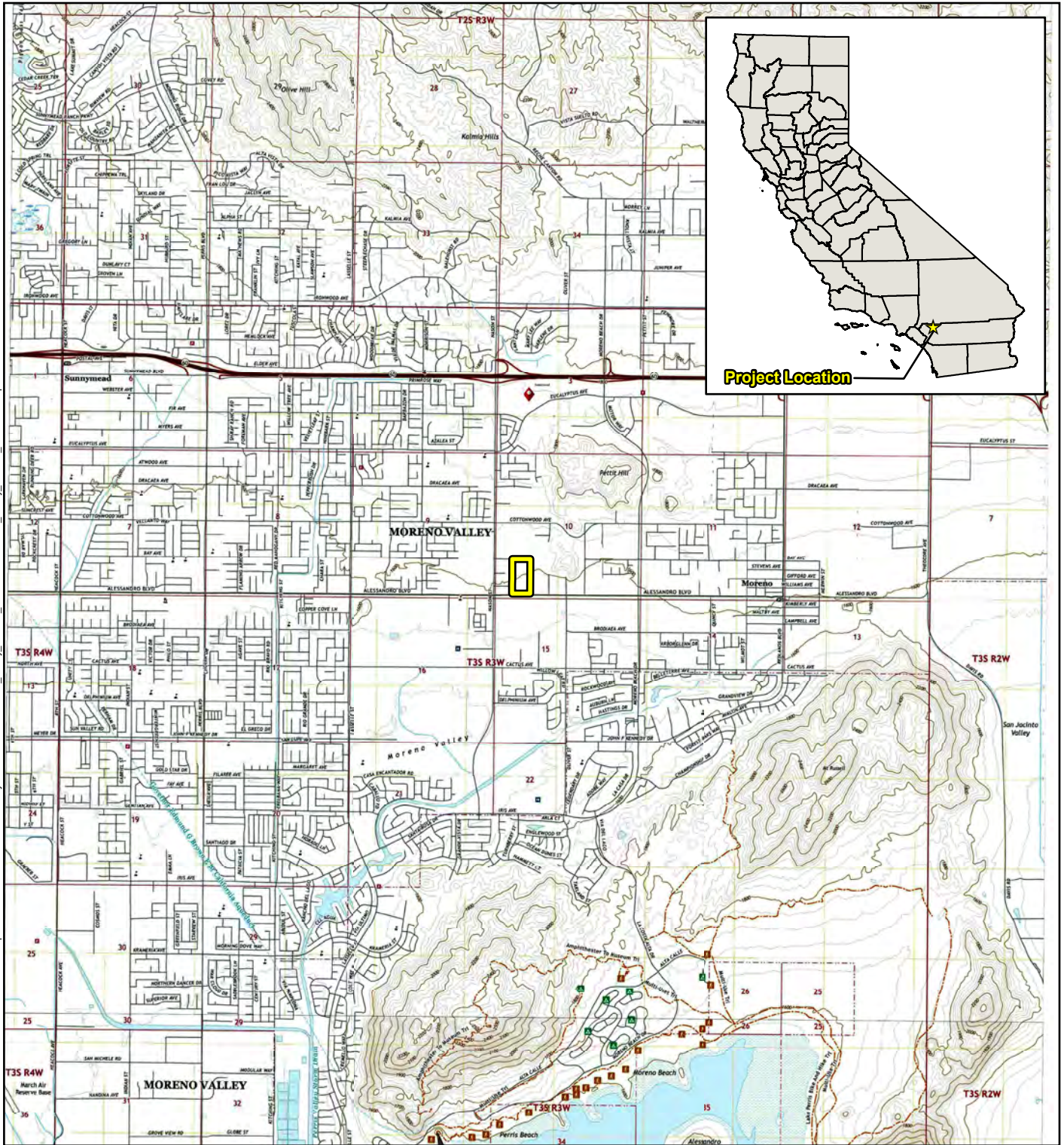
## 1.2 PROJECT DESCRIPTION

The proposed project includes the development of up to 108 residential units, a water basin, a park, and road construction on 19.10 acres (refer to Appendix A, *Proposed Site Plan*).

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<sup>2</sup> 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; State/locally rare vegetation communities; or species covered under the Western Riverside County Multiple Species Habitat Conservation Plan.

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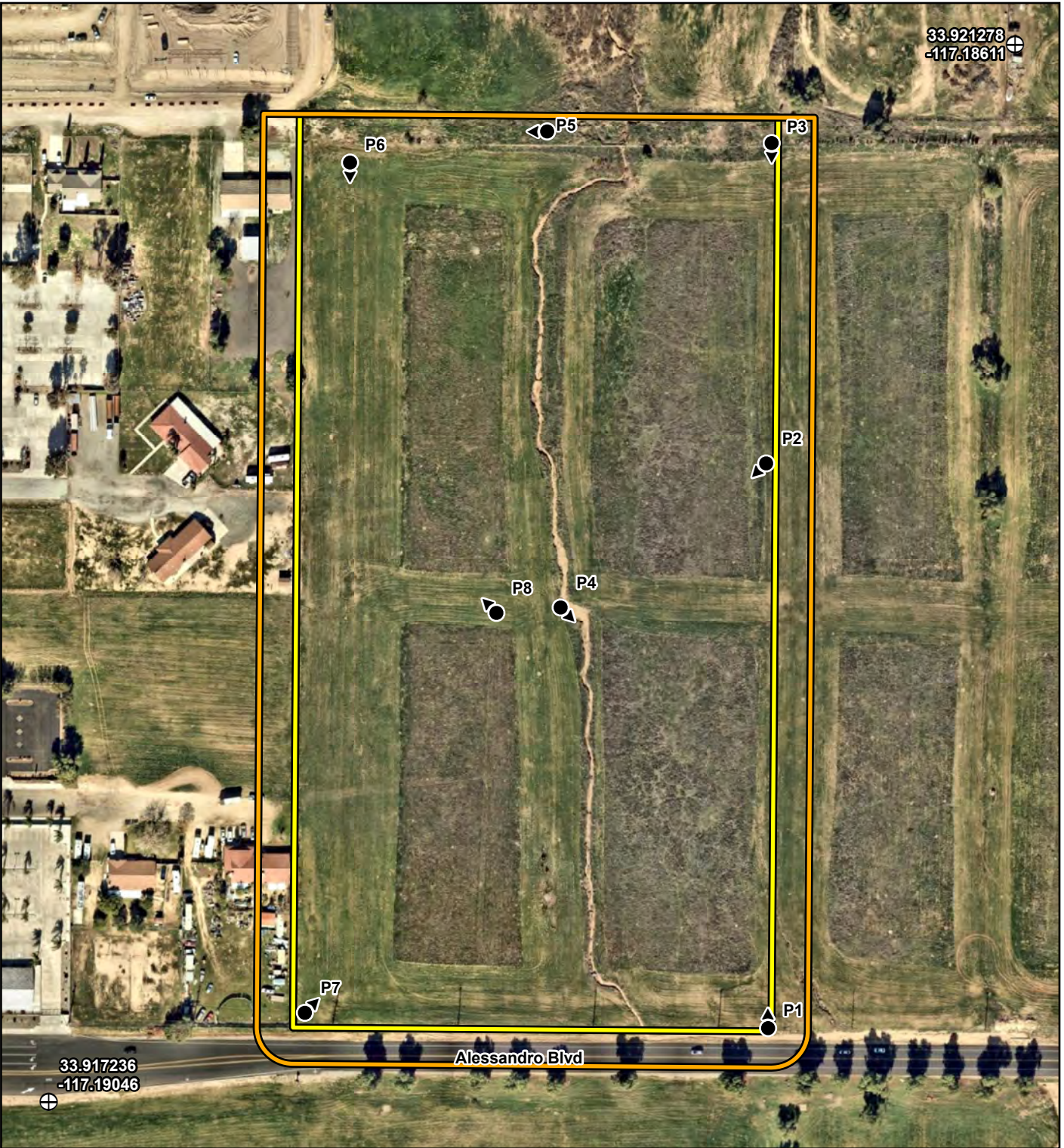


**Legend**





 Project Site (19.10 acres)


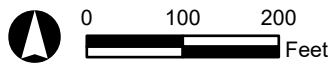
Figure 1

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**Legend**

-  Project Site (19.10 acres)
-  Survey Area (22.84 acres)
-  Reference Point
-  Photograph Point and Direction

Source: Nearmap (01/2022)

SUNSET CROSSING TTM 38442  
HABITAT ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS  
**Project Site**

Figure 2

## Section 2 Methodology

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Prior to conducting the field survey, Michael Baker 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 in order to document existing biological conditions and determine the potential for special-status plant and wildlife species to occur within the survey area.

### 2.1 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 *El Casco*, *Perris*, *Riverside East*, *Steele Peak*, and *Sunnymead*, California 7.5-minute quadrangles were determined through a query of the CNDDDB (CDFW 2022a) and CIRP (CNPS 2022), and for the project region through a review of the IPaC (USFWS 2022a).

The current regulatory/conservation statuses of special-status plant and wildlife species were verified through lists and resources provided by the CDFW, specifically the *Special Animals List* (CDFW 2022c), *Special Vascular Plants, Bryophytes, and Lichens List* (CDFW 2022d), *State and Federally Listed Endangered and Threatened Animals of California* (CDFW 2022e), and *State and Federally Listed Endangered, Threatened, and Rare Plants of California* (CDFW 2022f). USFWS-designated Critical Habitat for species listed under the federal Endangered Species Act (FESA) was reviewed online via the Environmental Conservation Online System: Threatened and Endangered Species Active Critical Habitat Report (USFWS 2022b). In addition, Michael Baker reviewed previously prepared reports, survey results, and literature, as available, detailing the biological resources previously observed on or within the vicinity of the survey area to understand existing site conditions, confirm previous species observations, and note the extent of any disturbances, if present, that have occurred within the survey area that would otherwise limit the distribution of special-status biological resources. Standard field guides and texts were reviewed for specific habitat requirements of special-status species, as well as the following resources:

- Calflora Database (Calflora 2022)
- Google Earth Pro Historical Aerial Imagery from 1985 to 2021 (Google, Inc. 2021)
- Species Accounts provided by Birds of the World (Billerman et. al 2020)
- Cornell Lab of Ornithology's eBird Database (eBird 2022)
- *Custom Soil Resource Report for Western Riverside Area, California* (United States Department of Agriculture [USDA] 2022)
- National Wetlands Inventory Mapper (USFWS 2022c)

Refer to Section 6 for a complete list of technical references that were reviewed by Michael Baker throughout the course of the habitat assessment.

## 2.2 FIELD SURVEY

Michael Baker biologists Ryan Winkleman and Lauren Mapes 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 April 12, 2022. Michael Baker biologists 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	Weather Conditions	
			Temperature (°F) (start / finish)	Wind Speed (mph) (start / finish)
April 12, 2022	1000 / 1030	Ryan Winkleman, Lauren Mapes	66 sunny / 67 sunny	2 – 7

According to the RCA’s online MSHCP Information Application, the survey area is not located within any Subunits, Criteria Cells, Conservation Areas, Cores/Linkages, or Public/Quasi-Public (P/QP) Lands identified by the MSHCP. Additionally, the survey area is located within a designated survey area for burrowing owl (*Athene cunicularia* [BUOW]).

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 soil condition, topography, hydrology, anthropogenic disturbances, indicator species, and the overall condition of on-site vegetation communities were recorded.

## 2.3 VEGETATION COMMUNITIES

Vegetation communities occurring within the survey area were delineated on an aerial photograph during the field survey and later digitized using GIS ArcView software to quantify the area of each vegetation community in acres. Vegetation communities were classified in accordance with the vegetation communities provided 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 evaluating the presence or absence of special-status vegetation communities identified in the CNDDDB records search, which uses the Holland vegetation system.

## 2.4 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).

## 2.5 WILDLIFE

Wildlife species detected during the 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 included *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 this report (first reference only). To the extent possible, nomenclature of birds follows the most recent annual supplement of the American Ornithological Union’s *Checklist of North American Birds* (Chesser et al. 2019), nomenclature of amphibians and reptiles follows *Scientific and Standard 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).

## Section 3 Results and Discussion

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### 3.1 EXISTING CONDITIONS

#### 3.1.1 TOPOGRAPHY AND SOILS

The survey area is located within a moderately developed portion of the City of Moreno Valley, at an elevation of approximately 1,584 to 1,611 feet above mean sea level with generally flat topography throughout. Based on a review of Google Earth aerial imagery from 1985 to 2021, the survey area has been routinely cleared as a result of routine weed abatement activities (i.e., disking, tilling), resulting in heavily disturbed and compacted surface soils. According to the *Custom Soil Resource Report for Western Riverside Area, California* (USDA 2022), the survey area is underlain by the following soil units: Greenfield sandy loam, 0 to 2 percent slopes (GyA), Hanford coarse sandy loam, 2 to 8 percent slopes (HcC), and Ramona sandy loam, 0 to 5 percent slopes, severely eroded (RaB3). Refer to Figure 3, *USDA Soils*, for a depiction of soil units that have been mapped within the survey area. In addition, please refer to Appendix B for representative photographs of the survey area taken during the field survey.

#### 3.1.2 SURROUNDING LAND USES

Land uses in the immediate vicinity of the survey area include vacant, residential, and commercial land uses. Vacant, undeveloped land is located to the north, south and east of the survey area, while residential uses are located along the west, northwest, and northeast boundaries of the survey area. Additionally, commercial uses were currently being built near the northwest corner of the project boundary at the time of the field survey.

