

Appendix 3

General Biological Resources Assessment

Cherry Outpost Project

General Biological Resources Assessment

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ACRONYMS AND ABBREVIATIONS

AMSL	Above Mean Sea Level
BUOW	Burrowing owl
CASSA	Criteria Area Species Survey Area
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFG	California Fish and Game
City	City of Wildomar
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
County	County of Riverside
CRPR	California Rare Plant Rank
CWA	Clean Water Act
DBESP	Determination of Biological Equivalent or Superior Preservation
FESA	Federal Endangered Species Act
HANS	Habitat Acquisition and Negotiation Strategy
HCP	Habitat Conservation Plan
HELIX	HELIX Environmental Planning, Inc.
I	Interstate
LDMF	Local Development Mitigation Fee
MBTA	Migratory Bird Treaty Act
MCV	Manual of California Vegetation
MSHCP	Western Riverside County Multiple Species Habitat Conservation Plan
NEPSSA	Narrow Endemic Plant Species Survey Area
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
OHWM	Ordinary High-Water Mark
Project	Cherry Outpost Project
RCHCA	Riverside County Habitat Conservation Authority
RWQCB	Regional Water Quality Control Board

ACRONYMS AND ABBREVIATIONS (cont.)

S	State
SKR	Stephens' kangaroo rat
SSC	Species of Special Concern
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

SUMMARY

The Cherry Outpost Project (project) is in the City of Wildomar in western Riverside County, California. The proposed project consists of a hotel and on-site improvements with proposed retail, including restaurants, a convenience store, a gas and diesel station, and a car wash. Off-site improvements include road widening along Bundy Canyon Road and Cherry Street. The 7.6-acre study area consists of a 6.2-acre project site and a 1.4-acre off-site area and is located within the Elsinore Area Plan of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The study area is not located within or adjacent to an MSHCP Criteria Area or an MSHCP Conservation Area. HELIX Environmental Planning, Inc. conducted a general biological survey, including vegetation mapping and a general habitat assessment; a spring rare plant survey; burrowing owl (*Athene cunicularia*; BUOW) focused surveys; a jurisdictional assessment; and an MSHCP Riparian/Riverine Areas and Vernal Pool resource assessment.

The study area contains five vegetation communities and land uses, including wild oats and annual brome grasslands, developed areas, disturbed areas, eucalyptus groves, and agriculture. No rare plant species were detected during the spring rare plant survey. No BUOW or BUOW sign were observed during focused surveys completed between April and June 2023. The study area supports suitable habitat for nesting migratory bird species. The study area does not support sensitive plant communities, jurisdictional resources, or MSHCP Riparian/Riverine Areas and Vernal Pool habitat.

Approximately 6.8 acres of the study area will be permanently impacted (6.2 acres project site; 0.6 acre off-site). Permanent impacts on the project site (6.2 acres) include the proposed development, while off-site permanent impacts (0.6 acre) comprise road improvements along Bundy Canyon Road and Cherry Street. The remaining 0.8 acre of the off-site study area will be temporarily impacted to accommodate over-excavation during project construction and replacing existing asphalt with new asphalt. Potential significant impacts were identified for BUOW (if present during the 30-day pre-construction survey) and nesting bird species. The project is required to comply with regulations of the MSHCP and Habitat Conservation Plan for Stephens' kangaroo rat (*Dipodomys stephensi*; SKR).

Measures related to the following topics are proposed herein to fully mitigate potential impacts of the project pursuant to the California Environmental Quality Act (CEQA) and the MSHCP: BUOW, migratory nesting bird species, compliance with MSHCP landscaping restrictions, and payment of MSHCP and SKR mitigation fees. Successful implementation of these measures would mitigate potential impacts to MSHCP resources to below a level of significance as defined by CEQA.

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1.0 INTRODUCTION

1.1 PURPOSE OF THE REPORT

This report provides the City of Wildomar (City; California Environmental Quality Act [CEQA] lead agency), resource agencies, and the public, with current biological data to satisfy review of the proposed Cherry Outpost Project (project) located in the City of Wildomar, Riverside County (County), California. The purpose of this report is to document the existing biological conditions on and near the project site and provide an analysis of potential impacts to sensitive biological resources with respect to local, state, and federal policy. This report provides the biological resources technical documentation necessary for project review under CEQA by the City and demonstrates project consistency with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP; County 2003).

1.2 STUDY AREA LOCATION

The approximately 6.2-acre project site is located east of Interstate (I) 15 and west of I-215 in the northwestern portion of the City (Figure 1, *Regional Location*). The project site is located within Section 23 of Township 6 South, Range 4 West of the U.S. Geological Survey (USGS) 7.5-minute Lake Elsinore quadrangle map (Figure 2, *USGS Topography*). Specifically, the project site is located at the northwest intersection of Bundy Canyon Road and Cherry Street (Figure 3, *Aerial Photograph*). The project site comprises two parcels with Assessor's Parcel Numbers 366-290-007 and -008.

The project also comprises 1.4 acres of off-site area adjacent to the southwest corner of the project site and within the existing right-of-way (ROW) along Bundy Canyon Road and Cherry Street (Figure 3). The term "study area" is used throughout this report to collectively refer to the 6.2-acre project site and the 1.4-acre off-site area.

1.3 PROJECT DESCRIPTION

The proposed project consists of a commercial development with a hotel and on-site improvements (Figure 4, *Site Plan*). Proposed retail uses include restaurants, convenience stores, a gas and diesel station, and a car wash. Off-site improvements include road widening along Bundy Canyon Road and Cherry Street, and the placement of a 36-inch storm drainpipe outlet and associated riprap pad in the southwestern portion of the study area. The existing headwall on the northside of Bundy Canyon Road will be relocated to accommodate road widening.

2.0 METHODS

Project evaluation included a review of project plans; a literature review of biological resources occurring on the study area and surrounding vicinity; a general biological survey, including vegetation mapping and a general habitat assessment; a rare plant survey; burrowing owl (*Athene cunicularia*; BUOW) focused surveys; a jurisdictional assessment; and an MSHCP Riparian/Riverine and Vernal Pool Resources assessment. The methods used to evaluate the biological resources present on the study area are discussed in this section.

2.1 NOMENCLATURE

Nomenclature for this report follows Baldwin et al. (2012) for plants and the MSHCP (County 2003) for vegetation community classifications, with additional vegetation community information taken from Manual of California Vegetation, Second Edition (MCV; Sawyer et al. 2009), and Oberbauer (2008). Animal nomenclature follows Emmel and Emmel (1973) for butterflies, California Herps (2024) for reptiles and amphibians, American Ornithological Society (2023) for birds, and Baker et al. (2003) for mammals. Rare plant and sensitive animal statuses are from the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants of California (2024) and the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDDB; CDFW 2024). Rare plant species' habitats and flowering periods are from the Jepson Manual (Baldwin et al. 2012), MSHCP (County 2003), CNPS (2024a), and CNDDDB (CDFW 2024). Soil classifications were obtained from the Natural Resources Conservation Service's (NRCS) Web Soil Survey (2024).

2.2 LITERATURE REVIEW

Prior to conducting the site visit, HELIX Environmental Planning, Inc. (HELIX) reviewed regional planning documents, Google Earth aeriols (2024), Web Soil Survey (NRCS 2024), and sensitive species database records, including the Inventory of Rare and Endangered Plants of California (CNPS 2024a), CNDDDB (CDFW 2024), and U.S. Fish and Wildlife Service's (USFWS) critical habitat maps (2024). A nine-quadrangle database search was conducted on CNDDDB and CNPS, which included the Alberhill, Lake Elsinore, Lake Mathews, Romoland, Steele Peak, Sitton Peak, Wildomar, Murrieta, and Perris quadrangles. In addition, the MSHCP (County 2003) and the Regional Conservation Authority's MSHCP Information Tool (Western Riverside County Regional Conservation Authority 2024) were consulted to determine project compliance requirements under the MSHCP.

2.3 FIELD SURVEYS

Field surveys were conducted to document the existing condition of the study area and surrounding lands. A general biological survey and vegetation mapping was completed in February 2023, during which dominant plant species were noted. A spring rare plant survey was conducted on April 26, 2023. Focused BUOW surveys were conducted between April and June 2023. A jurisdictional assessment was conducted in February 2023 (concurrently with the general biological survey) to determine if resources are present under the jurisdiction of the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and/or CDFW in addition to Riparian/Riverine Areas and Vernal Pools as defined in Section 6.1.2 of the MSHCP.

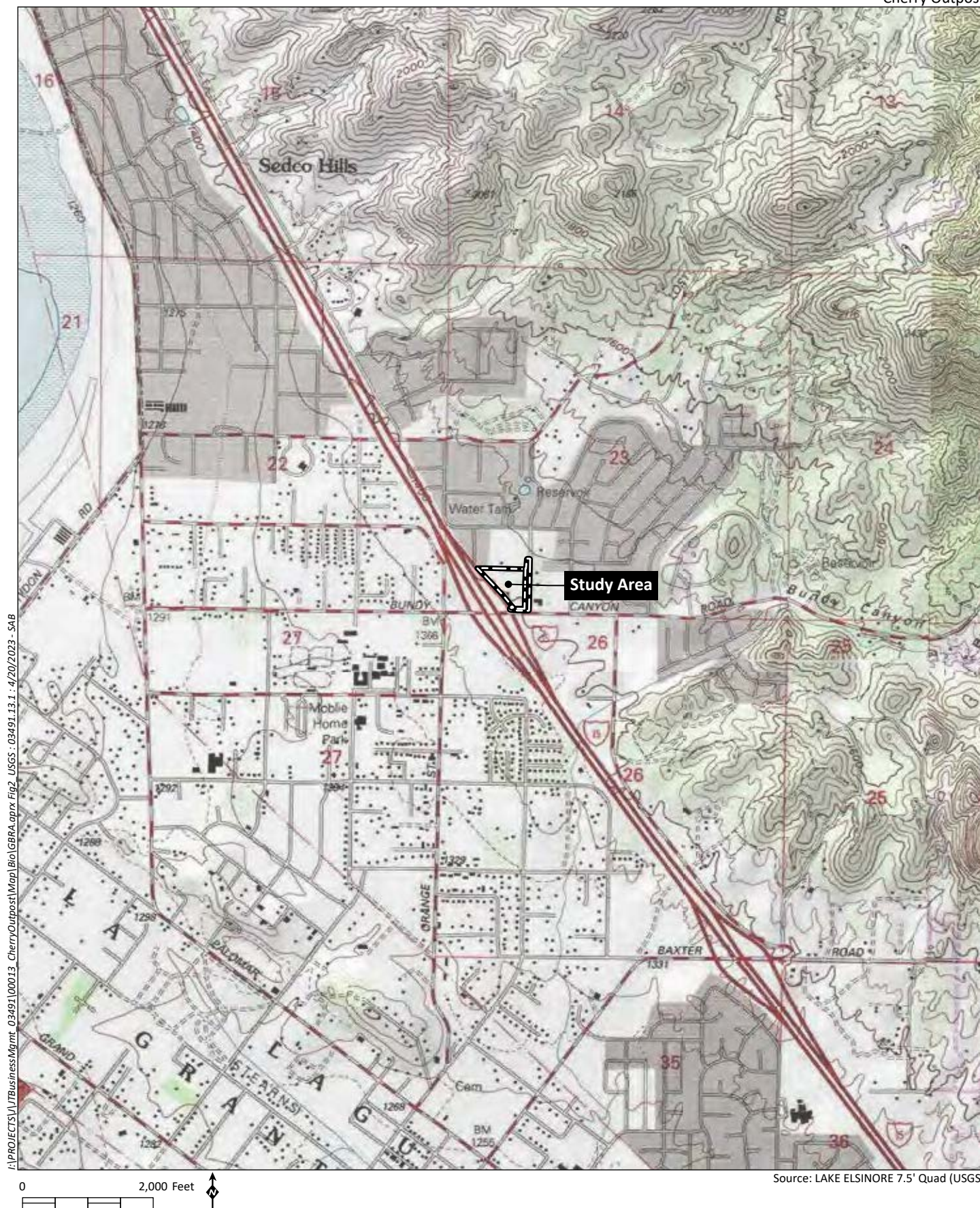
Lists of plant and animal species observed and/or detected during the field surveys are provided as Appendix A, *Plant Species Observed*, and Appendix B, *Animal Species Observed and/or Detected*. Noted animal species were identified by direct observation, vocalizations, or the observance of scat, tracks, or other signs. However, the list of animal species identified is not necessarily a comprehensive account of all species that use the study area, as species that are nocturnal, secretive, or seasonally restricted may not have been observed.