### 3.2 VEGETATION COMMUNITIES AND OTHER LAND USES

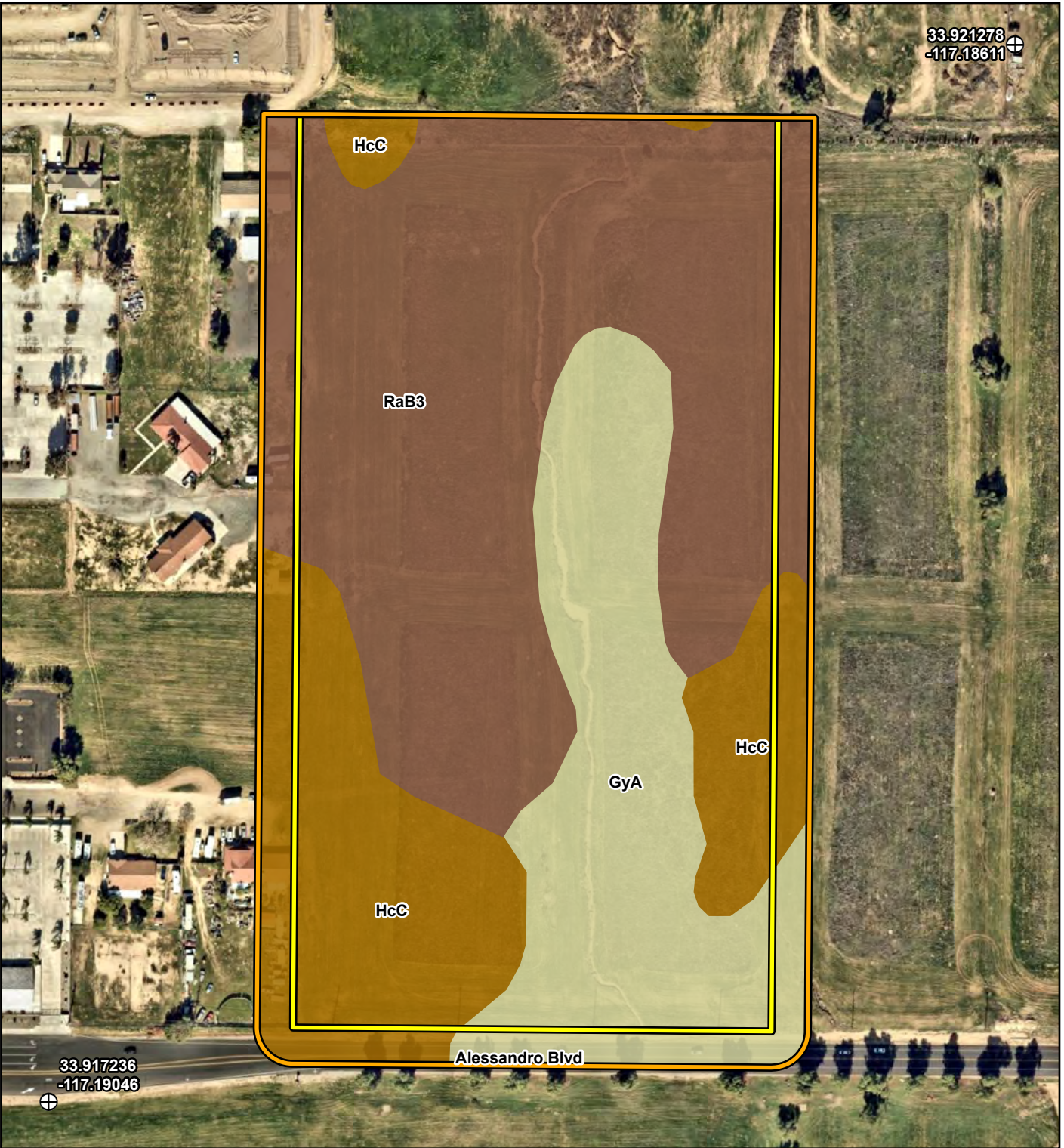
Natural habitats within the survey area have been eliminated due to routine weed abatement activities (i.e., disking, tilling), resulting in heavily disturbed and compacted surface soils. As such, native vegetation communities do not occur. The survey area is primarily comprised of disturbed habitat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

#### 3.2.1 DISTURBED HABITAT

Disturbed habitat comprises approximately 19.10 acres of the project site and 21.17 acres of the entire survey area. 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



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**Legend**

Project Site (19.10 acres)	GyA Greenfield sandy loam, 0 to 2 percent slopes	RaB3 Ramona sandy loam, 0 to 5 percent slopes, severely eroded
Survey Area (22.84 acres)	HcC Hanford coarse sandy loam, 2 to 8 percent slopes	
Reference Point		

Source: Nearmap (01/2022), USDA (2019)






SUNSET CROSSING TTM 38442  
 HABITAT ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS  
**USDA Soils**


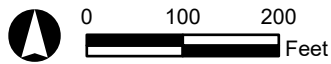
Figure 3

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**Legend**

	Project Site (19.10 acres)		Disturbed (21.17 acres)
	Survey Area (22.84 acres)		Developed (1.67 acres)
	Reference Point		

Source: Nearmap (01/2022)

SUNSET CROSSING TTM 38442  
 HABITAT ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS  
**Vegetation Communities and Other Land Uses**

Figure 4

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 areas include common fiddleneck (*Amsinckia intermedia*), wild oat (*Avena fatua*), ripgut brome (*Bromus diandrus*), red brome (*Bromus madritensis* ssp. *rubens*), short-podded mustard (*Hirschfeldia incana*), and telegraphweed (*Heterotheca grandiflora*).

### **3.2.2 DEVELOPED**

Developed areas are not present within the project site but make up approximately 1.67 acres of the entire survey area. They consist of areas that have been constructed upon or have been physically altered to a degree that native vegetation is no longer supported. Developed areas within the survey area include Alessandro Boulevard to the south.

## **3.3 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 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 C for a complete list of wildlife species observed during the field survey.

### **3.3.1 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.

### **3.3.2 AMPHIBIANS**

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

### **3.3.3 REPTILES**

One (1) reptile was observed within the survey area during the field survey, western side-blotched lizard (*Uta stansburiana elegans*). Since the survey area is primarily disturbed, it 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 longipes*) and San Diego alligator lizard (*Elgaria multicarinata webbia*).

### 3.3.4 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. Twenty-six (26) bird species were detected during the field survey, some of which included house finch (*Haemorrhous mexicanus*), California towhee (*Melozone crissalis*), savannah sparrow (*Passerculus sandwichensis*), Say’s phoebe (*Sayornis saya*) and western meadowlark (*Sturnella neglecta*). Refer to Appendix C for a complete list of bird species observed during the field survey.

Nesting birds are protected pursuant to the federal Migratory Bird Treaty Act (MBTA) of 1918 and the California Fish and Game Code (CFGC)<sup>3</sup>. 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 and indirect 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 (e.g., killdeer [*Charadrius vociferus*], western meadowlark). No nests were observed within the survey area during the field survey.

### 3.3.5 MAMMALS

Five (5) mammal species were observed during the field survey, coyote (*Canis latrans*), domestic dog (*Canis lupus familiaris*), domestic cat (*Felis catus*), California ground squirrel (*Otospermophilus beecheyi*), and 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, the routine 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*), striped skunk (*Mephitis mephitis*), and raccoon (*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 50-foot survey area.

## 3.4 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

<sup>3</sup> Section 3503 makes it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by the CFGC or any regulation made pursuant thereto; Section 3503.5 makes it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey); and Section 3513 makes it unlawful to take or possess any migratory non-game bird except as provided by the rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA, as amended (16 U.S.C. § 703 *et seq.*).

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 but has undeveloped, vacant land around it, particularly to the north and south that could function as something of a movement corridor for mammals. However, surrounding roads and development have fragmented the connection between the survey area and surrounding open space and naturally occurring vegetation communities. The disturbed landscape of the survey area and absence of 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 Nason Street, Alessandro Boulevard, Cottonwood Avenue, and surrounding residential development all decrease the suitability of the survey area to be used as a wildlife movement corridor or linkage.

### 3.5 SPECIAL-STATUS BIOLOGICAL RESOURCES

The CNDDDB, 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 *El Casco*, *Perris*, *Riverside East*, *Steele Peak*, and *Sunnymead*, 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 CNDDDB 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 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 CNDDDB, CIRP, and IPaC searches identified forty (40) special-status plant species and forty-three (43) special-status wildlife species as having been previously recorded within the USGS *El Casco, Perris, Riverside East, Steele Peak, and Sunnymead, California* 7.5-minute quadrangles. In addition, three (3) 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 D.

### 3.5.1 SPECIAL-STATUS PLANT SPECIES

Forty (40) special-status plant species have been recorded in the USGS *El Casco, Perris, Riverside East, Steele Peak, and Sunnymead, California* 7.5-minute quadrangles by the CNDDDB, CIRP, and IPaC (refer to Appendix D). No special-status plant species were observed within the survey area during the field survey. The survey area is primarily comprised of disturbed/ruderal non-native herbs and grasses, and disturbance-tolerant native wildflowers. Vegetation that is present primarily consists of common wild oat, ripgut brome, short-podded mustard, and horehound (*Marrubium vulgare*). Additionally, the routine weed abatement within the survey area and surrounding developed land uses have 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 CNDDDB, CIRP, and IPaC are not expected to occur within the survey area.

### 3.5.2 SPECIAL-STATUS WILDLIFE SPECIES

Forty-three (43) special-status wildlife species have been recorded in the USGS *El Casco, Perris, Riverside East, Steele Peak, and Sunnymead, California* 7.5-minute quadrangles by the CNDDDB (refer to Appendix D). One (1) special-status wildlife species was observed during the field survey: Cooper's hawk (*Accipiter cooperii*; a State Watch List [WL] species). One individual Cooper's hawk was observed foraging across the survey area. 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 BUOW (a State Species of Special Concern [SSC]), California horned lark (*Eremophila alpestris actia*; a State WL species), western mastiff bat (*Eumops perotis californicus*; a State SSC), and western yellow bat (*Lasiurus xanthinus*; a State SSC). All remaining special-status wildlife species identified by the CNDDDB database are not expected to occur within the survey area.

Due to regional significance in western Riverside County and the presence of a known population in the project vicinity (CDFW 2022a), 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 in further detail in Section 4.6.3.

### *Stephens' Kangaroo Rat*

The SKR is 1 of 19 subspecies of the kangaroo rat (genus *Dipodomys*) that comprise 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-Term 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; the San Jacinto Core Reserve is located approximately 2.5 miles to the southeast of the survey area.

According to the CNDDDB, there are eight (8) occurrence records for SKR within the USGS *Sunnymead, California* 7.5-minute quadrangle (CDFW 2022a). The closest, extant occurrence record was recorded in 1989 in Moreno Valley, approximately 0.5-mile northeast of the survey area, and the undeveloped areas surrounding the northern side of Perris Reservoir, approximately 2 miles from the survey area, are known to support a well-established SKR population (CDFW 2022a).

Suitable sparse coastal sage scrub and open grassland habitat 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. Although the survey area is approximately 2 miles from a well-established population to the north of Perris Reservoir, the site is separated by extensive development, primarily residential, and as a result combined with the lack of suitable on-site habitat the survey area is not expected to support SKR.

### **3.5.3 SPECIAL-STATUS VEGETATION COMMUNITIES**

Three (3) special-status vegetation communities have been reported in the USGS *El Casco, Perris, Riverside East, Steele Peak, and Sunnymead, California* 7.5-minute quadrangles by the CNDDDB: Southern Coast Live Oak Riparian Forest, Southern Cottonwood Willow Riparian Forest, and Southern Sycamore Alder Riparian Woodland. No special-status vegetation communities were observed within the survey area during the field survey.

### 3.6 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*).

### 3.7 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 dredged 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 Discharges 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.

two (2) drainage features were documented within the boundaries of the survey area as follows: Aquatic Feature 1 (AF-1) and Aquatic Feature 2 (AF-2). Neither feature qualified as a wetland. Refer to Table 2 and the following sections for a summary of jurisdictional features documented within the survey area.

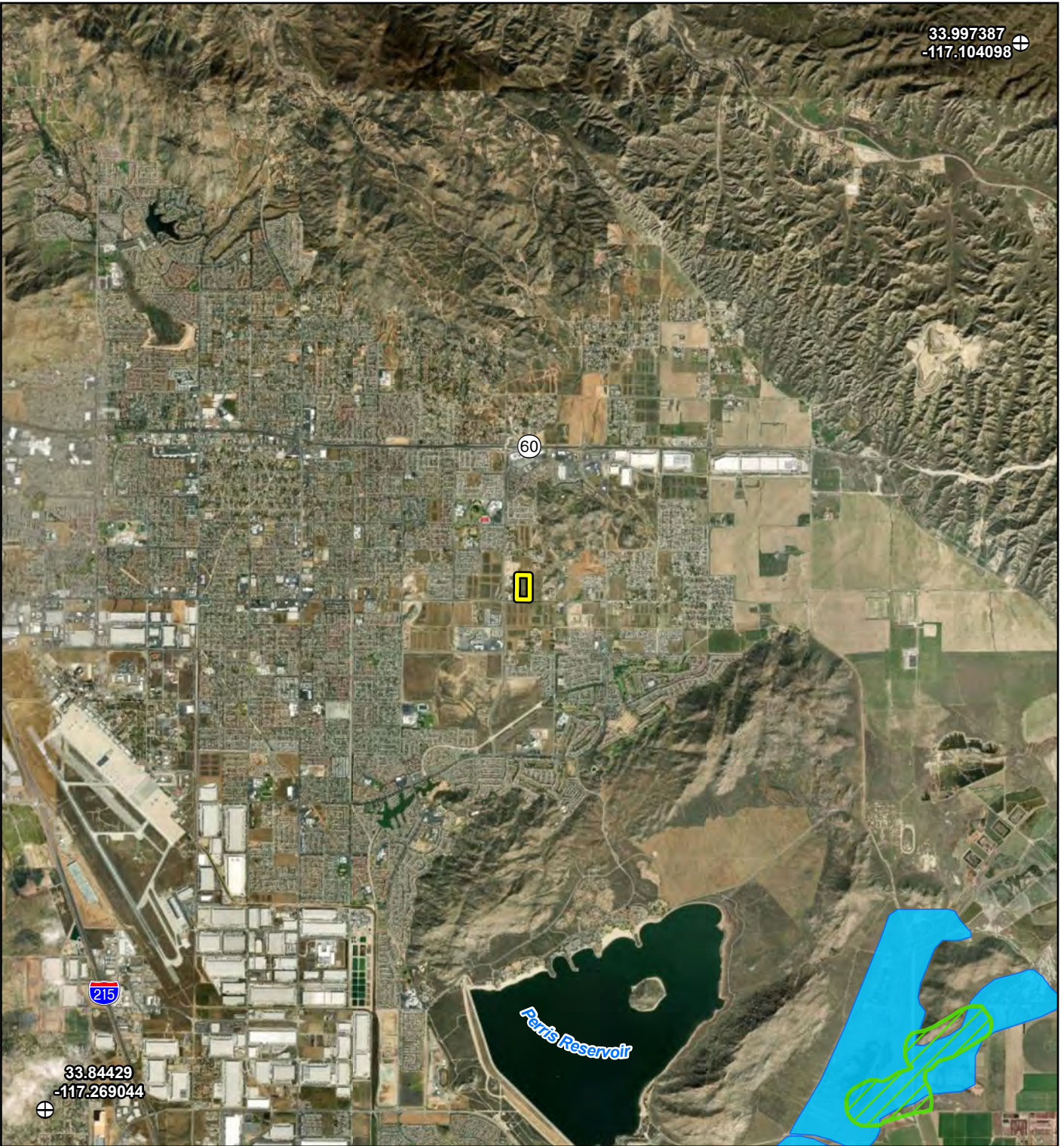
**Table 2: Jurisdictional Resources**

Aquatic Feature	Class of Aquatic Feature	Linear Feet	Acreage within Project Site				Acreage within Survey Area			
			RWQCB		CDFW		RWQCB		CDFW	
			Non-Wetland WotS	Wetland WotS	Streambed	Riparian	Non-Wetland WotS	Wetland WotS	Streambed	Riparian
AF-1	Non-Wetland	1,434	0.17	0.00	0.17	0.00	0.03	0.00	0.03	0.00
AF-2	Non-Wetland	201	< 0.01	0.00	< 0.01	0.00	0.01	0.00	0.01	0.00
<b>TOTAL ACREAGE*</b>		<b>1,635</b>	<b>0.17</b>	<b>0.00</b>	<b>0.17</b>	<b>&lt;0.01</b>	<b>0.05</b>	<b>0.00</b>	<b>0.05</b>	<b>0.00</b>





\*Total may not equal to sum due to rounding.