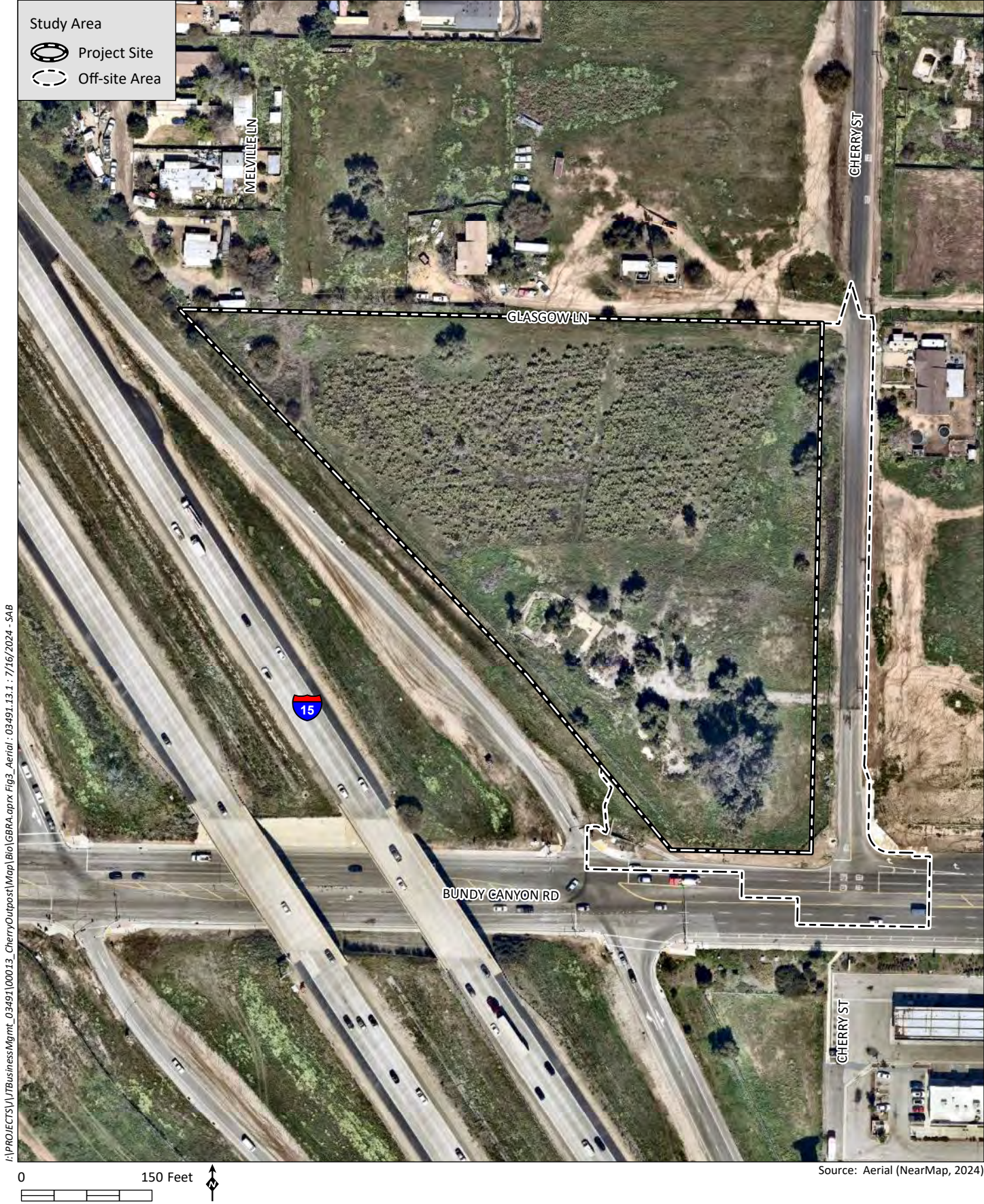
2.3.1 General Biological Survey

HELIX Biologists Matthew Dimson and Nelly Moreno conducted a general biological survey of the study area on February 8, 2023, in accordance with vegetation community classification described in Section

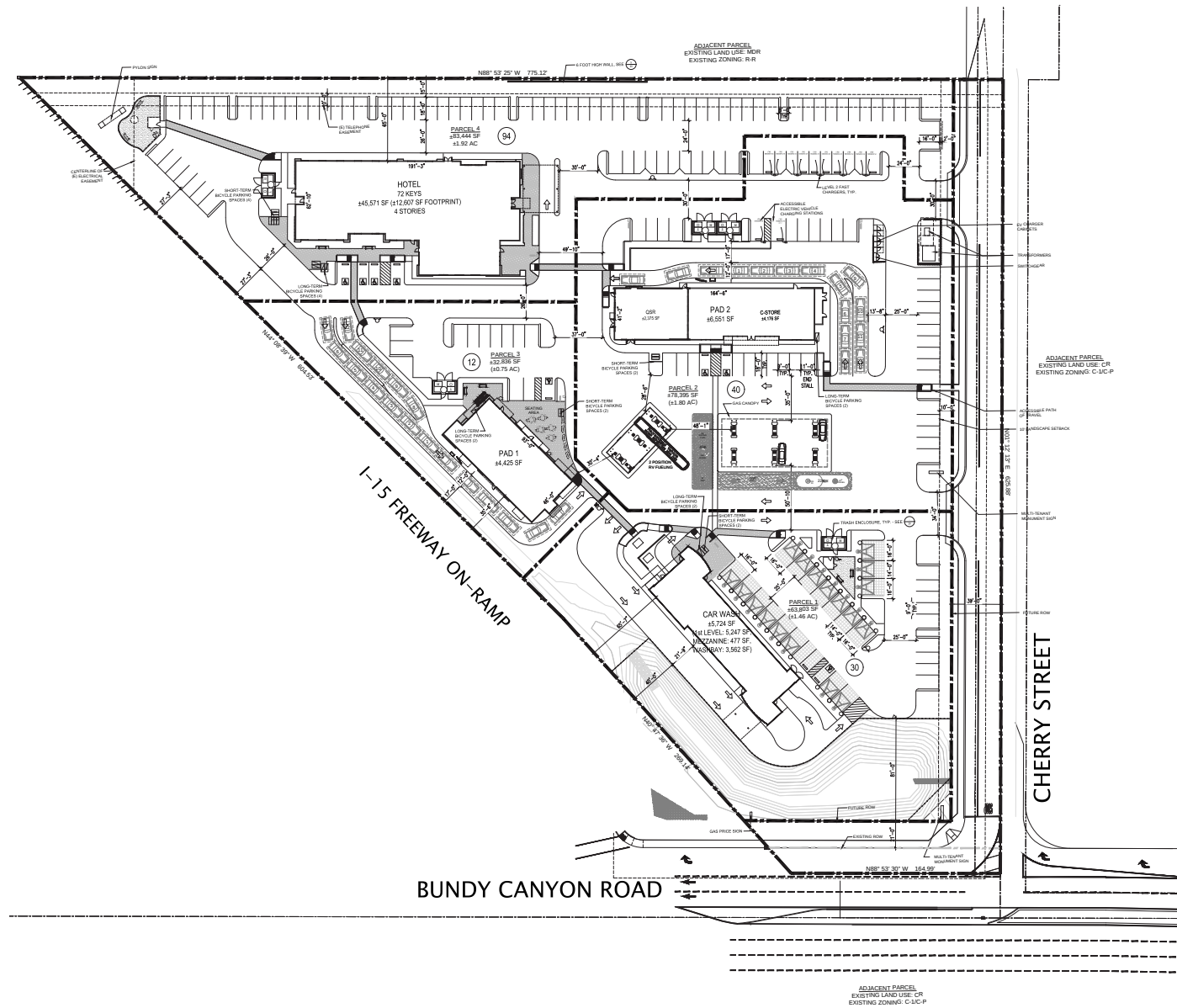


Figure 1





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Source: KGTy, 2024

2.1.3 of the MSHCP (County 2003), and with additional information from MCV (Sawyer et al. 2009) and Oberbauer (2008). Vegetation was mapped on a 120-foot scale (1 inch = 120 feet) aerial photograph of the study area. Vegetation communities and land uses were mapped by HELIX to one-tenth of an acre (0.1 acre). The entire site was surveyed on foot with the aid of binoculars. Representative photographs of the site were taken, with select photographs included in this report as Appendix C, *Site Photographs*. Plant and animal species observed or otherwise detected were recorded in field notebooks. Animal identifications were made in the field by direct, visual observation or indirectly by detection of calls, burrows, tracks, or scat. Plant identifications were made in the field or in the lab through comparison with voucher specimens or photographs.

2.3.2 Focused Species Surveys

2.3.2.1 Rare Plant Species Surveys

Rare plants investigated include those that are listed as threatened or endangered by USFWS or CDFW and those afforded a California Rare Plant Rank (CRPR) of 1 through 3 by CNPS (2024b).

HELIX Biologist Cache Tucker conducted a spring rare plant survey on April 26, 2023. The surveys were conducted in accordance with published agency guidelines (California Department of Fish and Game [CDFG] 2000, 2009; USFWS 2000) and during the appropriate flowering period to maximize the detection of those rare plant species with the potential to occur on the project site. Survey methods incorporated a combination of meandering transects and focused searches in areas with the greatest potential to support rare plant species with the potential to occur on the project site. If observed, individual rare plants were mapped using a handheld Global Positioning System unit.

2.3.2.2 Burrowing Owl

In accordance with the County's survey protocol, a Step I Habitat Assessment was conducted on the study area and within a 150-meter (approximately 500-foot) buffer zone around the periphery of the study area (survey area; County 2006). Mr. Dimson and Ms. Moreno completed a Step I habitat assessment on February 8, 2023, during which potential suitable BUOW habitat was observed.

Step II surveys, which consist of a focused burrow survey (Part A) and focused BUOW surveys (Part B), were conducted to determine whether the survey area supports suitable burrows and/or BUOWs. The focused burrow survey was conducted concurrently with the first focused BUOW survey. Since suitable burrows were observed within the survey area, four additional focused BUOW surveys were conducted. The biologist walked transects spaced no greater than 30 meters apart (approximately 100 feet) to allow for 100 percent visual coverage of all suitable habitat within the survey area. The biologist walked slowly and methodically, closely checking habitat for suitable burrows, BUOW diagnostic sign (e.g., molted feathers, pellets/castings, or whitewash at or near a burrow entrance), and individual BUOWs. Inaccessible areas of the survey area were visually assessed using binoculars. The focused burrow survey and four BUOW surveys were conducted by Mr. Tucker between April 6 and June 9, 2023. The BUOW-focused survey methods and results will be detailed in Appendix D, *BUOW Focused Survey Report*.

2.3.3 Jurisdictional Assessment

Prior to beginning fieldwork, 120-foot scale (1 inch = 120 feet) aerial photographs, 120-foot scale (1 inch = 120 feet) topographic maps, USGS quadrangle maps, and National Wetlands Inventory maps

(USFWS 2023) were reviewed to assist in determining the location of potential jurisdictional waters within the study area. Mr. Dimson and Ms. Moreno conducted the jurisdictional assessment on February 8, 2023. The assessment was conducted to identify jurisdictional waters potentially subject to USACE jurisdiction pursuant to Section 404 of the Clean Water Act (CWA); jurisdictional waters potentially subject to RWQCB jurisdiction pursuant to Section 401 of the CWA and/or State Porter-Cologne Water Quality Control Act; and streambed habitats potentially subject to CDFW jurisdiction pursuant to Sections 1600 *et seq.* of the California Fish and Game (CFG) Code. Data collection was targeted in areas that were deemed to have the potential to support jurisdictional resources, such as the presence of an ordinary high-water mark (OHWM), the presence of a bed/bank and streambed associated vegetation, and/or other surface indications of streambed hydrology.

2.3.4 Riparian/Riverine Areas and Vernal Pool Habitat Assessment

In accordance with the MSHCP, Mr. Dimson and Ms. Moreno conducted a Riparian/Riverine Areas and Vernal Pool habitat assessment on February 8, 2023. This habitat assessment was conducted concurrently with the jurisdictional assessment. The identification of Riparian/Riverine Areas and Vernal Pools is based on the potential for the habitat to support, or be tributary to habitat that supports, Riparian/Riverine Covered Species identified in MSHCP Section 6.1.2.

3.0 RESULTS

3.1 ENVIRONMENTAL SETTING

The study area has been used for agriculture since at least 1967 (Historic Aerials 2024). A structure near the western project boundary is visible in a 1967 aerial, and a smaller second structure in the northeast corner is visible in a 1978 aerial (Historic Aerials 2024). Most recently, the study area has supported a palm tree nursery between approximately 2009 and 2011 (Google Earth 2024). The nursery appeared to be abandoned after 2011, and structures within the study area were demolished sometime between 2013 and 2014 (Google Earth 2024). The palm trees, grown as part of the nursery operation, are still present in the northern half of the study area, as well as the larger building foundation near the western study area boundary. The remaining portions of the study area are dominated by wild oats and annual brome grassland. There are small eucalyptus groves in the southern portion of the study area and sparsely vegetated land adjacent to the existing paved Bundy Canyon Road and Cherry Street. The study area does not support any jurisdictional features, MSHCP Riparian/Riverine Areas, or Vernal Pool resources. The study area is within an urbanized area of the City and is bounded by rural residential properties to the north and east, a small commercial center to the south, and I-15 to the west. Undeveloped land associated with Sedco Hills is located east of the study area.

3.2 TOPOGRAPHY AND SOILS

The topography of the study area is mostly flat, with elevations ranging from approximately 1,398 feet (426 meters) above mean sea level (AMSL) within the southern portion of the study area along Bundy Canyon Road to a high of approximately 1,443 feet (440 meters) AMSL along Cherry Street in the northeastern corner of the study area.

The MSHCP lists nine sensitive soil types that occur within the Plan Area (County 2003). None of these soil types are mapped within the study area. Three soil types were mapped within the study area, with

the majority of the study area dominated by Ramona sandy loam (8 to 15 percent slopes, eroded; 8 to 15 percent slopes, severely eroded; 0 to 8 percent slopes, eroded; NRCS 2024). The other two soil types include Hanford coarse sandy loam (2 to 8 percent slopes) and Greenfield sandy loam (2 to 8 percent slopes, eroded). The three soils series consists of well-drained alluvium derived from granite.

3.3 VEGETATION COMMUNITIES

Five vegetation communities and land uses were mapped on the study area, including wild oats and annual brome grasslands, developed land, disturbed land, eucalyptus groves, and agriculture (Table 1, *Vegetation and Land Uses*; Figure 5, *Vegetation and Land Uses*). The study area does not support native-dominated vegetation communities. The CDFW CaCodes and Oberbauer Element Codes are provided in parentheses next to each community name in Table 1. A brief description of each vegetation community and land use mapped on the study area is provided below.

Table 1
VEGETATION AND LAND USES

MSHCP Vegetation Community Classification ¹		MCV/Oberbauer	Project Site (acres) ²	Off-site (acres) ²	TOTAL (acres) ²
Collapsed	Uncollapsed				
Grassland	Non-native Grassland	Wild Oats and Annual Brome Grasslands (CaCode ³ 42.026.23)	3.5	0.4	3.9
Developed/ Disturbed Land	Developed (Residential)	Developed (O ⁴ 12000)	0.1	0.8	0.9
	Disturbed (Residential)	Disturbed (O 11300)	<0.1 ⁵	0.2	0.2
	Non-native Vegetation (Exotic)	Eucalyptus Groves (CaCode 79.100.02)	0.2	0.0	0.2
Agricultural Land	Grove/Orchard	Agriculture (O 18000)	2.4	0.0	2.4
TOTAL			6.2	1.4	7.6

¹ Collapsed and uncollapsed community classifications are terms from MSHCP Table 2-1.

² Acreages are rounded to the nearest tenth.

³ CDFW CaCodes

⁴ Oberbauer Element Code

⁵ Actual acreage is 0.003 acre.

3.3.1 Wild Oats and Annual Brome Grasslands

Wild oats and annual brome grassland (non-native grassland under the MSHCP Community Classification) is a dense to sparse cover of annual grasses, often associated with numerous species of showy-flowered native annual forbs. Characteristic species include oats (*Avena* spp.), brome grasses (*Bromus* spp.), and mustards (*Brassica* spp., short-pod mustard [*Hirschfeldia incana*]). Most of the annual introduced species within the non-native grassland originated from the Mediterranean region, an area with a long history of agriculture and a climate similar to California. Intensive grazing and agricultural practices combined with severe droughts in California contributed to the successful invasion and establishment of these species and the replacement of native grasslands with annual-dominated non-native grasslands (Jackson 1985).

The majority of the study area supports wild oats and annual brome grasslands, covering approximately 3.9 acres (3.5 acres project site, 0.4 acres off-site). This plant community was dominated by red brome (*Bromus rubens*) and slender oat (*Avena barbata*). Other non-native species observed included London

rocket (*Sisymbrium irio*), short-pod mustard, tocalote (*Centaurea melitensis*), and scattered Brazilian pepper trees (*Schinus molle*) and Peruvian pepper trees (*Schinus terebinthifolia*). Sporadic native species were also observed, including brittlebush (*Encelia farinosa*), California buckwheat (*Eriogonum fasciculatum*), Menzie's goldenbush (*Isocoma menziesii*), and rancher's fiddleneck (*Amsinckia intermedia*). One native southern California black walnut (*Juglans californica*) was observed within this community in the northwest corner of the study area.

3.3.2 Disturbed

Disturbed land is included under the Urban/Residential/Exotic classification in the MSHCP. This land use includes land cleared of vegetation (e.g., dirt roads), land containing a preponderance of non-native plant species, such as ornamentals or ruderal exotic species, that take advantage of disturbance (previously cleared or abandoned landscaping), or land showing signs of past or present animal usage that removes any capability of providing viable habitat.

Disturbed land was observed adjacent to Bundy Canyon Road and Cherry Street, which totaled 0.2 acre (<0.1 acre project site, 0.2 acre off-site). These areas consisted of compacted dirt road shoulders and were mostly unvegetated due to frequent vehicle use. Scattered non-native species were observed within the disturbed areas, including London rocket, red brome, redstem filaree (*Erodium cicutarium*), short-pod mustard, and slender oat.

3.3.3 Developed

Developed land is included under the Urban/Residential/Exotic classification in the MSHCP. Developed land is where permanent structures and/or pavement have been placed, which prevents the growth of vegetation, or where landscaping is clearly tended and maintained.

Developed land included the paved portions of Bundy Canyon Road and Cherry Street along the southern and eastern study area boundaries, the building foundation along the western study area boundary, and an artificial pond in the southern portion of the study area. The artificial pond was lined with plastic sheeting and appeared to be a water feature installed by prior residents. No water was observed within the feature (see Photo 5 in Appendix C). Developed land within the study area totaled 0.9 acre (0.1 acre project site, 0.8 acre off-site).

3.3.4 Eucalyptus Groves

Eucalyptus groves (exotic community in the MSHCP) are dominated by eucalyptus (*Eucalyptus* spp.), an introduced species that has often been planted purposely for wind-blocking, ornamental, and hardwood production purposes. Most groves are monotypic, with the most common species being either the blue gum (*Eucalyptus globulus*) or red gum (*Eucalyptus camaldulensis*). The understory within well-established groves is usually very sparse due to the closed canopy and allelopathic nature of the abundant leaf and bark litter. If sufficient moisture is available, this species becomes naturalized and can reproduce and expand its range. The sparse understory offers only limited wildlife habitat; however, these woodlands provide excellent nesting sites for a variety of raptors. During winter migrations, a large variety of warblers may be found feeding on the insects that are attracted to the eucalyptus flowers.



One small eucalyptus grove was observed in the southern portion of the study area, totaling 0.2 acre (project site only). This community consisted of red gum trees with an understory of london rocket, rancher's fiddleneck, and red-stem filaree.

3.3.5 Agriculture

Agriculture is defined broadly as land used primarily for the production of food and fiber. On satellite imagery, the chief indications of agricultural activity are distinctive geometric field and road patterns on the landscape and the traces produced by livestock or mechanized equipment. However, pasture and other lands where such equipment is used infrequently may not show as well-defined shapes as other areas. By definition, the number of building complexes is smaller, and the density of the road and highway network is much lower in agriculture than in urban/developed land.

Agriculture consisted of the abandoned Mexican fan palm (*Washingtonia robusta*) nursery in the northern half of the study area, totaling 2.4 acres (project site only).

3.4 PLANTS

HELIX identified 29 plant species on the study area during surveys to date, of which 24 (83 percent) are non-native species (Appendix A). Non-native species cover was high, and the predominance of non-native species cover is indicative of the high degree of disturbance as a result of historical and current use of the study area.

3.5 ANIMALS

A total of 16 animal species were detected on the study area during surveys to date, including 15 bird species and one mammal species (Appendix B).

3.6 SENSITIVE BIOLOGICAL RESOURCES

3.6.1 Rare Plant Species

Rare plant species are uncommon or limited in that they: (1) are only found in the western Riverside County region; (2) are a local representative of a species or association of species not otherwise found in the region; or (3) are severely depleted within their ranges or within the region. Rare plant species include those species listed by CNPS with a California Rare Plant Rank (CRPR) of 1, 2, or 3 (2023), federally and state listed endangered and threatened species, or those species that require additional surveys by the MSHCP (County 2003). The MSHCP survey requirements for rare plant species are discussed below in Section 3.7.

Thirteen rare plant species were recorded within the Alberhill, Lake Elsinore, Lake Mathews, Romoland, Steele Peak, Sitton Peak, Wildomar, Murrieta, and Perris quadrangles based on a database search conducted on CNDDDB (CDFW 2024) and CNPS (2024a). These species are included in Appendix E, *Rare Plant Species Potential to Occur*. Of the 13 rare plant species recorded within the vicinity of the study area, 11 species were considered to have no potential to occur based on geographic range, elevation range, and/or lack of suitable habitat on the study area. San Diego ambrosia (*Ambrosia pumila*) and Parry's spineflower (*Chorizanthe parryi* var. *parryi*) were determined to have a low potential to occur on the study area based on the presence of non-native grassland and disturbed habitats. San Diego

ambrosia is a federally endangered species and a CRPR 1B.1 species. Parry's spineflower is a CRPR 1B.1 species. Both species are conditionally covered under the MSHCP. These species were searched for during a rare plant survey performed by Mr. Tucker on April 26, 2023, which was during the appropriate flowering period for these species. These species were not observed, and, therefore, are presumed absent.

3.6.2 Sensitive Animal Species

Sensitive animal species include federally and state listed endangered and threatened, candidate species for listing by CDFW, and/or species of special concern (SSC) pursuant to CDFW.

Forty-three sensitive animal species were recorded within the Alberhill, Lake Elsinore, Lake Mathews, Romoland, Steele Peak, Sitton Peak, Wildomar, Murrieta, and Perris quadrangles based on a database search conducted on CNDDDB (CDFW 2024). These species are included in Appendix F, *Sensitive Animal Species Potential to Occur*. Of the 41 sensitive animal species recorded within the vicinity of the study area, 34 species were considered to have no potential to occur on the study area due to a lack of suitable habitat. The remaining eight species are discussed in detail below. An evaluation of each sensitive animal species' potential to occur on the study area is provided in Appendix F.