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**Legend**

	Project Site (19.10 acres)		Spreading navarretia ( <i>Navarretia fossalis</i> )
	Reference Point		Thread-leaved brodiaea ( <i>Brodiaea filifolia</i> )

### **3.7.1 UNITED STATES ARMY CORPS OF ENGINEERS**

The USACE regulates discharge of dredged or fill material into WoUS pursuant to Section 404 of the CWA and Section 10 of the Rivers and Harbors Act. No USACE jurisdiction occurs in association with the project site, as neither AF-1 nor AF-2 exhibit any downstream surface connection (significant nexus) to a Relatively Permanent Water or a Traditionally Navigable Water.

### **3.7.2 REGIONAL WATER QUALITY CONTROL BOARD**

The RWQCB regulates discharges to surface waters pursuant to Section 401 of the CWA and Section 13263 of the Porter-Cologne Act. Based on a review of the conceptual site plan, approximately 0.22 acre of impacts to RWQCB jurisdiction (non-wetland WotS) are anticipated, comprised of 0.17 acre of permanent impacts within the project site, and 0.05 acre of temporary impacts within the survey area. Therefore, it would be necessary for the project proponent to obtain a Waste Discharge Requirement from the RWQCB prior to impacts occurring within RWQCB jurisdictional areas.

### **3.7.3 CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE**

The CDFW regulates alterations to lakes, streambeds, and riparian habitats pursuant to Section 1600 *et seq.* of the CFGC. Based on a review of the conceptual site plan, a total of 0.22 acre of impacts to CDFW jurisdiction are anticipated. Anticipated impacts consist of 0.17 acre of permanent impacts and 0.05 acre of temporary impacts to vegetated streambed, with no impacts to any associated riparian habitat, which is not present. Therefore, it would be necessary for the project proponent to obtain a Section 1602 Streambed Alteration Agreement from the CDFW prior to impacts occurring within CDFW jurisdictional areas.

## Section 4 MSHCP Consistency Analysis

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This section contains the findings of Michael Baker’s 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 Subunits, Criteria Cells, Conservation Areas, Cores/Linkages, or P/QP lands identified by the MSHCP (refer to Figure 6, *MSHCP Conservation Areas*). However, the project site is located within designated survey area for BUOW according to the RCA’s online MSHCP Information Application.

### 4.1 PROJECT INTRODUCTION AND SETTING

#### 4.1.1 PROJECT AREA

The project site consists of APN 488-210-020 and 488-210-006 which is approximately 19.10 acres. 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 is not located within any Subunits, Criteria Cells, Conservation Areas, Cores/Linkages, or P/QP lands identified by the MSHCP.

#### 4.1.2 PROJECT DESCRIPTION

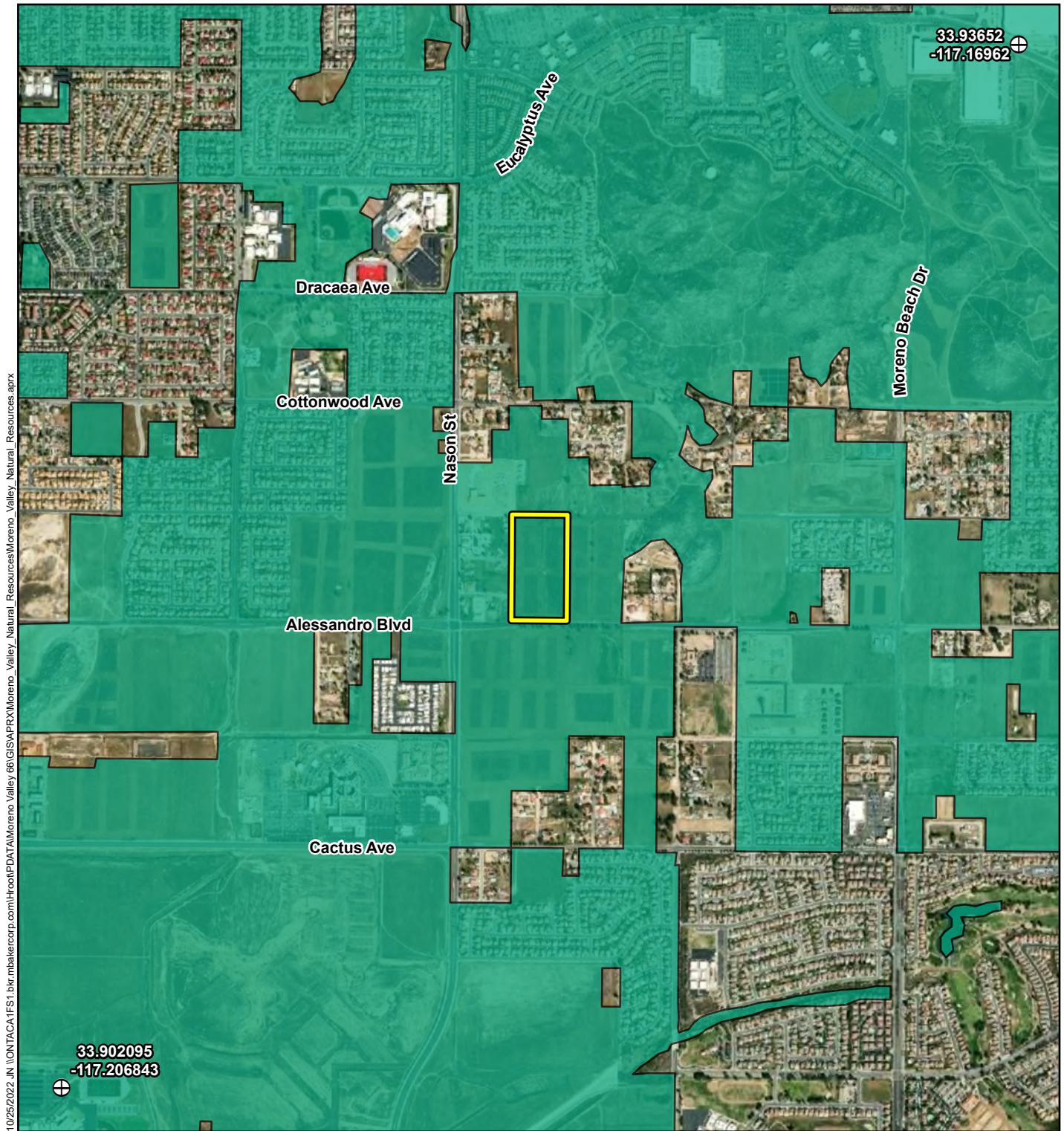
The proposed project includes the development of up to 108 residential units, a water basin, a park, and road construction on 19.10 acres (refer to Appendix A, *Proposed Site Plan*).

#### 4.1.3 COVERED ROADS



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


#### 4.1.4 GENERAL SETTING



The project site is located within a moderately developed portion of the City of Moreno Valley, east of Alessandro Boulevard and Nason Street intersection. Natural habitats within the project site have been eliminated due to routine weed abatement activities (i.e., disking, tilling), 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 vacant, residential, and commercial land uses. Vacant, undeveloped land is located to the north, south, and east of the project site, while residential uses are located along the west, northwest, and northeast boundaries of the site. Additionally, commercial uses were currently being built along the western boundary at the time of the field survey.



**Legend**

 Project Site (19.10 acres)     Burrowing Owl Survey Area

 Reference Point

  0 850 1,700 Feet

Source: Nearmap (01/2022), WRCRA (04/2022)

SUNSET CROSSING TTM 38442  
HABITAT ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS  
**MSHCP Conservation Areas**

Figure 6

## 4.2 RESERVE ASSEMBLY ANALYSIS

According to the RCA's online MSHCP Information Application, the project site is not located within any Subunits, Criteria Cells, Conservation Areas, Cores/Linkages, or P/QP lands identified by the MSHCP (refer to Figure 6, *MSHCP Conservation Areas*). Therefore, a Reserve Assembly discussion related to the proposed project is not warranted.

### 4.2.1 PUBLIC/QUASI-PUBLIC LANDS ANALYSIS

According to the RCA's online MSHCP Information Application, the project site is not located within any P/QP lands identified by the MSHCP. Therefore, a discussion related to P/QP lands and the proposed project is not warranted.

## 4.3 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. Michael Baker 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 the field surveys and later digitized using the GIS ArcView software to quantify the area of each vegetation community in acres. Vegetation communities occurring within the project site were classified in accordance with the vegetation descriptions provided in the *Manual of California Vegetation* (Sawyer *et al.*, 2009) and cross referenced with the vegetation communities described in the MSHCP and the 2012 vegetation layer presented in the RCA's online MSHCP Information Application.

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, tilling), resulting in heavily disturbed and compacted surface soils. As such, native vegetation communities do not occur. The project site is primarily comprised of disturbed and developed land that is dominated by ruderal/weedy, low-growing plant species and ornamental plant species (refer to Figure 4, *Vegetation Communities and Other Land Uses*). Based on the 2012 vegetation layer presented in the RCA's online MSHCP Information Application, the entire project site was mapped as developed/disturbed land. Refer to Table 3 below for a summary of the vegetation communities and land cover types within the project site and 50-foot survey area.

**Table 3: Vegetation Communities and Land Cover Types**

Vegetation Community/Land Cover	Project Site	Survey Area	Total
Disturbed Habitat	19.10	2.07	21.17
Developed	0.00	1.67	1.67
<b>TOTAL ACREAGE*</b>	<b>19.10</b>	<b>21.74</b>	<b>22.84</b>

\*Total may not equal to sum due to rounding.

## **4.4 PROTECTION OF SPECIES ASSOCIATED WITH RIPARIAN/RIVERINE RESOURCES AND VERNAL POOLS**

### **4.4.1 RIPARIAN/RIVERINE**

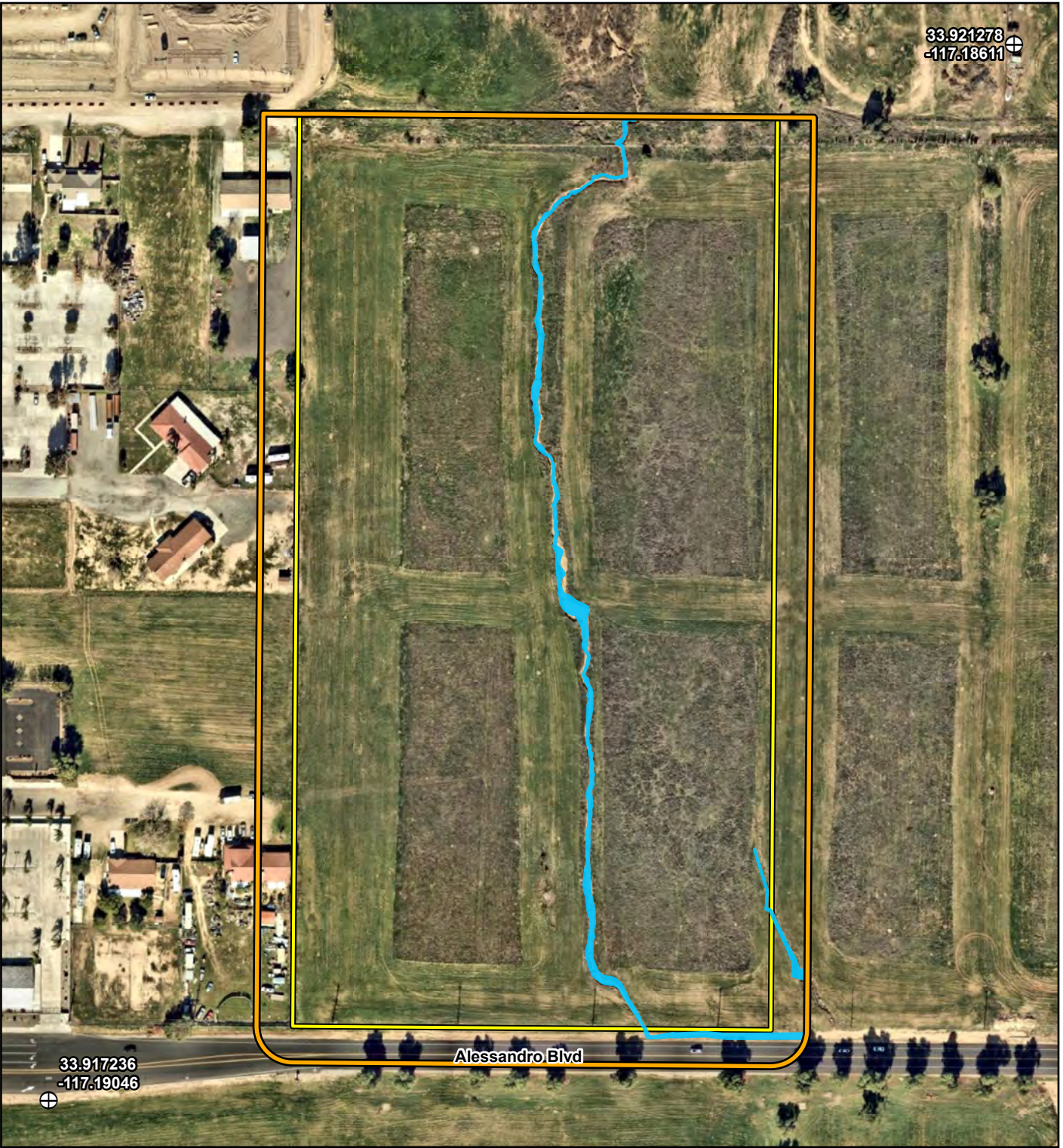
As defined under Section 6.1.2 of the MSHCP, riparian/riverine resources are areas dominated by trees, shrubs, persistent emergent plants, or emergent mosses and lichens which occur close to or are dependent upon nearby freshwater, or areas with freshwater flowing during all or a portion of the year. 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 plant species.