Seven species were determined to have a low potential to occur on the study area based on the presence of low-quality habitat, limited acreage of habitat, and lack of recent observations within the immediate vicinity of the study area. These species include California glossy snake (*Arizona elegans occidentalis*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), coast patch-nosed snake (*Salvadora hexalepis virgulata*), BUOW, white-tailed kite (*Elanus leucurus*), Stephens' kangaroo rat (*Dipodomys stephensi*; SKR), and western mastiff bat (*Eumops perotis californicus*; foraging only). BUOW, California glossy snake, coast patch-nosed snake, coastal whiptail, and western mastiff bat are SSC, SKR is a State and federally threatened species, and white-tailed kite is a State fully protected species. Coastal whiptail, white-tailed kite, and SKR are covered species under the MSHCP, and BUOW is a conditionally covered species. California glossy snake, coast patch-nosed snake, and western mastiff bat are not covered species under the MSHCP.

The current status of BUOW on the study area is discussed in further detail below.

Burrowing Owl

Focused surveys for BUOW were conducted in accordance with the County's survey protocol (2006), as previously described in Section 2.3.2.1 above. No BUOWs or BUOW sign were observed within the survey area. Therefore, the study area does not currently support BUOWs. The survey results are discussed in detail in a separate letter report, which is provided as Appendix D.

3.6.3 Sensitive Vegetation Communities/Habitats

Sensitive vegetation communities/habitats are considered either rare within the region or sensitive by CDFW (CDFW 2023). Communities are given a Global and State (S) ranking on a scale of 1 to 5. Communities afforded a rank of 5 are most common, while communities with a rank of 1 are considered highly periled. CDFW considers sensitive communities as those with a rank between S1 and S3.

The study area does not support any sensitive vegetation communities or habitats.

3.6.4 Habitat and Wildlife Corridor Evaluation

Wildlife corridors connect otherwise isolated pieces of habitat and allow the movement or dispersal of plants and animals. Corridors can be local or regional in scale; their functions may vary temporally and spatially based on conditions and species presence. Local wildlife corridors allow access to resources such as food, water, and shelter within the framework of their daily routine. Animals use these corridors, which are often hillsides or tributary drainages, to move between different habitats. Regional corridors provide these functions over a larger scale and link two or more large habitat areas, allowing the dispersal of organisms and the consequent mixing of genes between populations.

The study area is not located within any MSHCP Linkages, which are areas within the Plan Area that are identified as having the potential to facilitate wildlife movement. The nearest linkage to the study area is Proposed Linkage 8, which is approximately one mile east of the study area and consists of upland habitat within the Wildomar area (County 2003). The study area is not located within any linkages recognized by the South Coast Missing Linkages report (South Coast Wildlands 2008). The nearest linkage described by the South Coast Missing Linkages report is the Santa Ana-Palomar Connection, located approximately 12.5 to the southeast of the study area.

The study area does not directly connect to large blocks of habitat. The study area is bounded by rural residential properties to the north and east, a small commercial center to the south, and I-15 to the west. The study area is disturbed from historical and surrounding human activities and supports minimal vegetative cover dominated by non-native species, including red brome, London rocket, and short-pod mustard. Since the study area does not connect two or more large habitat areas, the study area is not considered a wildlife corridor.

Although the study area does not function as a wildlife corridor, it does support some shrubs and herbaceous ground cover that may provide limited opportunities for local wildlife movement or wildlife movement. Smaller mammals and reptiles that are adapted to human disturbance (e.g., California ground squirrel [*Otospermophilus beecheyi*], cottontail rabbits [*Sylvilagus* sp.], western fence lizard [*Sceloporus occidentalis*]) may use the study area for foraging and/or cover, while bird species may fly over existing development to access the study area for foraging and/or nesting. Some wildlife may use the study area for cover and/or foraging. Therefore, the study area may support some low-quality habitat for wildlife, but the study area does not function as a wildlife corridor since it does not connect two or more large blocks of habitat.

3.6.5 Jurisdictional Waters

Based on the results of the jurisdictional assessment, no jurisdictional features were observed within the study area. Streambed field indicators, such as an OHWM or the presence of a defined bed and bank, were not observed within the study area. There is a small concrete asphalt ribbon gutter in the southwest corner of the study area, on the north side of Bundy Canyon Road (see Photo 6 in Appendix C). The ribbon gutter conveys runoff from Bundy Canyon Road into a culvert at the northeast corner of Bundy Canyon Road and the I-15 northbound onramp. The ribbon gutter is entirely paved, does not support vegetation, and does not connect to an upstream natural water source. Therefore, the ribbon gutter and culvert are presumed to not support waters of the U.S. under USACE jurisdiction or waters of the State under RWQCB and/or CDFW jurisdiction.

3.7 WESTERN RIVERSIDE COUNTY MSHCP CONSISTENCY ANALYSIS

3.7.1 Project Location within the MSHCP

The MSHCP Plan Area is divided into 16 Area Plans, within which 153,000 acres were identified as potential areas for conservation that would contribute to the overall existing MSHCP Conservation Area. The areas identified for conservation within the MSHCP Plan Area are called Criteria Areas and include Core Areas that support habitat for covered species and Linkages that provide a connection between Core Areas. The Criteria Areas are divided into 160-acre cells, which each have their own conservation goal. All projects within a cell or cell group are required to be accessed through the Habitat Acquisition and Negotiation Strategy (HANS) process to determine the amount of MSHCP conservation required. The HANS process aids in the acquisition of lands that will contribute to the assembly of the MSHCP Reserve.

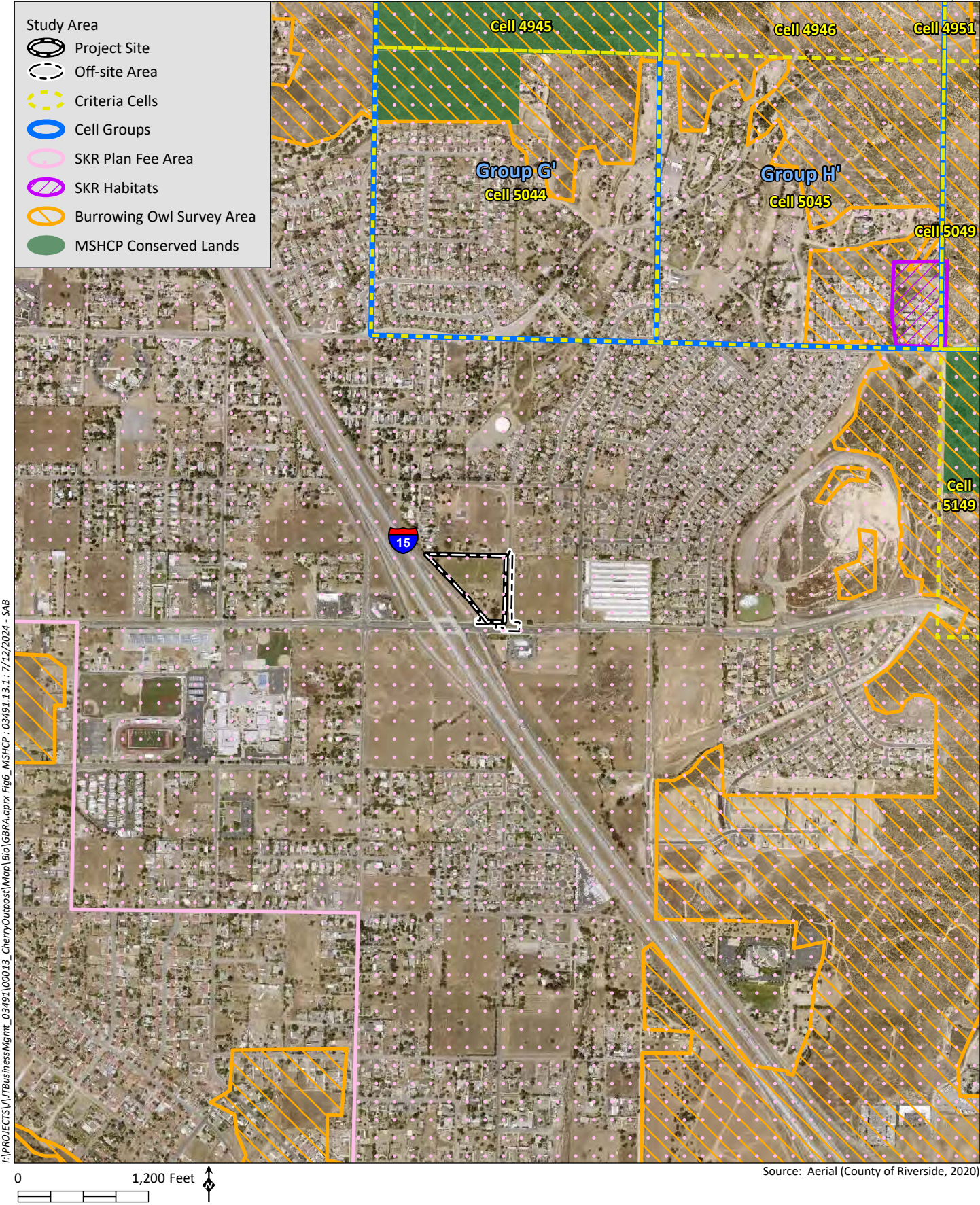
As described in Section 2.1.2 of the MSHCP, the study area is in the Riverside Lowlands bioregion, an area lying generally below 2,000 AMSL and characterized by Riversidean sage scrub and annual grasslands. The relatively arid climate is partly the result of the rain shadow cast by the Santa Ana Mountains. A high level of disturbance and urbanization are noted within this bioregion (County 2003).

The study area is located within the Elsinore Area Plan and is not located within or adjacent to an MSHCP Criteria Area. Therefore, the study area is not subject to special conservation requirements that apply to cells and is not required to undergo the HANS process. The nearest criteria cells to the study area are Cell 5044, which is located approximately 0.4 mile to the north, and Cell 5045, which is located approximately 0.5 mile to the northeast (Figure 6, *MSHCP Context*). The study area is not located within or directly adjacent to any MSHCP Conservation Areas. The study area is located approximately one mile east of Proposed Linkage 8. Existing development separates the study area from the proposed linkage.

3.7.2 Riparian/Riverine Areas and Vernal Pool Habitat Assessment (MSHCP Section 6.1.2)

The identification of MSHCP Riparian/Riverine Areas is based on the potential for the habitat to support, or be a tributary to habitat that supports, Riparian/Riverine Covered Species. Riparian/Riverine Covered Species are identified in MSHCP Section 6.1.2. The MSHCP defines Riparian/Riverine Areas as “lands which contain Habitat dominated by trees, shrubs, or emergent mosses and lichens, which occur close to, or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year” (County 2003). The MSHCP defines Vernal Pools as “seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season” (County 2003). Artificially created features, except for those created intentionally to provide wetland habitat or resulting from the creation of open waters or alteration of natural stream courses, are not considered MSHCP Riparian/Riverine Areas or Vernal Pools.

In accordance with the MSHCP, Mr. Dimson and Ms. Moreno conducted a Riparian/Riverine Areas assessment on February 8, 2023. The Riparian/Riverine Areas and Vernal Pool habitat assessment was conducted concurrently with the jurisdictional assessment. No MSHCP Riparian/Riverine Areas or Vernal Pools were identified within the study area. As described in Section 3.6.5 above, there is a small asphalt ribbon gutter in the southwest corner of the study area, on the north side of Bundy Canyon Road (see



MSHCP Context

Figure 6

Photo 6 in Appendix C). The ribbon gutter conveys runoff from Bundy Canyon Road into a culvert at the northeast corner of Bundy Canyon Road and the I-15 northbound onramp. The ribbon gutter is entirely paved, does not support vegetation, and does not connect to an upstream natural water source. Based on aerial review, a natural stream course was not historically present at this location, and the ribbon gutter and culvert were not an alteration of a natural stream course (Historic Aerials 2024). No depressional areas capable of supporting fairy shrimp species were observed within the study area. An artificial pond was observed in the southern portion of the study area. The artificial pond was lined with plastic sheeting and appeared to be a water feature installed by prior residents. No water was observed within the feature (see Photo 5 in Appendix C). As defined in the MSHCP, artificially created features are not considered MSHCP Riparian/Riverine Areas or Vernal Pools. As a result, the study area does not support Riparian/Riverine Areas or Vernal Pools or suitable habitat for associated species, as defined by MSHCP, and a Determination of Biologically Equivalent or Superior Preservation (DBESP) for Riparian/Riverine Areas and Vernal Pools is not required.

3.7.2.1 Riparian/Riverine Areas and Vernal Pool Species

Through the protection of Riparian/Riverine Areas and Vernal Pool habitats, the MSHCP aims to conserve several plant and animal species within the Plan Area. During the Riparian/Riverine Areas assessment discussed above, each plant and animal species listed in Section 6.1.2 of the MSHCP was evaluated to determine the potential to occur on the study area. Riparian/Riverine Areas and Vernal Pool species are discussed in detail below.

Plant Species

The MSHCP lists 23 rare plant species that have the potential to occur in Riparian/Riverine Areas and/or Vernal Pool habitats within the MSHCP Plan Area, which are listed below in Table 2, *MSHCP Riparian/Riverine Areas and Vernal Pool Plant Species*.

No MSHCP Riparian/Riverine Areas or Vernal Pool plant species are expected to occur on the study area based on the absence of drainage features, vernal pools, and depressions.

Table 2
MSHCP RIPARIAN/RIVERINE AREAS AND VERNAL POOL PLANT SPECIES

Common Name	Scientific Name	Habitat
Brand's phacelia	<i>Phacelia stellaris</i>	Sandy washes and/or benches in alluvial flood plains.
California black walnut	<i>Juglans californica</i> var. <i>californica</i>	Open savannahs, creek beds, alluvial terraces, and north-facing slopes.
California Orcutt grass	<i>Orcuttia californica</i>	Vernal pools.
Coulter's matilija poppy	<i>Romneya coulteri</i>	Dry washes and canyons in chaparral and coastal sage scrub communities and disturbed areas.
Engelmann oak	<i>Quercus engelmannii</i>	Woodlands, mixed chaparral, and savannah grasslands.
Fish's milkwort	<i>Polygala cornuta</i> var. <i>fishiae</i>	Shaded, rocky places in canyons associated with woodlands and chaparral.

Common Name	Scientific Name	Habitat
graceful tarplant	<i>Holocarpha virgata</i> ssp. <i>elongata</i>	Coastal mesas and foothills with grassland habitats.
lemon lily	<i>Lilium parryi</i>	Moist montane meadows.
Mojave tarplant	<i>Deinandra mohavensis</i>	Drainages within arid montane chaparral.
mud nama	<i>Nama stenocarpum</i>	Marshes, swamps, lake margins, and riverbanks along muddy embankments.
ocellated Humboldt lily	<i>Lilium humboldtii</i> ssp. <i>ocellatum</i>	Shaded montane canyons.
Orcutt's brodiaea	<i>Brodiaea orcuttii</i>	Vernally moist grasslands and vernal pools; occasionally occurs along stream embankments within clay soils.
Parish's meadowfoam	<i>Limnanthes gracilis</i> var. <i>parishii</i>	Montane meadows with abundant annual and herbaceous perennials and lack of shrubs.
prostrate navarretia	<i>Navarretia prostrata</i>	Coastal sage scrub, valley and foothill grassland, and vernal pools.
San Diego button-celery	<i>Eryngium aristulatum</i> var. <i>parishii</i>	Vernal pools.
San Jacinto Valley crownscale	<i>Atriplex coronata</i> var. <i>notatior</i>	Highly alkaline and silty-clay soils associated with alkali sink scrub, alkali playa, vernal pool, and annual alkali grassland habitats.
San Miguel savory	<i>Clinopodium chandleri</i>	Coastal sage scrub, chaparral, cismontane woodland, riparian woodland, and valley and foothill grasslands.
Santa Ana River woolly-star	<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>	Sandy soils on flood plains and terraces within coastal scrub and chaparral communities.
slender-horned spineflower	<i>Dodecahema leptoceras</i>	Sandy soil associated with alluvial scrub; is often found on stream terraces and banks.
smooth tarplant	<i>Centromadia pungens</i> ssp. <i>laevis</i>	Alkali scrubs, playas, and grasslands; riparian woodland and streams.
spreading navarretia	<i>Navarretia fossalis</i>	Vernal pools, depressions, and ditches.
thread-leaved brodiaea	<i>Brodiaea filifolia</i>	Clay soils in vernal moist grasslands and vernal pool periphery are typical locales.
vernal barley	<i>Hordeum intercedens</i>	Saline flats and depressions in grasslands or vernal pools.

Source: County (2003).

Animal Species

The MSHCP lists 12 sensitive animal species that have the potential to occur in Riparian/Riverine Areas and/or Vernal Pools within the MSHCP Plan Area, which are provided in Table 3, *MSHCP*

Riparian/Riverine Areas and Vernal Pool Animal Species. The MSHCP requires focused surveys to be conducted for projects that propose impacts to three invertebrate and three bird species, as described in detail below.

Table 3
MSHCP RIPARIAN/RIVERINE AREAS AND VERNAL POOL ANIMAL SPECIES

Common Name	Scientific Name	Habitat
Riverside fairy shrimp	<i>Streptocephalus woottoni</i>	Deep vernal pools and other ephemeral basins that hold water for typically 30 or more days.
Santa Rosa Plateau fairy shrimp	<i>Linderiella santarosae</i>	Limited to vernal pools within the Santa Rosa Plateau.
vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	Vernal pools and other ephemeral basins within patches of grassland and agriculture interspersed in coastal sage scrub and chaparral.
arroyo toad	<i>Anaxyrus californicus</i>	Washes and intermittent streams with open-canopy riparian forest.
California red-legged frog	<i>Rana aurora draytonii</i>	Perennial streams with dense, shrubby riparian vegetation.
mountain yellow-legged frog	<i>Rana muscosa</i>	Perennial waterways, often within open riparian vegetation.
Santa Ana sucker	<i>Catostomus santaanae</i>	Clear, cool perennial streams with loose sand, gravel, cobble, and boulders with algae, aquatic emergent vegetation, macroinvertebrates, and riparian vegetation.
bald eagle	<i>Haliaeetus leucocephalus</i>	Within close proximity to lakes or other water bodies.
least Bell's vireo	<i>Vireo bellii pusillus</i>	Well-developed riparian scrub, woodland, or forest.
peregrine falcon	<i>Falco peregrinus</i>	Generally, areas with cliffs or tall buildings near water where prey (shorebirds and ducks) is concentrated.
southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	Breeds within thickets of willows or other riparian understory usually along streams, ponds, lakes, or canyons.
western yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>	Extensive stands of mature riparian woodland.

Source: County (2003).

Invertebrates

There are three sensitive fairy shrimp species that occur in the MSHCP Plan Area, including Riverside fairy shrimp (*Streptocephalus woottoni*), Santa Rosa Plateau fairy shrimp (*Linderiella santarosae*), and vernal pool fairy shrimp (*Branchinecta lynchi*). Vernal pool fairy shrimp occurs throughout the Central Valley and in several disjunct populations in Riverside County. This species exists in vernal pools and other ephemeral basins, often located in patches of grassland and agriculture interspersed in coastal sage scrub and chaparral. Riverside fairy shrimp occurs in Riverside, Orange, and San Diego Counties, as well as in northern Baja California, Mexico. This species is typically found in deeper vernal pools and

other ephemeral basins that hold water for long periods of time (30 or more days). Santa Rosa Plateau fairy shrimp is limited to the Santa Rosa Plateau in Riverside County.

An artificial pond was observed in the southern portion of the study area. The artificial pond was lined with plastic sheeting and appeared to be a water feature installed by prior residents. No water was observed within the feature (see Photo 5 in Appendix C). The study area does not support suitable habitat for sensitive invertebrate species.

Birds

Riparian/Riverine Areas within the MSHCP Plan Area provide suitable habitat for sensitive bird species, such as least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), bald eagle (*Haliaeetus leucocephalus*), and peregrine falcon (*Falco peregrinus*). Typical habitat for least Bell's vireo consists of well-developed riparian scrub, woodland, or forest dominated by willows, mule fat, and Fremont cottonwood. Least Bell's vireo will also use small patches of trees adjacent to dense, riparian habitat. Southwestern willow flycatcher and western yellow-billed cuckoo require mature riparian forest with a stratified canopy and nearby water. Both the bald eagle and peregrine falcon occur primarily in and adjacent to open water habitats, with peregrine falcon occurring in riparian areas.

The MSHCP requires focused surveys to be conducted for projects that propose impacts to suitable habitat for least Bell's vireo, southwestern willow flycatcher, and western yellow-billed cuckoo. The study area does not support suitable riparian habitat for sensitive bird species.

3.7.3 Narrow Endemic Plant Species Survey Area (MSHCP Section 6.1.3)

The MSHCP requires focused plant surveys to be conducted for projects located within a Narrow Endemic Plant Species Survey Area (NEPSSA). There are 14 narrow endemic plant species that are associated with 10 different NEPSSAs located throughout the MSHCP Plan Area (see Table 6-1 in the MSHCP). Prior to conducting focused surveys, a habitat assessment should be conducted to determine whether the study area supports suitable habitat for plant species listed for the NEPSSA species. Focused surveys for species listed for the NEPSSA should be conducted if suitable habitat is present. If focused surveys are positive, 90 percent of the property that supports habitat suitable for long-term conservation of the species must be avoided until conservation goals for the species are satisfied.

The study area is not within a NEPSSA. Therefore, focused NEPSSA surveys were not required.

3.7.4 Additional Survey Needs and Procedures (MSHCP Section 6.3.2)

The MSHCP requires additional surveys for projects that support suitable habitat for certain conditionally covered species. The survey results provide species-specific information for the MSHCP to satisfy the Federal Endangered Species Act (FESA) issuance criteria. If focused surveys are positive for conditionally covered species, 90 percent of the property that supports habitat suitable for long-term conservation of the species must be avoided until conservation goals for the species are satisfied. Additional survey requirements are discussed in detail below.

3.7.4.1 Criteria Area Species

Focused surveys for rare plant species must be conducted for projects located within a Criteria Area Species Survey Area (CASSA). There are 13 criteria area species, which are associated with eight CASSAs located throughout the MSHCP Plan Area (see Table 6-1 in the MSHCP). Prior to conducting focused surveys, a habitat assessment should be conducted to determine whether the study area supports suitable habitat for plant species listed for the CASSA. If suitable habitat is present, focused surveys for species listed for the CASSA should be conducted.

The study area is not within a CASSA; therefore, focused CASSA surveys were not required.

3.7.4.2 Amphibian Species

Focused surveys for arroyo toad (*Bufo californicus*), California red-legged frog (*Rana draytonii*), and mountain yellow-legged frog (*Rana muscosa*) must be conducted for projects located within an Amphibian Species Survey Area.

The study area is not within the Amphibian Species Survey Area; therefore, focused surveys were not required.

3.7.4.3 Bird Species

The study area is located within the BUOW Survey Area. Therefore, BUOW focused surveys were required in accordance with the County's survey protocol (County 2006). As discussed in Section 3.6.2, BUOW or BUOW sign were not observed during the focused surveys.

3.7.4.4 Mammal Species

Focused surveys for Aguanga kangaroo rat (*Dipodomys merriami collinus*), San Bernardino kangaroo rat (*Dipodomys merriami parvus*), and Los Angeles pocket mouse (*Perognathus longimembris brevinasus*) must be conducted for projects located within a Mammal Species Survey Area.

The study area is not within the Mammal Species Survey Area; therefore, focused surveys were not required.

4.0 REGIONAL AND REGULATORY CONTEXT

Biological resources located within the study area are subject to regulatory review by federal, state, and local agencies. These biological resources-related laws and regulations are summarized below.

4.1 FEDERAL REGULATIONS

4.1.1 Federal Endangered Species Act

Administered by the USFWS, the FESA provides the legal framework for the listing and protection of species (and their habitats) identified as being endangered or threatened with extinction. Actions that jeopardize endangered or threatened species and the habitats upon which they rely are considered a "take" under the ESA. Section 9(a) of the ESA defines take as "to harass, harm, pursue, hunt, shoot,

wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.” “Harm” and “harass” are further defined in federal regulations and case law to include actions that adversely impair or disrupt a listed species’ behavioral patterns.