As documented in the *Delineation of State and Federal Jurisdictional Waters* (Michael Baker 2022), two (2) drainage features were recorded within the survey area (AF-1 and AF-2). These drainage features qualify as riparian/riverine resources pursuant to Section 6.1.2 of the MSHCP and total approximately 0.17 acre of riverine habitat within the project site (0.22 acre within the entire survey area); no riparian habitat is present (refer to Figure 7, *Riparian/Riverine Resources*). AF-1 and AF-2 are ephemeral and only flow in direct response to precipitation. If impacts to riverine resources cannot be avoided, a Determination of Biologically Equivalent or Superior Preservation (DBESP) report would need to be prepared and submitted to the RCA and Wildlife Agencies (USFWS and CDFW) for review and approval prior to implementation of the proposed project.

### **4.4.2 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.

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**Legend**

- Project Site (19.10 acres)
- Survey Area (22.84 acres)
- Riverine (0.22 acre)
- ⊕ Reference Point

**Michael Baker**  
INTERNATIONAL

0 100 200  
Feet

Source: Nearmap (01/2022)

SUNSET CROSSING TTM 38442  
HABITAT ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS  
**Riparian/Riverine Resources**

Figure 7

Based on a review of the *Custom Soil Resource Report for Western Riverside Area, California* (USDA 2022), 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 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. Therefore, no direct or indirect impacts are expected to occur, and no further discussion related to the proposed project and vernal pools is warranted.

#### 4.4.3 FAIRY SHRIMP

One species of fairy shrimp has been recorded in the USGS *Sunnymead, 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 typically dry a portion of the year, but usually are filled by late fall, winter or spring rains, and may persist through May. 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. According to the CNDDDB, there are two (2) occurrence records for Riverside fairy shrimp within the USGS *Sunnymead, California 7.5-minute quadrangle*. The closest occurrence (Occurrence Number 27) was recorded in 1998, approximately 4-miles southwest of the project site in a complex of pools on March Airforce Base; Riverside fairy shrimp cysts were found during dry-season survey in 1998 and there were no mature Riverside fairy shrimp during the wet season. However, this occurrence record is now considered extirpated since 2009 (CDFW 2022a).

Based on the results of the vernal pool habitat assessment in the previous section 4.4.2, no vernal pools occur within the project site. In addition, the project site is separated from the closest extant occurrence record for Riverside fairy shrimp (Occurrence Number 27) 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 anywhere 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.

#### 4.4.4 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 yellow-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.



## 4.5 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.

## 4.6 ADDITIONAL SURVEY NEEDS AND PROCEDURES

### 4.6.1 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.

### 4.6.2 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.

### 4.6.3 BURROWING OWL

According to the RCA's online MSHCP Information Application and Figure 6-4 of the MSHCP, the proposed project is located within a mapped survey area for BUOW.

### Literature Review and Habitat Assessment Results

The BUOW is currently designated as a State SSC and is a fully covered species under the MSHCP. The BUOW is a grassland specialist distributed throughout western North America where it occupies open areas with short vegetation and bare ground within shrub, desert, and grassland environments. BUOWs use a wide variety of arid and semi-arid environments with well-drained, level to gently sloping areas characterized by sparse vegetation and bare ground (Haug and Didiuk, 1993; Dechant et al., 1999). BUOWs are dependent upon the presence of burrowing mammals (e.g., California ground squirrels, coyotes, American badger [*Taxidea taxus*]) whose burrows are used for roosting and nesting. The presence or absence of mammal burrows is often a major factor that limits the presence or absence of BUOW. Where mammal burrows are scarce, BUOWs have been found occupying man-made cavities, such as buried and non-functioning drain pipes, stand-pipes, and dry culverts. BUOWs may also burrow beneath rocks and debris or large, heavy objects such as abandoned cars, concrete blocks, or concrete pads. They also require open vegetation allowing open line-of-sight of the surrounding habitat to forage as well as watch for predators.

According to the CNDDDB, there are two (2) occurrence records for BUOW within the USGS *Sunnymead*,

*California* 7.5-minute quadrangle. The closest extant occurrence (Occurrence Number 65) was recorded in 1980, approximately 2.25 miles south of the project site, where a colony of owls was observed at the Perris Reservoir Recreation Area (CDFW 2022a). Additionally, another occurrence (Occurrence Number 439) approximately 4 miles to the southwest of the project site; has seen continual BUOW use since 1991, with the most being in 2007 (CDFW 2022a). In addition, there are dozens of records of this species in the eBird database, within and just outside of a 5-mile radius from the project site (eBird 2022).

Michael Baker biologists surveyed 100% of the project site during the field survey and no BUOWs, sign (i.e., pellets, feathers, castings, or whitewash), occupied burrows, or remnant burrows were observed. Although no BUOWs, sign, occupied burrows, or remnant burrows were observed during the field survey, the project site is sparsely vegetated with a variety of low-growing plant species that allow for open line-of-sight and foraging opportunities for BUOW. In accordance with the *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area*, if BUOW habitat occurs on-site, both focused surveys and pre-construction clearance surveys are required (RCA 2006).

### **Focused Burrowing Owl Surveys**

Michael Baker conducted focused burrowing owl surveys in April, May, and June 2022 following the MSHCP survey protocol, *Burrowing Owl Survey Instructions for the Western Riverside County Multiple Species Habitat Conservation Plan Area* (RCA 2006). Surveys were conducted between April 12 and June 28, 2022 on the project site and in suitable habitat in the designated BUOW survey area within 500 feet. Although suitable burrows were found within the survey area, no burrowing owls were detected by Michael Baker and the species was determined to be absent from the project site and its immediate vicinity (refer to Appendix E, *Focused Burrowing Owl Survey Report*).

### **Additional Survey and Mitigation Requirements**

Although burrowing owls were not observed during the focused surveys, the survey area contains suitable burrows and habitat that could become occupied by burrowing owls prior to implementation of the proposed project. Therefore, 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.

#### 4.6.4 MAMMALS

The proposed project is not located within a mapped survey area for mammal species according to the RCA's online MSHCP Information Application and Figure 6-5 of the MSHCP. Therefore, a discussion related to the proposed project and MSHCP mammal species is not warranted.

### 4.7 INFORMATION ON OTHER SPECIES

#### 4.7.1 DELHI SANDS FLOWER-LOVING FLY

According to the RCA's online MSHCP Information Application and the *Custom Soil Resource Report for Western Riverside Area, California* (USDA 2022), 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.

#### 4.7.2 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. *callicarpa*), 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. *platycarpa*) 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 site conditions and a review of specific habitat requirements, occurrence records, and known distributions.

### 4.8 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, Conservation Areas, Cores/Linkages, or P/QP 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.

## **4.9 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 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.
- In order to avoid or minimize impacts to water quality, a construction Storm Water Pollution Prevention Plan and Soil Erosion and Sedimentation 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 also 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.
- In order 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 Valley 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 so as 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.

## Section 5      Conclusions and Recommendations

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The survey area is located within a moderately developed portion of the City of Moreno Valley, north of Alessandro Boulevard, south of Bay Avenue, west of Marion Road, and east of Nason Street. Natural habitats within the survey area have been eliminated due to routine weed abatement activities (i.e., disking, tilling), resulting in heavily disturbed and compacted surface soils. As such, native vegetation communities do not occur. 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, Michael Baker determined that all special-status plant species identified by the CNDDDB, CIRP, and IPaC either have a low potential or are not expected to occur within the survey area.

Cooper's hawk was the only special-status wildlife species observed 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 BUOW (a State SSC), California horned lark (a State WL species), western mastiff bat (a State SSC), and western yellow bat (a State SSC). 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 across Alessandro Boulevard to the south 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.

In addition to the standard BMPs identified in Section 4.9 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:

AMM BIO-1: 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 or 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

shall 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.

AMM BIO-2: No less than 60 days prior to initiating project activities, a qualified bat biologist shall conduct a bat roosting habitat suitability assessment of any vegetation that may be removed, altered, or indirectly impacted by the project activities. Any locations identified as having potentially suitable bat roosting habitat by the qualified approved bat biologist shall be subject to additional nighttime surveys (bat surveys) during the summer months (i.e., June through August) to determine the numbers and bat species using the roost(s). The information collected during these additional bat surveys shall be used by the qualified bat biologist to develop species-specific measures to minimize impacts to roosting bats should bats be detected using the site. The bat surveys shall be conducted by the qualified bat biologist using an appropriate combination of visual inspection, sampling, exit counts, and acoustic surveys. The results of the pre-construction bat surveys shall be submitted to CDFW for review no less than 30 days prior to the initiation of project activities.

If the presence of bats within the project is confirmed, avoidance and minimization measures, including the designation of buffers based upon the particular bat species found and phased removal of trees, shall be developed and submitted to CDFW for review and approval. If the site supports maternity roosts, the project applicant shall avoid disturbing those areas during the breeding season.

If the site supports a maternity roost(s) or special-status species, the project applicant shall contact CDFW and conduct an impact assessment prior to commencing project activities to assist in the development of minimization and mitigation measures. The project applicant shall compensate for impacts and losses to maternity roosts and/or special-status bat habitat through a mitigation strategy approved by CDFW.

AMM BIO-3: 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.

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 2022), 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 known to occur in the surrounding area by residential and commercial development, I-215, and other highly trafficked roadways. Therefore, no direct or indirect impacts are expected to occur to Riverside fairy shrimp.

Two (2) drainage features (AF-1 and AF-2) occur within the survey area and would fall under regulatory authority of the RWQCB and CDFW. Based on a review of the conceptual site plan, approximately 0.22 acre of impacts to RWQCB jurisdiction (non-wetland WotS) are anticipated, comprised of 0.17 acre of permanent impacts within the project site and 0.05 acre of temporary impacts within the survey area, as well as a total of 0.22 acre of impacts to CDFW jurisdiction consisting of 0.17 acre of permanent impacts and 0.05 acre of temporary impacts to vegetated streambed. No riparian habitat is present within the project site or survey area. It is anticipated that the project proponent would need to obtain the following regulatory permits prior to impacts occurring within jurisdictional areas: 1) Waste Discharge Requirement from the RWQCB, and 2) Section 1602 Streambed Alteration Agreement from CDFW.

AF-1 and AF-2 would qualify as riparian/riverine resources pursuant to Section 6.1.2 of the MSHCP; a total of approximately 0.17 acre of riverine habitat occurs within the project site. Riparian habitat is not present and Riverine resources within the survey area do not provide suitable habitat for western yellow-billed cuckoo, southwestern willow flycatcher, least Bell's vireo, or fairy shrimp, and vernal pools are not present. If impacts to riverine resources cannot be avoided, a DBESP report would need to be prepared and submitted to the RCA and Wildlife Agencies (USFWS and CDFW) for review and approval prior to implementation of the proposed project.



## Section 6      References

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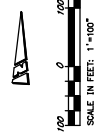
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**Appendix A Proposed Site Plan**

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488-180-028  
LANG CHYR CHANG

488-280-002  
EAST VALLEY PLAZA



TRACT 38442 (SOUTH OF BAY) LEGEND & LOT COUNT				TRACT 38443 (NORTH OF BAY) LEGEND & LOT COUNT			
LOT SIZE	MIN LOT AREA	# OF LOTS		LOT SIZE	MIN LOT AREA	# OF LOTS	
40' x 80'	3200 SF	64	Orange	45x100'	4500 SF	52	Pink
45x100'	4500 SF	44	Pink	60' x 100'	6000 SF	81	Blue
OPEN SPACE	N/A	TOTAL - 108		OPEN SPACE	N/A	7	
WQ BASIN	N/A	1	Cyan	WQ BASIN	N/A	1	Cyan
<b>PROJECT TOTAL - 241</b>				<b>PROJECT TOTAL - 241</b>			

## **Appendix B Site Photographs**

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**Photograph 1:** Standing in the southeast corner of the project site, facing north overlooking disturbed habitat.



**Photograph 2:** Standing along the eastern border of the project site, facing southwest overlooking disturbed habitat.



**Photograph 3:** Standing in the northeast corner of the project site, facing south overlooking disturbed habitat.



**Photograph 4:** Standing west of the center of the project site, facing southeast looking at a potentially jurisdictional feature.





**Photograph 5:** Standing along the northern boundary of the project site, facing west overlooking disturbed habitat.



**Photograph 6:** Standing near the northwest corner of the project site, facing south overlooking disturbed habitat.



**Photograph 7:** Standing in the southwest corner of the project site, facing northeast overlooking disturbed habitat.



**Photograph 8:** Standing in the center of the project site, facing northwest overlooking disturbed habitat.

# **Appendix C Plant and Wildlife Species Observed List**

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Table C-1: Plant and Wildlife Species Observed List

<i>Scientific Name*</i>	<i>Common Name</i>	<i>Cal-IPC Rating**</i>	<i>Special-Status Rank***</i>
<b>Plants</b>			
<i>Achyrrachaena mollis</i>	blow wifes		
<i>Amaranthus</i> sp.	amaranth		
<i>Ambrosia acanthicarpa</i>	flatspine bur ragweed		
<i>Ambrosia artemisiifolia*</i>	annual ragweed		
<i>Amsinckia intermedia</i>	common fiddleneck		
<i>Avena fatua*</i>	common wild oat	Moderate	
<i>Brachypodium distachyon*</i>	purple false brome	Moderate	
<i>Bromus diandrus*</i>	great brome	Moderate	
<i>Bromus hordeaceus*</i>	bull grass	Limited	
<i>Bromus madritensis*</i>	red brome	High	
<i>Bromus</i> sp.	brome grass		
<i>Chenopodium album*</i>	lamb's quarter		
<i>Datura wrightii</i>	jimsonweed		
<i>Erodium cicutarium*</i>	redstem filaree	Limited	
<i>Helianthus annuus</i>	common sunflower		
<i>Heterotheca grandiflora</i>	telegraphweed		
<i>Hirschfeldia incana*</i>	shortpod mustard	Moderate	
<i>Hordeum</i> sp.	barley		
<i>Lactuca serriola*</i>	prickly lettuce		
<i>Malva parviflora*</i>	cheeseweed		
<i>Marrubium vulgare*</i>	horehound	Limited	
<i>Melia azedarach*</i>	Chinaberry		
<i>Oncosiphon pilulifer*</i>	stinknet	High	
<i>Astragalus pomonensis</i>	Pomona milk vetch		
<i>Rumex crispus*</i>	curly dock	Limited	
<i>Salsola tragus*</i>	Russian thistle	Limited	
<i>Sisymbrium irio*</i>	London rocket	Limited	
<b>Reptiles</b>			
<i>Uta stansburiana elegans</i>	western side-blotched lizard		
<b>Birds</b>			
<i>Accipiter cooperii</i>	Cooper's hawk		WL
<i>Aeronautes saxatalis</i>	white throated swift		
<i>Agelaius phoeniceus</i>	red-winged blackbird		
<i>Anthus rubescens</i>	American pipit		
<i>Calypte anna</i>	Anna's hummingbird		
<i>Columba livia*</i>	rock pigeon		
<i>Corvus brachyrhynchos</i>	American crow		
<i>Spinus lawrencei</i>	Lawrence's goldfinch		
<i>Haemorhous mexicanus</i>	house finch		
<i>Icterus bullockii</i>	Bullock's oriole		

**Table C-1: Plant and Wildlife Species Observed List**

<i>Scientific Name*</i>	<b>Common Name</b>	<b>Cal-IPC Rating**</b>	<b>Special-Status Rank***</b>
<i>Icterus cucullatus</i>	hooded oriole		
<i>Melospiza crissalis</i>	California towhee		
<i>Mimus polyglottos</i>	northern mockingbird		
<i>Passer domesticus*</i>	house sparrow		
<i>Passerculus sandwichensis</i>	savannah sparrow		
<i>Petrochelidon pyrrhonota</i>	cliff swallow		
<i>Pheucticus melanocephalus</i>	black-headed grosbeak		
<i>Psaltiriparus minimus</i>	bush-tit		
<i>Sayornis nigricans</i>	black phoebe		
<i>Sayornis saya</i>	Say's phoebe		
<i>Spinus psaltria</i>	lesser goldfinch		
<i>Streptopelia decaocto*</i>	Eurasian collared-dove		
<i>Sturnella neglecta</i>	western meadowlark		
<i>Tyrannus vociferans</i>	Cassin's kingbird		
<i>Zenaidura macroura</i>	mourning dove		
<i>Zonotrichia leucophrys</i>	white-crowned sparrow		
<b>Mammals</b>			
<i>Canis latrans</i>	coyote		
<i>Canis lupus familiaris*</i>	domestic dog		
<i>Felis catus*</i>	domestic cat		
<i>Otospermophilus beecheyi</i>	California ground squirrel		
<i>Sylvilagus audubonii</i>	desert cottontail		

\* **Non-native species**\*\* **California Invasive Plant Council (Cal-IPC) Ratings**

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

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

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

\*\*\* **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 D Potentially Occurring Special-Status Biological Resources**

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Table D-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special- Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
<b>SPECIAL-STATUS WILDLIFE SPECIES</b>					
<i>Accipiter cooperii</i> 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	<b>Present:</b> Species was observed within the boundaries of the project site.
<i>Agelaius tricolor</i> tricolored blackbird	ST SSC G1G2 S1S2	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 ( <i>Typha</i> spp.), willows ( <i>Salix</i> spp.), and bulrushes ( <i>Schoenoplectus</i> spp.), and either flooded or thorny/spiny vegetation and suitable foraging space providing adequate insect prey.	Yes	No	<b>Not Expected:</b> There is minimal to no suitable habitat preferred by this species within the project site. Additionally, there is no riparian scrub habitats nearby that this species would forage or breed in.
<i>Aimophila ruficeps canescens</i> southern California rufous-crowned sparrow	WL G5T3 S3	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 ( <i>Artemisia californica</i> ), 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	<b>Not Expected:</b> 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.
<i>Anniella stebbinsi</i> southern California legless lizard	SSC G3 S3	Locally abundant specimens are found in coastal sand dunes and a variety of interior habitats, including sandy washes and alluvial fans. A large protected population persists in the remnant of the once extensive El Segundo Dunes at Los Angeles International Airport.	No	No	<b>Not Expected:</b> Suitable habitats consisting of coastal sand dunes, sandy wash and alluvial fans are not present within the 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.

Table D-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special- Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
<i>Arizona elegans occidentalis</i> California glossy snake	SSC G5T2 S2	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	<b>Not Expected:</b> 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 likely preclude this species from occurring.
<i>Artemisiospiza belli belli</i> Bell's sage sparrow	WL G5T2T3 S3	This species has a wide, but sparse 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 ( <i>Adenostoma fasciculatum</i> ).	Yes	No	<b>Not Expected:</b> Suitable coastal sage scrub and chaparral habitats preferred by this species for foraging and nesting are not present within the project site.
<i>Asio otus</i> long-eared owl	SSC G5 S3?	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	<b>Not Expected:</b> Suitable woodland habitats preferred by this species for nesting are not present within the project site.
<i>Aspidoscelis hyperythra</i> orange-throated whiptail	WL G5 S2S3	Uncommon to fairly common over much of its range 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	<b>Not Expected:</b> Despite there been an observed sighting within 0.25-mile northeast of the project (CDFW 2022a) site, however there is no suitable coastal chaparral/ semi-arid brushy habitats preferred by this species 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.



Table D-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
<i>Aspidoscelis tigris stejnegeri</i> coastal whiptail	SSC G5T5 S3	This subspecies is found in coastal southern California, mostly west of the Peninsular 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 riparian areas. Associated with rocky areas with little vegetation or sunny microhabitats within shrub or grassland associations.	Yes	No	<b>Not Expected:</b> 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.
<i>Athene cunicularia</i> burrowing owl	SSC G4 S3	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 (c)	No	<b>Low (Foraging):</b> 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 southwest of the project site; there was 6 adults observed and 2 juveniles on March Air Force Base (CDFW 2022a). Protocol surveys conducted in spring 2022 were negative.
<i>Aquila chrysaetos</i> golden eagle	FP WL G5 S3	Yearlong resident of California. Occupies nearly all terrestrial habitats of the western states except densely forested areas. Favors secluded cliffs with overhanging ledges and large trees for nesting and cover. Hilly or mountainous country where takeoff and soaring are supported by updrafts is generally preferred to flat habitats. Deeply cut canyons rising to open mountain slopes and crags are ideal habitat.	Yes	No	<b>Not Expected:</b> Although the project site provides marginal foraging habitat for this species, the closest extant occurrence (Occurrence Number 302) was recorded in 1980 and over 9 miles northeast of the project site.
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	FT G3 S3	Endemic to California and only found in vernal pools. Vernal pool habitats form in depressions above an impervious substrate layer, or claypan/duripan. This species does not occur in riverine, marine, or other permanent bodies of water. When the temporary pools dry, offspring persist in suspended development as desiccation-resistant embryos (commonly called cysts) in the pool substrate until the return of winter rains and appropriate temperatures allow some of the cysts to hatch.	Yes	No	<b>Not Expected:</b> 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. Additionally, federally designated Critical Habitat for this species is not present within the project site.
<i>Buteo regalis</i> ferruginous hawk	WL G4 S3S4	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	<b>Not Expected:</b> Suitable grassland habitats and agricultural areas preferred by this species for foraging are not present within the project site.

Table D-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
<i>Chaetodipus fallax fallax</i> northwestern San Diego pocket mouse	SSC 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	<b>Not Expected:</b> 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.
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	FT SE G5T2T3 S1	Uncommon summer resident where its breeding distribution is restricted to isolated sites in the Sacramento, Armargosa, Kern, Santa Ana, and Colorado River valleys. The species requires large patches of multi-layered riparian forest, with cottonwoods and willows. The presence of standing or flowing surface water under the riparian canopy is also preferred. Mesquite ( <i>Prosopis</i> spp.) groves may also be used, but usually only when cottonwood-willow habitat is unavailable.	Yes (a)	No	<b>Not Expected:</b> Although there are possible jurisdictional features within the project site, these features do not contain the extensive riparian habitat that this species requires.
<i>Crotalus ruber</i> red-diamond rattlesnake	SSC G4 S3	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 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 ( <i>Adenostoma sparsifolium</i> ) associations may offer better structural habitat for refuges and food resources for this species than other habitats.	Yes	No	<b>Not Expected:</b> Suitable habitats with heavy brush and large rocks/boulders 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.
<i>Danaus plexippus</i> monarch butterfly	SC G4T2T3 S2S3	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts are located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	No	No	<b>Not Expected:</b> The survey area does not provide suitable habitat for this species. Based on maps of known wintering roosts for this species, there are no known roosts in this area (Xerces Society 2022).

Table D-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
<i>Dipodomys merriami parvus</i> San Bernardino kangaroo rat	FE CSE SSC G5T1 S1	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 (c)	No	<b>Not Expected:</b> 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.
<i>Dipodomys stephensi</i> Stephens' kangaroo rat	FT ST G2 S2	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	<b>Not Expected:</b> 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.
<i>Elanus leucurus</i> white-tailed kite	FP G5 S3S4	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 ( <i>Microtus californicus</i> ). Nests in tall (20 to 50 feet) coast live oaks ( <i>Quercus agrifolia</i> ).	Yes	No	<b>Not Expected:</b> 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.
<i>Empidonax traillii extimus</i> southwestern willow flycatcher	FE SE G5T2 S1	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. 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.	Yes	No	<b>Not Expected:</b> Suitable riparian habitat consisting of thickets of willows along a stream course preferred by this species for foraging and nesting is not present within the project site.
<i>Emys marmorata</i> western pond turtle	SSC G3G4 S3	Found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, either rocky or muddy bottoms, in woodland, forest, and grassland. In streams, prefers pools to shallower areas. Logs, rocks, cattail mats, and exposed banks are required for basking. May enter brackish water and even seawater. Found at elevations from sea level to over 5,900 feet amsl.	Yes	No	<b>Not Expected:</b> Suitable habitats preferred by this species for foraging and nesting are not present within the project site.

Table D-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
<i>Eremophila alpestris actia</i> California horned lark	WL G5T4Q S4	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	<b>Low (Foraging and Nesting):</b> The project site provides marginal foraging and nesting habitat for this species. There is a known occurrence (Occurrence 35) 1 mile southwest of the project site (CDFW 2022a).
<i>Eumops perotis californicus</i> western mastiff bat	SSC G5T4 S3S4	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	<b>Low (Foraging):</b> There are marginal grasslands preferred by this species for foraging within the project site. However, the species is not expected to roost within the project site due to the lack of high cliff roosts. There was an observed occurrence (Occurrence 80) in 1990 within 0.75 miles southwest of the project site, where two females were observed and collected (CDFW 2022a).
<i>Euphydryas editha quino</i> quino checkerspot butterfly	FE G5T1T2 S1S2	Occupies a variety of habitat types that support California plantain ( <i>Plantago erecta</i> ), 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	<b>Not Expected:</b> 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.
<i>Haliaeetus leucocephalus</i> bald eagle	SE G5 S3	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 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.	Yes	No	<b>Not Expected:</b> Suitable habitats preferred by this species for foraging and nesting are not present within the project site.

Table D-1: Potentially Occurring Special-Status Biological Resources

<i>Scientific Name</i> Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
<i>Icteria virens</i> yellow-breasted chat	SSC G5 S3	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	<b>Not Expected:</b> Suitable dense riparian woodland habitats preferred by this species for foraging and nesting are not present within the project site.
<i>Lanius ludovicianus</i> loggerhead shrike	SSC G4 S4	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	<b>Not Expected:</b> Suitable habitats preferred by this species for foraging and nesting are not present within the project site.
<i>Lasiurus xanthinus</i> western yellow bat	SSC G5 S3	Roosts in palm trees in foothill riparian, desert wash, and palm oasis habitats with access to water for foraging.	No	No	<b>Low (Foraging):</b> 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. There was an observed occurrence (Occurrence 53) in 1992 within 0.75 mi southwest of the project site, where there was a male and female observed and collected (CDFW 2022a).
<i>Laterallus jamaicensis coturniculus</i> California black rail	FT G3T1 S1	Suitable habitat generally includes salt marshes, freshwater marshes, and wet meadows. Typical associated vegetation includes pickle weed ( <i>Salicornia virginica</i> ) in salt marshes and bulrushes in less saline habitats.	No	No	<b>Not Expected:</b> The project site does not contain any of the water features this species prefers.

Table D-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
<i>Neotoma lepida intermedia</i> San Diego desert woodrat	SSC G5T3T4 S3S4	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	<b>Not Expected:</b> Suitable chaparral, coastal sage scrub, and grassland habitats with rock outcroppings, boulders, cacti 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.
<i>Nyctinomops femorosaccus</i> pocketed free-tailed bat	SSC G5 S3	Often found in pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree ( <i>Yucca brevifolia</i> ) woodland, and palm oasis habitats. Prefers rocky desert areas with high cliffs or rock outcrops, which are used as roosting sites.	No	No	<b>Not Expected:</b> Suitable habitats preferred by this species for foraging and nesting are not present within the project site.
<i>Onychomys torridus ramona</i> southern grasshopper mouse	SSC G5T3 S3	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	<b>Not Expected:</b> 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.
<i>Perognathus longimembris brevinasus</i> Los Angeles pocket mouse	SSC G5T1T2 S1S2	Occurs in lower elevation grasslands and coastal sage scrub communities in and around 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.	Yes (c)	No	<b>Not Expected:</b> Suitable grassland and coastal scrub 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.

Table D-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
<i>Phrynosoma blainvillii</i> coast horned lizard	SSC G3G4 S4	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	<b>Not Expected:</b> 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.
<i>Plegadis chihi</i> white-faced ibis	WL G5 S3S4	Locally rare resident/migrant in southern California. Prefers to feed in fresh emergent wetland, shallow lacustrine waters, muddy ground of wet meadows, and irrigated or flooded pastures and croplands. Nests in dense, fresh emergent wetland.	Yes	No	<b>Not Expected:</b> Suitable wetland and wet meadow 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.
<i>Polioptila californica californica</i> coastal California gnatcatcher	FT SSC G4G5T2Q S2	Yearlong resident of sage scrub habitats that are dominated by California sagebrush. This species generally 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	<b>Not Expected:</b> Suitable coastal sage scrub habitats preferred by this species for foraging and nesting are not present within the project site.
<i>Salvadora hexalepis virgultea</i> coast patch-nosed snake	SSC G5T4 S2S3	Occurs in brushy vegetation including coastal scrub and chaparral from the coast to the mountains. Takes refuge in existing small mammal burrows.	No	No	<b>Not Expected:</b> Suitable coastal scrub and chaparral habitats preferred by this species for foraging and nesting are not present within the project site.
<i>Setophaga petechia</i> yellow warbler	SSC G5 S3S4	Present in California from April through September. Nests in riparian areas dominated by willows, cottonwoods, California sycamores, or alders ( <i>Alnus</i> spp.) or in mature chaparral. May also use oaks, conifers, and urban areas near stream courses.	Yes	No	<b>Not Expected:</b> 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.