Sections 4(d), 7, and 10(a) of the FESA regulate actions that could jeopardize endangered or threatened species. Section 7 describes a process of federal interagency consultation for use when federal actions may adversely affect listed species. A biological assessment is required for any major construction activity if it may affect listed species. In this case, take can be authorized via a letter of biological opinion issued by the USFWS for non-marine related listed species issues. A Section 7 consultation is required when there is a nexus between federally listed species’ use of the site and impacts to USACE jurisdictional areas. Section 10(a) allows the issuance of permits for “incidental” take of endangered or threatened species. The term “incidental” applies if the taking of a listed species is incidental to and not the purpose of an otherwise lawful activity. The MSHCP is the Section 10(a) permit for western Riverside County, including the study area.

4.1.2 Federal Clean Water Act, Section 404

Federal wetland regulation (non-marine issues) is guided by the Rivers and Harbors Act of 1899 and the CWA. The Rivers and Harbors Act deals primarily with discharges into navigable waters, while the purpose of the CWA is to restore and maintain the chemical, physical, and biological integrity of all waters of the U.S. Permitting for projects filling waters of the U.S., including wetlands and vernal pools, is overseen by USACE under Section 404 of the CWA. Projects may be permitted on an individual basis or may be covered under one of several approved Nationwide Permits. Individual Permits are assessed individually based on the type of action, amount of fill, etc. Individual Permits typically require substantial time (often longer than six months) to review and approve, while Nationwide Permits are pre-approved if a project meets the appropriate conditions. A CWA Section 401 Water Quality Certification, which is administered by the State Water Resources Control Board, must be issued prior to any 404 Permit.

4.1.3 Migratory Bird Treaty Act

All migratory bird species that are native to the United States or its territories are protected under the Federal MBTA, as amended under the Migratory Bird Treaty Reform Act of 2004 (FR Doc. 05-5127). The MBTA is generally protective of migratory birds but does not actually stipulate the type of protection required. In common practice, the MBTA is used to place restrictions on disturbance of active bird nests during the nesting season, which is generally defined as February 15 through August 31 for songbirds. In addition, the USFWS commonly places restrictions on the disturbances allowed near active raptor nests. The raptor nesting season is generally defined as January 15 through August 31.

4.1.4 Critical Habitat

As described by the FESA, critical habitat is the geographic area occupied by a threatened or endangered species essential to species conservation that may require special management considerations or protection. Critical habitat also may include specific areas not occupied by the species, but that have been determined to be essential for species conservation.

Critical habitat does not occur on the study area. The nearest critical habitats to the study area include coastal California gnatcatcher (*Poliophtila californica californica*) critical habitat, which is approximately 1.8 miles east of the study area (USFWS 2024).

4.2 STATE REGULATIONS

4.2.1 California Environmental Quality Act

Primary environmental legislation in California is found in CEQA and its implementing guidelines (State CEQA Guidelines), which require that projects with potential adverse effects (i.e., impacts) on the environment undergo environmental review. Adverse environmental impacts are typically mitigated as a result of the environmental review process in accordance with existing laws and regulations.

4.2.2 California Endangered Species Act

The CESA is similar to the FESA in that it contains a process for the listing of species and regulating potential impacts to listed species. Section 2081 of the CESA authorizes the CDFW to enter into a memorandum of agreement for take of listed species for scientific, educational, or management purposes. The MSHCP is the regional 2081 for this portion of the County, which includes the study area. The golden eagle (*Aquila chrysaetos*) and white-tailed kite are considered state fully protected species. Fully protected species may not be taken or possessed at any time, and no state licenses or permits may be issued for their take except for collecting the species necessary for scientific research, and relocation of the bird species for the protection of livestock (CFG Code Sections 3511, 4700, 5050, and 5515).

The Native Plant Protection Act (NPPA) enacted a process by which plants are listed as rare or endangered. The NPPA regulates the collection, transport, and commerce of plants that are listed. The CESA followed the NPPA and covers both plants and animals that are determined to be endangered or threatened with extinction. Plants listed as rare under NPPA were designated threatened under the CESA.

4.2.3 Protection of Raptor Species

Raptors (birds of prey) and owls and their active nests are protected by CFG Code Section 3503.5, which states that it is unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird unless authorized by the CDFW.

4.2.4 California Fish and Game Code, Section 1602

The CFG Code (Section 1600 et seq.) requires an agreement with the CDFW for projects affecting riparian and wetland habitats through the issuance of a Streambed Alteration Agreement.

4.3 LOCAL REGULATIONS

4.3.1 Multiple Species Habitat Conservation Plan Consistency

The MSHCP is a comprehensive multi-jurisdictional effort that includes Riverside County and multiple cities in western Riverside County. Rather than addressing sensitive species on an individual basis, the MSHCP focuses on the conservation of 146 species, proposing a reserve system of approximately

500,000 acres and a mechanism to fund and implement the reserve system (County 2003). Most importantly, the MSHCP allows participating entities to issue take permits for listed species so that individual applicants need not seek their own permits from the USFWS and/or CDFW. The MSHCP was adopted on June 17, 2003, by the Riverside County Board of Supervisors. The Incidental Take Permit was issued by both the USFWS and CDFW on June 22, 2004. Section 3.7 above and Section 5.5 below demonstrate the project's consistency with the MSHCP.

4.3.2 Stephens' Kangaroo Rat Habitat Conservation Plan

The Habitat Conservation Plan (HCP) for SKR describes the conservation, mitigation, and monitoring measures that are implemented within core reserves (Riverside County Habitat Conservation Authority [RCHCA 1996]). Within the HCP, there are seven core reserves totaling 41,221 acres for the conservation of SKR and associated habitat. The HCP provides a 30-year incidental take authorization for SKR on lands within its boundaries, which includes 533,954 acres within the County of Riverside and the Cities of Corona, Hemet, Lake Elsinore, Moreno Valley, Murrieta, Perris, Riverside, and Temecula.

The study area is within the SKR HCP but is not located within any of the core reserves. Therefore, the project is required to pay an SKR mitigation fee for incidental take authorization under the SKR HCP.

5.0 PROJECT EFFECTS

This section describes potential direct and indirect impacts associated with the proposed project. Direct impacts immediately alter the affected biological resources such that those resources are eliminated temporarily or permanently. Indirect impacts consist of secondary effects of a project, including noise, decreased water quality (e.g., through sedimentation, urban contaminants, or fuel release), fugitive dust, colonization of non-native plant species, animal behavioral changes, and night lighting. The magnitude of an indirect impact can be the same as a direct impact; however, the effect usually takes a longer time to become apparent.

The significance of impacts to biological resources present or those with the potential to occur was determined based on the sensitivity of the resource and the extent of the anticipated impacts. For certain highly sensitive resources (e.g., a federally listed species), any impact would be significant. Conversely, other resources that are of low sensitivity (e.g., species with a large, locally stable population in the County but declining elsewhere) could sustain some impact with a less than significant effect.

According to Appendix G of the CEQA Guidelines, project impacts to biological resources would be considered significant if they would:

- (a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.
- (b) Have a substantial adverse effect on any riparian habitat or sensitive natural community identified by local or regional plans, policies, regulations, or by CDFW or USFWS.

- (c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling hydrological interruption, or other means.
- (d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or within an established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.
- (e) Conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- (f) Conflict with provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

5.1 SENSITIVE SPECIES

5.1.1 Rare Plant Species

No Impacts

Eleven of the thirteen plant species recorded within the Alberhill, Lake Elsinore, Lake Mathews, Romoland, Steele Peak, Sitton Peak, Wildomar, Murrieta, and Perris quadrangles were not considered to have a potential to occur based on geographic range, elevation range, and/or lack of suitable habitat (see Appendix E). Rare plant surveys were not required since the study area is not located within a CASSA (see Section 5.5.4 below) or NEPSSA (see Section 5.5.2 below).

Two species (Parry's spineflower and San Diego ambrosia) were determined to have a low potential to occur on the study area based on some areas of low-quality habitat (see Appendix E). Parry's spineflower and San Diego ambrosia are conditionally covered under the MSHCP and CRPR 1B.1 species. San Diego ambrosia is also a federally endangered species. Although potentially suitable habitat is present, these two species were not detected during a spring rare plant survey conducted on April 26, 2023. Therefore, these species are presumed absent from the study area, and the project will not impact rare plant species.

5.1.2 Sensitive Animal Species

Less than Significant Impacts with Mitigation Incorporated

Of the 41 sensitive animal species recorded within the Alberhill, Lake Elsinore, Lake Mathews, Romoland, Steele Peak, Sitton Peak, Wildomar, Murrieta, and Perris quadrangles, 34 species were considered to have no potential to occur on the study area due to lack of suitable habitat (see Appendix F). Therefore, no significant impacts to these sensitive wildlife species are anticipated by the project. The remaining seven species were determined to have a low potential to occur on the study area based on the presence of low-quality habitat, limited acreage of habitat, and lack of recent observations within the immediate vicinity of the study area. These species include BUOW, California glossy snake, coast patch-nosed snake, coastal whiptail, SKR, western mastiff bat, and white-tailed kite. These species are discussed in detail below.

Species Not Covered by the MSHCP: California glossy snake, coast patch-nosed snake, and western mastiff bat are State SSC and not a covered species under the MSHCP. These species have not been recorded within the vicinity of the study area (10-mile to 20-mile radius), indicating that regionally significant populations of these species are not present (CDFW 2024). California glossy snake and coast patch-nosed snake were not incidentally observed during field surveys. Therefore, the study area is not expected to support large populations of California glossy snake or coast patch-nosed snake, and a loss of a few individuals, if present, would not be expected to reduce regional population numbers. Western mastiff bat may use the study area for foraging habitat given it uses a variety of habitats. Although there is a potentially suitable foraging habitat for the western mastiff bat, there is no suitable roosting habitat (i.e., vertical cliff faces) on the study area. The loss of small amounts of potential foraging habitat is not expected to be regionally significant, given that suitable foraging habitat is not limited in the area. The project would not significantly impact California glossy snake, coast patch-nosed snake, or western mastiff bat; therefore, no mitigation is warranted for the aforementioned species.

MSHCP Covered Species: Coastal whiptail is a State SSC, white-tailed kite is State fully protected species, and SKR is a State and federally threatened species. These three species are fully covered species under the MSHCP. With the payment of the MSHCP Local Development Mitigation Fee (LDMF) and SKR mitigation fee, no additional mitigation is required for potential impacts to these species (see Section 5.5.6 below).

MSHCP Conditionally Covered Species: BUOW is a State SSC and MSHCP conditionally covered species. Based on the results of the focused BUOW surveys, the study area does not support BUOW. Prior to commencement of ground-disturbing activities, a pre-construction survey must be conducted within 30 days of ground-disturbing activities (County 2006; see Measure BIO-1 in Section 6.0 below). If BUOW is detected during the pre-construction survey, avoidance of active nests and/or relocation of BUOW would be required as outlined in Measure BIO-1 in Section 6.0 below.

5.1.3 Sensitive Vegetation Communities

5.1.3.1 California Department of Fish and Wildlife Sensitive Vegetation Communities/Habitats

No Impacts

The entire 7.6-acre study area would be impacted, which does not support native vegetation communities (Figure 7, *Impacts to Vegetation and Land Uses*; Table 4, *Impacts to Vegetation and Land Uses*).

Of the 7.6-acre study area, 6.8 acres (6.2 acres project site; 0.6 acre off-site) would be permanently impacted. Permanent impacts on the project site include the proposed development, while off-site permanent impacts comprise the installation of a new storm drain outlet at the southwest corner of the study area and road improvements along Bundy Canyon Road and Cherry Street. The remaining 0.8 acre (off-site only) would be temporarily impacted to accommodate over-excavation during project construction and replace existing asphalt with new asphalt. None of the vegetation communities mapped on the study area are dominated by native plant species or are considered sensitive pursuant to CDFW (2023). Therefore, no impacts to sensitive vegetation communities would occur and mitigation is not warranted.