Table D-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
<i>Spea hammondi</i> western spadefoot	SSC G3 S3	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 ( <i>Lithobates catesbeianus</i> ), 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	<b>Not Expected:</b> 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.
<i>Streptocephalus woottoni</i> Riverside fairy shrimp	FE G1G2 S1S2	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 (a)	No	<b>Not Expected:</b> 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.
<i>Taxidea taxus</i> American badger	SSC G5 S3	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 found in riparian zones and open chaparral with less than 50% plant cover.	No	No	<b>Not Expected:</b> Suitable habitats and friable sandy soils preferred by this species are not present within the 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.



Table D-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
<i>Vireo bellii pusillus</i> least Bell's vireo	FE SE SSC G5T2 S2	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 (a)	No	<b>Not Expected:</b> Suitable riparian habitat along a stream course/water preferred by this species for foraging and nesting is not present within the project site.
<b>SPECIAL-STATUS PLANT SPECIES</b>					
<i>Abronia villosa var. aurita</i> chaparral sand-verbena	1B.1 G5T2? S2	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	<b>Not Expected:</b> 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.
<i>Allium marvinii</i> yucaipa onion	1B.2 G1 S1	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 (b)	No	<b>Not Expected:</b> 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.
<i>Allium munzii</i> Munz's onion	FE ST 1B.1 G1 S1	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 (b)	No	<b>Not Expected:</b> 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. Additionally, federally designated Critical Habitat for this species is not present within the project site.
<i>Ambrosia pumila</i> San Diego ambrosia	FE 1B.1 G1 S1	Perennial rhizomatous herb. Occurs on sandy loam or clay soils (often in disturbed areas) 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.	Yes (b)	No	<b>Not Expected:</b> 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.

Table D-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
<i>Arenaria paludicola</i> marsh sandwort	FE CE 1B.1 G1 S1	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 through August.	No	No	<b>Not Expected:</b> 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.
<i>Artemisia palmeri</i> San Diego sagewort	4.2 G3? S3?	Perennial deciduous herb. Found on sandy, mesic soils within chaparral, coastal scrub, riparian forest, riparian scrub, and riparian woodland habitats. Found at elevations ranging from 49 to 3,002 feet amsl. Blooming period is from (February) May to September.	No	No	<b>Not Expected:</b> 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.
<i>Astragalus pachypus</i> var. <i>jaegeri</i> Jaeger's milk-vetch	1B.1 G4T1 S1	Perennial shrub. Grows in chaparral cismontane woodland, coastal scrub, valley and foothill grassland habitats and sometimes in rocky and sandy soils. Found at elevations ranging from 1,200 to 3,200 feet amsl. Blooming period is December through June.	Yes	No	<b>Not Expected:</b> 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.
<i>Atriplex coronata</i> var. <i>notatior</i> San Jacinto Valley crowscale	FE 1B.1 G4T1 S1	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 (d)	No	<b>Not Expected:</b> 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.
<i>Atriplex parishii</i> Parish's brittlescale	1B.1 G1 G2 S1	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 (d)	No	<b>Not Expected:</b> 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.
<i>Atriplex serenana</i> var. <i> davidsonii</i> Davidson's saltscale	1B.2 G5T1 S1	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 (d)	No	<b>Not Expected:</b> 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.
<i>Berberis nevini</i> Nevin's barberry	FE CE 1B.1 G1 S1	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 (d)	No	<b>Not Expected:</b> 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.

Table D-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special- Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
<i>Brodiaea filifolia</i> thread-leaved brodiaea	FT SE 1B.1 G2 S2	Perennial bulbiferous herb. Often found on clay soils within chaparral (openings), cismontane woodland, coastal scrub, playas, valley and foothill grassland, and vernal pools. Found at elevations ranging from 82 to 3,675 feet amsl. Blooming period is March through June.	Yes (d)	No	<b>Not Expected:</b> 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. Additionally, federally designated Critical Habitat for this species is not present within the project site.
<i>Calochortus plummerae</i> Plummer's mariposa-lily	4.2 G4 S4	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 (e)	No	<b>Not Expected:</b> 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.
<i>Caulanthus simulans</i> Payson's jewelflower	4.2 G4 S4	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	<b>Not Expected:</b> 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.
<i>Centromadia pungens ssp. laevis</i> smooth tarplant	1B.1 G3G4T2 S2	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 (d)	No	<b>Not Expected:</b> 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.
<i>Chloropyron maritimum ssp. maritimum</i> salt marsh bird's-beak	FE CE 1B.2 G4?T1 S2	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	<b>Not Expected:</b> 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.
<i>Chorizanthe leptotheca</i> Peninsular spineflower	4.2 G3 S3	Annual herb. Occurs on alluvial, granitic soils within chaparral, coastal scrub, and lower montane coniferous forest habitats. Found at elevations ranging from 984 to 6,233 feet amsl. Blooming period is May through August.	Yes (e)	No	<b>Not Expected:</b> 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.
<i>Chorizanthe parryi</i> var. <i>parryi</i> Parry's spineflower	1B.1 G3T2 S2	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 (e)	No	<b>Not Expected:</b> 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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Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
<i>Chorizanthe polygonoides</i> var. <i>longispina</i> long-spined spineflower	1B.2 G5T3 S3	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	<b>Not Expected:</b> 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.
<i>Chorizanthe xanti</i> var. <i>leucotheca</i> white-bracted spineflower	1B.2 G4T3 S3	Annual herb. Occurs on sandy or gravelly soils in coastal sage scrub (alluvial fans), Mojavean desert scrub, and pinyon and juniper woodland habitats. Found at elevations ranging from 984 to 3,937 feet amsl. Blooming period is from April to June.	No	No	<b>Not Expected:</b> 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.
<i>Convolvulus simulans</i> small-flowered morning-glory	4.2 G4 S4	Annual herb. Found on wet clay and serpentine ridges within chaparral, coastal scrub, and valley and foothill grassland. Found at elevations ranging from 100 to 2820 feet amsl. Blooming period is March through July.	Yes	No	<b>Not Expected:</b> 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.
<i>Deinandra paniculata</i> paniculate tarplant	4.2 G4 S4	Annual herb. Occurs in coastal scrub, vernal pools, and valley/foothill grassland habitats. Found at elevations ranging from 82 to 3,084 feet amsl. Blooming period is April through November.	No	No	<b>Not Expected:</b> 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.
<i>Diplacus clevelandii</i> Cleveland's bush monkeyflower	4.2 G4 S4	Perennial rhizomatous herb. Grows in chaparral, cismontane woodland, and lower montane coniferous forest habitats often within disturbed and open areas, gabbroic, and rocky soils. Found at elevations ranging from 1,475 to 6,560 feet amsl. Blooming period is April through July.	Yes (f)	No	<b>Not Expected:</b> 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.
<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i> Santa Ana River Woolly-star	FE SE 1B.1 G4T1 S1	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	<b>Not Expected:</b> 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.
<i>Harpagonella palmeri</i> Palmer's grapplinghook	4.2 G4 S3	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	<b>Not Expected:</b> 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.
<i>Hordeum intercedens</i> vernal barley	3.2 G3G4 S3S4	Annual herb. Habitat includes coastal dunes, coastal scrub, vernal pools, and valley/foothill grassland. Grows in elevations ranging from 16 to 3,281 feet amsl. Blooming period is from March to June.	Yes	No	<b>Not Expected:</b> 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.

Table D-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
<i>Juglans californica</i> southern California black walnut	4.2 G4 S4	Perennial deciduous tree. Found in chaparral, cismontane woodland, coastal scrub, and riparian woodland habitats. Found at elevations ranging from 164 to 2,953 feet amsl. Blooming period is March through August.	Yes	No	<b>Not Expected:</b> This species was not observed during the field survey. 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.
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i> Coulter's goldfields	1B.1 G4T2 S2	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 (d)	No	<b>Not Expected:</b> 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.
<i>Lepidium virginicum</i> var. <i>robinsonii</i> Robinson's pepper-grass	4.3 G5T3 S3	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	<b>Not Expected:</b> 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.
<i>Myosurus minimus</i> ssp. <i>apus</i> little mousetail	3.1 G5T2Q S2	Annual herb. Occurs on valley and foothill grassland and vernal pools (alkaline). Found at elevations ranging from 66 to 2,100 feet amsl. Blooming period is March through June.	Yes (d)	No	<b>Not Expected:</b> 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.
<i>Nama stenocarpa</i> mud nama	2B.2 G4G5 S1S2	Annual/perennial herb. Grows in marsh and swamp habitats like margins and riverbanks. Found at elevations ranging from 15 to 1,640 feet amsl. Blooming period is January through July.	Yes (d)	No	<b>Not Expected:</b> 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.
<i>Navarretia fossalis</i> spreading navarretia	FT 1B.1 G2 S2	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 (b)	No	<b>Not Expected:</b> 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.
<i>Phacelia stellaris</i> Brand's star phacelia	1B.1 G1 S1	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 (b)	No	<b>Not Expected:</b> 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.

Table D-1: Potentially Occurring Special-Status Biological Resources

<i>Scientific Name</i> Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
<i>Quercus engelmannii</i> Engelmann oak	4.2 G3 S3	Perennial deciduous tree. Grows in chaparral, cismontane woodland, riparian woodland, valley and foothill grassland habitats. Found at elevations ranging from 165 to 4,265 feet amsl. Blooming period is March through June.	Yes	No	<b>Not Expected:</b> 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.
<i>Romneya coulteri</i> Coulter's matilija poppy	4.2 G4 S4	Perennial rhizomatous herb. Habitats include chaparral and coastal scrub. Grows at elevations ranging from 66 to 3,937 feet amsl. Blooming period is from March to July.	Yes (e)	No	<b>Not Expected:</b> 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.
<i>Senecio aphanactis</i> chaparral ragwort	2B.2 G3 S2	Annual herb. Grows on alkaline soils within chaparral, cismontane woodland, and coastal scrub habitats. Found at elevations ranging from 49 to 2,625 feet amsl. Blooming period is January through April (May).	No	No	<b>Not Expected:</b> 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.
<i>Symphotrichum defoliatum</i> San Bernardino aster	1B.2 G2 S2	Perennial rhizomatous herb. Occurs near ditches, streams, and springs within cismontane woodland, coastal scrub, lower montane coniferous forest, meadows, seeps, marshes, and valley/foothill grassland. Grows in elevations ranging from 0 to 6,700 feet amsl. Blooming period is from July to November.	No	No	<b>Not Expected:</b> 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.
<i>Texosporium sancti-jacobi</i> woven-spored lichen	3 G3 S2	Lichen. Found in open sites within chaparral. Typically found on soil, small mammal pellets, dead twigs, and on Selaginella. In California, this species is typically associated with Adenostoma fasciculatum, Eriogonum, and Selaginella.	No	No	<b>Not Expected:</b> 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.
<i>Tortula californica</i> California screw moss	1B.2 G2G3 S2?	Moss. Found on sandy soils within chenopod scrub and valley and foothill grassland habitats. Found at elevations ranging from 33 to 4,790 feet amsl. This species does not have a blooming period.	No	No	<b>Not Expected:</b> 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.
<i>Trichocoronis wrightii</i> var. <i>wrightii</i> Wright's trichocoronis	2B.1 G4T3 S1	Annual herb. Found on alkaline soils within meadows and seeps, marshes and swamps, riparian forest, and vernal pool habitats. Grows in elevations ranging from 16 to 1,427 feet amsl. Blooming period is from May to September.	Yes (b)	No	<b>Not Expected:</b> 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.

**Table D-1: Potentially Occurring Special-Status Biological Resources**

<i>Scientific Name</i> Common Name	Special- Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
<b>SPECIAL-STATUS VEGETATION COMMUNITIES</b>					
<p><b>CNDDDB/Holland (1986)</b> Southern Coast Live Oak Riparian Forest</p> <p><b>MCV (1995)</b> Coast Live Oak Series</p> <p><b>NVCS (2009)</b> <i>Quercus agrifolia</i> Woodland Alliance</p>	G5 S4	Found at elevations ranging from sea level to 3,937 feet amsl in alluvial terraces, canyon bottoms, stream banks, slopes, and flats. Soils are deep, sandy or loamy with high organic matter. Coast live oak is a dominant or co-dominant in the tree canopy with bigleaf maple ( <i>Acer macrophyllum</i> ), box elder ( <i>Acer negundo</i> ), madrono ( <i>Arbutus menziesii</i> ), southern California black walnut, California sycamore, Fremont cottonwood, blue oak ( <i>Quercus douglasii</i> ), Engelmann oak ( <i>Quercus engelmannii</i> ), California black oak ( <i>Quercus kelloggii</i> ), valley oak ( <i>Quercus lobata</i> ), arroyo willow ( <i>Salix lasiolepis</i> ), and California bay ( <i>Umbellularia californica</i> ). Trees are less than 98 feet tall; canopy is open to continuous. Shrub layer is sparse to intermittent. Herbaceous layer is sparse or grassy.	-	No	<b>Absent:</b> This vegetation community does not occur within the project site.
<p><b>CNDDDB/Holland (1986)</b> Southern Cottonwood Willow Riparian Forest</p> <p><b>MCV (1995)</b> Fremont Cottonwood Series</p> <p><b>NVCS (2009)</b> <i>Populus fremontii</i> Forest Alliance</p>	G4 S3.2	Found at elevations ranging from sea level to 7,874 feet amsl on floodplains, along low-gradient rivers, perennial or seasonally intermittent streams, springs, in lower canyons in desert mountains, in alluvial fans, and in valleys with a dependable subsurface water supply that varies considerably during the year. Fremont cottonwood is a dominant or co-dominant in the tree canopy with box elder, desert baccharis ( <i>Baccharis sergiloides</i> ), Oregon ash ( <i>Fraxinus latifolia</i> ), northern California black walnut ( <i>Juglans hindsii</i> ), California sycamore, coast live oak, narrowleaf willow ( <i>Salix exigua</i> ), Goodding's willow ( <i>Salix goodingii</i> ), polished willow ( <i>Salix laevigata</i> ), arroyo willow, pacific willow ( <i>Salix lasiandra</i> ssp. <i>lasiandra</i> ), and yellow willow ( <i>Salix lutea</i> ). Trees and less than 25 meters tall; canopy is continuous to open. Shrub layer is intermittent to open. Herbaceous layer is variable.	-	No	<b>Absent:</b> This vegetation community does not occur within the project site.

**Table D-1: Potentially Occurring Special-Status Biological Resources**

<i>Scientific Name</i> Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
<u>CNDDDB/Holland (1986)</u> Southern Sycamore Alder Riparian Woodland <u>MCV (1995)</u> California Sycamore Series <u>NYCS (2009)</u> Platanus racemosa Woodland Alliance	G4 S4	Found at elevations ranging from sea level to 7,874 feet amsl in gullies, intermittent streams, springs, seeps, stream banks, and terraces adjacent to floodplains that are subject to high-intensity flooding. Soils are rocky or cobbly alluvium with permanent moisture at depth. California sycamore is a dominant or co-dominant in the tree canopy with white alder, southern California black walnut, Fremont cottonwood, coast live oak, valley oak, narrowleaf willow, Gooding’s willow, polished willow, arroyo willow, yellow willow, Peruvian pepper tree (Schinus mole), and California bay.	-	No	<b>Absent:</b> 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 threats known).

**NatureServe Conservation Status Rank**

The Global Rank (G#) reflects the overall condition and imperilment of a species throughout its global range. The Intraspecific 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 – Fully Covered.

No – Not Covered.

Yes (a) – May require additional surveys pursuant to Section 6.1.2, *Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools*.

Yes (b) – May require additional surveys pursuant to Section 6.1.3, *Protection of Narrow Endemic Plant Species*.

Yes (c) – May require additional surveys pursuant to Section 6.3.2, *Additional Survey Needs and Procedures*.

# **Appendix E Focused Burrowing Owl Survey Report**

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November 2, 2022

JN 184659

**HIGHPOINTE COMMUNITIES**

Attn: Ross Yamaguchi  
530 Technology Dr, #100  
Irvine, California 92618

**SUBJECT: Results of Focused Burrowing Owl (*Athene cunicularia*) Surveys for Sunset Crossing TTM 38442 – City of Moreno Valley, Riverside County, California**

Dear Mr. Yamaguchi:

This report contains the findings of Michael Baker International's (Michael Baker) focused burrowing owl (*Athene cunicularia*; [BUOW]) surveys conducted during the 2022 breeding season for Sunset Crossing TTM 38442 (project) located in the City of Moreno Valley, Riverside County, California. Based on the results of Michael Baker's initial review of California Natural Diversity Database RareFind 5 (CDFW 2022) occurrence records, the project site is located within an area that is or was previously known to be occupied by BUOW and likely provides suitable nesting and foraging habitat. As such, focused BUOW surveys were conducted in accordance with the *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area* (RCA 2006). The focused BUOW surveys were conducted on four (4) separate days during the 2022 breeding season to document the presence/absence of BUOW within the project site and areas of suitable habitat within 500 feet (survey area).

**Project Location**

The project site is located within the City of Moreno Valley, generally to the north of Perris Reservoir, east of Interstate 215 (I-215), south of State Route 60 (SR-60), and west of SR-79 (refer to Figure 1, *Regional and Project Vicinity*). The project site is depicted in Section 10, Township 3 South, Range 3 West, on the United States Geological Survey's (USGS) *Sunnymead, California* 7.5-minute quadrangle. Specifically, the project site is located north of Alessandro Boulevard, south of Bay Avenue, west of Marion Road, and east of Nason Street on assessor's parcel numbers (APN) 488-210-020 and 488-210-006.

**Project Description**

The proposed project includes the development of up to 108 residential units, a water basin, a park, and road construction on 19.10 acres.

## Background

### *Burrowing Owl*

The BUOW is a grassland specialist distributed throughout western North America, where it is known to occupy a wide variety of arid and semi-arid open areas within shrub, desert, and grassland environments. The California Department of Fish and Wildlife (CDFW) currently lists the BUOW as a California Species of Special Concern. BUOWs require large open, sparsely vegetated areas, on rolling or level terrain with an abundance of fossorial mammal burrows (> 4 inches in diameter). In addition, BUOWs require low-growing vegetation allowing line-of-sight of the surrounding habitat to forage as well as watch for predators. BUOWs are dependent upon the presence of burrowing mammals (e.g., California ground squirrel [*Otospermophilus beecheyi*], coyote [*Canis latrans*], American badger [*Taxidea taxus*]) whose burrows are used for roosting and nesting (Haug et al. 1993). The presence or absence of fossorial mammal burrows is often a major factor that limits the presence or absence of BUOW. Where mammal burrows are scarce, BUOWs have been observed digging their own burrows in soft, friable soil and have been observed utilizing man-made cavities such as buried and non-functioning drain pipes, stand-pipes, and dry culverts. Additionally, BUOWs may burrow beneath rocks and debris or large, heavy objects such as abandoned cars, concrete blocks, or concrete pads. Large, hard objects at burrow entrances stabilize the entrance from collapse and may inhibit excavation by predators.

Adult BUOWs are small owls (approximately 7.5 to 9.8 inches) with long legs and short tails that are speckled brown and white, with yellow eyes and a yellow bill. A bold white throat and eyebrows are also typical distinguishing features for BUOWs. Juvenile BUOWs are usually less mottled than adults, with buffy-yellow underparts. BUOWs have crepuscular (dawn and dusk) hunting habits but are often observed perched in or near the burrow entrance during the day. One burrow is typically selected for use as the main nest burrow, however, BUOWs also utilize satellite burrows that are often located within the immediate vicinity of the main nest burrow. BUOWs prey upon invertebrates and small vertebrates through the low growing vegetation which allows for foraging visibility (Thomsen 1971). They typically forage in short-grass, mowed, or overgrazed pasture, golf courses and airports (Thomsen 1971). Based on the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012), the BUOW breeding season in California extends from February 1 through August 31. BUOWs in California may migrate southerly, but often remain in their breeding area during the non-breeding months. The BUOW was once abundant and widely distributed within southern California, but it has declined precipitously in counties such as Los Angeles, Orange, San Diego, Riverside, and San Bernardino.

### *Regulatory Framework*

The BUOW is a resident and migratory bird species protected by international treaty under the Migratory Bird Treaty Act (MBTA) of 1918. The MBTA reflects agreements made between the U.S., England, Mexico, the former Soviet Union, and Japan to protect all of North America's migratory bird populations. The MBTA protects migratory bird nests from possession, sale, purchase, barter, transport, import and export, and collection. The other prohibitions (i.e., capture, pursue, hunt, and kill) of the MBTA are inapplicable to nests. The regulatory definition of take, as defined in Title 50 Code of Federal Regulations (C.F.R.) Part 10.12, means to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to hunt, shoot, wound, kill, trap, capture, or collect. Only the verb "collect" applies to nests. It is illegal to collect, possess, and by any means transfer possession of any migratory bird nest. The MBTA prohibits the

destruction of a nest when it contains birds or eggs, and no possession shall occur during the destruction (U.S. Fish and Wildlife Service 2017). Certain exceptions to this prohibition are included in Title 50 C.F.R. Section 21. Pursuant to Section 3513 of the California Fish and Game Code (CFGC), CDFW enforces the MBTA consistent with rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

Additionally, BUOW is protected under Sections 3503, 3503.3, 3511, and 3513 of the CFGC which prohibit the take, possession, or destruction of birds, their nests or eggs. Implementation of the take provisions requires that project-related disturbance at active nesting territories be reduced or eliminated during critical phases of the nesting cycle (March 1 - August 15, annually). Section 3503.5 of the CFGC protects birds in the orders Falconiformes or Strigiformes (birds of prey, such as hawks and owls, including BUOWs) which makes it unlawful to take, possess, or destroy their nest or eggs.

The *Staff Report on Burrowing Owl Mitigation* (CDFG 2012) offers long-term assurances for conservation of this species in exchange for biologically appropriate levels of incidental take and/or habitat loss as defined in the approved plan. California's Natural Community Conservation Plan (NCCP) Act (CFGC §2800 *et seq.*) governs such plans at the state level, and was designed to conserve species, natural communities, ecosystems, and ecological processes across a jurisdiction or a collection of jurisdictions. Complementary Habitat Conservation Plans (HCPs) are governed by the federal endangered Species Act (7 U.S.C. § 136, 16 U.S.C. § 1531 *et seq.*). Regional conservation plans (and certain other landscape-level conservation and management plans), may provide conservation for unlisted as well as listed species. Because the geographic scope of NCCPs and HCPs may span many hundreds of thousands of acres, these planning tools have the potential to play a significant role in conservation of BUOWs.

BUOWs have been included as one of the one hundred and forty-six (146) focal species covered by the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The objectives for BUOWs within the MSHCP are to maintain and ensure the conservation of occupied burrows on current conserved lands, decrease harmful effects to BUOWs, and identify and implement monitoring and management to sustain the BUOW population within the MSHCP. BUOWs can be found in a variety of habitats within the MSHCP, predominantly on open land, including grassland, agriculture (e.g., dry-land farming and grazing areas), playa, and sparse coastal sage scrub and desert scrub habitats. Within the MSHCP, BUOWs are narrowly distributed at relatively few locations where suitable habitat is present.

## **Methodology**

As documented in the Habitat Assessment and Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis (Michael Baker 2022), the project site is located within a designated survey area for BUOW as identified in the MSHCP and also provides suitable habitat and foraging opportunities for BUOW. As such, focused BUOW surveys were conducted by qualified biologists Lauren Mapes, Ryan Winkleman, April Nakagawa, and Tom Millington on four (4) separate days during the 2022 breeding season: April 12, May 31, June 14, and June 28, 2022. Please refer to Table 1 below for a summary of the survey dates, timing, surveyors, and weather conditions for each of the surveys.

**Table 1: Survey Dates, Timing, Surveyors, and Weather Conditions**

Date	Time (start / finish)	Surveyors	Temperature (°F) (start / finish)	Average Wind Speed (mph)
April 12, 2022	0630 / 0750	LM, RW	57 clear skies / 63 sunny	2 – 3
May 31, 2022	0700 / 0815	LM, AN	58 clear skies / 71 sunny	2 – 4
June 14, 2022	0700 / 0800	LM, AN, TM	63 sunny / 73 sunny	0 – 2
June 28, 2022	0700 / 0800	LM, AN	74 sunny / 80 sunny	0 – 2
*RW = Ryan Winkleman, LM = Lauren Mapes, TM = Tom Millington, AN = April Nakagawa				

The BUOW focused surveys were conducted during the 2022 breeding season (February 1 through August 31) in accordance with the survey guidelines and protocols provided in the *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area* (RCA 2006). Areas providing suitable habitat for BUOWs within the survey area were surveyed for suitable, occupied, and remnant burrows consisting of natural and non-natural substrates (refer to Figure 2, *Survey Area*, in Attachment A). Survey transects were conducted at 10-meter (approximately 33 feet) intervals to ensure 100% visual coverage of all areas in suitable habitat, as applicable based on-site topography, and access. Binoculars were used to scan areas that were inaccessible due to lack of right-of-entry to observe and identify distant birds; identify any suitable, occupied, and remnant burrows consisting of natural and non-natural substrates; and search for any activity around suitable BUOW habitat. Methods to detect the presence of BUOWs included direct observation, aural detection, and signs of presence (i.e., pellets, white wash, feathers, or prey remains). The location of all suitable habitat, potential burrows, sign, and BUOWs observed within the survey area were recorded and mapped, with a hand-held Global Positioning System (GPS) unit. Surveys were not conducted during rain, high winds, dense fog, or high temperatures. All BUOW focused surveys were conducted between morning civil twilight and 1000 hours.

## Results

### *Existing Conditions*

After a review of Google Earth historic imagery and results from the field survey, it was determined that the survey area is comprised of developed land and areas of disturbed habitat and bare ground which consist of heavily disturbed/compacted soils. Google Earth historic imagery from 1985 through 2021 also shows that the survey area has continually been exposed to disturbances due to routine weed abatement activities (i.e., disking, tilling) throughout the undeveloped portions of the survey area and that these activities have eliminated any natural vegetation communities. Vacant land is present in patches to the north, south, and east of the survey area. Residential land use is located along the west, northwest, and northeast boundary of the survey area. Additionally, commercial uses were currently being built near the northwestern boundary of the project site at the time of the surveys. Please refer to Attachment B for representative photographs taken throughout the survey area.

### *Regional Context*

According to the CNDDDB, there are twenty-two (22) occurrence records for burrowing owl within the USGS *El Casco, Perris, Riverside East, Steele Peak, and Sunnymead, California* 7.5-minute quadrangles, which constitute the quadrangles within a 5-mile radius of the survey area. The closest extant occurrence (Occurrence Number 65) was recorded in 1980, approximately 2.25 miles south of the project site where a

colony of many owls observed at Perris Reservoir Recreation Area (CDFW 2022). Additionally, another occurrence (Occurrence Number 439) approximately 4 miles to the southwest of the project site has seen continual BUOW use was initially recorded in 1991, with the most recent update in 2007 (CDFW 2022). In addition, there are dozens of records of this species in the eBird database, within and just outside of a 5-mile radius from the project site (eBird 2022).

#### *Focused Burrowing Owl Survey Results*

No BUOWs or BUOW sign (i.e., pellets, white wash, feathers, or prey remains) were observed during any of the four (4) focused surveys. Suitable foraging habitat and line of site opportunities were observed throughout the survey area, as well as suitable burrows (> 4 inches in diameter) capable of providing roosting and nesting opportunities for BUOW. Most burrows observed were located within the eastern portion of the 500-foot buffer area and consisted of small mammal burrows < 4 inches in diameter (Refer to Figure 2, *Survey Area*, in Attachment A). The existing telephone poles, light posts, fencing, and residential and commercial land use that occur within the survey area decrease the likelihood that BUOWs would occur as these features provide perching opportunities for larger raptor species (i.e., red-tailed hawk [*Buteo jamaicensis*]) that prey on BUOWs.

Common bird species detected during the focused surveys included common raven (*Corvus corax*), house finch (*Haemorhous mexicanus*), northern mockingbird (*Mimus polyglottos*), house sparrow (*Passer domesticus*), Say's phoebe (*Sayornis saya*), western meadowlark (*Sturnella neglecta*), and white-crowned sparrow (*Zonotrichia leucophrys*). Please refer to Attachment C for a complete list of wildlife species observed during the surveys.

#### **Conclusions and Recommendations**

No BUOWs, BUOW sign, occupied BUOW burrows, or remnant BUOW burrows were observed on or within the vicinity of the survey area. Therefore, project-related activities are not expected to result in any direct or indirect impacts to BUOWs or occupied BUOW burrows on or within the vicinity of the survey area.

Although BUOWs were not observed during the focused survey, the survey area does contain suitable foraging and nesting habitat for BUOW. Due to the presence of suitable foraging habitat for BUOW and the proximity of the survey area to existing occurrence records for BUOW, in accordance with the *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area* (RCA 2006), one (1) pre-construction clearance survey should be conducted no more than thirty (30) days prior to any ground disturbing activities to avoid direct take of BUOWs. The clearance survey shall be conducted by a qualified biologist and cover all suitable habitat within the project impact area, including adjacent suitable habitat within a 500-foot buffer (as accessible). Following completion of the clearance survey, the qualified biologist shall prepare and submit a final report documenting the methods and results of the survey. If no BUOWs or occupied burrows are detected, project activities may begin, and no additional avoidance and minimization measures would be required. If an occupied burrow is found within the project impact area during pre-construction clearance surveys, a BUOW exclusion plan shall be prepared and submitted to the RCA and Wildlife Agencies (USFWS and CDFW) for approval prior to initiating project activities that includes proposed mitigation for direct and permanent impacts to nesting, occupied, and satellite burrows and/or BUOW habitat.