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Table 4
IMPACTS TO VEGETATION AND LAND USES

Manual of California Vegetation/Oberbauer	Study Area Permanent Impacts (acres) ¹			Study Area Temporary Impacts (acres) ¹		
	Project Site	Off-site	TOTAL	Project Site	Off-site	TOTAL
Wild Oats and Annual Brome Grasslands	3.5	0.4	3.9	0.0	<0.1 ²	<0.1
Developed	0.1	<0.1 ³	0.1	0.0	0.8	0.8
Disturbed	<0.1 ⁴	0.2	0.2	0.0	<0.1 ⁵	<0.1
Eucalyptus Groves	0.2	0.0	0.2	0.0	0.0	0.0
Agriculture	2.4	0.0	2.4	0.0	0.0	0.0
TOTAL	6.2	0.6	6.8	0.0	0.8	0.8

¹ Acreages are rounded to the nearest tenth.

² Actual acreage is acre 0.027 acre.

³ Actual acreage is 0.002 acre.

⁴ Actual acreage is 0.003 acre.

⁵ Actual acreage is 0.016 acre.

5.1.3.2 California Department of Fish and Wildlife Riparian Habitat and Streambed

No Impacts

The study area does not support any drainage features, wetlands, or other special aquatic sites under the jurisdiction of CDFW. Therefore, no impacts to CDFW jurisdiction would occur, and mitigation is not warranted.

5.2 U.S. ARMY CORPS OF ENGINEERS/REGIONAL WATER QUALITY CONTROL BOARD JURISDICTION

No Impacts

The study area does not support any drainage features, wetlands, or other special aquatic sites under the jurisdiction of USACE/RWQCB. Therefore, no impacts to waters of the U.S. or waters of the State would occur, and mitigation is not warranted.

5.3 WILDLIFE MOVEMENT AND MIGRATORY SPECIES

5.3.1 Wildlife Movement

Less than Significant

The study area is not part of a regional corridor and does not serve as a nursery site. The study area is not identified by the MSHCP (County 2003) or South Coast Missing Linkages (South Coast Wildlands 2008) as being part of a local or regional corridor or linkage. The study area currently does not directly connect two or more large blocks of habitat. The study area is within an urbanized area of the City and is bounded by rural residential properties to the north and east, a small commercial center to the south, and I-15 to the west. The study area supports primarily non-native forbs, grasses, and trees that may be

used by birds, smaller mammals, and reptiles that have adapted to human disturbance. Some wildlife moving may use the study area for foraging and/or nesting, but the use of the study area would be restricted due to limited vegetative cover and adjacent disturbance from existing human development.

5.3.2 Migratory Species

Less than Significant Impacts with Mitigation Incorporated

Development of the proposed project could disturb or destroy active migratory bird nests, including eggs and young. Disturbance to or destruction of migratory bird eggs, young, or adults is in violation of the MBTA and is considered a potentially significant impact. Although suitable habitat for nesting birds on the study area is limited, herbaceous ground cover and shrubs located throughout the study area could provide habitat for protected nesting bird species. Measure BIO-2 in Section 6.0 will help ensure the project complies with MBTA regulations.

5.4 LOCAL POLICIES AND ORDINANCES

No Impacts

The project does not conflict with any local policies or ordinances protecting biological resources, such as tree preservations or local ordinances.

5.5 ADOPTED HABITAT CONSERVATION PLANS

Less than Significant Impacts with Mitigation Incorporated

As discussed in Section 3.6.1 above, the study area is within the Elsinore Area Plan of the MSHCP. The study area is not located within or adjacent to an MSHCP Criteria Area; therefore, the study area is not subject to special conservation requirements that apply to cells and is not required to undergo the HANS process. The following sections demonstrate the project's compliance with MSHCP requirements.

5.5.1 Riparian/Riverine Areas and Vernal Pools (MSHCP Section 6.1.2)

The identification of MSHCP Riparian/Riverine Areas is based on the potential for the habitat to support, or be a tributary to, habitat that supports Riparian/Riverine Covered Species. Riparian/Riverine Covered Species are identified in MSHCP Section 6.1.2. The MSHCP defines Riparian/Riverine Areas as "lands which contain Habitat dominated by trees, shrubs, or emergent mosses and lichens, which occur close to, or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year" (County 2003). The MSHCP defines Vernal Pools as "seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season" (County 2003). Artificially created wetlands, except for those created intentionally to provide habitat or resulting from the creation of open waters or alteration of natural stream courses, are not considered MSHCP Vernal Pools.

Riparian/Riverine Areas

The study area does not support Riparian/Riverine Areas or Vernal Pools, or suitable habitat for associated species, as defined by the MSHCP. Therefore, a DBESP for Riparian/Riverine Areas and Vernal Pools is not required.

Riparian/Riverine Area Species

The study area does not support suitable habitat for Riparian/Riverine Areas or Vernal Pool plant or animal species.

As discussed above, the proposed project is consistent with MSHCP Section 6.1.2.

5.5.2 Narrow Endemic Plant Species (MSHCP Section 6.1.3)

The study area is not located within a NEPSSA; therefore, no focused surveys were required, and the proposed project is consistent with Section 6.1.3 of the MSHCP.

5.5.3 Urban/Wildland Interface Guidelines (MSHCP Section 6.1.4)

Proposed developments adjacent to MSHCP Conservation Areas may create edge effects that can impact conserved biological resources. The MSHCP provides several guidelines that address the potential indirect effects from the proposed developments that are in proximity to MSHCP Conservation Areas. These guidelines include measures addressing the quantity and quality of runoff generated by the development (i.e., drainage and toxics), night lighting, noise, non-native invasive plant species, barriers to humans and animal predators, and grading/land development encroachment.

The study area is not adjacent to land targeted for conservation or existing MSHCP Conservation Areas. The nearest linkage to the study area is Proposed Linkage 8, which is approximately one mile east of the study area and consists of upland habitat within the Wildomar area (County 2003). Since the study area is not within or adjacent to MSHCP Conservation Areas, many of the MSHCP Urban/Wildland Interface Guidelines are not required. As discussed below, the project will comply with applicable guidelines to ensure consistency with MSHCP Section 6.1.4.

Drainage

The study area does not support natural drainage features. However, the project will incorporate measures to avoid the discharge of untreated surface runoff into downstream waters. Measures will include those required for construction pursuant to the State Water Resources Control Board General Construction Stormwater Permit and those required post-construction pursuant to the National Pollutant Discharge Elimination System and Municipal Storm Drain requirements. The project is being designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials, or other elements that might degrade or harm biological resources or ecosystem processes downstream from the project.

Toxics

Land uses that use chemicals or generate bio-products that are potentially toxic or may adversely affect wildlife species, habitat, or water quality shall incorporate measures to ensure that the application of

such chemicals does not result in a discharge into downstream waters. Measures, such as those employed to address drainage issues, would be implemented by the proposed infrastructure to avoid the potential impacts of toxics.

Lighting

The study area does not occur directly adjacent to MSHCP Conservation Areas, which are separated by existing development. Therefore, lighting standards are not applicable.

Noise

The study area does not occur directly adjacent to MSHCP Conservation Areas, which are separated by existing development. Therefore, noise standards are not applicable.

Invasives

The project shall not use invasive plants for erosion control, landscaping, wind rows, or other purposes. A measure (Measure BIO-3) is provided in Section 6.0 below, which requires the project to comply with the MSHCP and avoid the use of invasive, non-native plants in accordance with MSHCP Table 6.2.

Barriers

Since the study area is not directly adjacent to the MSHCP Conservation Area, barriers or signage are not necessary.

Grading/Land Development

The project is not adjacent to an existing or proposed MSHCP Conservation Areas. Therefore, manufactured slopes associated with the proposed site development will not extend into an MSHCP Conservation Area.

5.5.4 Additional Surveys (MSHCP Section 6.3.2)

The study area is not within a CASSA or an amphibian or mammal survey area. No impacts to CASSA species or sensitive amphibian or mammal species are proposed.

Based on the results of the focused BUOW surveys, the study area does not support BUOW. Prior to commencement of ground-disturbing activities, a pre-construction survey must be conducted within 30 days of ground-disturbing activities (County 2006; see Measure BIO-1 in Section 6.0 below). If BUOW is detected during the pre-construction survey, avoidance of active nests and/or relocation of BUOW would be required as outlined in Measure BIO-1 in Section 6.0 below.

As discussed above and with the implementation of Measure BIO-1, the proposed project is consistent with MSHCP Section 6.3.2.

5.5.5 Fuels Management (MSHCP Section 6.4)

The property is not adjacent to an MSHCP Conservation Area. Therefore, fuel modification impacts would not extend into a conservation area. The project is consistent with MSHCP Section 6.4.

5.5.6 Multiple Species Habitat Conservation Plan and Stephens' Kangaroo Rat Fees

For the project to participate in the MSHCP, the project proponent is required to pay an MSHCP LDMF to finance the acquisitions of conservation areas to provide habitat for MSHCP covered species (City 2021). The LDMF must be paid prior to the issuance of a building permit. The applicant shall pay the LDMF as determined by the City. Final fee credits shall be determined through coordination with the City.

The study area is also within the SKR HCP but is not located within any of the core reserves (RCHCA 1996). Therefore, the project is required to pay an SKR mitigation fee for incidental take authorization under the SKR HCP (City 2008).

A measure (Measure BIO-4) is provided in Section 6.0, which requires the project proponent to pay the MSHCP LDMF and SKR HCP fees.

6.0 MITIGATION MEASURES

The following provides recommended measures intended to minimize or avoid impacts to biological resources:

BIO-1 Burrowing Owl: In compliance with the MSHCP, a pre-construction survey shall be conducted within 30 days prior to ground-disturbing activities (i.e., earthwork, clearing, grubbing, watering, staging, etc.) occurring on the study area. If the pre-construction survey is negative and BUOW is confirmed absent, then ground-disturbing activities shall be allowed to commence, and no further measures would be required.

If BUOWs are observed during the pre-construction survey, take of active nests must be avoided, and the City must be immediately notified. The City will coordinate with the Wildlife Agencies (i.e., CDFW and USFWS) to determine whether a BUOW Protection and Relocation Plan is required prior to ground disturbance. If ground-disturbing activities occur, but the site is left undisturbed for more than 30 days, a pre-construction survey must be conducted again to confirm BUOW has not colonized the study area since it was last disturbed. If BUOW is found, the same coordination described above would be required.

BIO-2 Nesting Birds: To the extent feasible, construction activities (i.e., earthwork, clearing, and grubbing) shall occur outside of the general bird nesting season for migratory birds, which is February 15 through August 31 for songbirds and January 1 to August 31 for raptors.

1. If construction activities (i.e., earthwork, clearing, and grubbing) must occur during the general bird nesting season for migratory birds and raptors, a qualified biologist shall perform a pre-construction survey of potential nesting habitat to confirm the absence of active nests belonging to migratory birds and raptors afforded protection under the MBTA and CFG Code. The pre-construction survey shall be performed no more than seven days prior to the commencement of construction activities. The qualified biologist shall document the results of the pre-construction survey. If

construction is inactive for more than seven days, an additional survey shall be conducted.

2. If the qualified biologist determines that no active migratory bird or raptor nests occur, the activities shall be allowed to proceed without any further requirements. If the qualified biologist determines that an active migratory bird or raptor nest is present, no construction activities within 300 feet (500 feet for raptors) of the active nest shall occur until the young have fledged the nest and the nest is confirmed to no longer be active, or as determined by the qualified biologist. The biological monitor may modify the buffer or propose other recommendations to minimize disturbance to nesting birds.

BIO-3 **MSHCP Landscaping Restrictions:** In accordance with MSHCP Section 6.1.4, no species listed in Table 6-2, *Plants that Should Be Avoided Adjacent to the MSHCP Conservation Area*, shall be used in the project landscape plans (including hydroseed mix used for interim erosion control).