Please do not hesitate to contact me at (949) 246-7004 or [tommillington@mbakerintl.com](mailto:tommillington@mbakerintl.com) or Ryan Winkleman at (949) 533-0918 or [ryan.winkleman@mbakerintl.com](mailto:ryan.winkleman@mbakerintl.com) should you have any questions or require further information.

Sincerely,



Tom Millington  
Senior Biologist



Ryan Winkleman  
Senior Biologist

Attachments:

- A. *Project Figures*
- B. *Site Photographs*
- C. *Wildlife Species Observed List*
- D. *References*

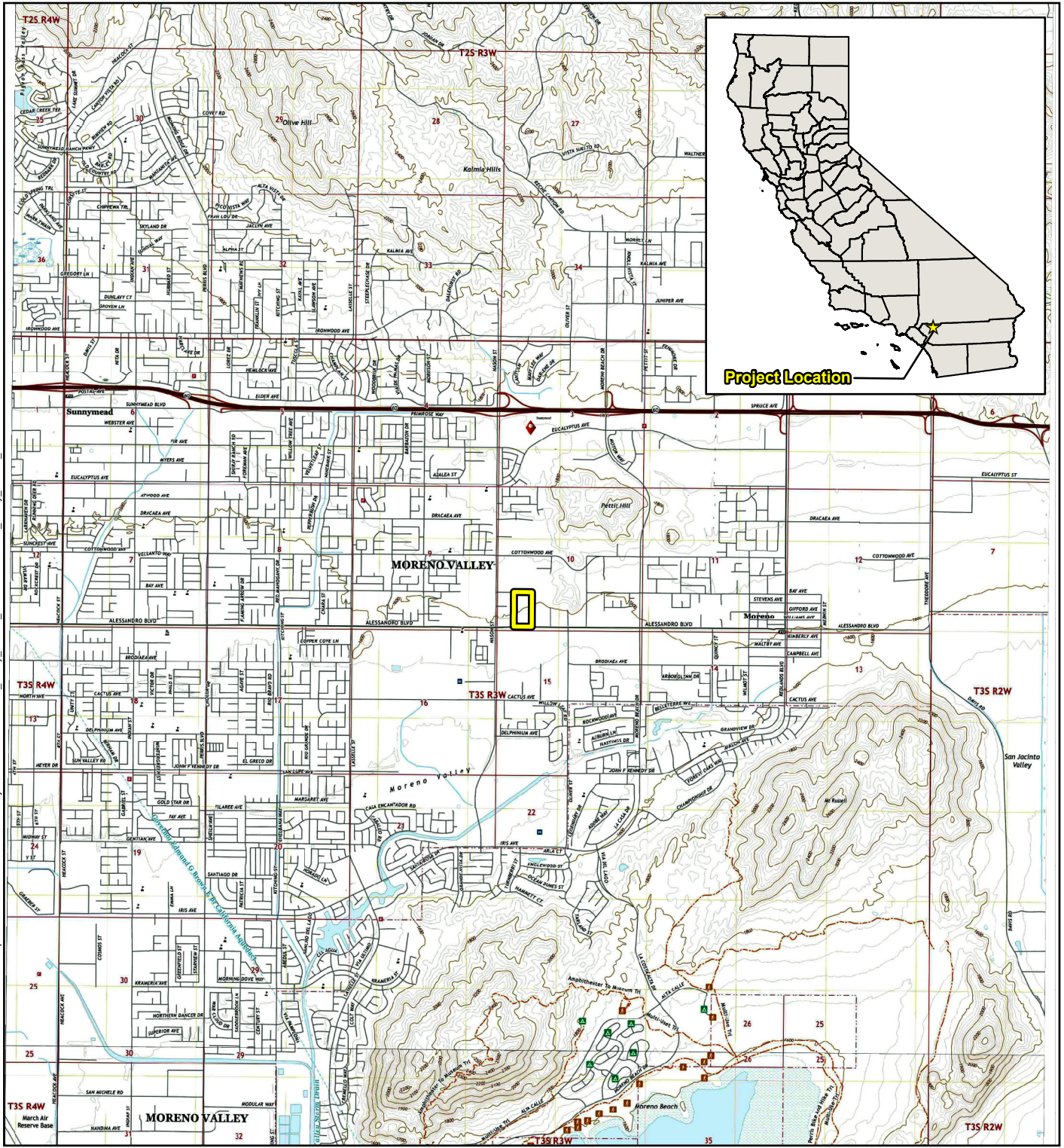


**Attachment A**

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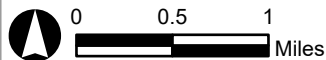
Project Figures

8/23/2022 J:\VONTACA\FS1.bkr.mbakercorp.com\Hoot\PDATA\Moreno Valley\66\GIS\APRX\Moreno\_Valley\_Natural\_Resources\APRX



**Legend**

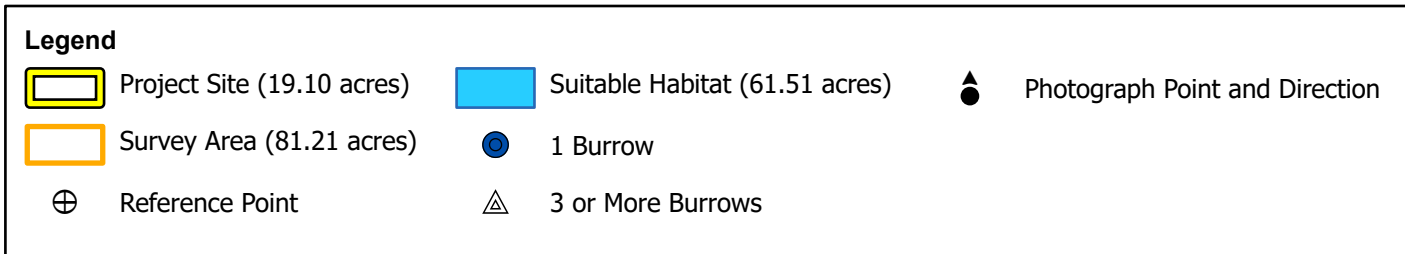
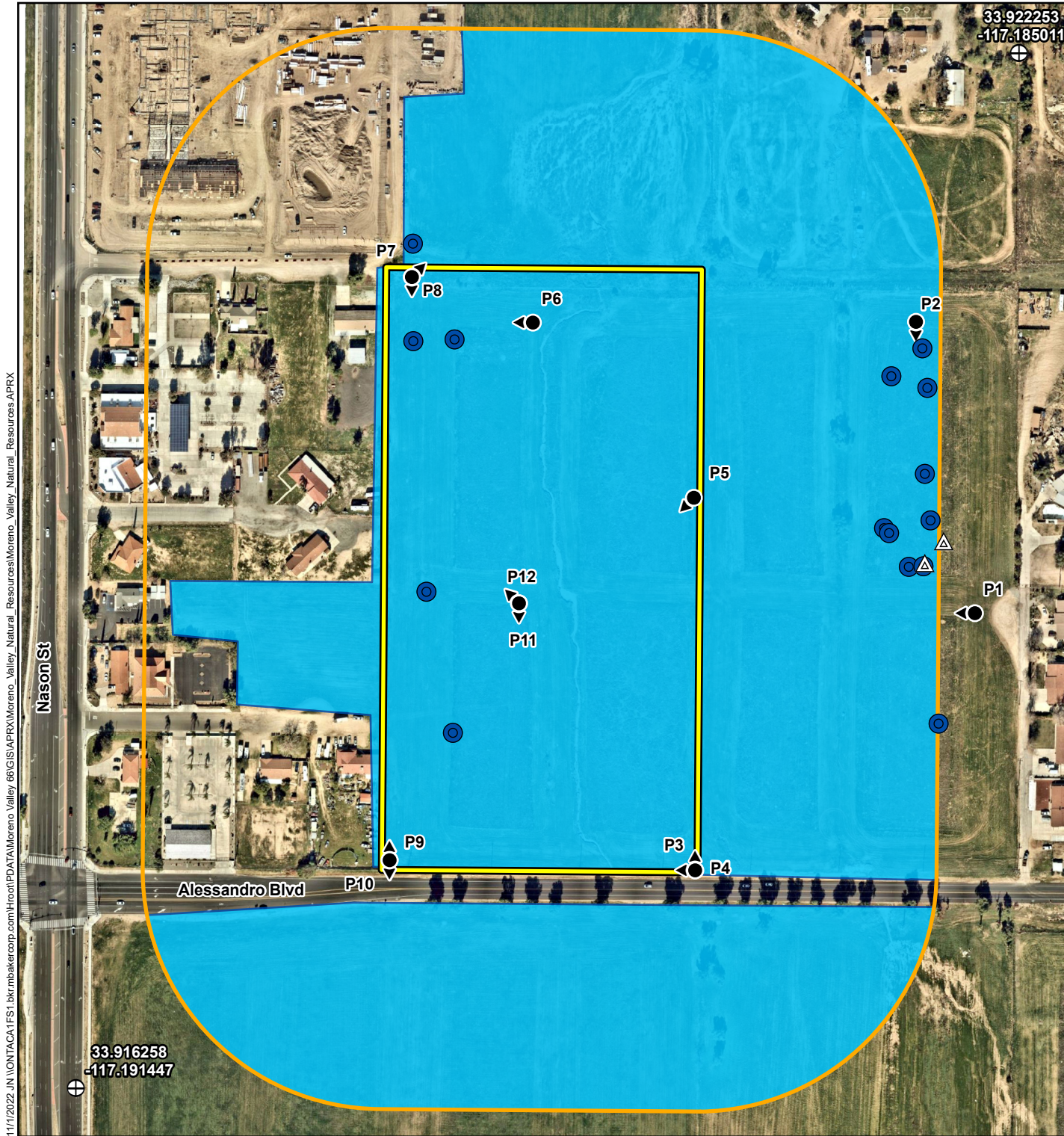
 Project Site (19.10 acres)



Source: USGS 7.5-Minute topographic quadrangle maps: Perris and Sunnymead, California (2021)

SUNSET CROSSING TTM 38442  
 FOCUSED BURROWING OWL SURVEY REPORT  
**Regional and Project Vicinity**

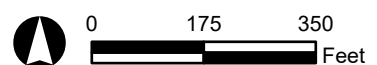
Figure 1



SUNSET CROSSING TTM 38442  
 FOCUSED BURROWING OWL SURVEY REPORT

# Survey Area

Figure 2



Source: Nearmap (01/2022)

**Attachment B**

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Site Photographs



**Photograph 1:** Standing near the eastern boundary of the survey buffer, facing west overlooking open suitable habitat for burrowing owl (BUOW).



**Photograph 2:** Standing near the northern boundary of the survey buffer, facing south overlooking open suitable habitat for BUOW.



**Photograph 3:** Standing in the southeast corner of the project site, facing north overlooking open suitable habitat for BUOW.



**Photograph 4:** Standing in the southeast corner of project site, facing west overlooking open suitable habitat for BUOW.



**Photograph 5:** Standing near the eastern border of the project site, facing southwest overlooking open suitable habitat for BUOW.



**Photograph 6:** Standing near the north boundary of the project site, facing west overlooking open suitable habitat for BUOW.



**Photograph 7:** Standing in northwest corner of the project site, facing northeast overlooking suitable habitat for BUOW along the project's northern edge and survey buffer.



**Photograph 8:** Standing near the northwest corner of the project site, facing south overlooking open suitable habitat for BUOW.





**Photograph 9:** Standing in the southwest corner of the project site, facing north overlooking open suitable habitat for BUOW.



**Photograph 10:** Standing in the southwest corner of the project site, facing south overlooking the survey buffer with open suitable habitat for BUOW.



**Photograph 11:** Standing in the center of the project site, facing south overlooking disturbed habitat suitable for BUOW.



**Photograph 12:** Standing in the center of the project site, facing northwest overlooking disturbed habitat suitable for BUOW.

**Attachment C**

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Wildlife Species Observed List

**Table C-1: Wildlife Species Observed List**

<i>Scientific Name*</i>	<i>Common Name</i>	<i>Special-Status Rank**</i>
<b>Reptiles</b>		
<i>Uta stansburiana elegans</i>	western side-blotched lizard	
<b>Birds</b>		
<i>Accipiter cooperii</i>	Cooper's hawk	WL
<i>Aeronautes saxatalis</i>	white throated swift	
<i>Agelaius phoeniceus</i>	red-winged blackbird	
<i>Anthus rubescens</i>	American pipit	
<i>Calypte anna</i>	Anna's hummingbird	
<i>Columba livia*</i>	rock pigeon	
<i>Corvus brachyrhynchos</i>	American crow	
<i>Spinus lawrencei</i>	Lawrence's goldfinch	
<i>Haemorhous mexicanus</i>	house finch	
<i>Icterus bullockii</i>	Bullock's oriole	
<i>Icterus cucullatus</i>	hooded oriole	
<i>Melospiza crissalis</i>	California towhee	
<i>Mimus polyglottos</i>	northern mockingbird	
<i>Passer domesticus*</i>	house sparrow	
<i>Passerculus sandwichensis</i>	savannah sparrow	
<i>Petrochelidon pyrrhonota</i>	cliff swallow	
<i>Pheucticus melanocephalus</i>	black-headed grosbeak	
<i>Psaltiriparus minimus</i>	bushtit	
<i>Sayornis nigricans</i>	black phoebe	
<i>Sayornis saya</i>	Say's phoebe	
<i>Spinus psaltria</i>	lesser goldfinch	
<i>Streptopelia decaocto*</i>	Eurasian collared-dove	
<i>Sturnella neglecta</i>	western meadowlark	
<i>Tyrannus vociferans</i>	Cassin's kingbird	
<i>Zenaidura macroura</i>	mourning dove	
<i>Zonotrichia leucophrys</i>	white-crowned sparrow	
<b>Mammals</b>		
<i>Canis latrans</i>	coyote	
<i>Canis lupus familiaris*</i>	domestic dog	
<i>Felis catus*</i>	domestic cat	
<i>Lepus californicus bennettii</i>	San Diego black-tailed jackrabbit	
<i>Otospermophilus beecheyi</i>	California ground squirrel	
<i>Sylvilagus audubonii</i>	desert cottontail	

\* **Non-native species**\*\* **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.

## **Attachment D**

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### References

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