BIO-4 **Habitat Conservation Plan Fees:** The project applicant is subject to the MSHCP LDMF and the SKR Habitat Conservation Plan Fee, which shall be paid prior to issuance of any grading permit.

7.0 CERTIFICATION/QUALIFICATION

The following individuals contributed to the fieldwork and/or preparation of this report:

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Appendix A

Plant Species Observed

Family	Scientific Name	Common Name
EUDICOTS		
Anacardiaceae	<i>Schinus molle</i> *	Peruvian pepper tree
	<i>Schinus terebinthifolia</i> *	Brazilian pepper tree
Asteraceae	<i>Amsinckia intermedia</i>	rancher's fiddleneck
	<i>Centaurea melitensis</i> *	tocalote
	<i>Encelia farinosa</i>	brittlebush
	<i>Isocoma menziesii</i>	Menzies' goldenbush
	<i>Oncosiphon piluliferum</i> *	stinknet
Brassicaceae	<i>Hirschfeldia incana</i> *	short-pod mustard
	<i>Sisymbrium irio</i> *	London rocket
Cactaceae	<i>Opuntia ficus-indica</i> *	mission cactus
Chenopodiaceae	<i>Salsola tragus</i> *	Russian thistle
Fabaceae	<i>Parkinsonia aculeata</i> *	Jerusalem thorn
Geraniaceae	<i>Erodium brachycarpum</i> *	short-beak filaree
	<i>Erodium cicutarium</i> *	redstem filaree
Juglandaceae	<i>Juglans californica</i>	southern California black walnut
Malvaceae	<i>Malva parviflora</i> *	cheeseweed
Moraceae	<i>Ficus</i> sp.*	fig
Myrtaceae	<i>Eucalyptus camaldulensis</i> *	river red gum
Polygonaceae	<i>Eriogonum fasciculatum</i>	California buckwheat
Nyctaginaceae	<i>Bougainvillea spectabilis</i> *	great bougainvillea
Tamaricaceae	<i>Tamarix ramosissima</i> *	saltcedar
MONOCOTS		
Arecaceae	<i>Washingtonia robusta</i> *	Mexican fan palm
Cupressaceae	<i>Juniperus</i> sp.*	juniper
Poaceae	<i>Avena barbata</i> *	slender oat
	<i>Avena fatua</i> *	wild oat
	<i>Bromus diandrus</i> *	common ripgut grass
	<i>Bromus rubens</i> *	red brome
	<i>Hordeum murinum</i> *	common barley
	<i>Nassella tenuissima</i> *	Mexican feathergrass

* Non-native species

Appendix B

Animal Species Observed or Detected

Order	Family	Scientific Name	Common Name
VERTEBRATES			
Birds			
Accipitriformes	Accipitridae	<i>Buteo jamaicensis</i>	red-tailed hawk
Apodiformes	Trochilidae	<i>Calypte anna</i>	Anna's hummingbird
		<i>Selasphorus sasin</i>	Allen's hummingbird
Charadriiformes	Laridae	<i>Larus occidentalis</i>	western gull
Columbiformes	Columbidae	<i>Zenaida macroura</i>	mourning dove
Passeriformes	Aegithalidae	<i>Psaltiriparus minimus</i>	bushtit
	Corvidae	<i>Corvus brachyrhynchos</i>	American crow
		<i>Corvus corax</i>	common raven
	Fringillidae	<i>Haemorhous mexicanus</i>	house finch
		<i>Spinus lawrencei</i>	Lawrence's goldfinch
		<i>Spinus psaltria</i>	lesser goldfinch
		<i>Spinus tristis</i>	American goldfinch
	Passerellidae	<i>Melospiza melodia</i>	song sparrow
	Passeridae	<i>Passer domesticus</i>	house sparrow
	Parulidae	<i>Setophaga coronata</i>	yellow-rumped warbler
Mammals			
Rodentia	Sciuridae	<i>Otospermophilus beecheyi</i>	California ground squirrel

Appendix C

Site Photographs



Photograph 1: View of the wild oats and annual brome grasslands near the eastern study area boundary, facing northwest.



Photograph 2: View of the eucalyptus grove and the surrounding wild oats and annual brome grasslands in the southern portion of the study area, facing east.



Photograph 3: View of a foundation from a previous development in the western portion of the study area, facing north.



Photograph 4: View of the abandoned palm tree nursery (mapped as agriculture) in the northern portion of the study area, facing east.



Photograph 5: View of the artificial pond in the southern portion of the study area. The plastic lining is visible and no water was present.



Photograph 6: View of the ribbon gutter and culvert in the southwest portion of the study area, on the north side of Bundy Canyon Road.

Appendix D

Burrowing Owl Focused Survey Report

June 13, 2023

03491.00013.001

Mr. Jack Kofdarali
Cherry Outpost, LP
P.O. Box 1958
Corona, CA 92878

Subject: 2023 Burrowing Owl (*Athene cunicularia*) Survey Report for the Cherry Outpost Project

Dear Mr. Kofdarali:

This letter report presents the results of the 2023 focused burrowing owl (*Athene cunicularia*; BUOW) survey conducted by HELIX Environmental Planning, Inc. (HELIX) for the Cherry Outpost Project (project) located in the City of Wildomar (City), Riverside County (County), California. The survey was conducted in accordance with the County's Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP).¹ This survey was conducted to meet applicable conditions under the MSHCP, which was approved in 2003.² The MSHCP is a comprehensive planning effort that includes multiple cities throughout Riverside County, including the City of Wildomar. As part of the MSHCP implementation, enrolled jurisdictions are required to impose terms of the MSHCP, including appropriate surveys in accordance with Volume 1, Section 6. The project is located within the MSHCP BUOW Survey Area; therefore, surveys are required if suitable habitat is present. This letter report describes the methods used to perform the survey and the survey results.

STUDY AREA LOCATION

The approximately 6.2-acre project site is located in the City of Wildomar in western Riverside County, California, and is generally located east of Interstate (I) 15 and west of I-215 in the northwestern portion of the City (Figure 1, *Regional Location*). The project site is located within Township 6 South, Range 4 West, Section 23 on the U.S. Geological Survey (USGS) 7.5-minute Lake Elsinore quadrangle map (Figure 2, *USGS Topography*). Specifically, the project site is located at the northwest intersection of Bundy

¹ Riverside, County of. 2006. Burrowing owl survey instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area. Environmental Programs Department. Retrieved from: https://www.wrc-rca.org/species/survey_protocols/burrowing_owl_survey_instructions.pdf. Accessed June 8, 2023.

² Riverside, County of. 2003. Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Final MSHCP Volume I. Prepared by Dudek and Associate. Prepared for County of Riverside, Transportation and Land Management Agency. Available from: <http://www.rctlma.org/Portals/0/mshcp/index.html>. Accessed June 8, 2023.

Canyon Road and Cherry Street (Figure 3, *Aerial Photograph*). The project site comprises two parcels with Assessor's Parcel Numbers 366-290-007 and -008.

The project also comprises 1.3 acres of off-site areas adjacent to the southwest corner of the project site and within the existing paved right-of-way along Bundy Canyon Road and Cherry Street (Figure 3). The term "study area" is used throughout this report to collectively refer to the 6.2-acre project site and 1.3-acre off-site areas.

PROJECT DESCRIPTION

The proposed project consists of a commercial development with a hotel and on-site improvements. Proposed retail uses include restaurants, convenience stores, a gas and diesel station, and a car wash. Off-site improvements include road widening along Bundy Canyon Road and Cherry Street and the placement of a 36-inch storm drain pipe outlet and associated riprap pad in the southwestern portion of the study area.

STUDY AREA DESCRIPTION

The study area is dominated by non-native grasses, and supports smaller areas of existing developed land, disturbed habitat, eucalyptus grove, and agricultural land. The agricultural land comprises an abandoned palm tree nursery in the center of the study area. The study area is within an urbanized area of the City and is bounded by rural residential properties to the north and east, a small commercial center to the south, and I-15 to the west. Undeveloped land associated with Sedco Hills is located east of the study area.

The topography of the study area is mostly flat, with elevations ranging from approximately 1,398 feet (426 meters) above mean sea level (AMSL) within the southern portion of the study area along Bundy Canyon Road to a high of approximately 1,443 feet (440 meters) AMSL along Cherry Avenue in the northeastern corner of the study area. Three soil types were mapped within the study area, with the majority of the study area dominated by Ramona sandy loam (8 to 15 percent slopes, eroded; 8 to 15 percent slopes, severely eroded; 0 to 8 percent slopes, eroded; NRCS 2023). The other two soil types include Hanford coarse sandy loam (2 to 8 percent slopes) and Greenfield sandy loam (2 to 8 percent slopes, eroded).

Representative photographs of the study area are depicted in Attachment A, *Representative Site Photographs*.

METHODS

HELIX biologists Matthew Dimson and Nelly Moreno conducted a Step I Habitat Assessment on February 8, 2023. Step II Locating Burrows and Burrowing Owls, including Part A: Focused Burrow Surveys and Part B: Focused Burrowing Owl Surveys, were conducted on the study area by HELIX biologist Cache Tucker between April 6 and June 9, 2023, in accordance with the County's survey protocol. The specific survey information is provided in Table 1, *Survey Information*. The habitat assessment and Part A: Focused Burrow Surveys and Part B: Focused Burrowing Owl Surveys are described in detail below.

Table 1
SURVEY INFORMATION

Site Visit	Survey Date	Biologists	Start/Stop Time	Start/Stop Weather Conditions	Survey Results
HA ¹	02/08/23	Matthew Dimson Nelly Moreno	0740-0945	50°F, wind 0-1 mph, 10% clouds 54°F, wind 2-4 mph, 5% clouds	Suitable habitat detected; no BUOW detected.
1	04/06/23	Cache Tucker	0700-0830	48°F, wind 1-2 mph, 0% clouds 51°F, wind 0-4 mph, 0% clouds	Potential burrows/ burrow surrogates were observed; no BUOW detected.
2	04/26/23	Cache Tucker	0645-0800	61°F, wind 1-3 mph, 5% clouds 59°F, wind 3-5 mph, 5% clouds	No BUOW detected.
3	05/17/23	Cache Tucker	0600-0745	58°F, wind 0-1 mph, 0% clouds 65°F, wind 0-2 mph, 0% clouds	No BUOW detected.
4	06/09/23	Cache Tucker	0600-0740	57°F, wind 0-2 mph, 100% clouds 58°F, wind 0-1 mph, 1000% clouds	No BUOW detected.

¹ Step I Habitat Assessment

Step I – Habitat Assessment

The study area is located within an MSHCP BUOW survey area; therefore, a Step I Habitat Assessment was conducted to determine whether the study area supports suitable BUOW habitat. The assessment was conducted on the study area and within a 150-meter (approximately 500-foot) buffer zone around the periphery study area (collectively, the survey area). The survey area was slowly walked and assessed for suitable BUOW habitat, including:

- disturbed low-growing vegetation within grassland and shrublands (less than 30 percent canopy cover);
- gently rolling or level terrain;
- areas with abundant small mammal burrows, especially California ground squirrel burrows (*Otospermophilus beecheyi*);
- fence posts, rocks, or other low perching locations; and
- artificially created structures, such as earthen berms, debris piles, and cement culverts.

Inaccessible areas of the buffer zone were visually assessed using binoculars.

Step II – Locating Burrows and Burrowing Owls

Since suitable habitat was observed during the habitat assessment, Step II surveys were conducted within the survey area. Step II surveys, which consist of a focused burrow survey (Part A) and four focused BUOW surveys (Part B), were conducted to determine whether the survey area supports suitable burrows and/or BUOW. The focused burrow survey was conducted concurrently with the first BUOW survey.

All potential burrows were checked for signs of recent owl occupation. Signs of occupation include:

- pellets/casting (regurgitated fur, bones, and/or insect parts);
- white wash (excrement); and/or
- feathers.

Since suitable burrows were observed within the survey area, three additional BUOW surveys were conducted. The biologist walked transects spaced no greater than 30 meters apart (approximately 100 feet) to allow for 100 percent visual coverage of all suitable habitat within the survey area. The biologist walked slowly and methodically, closely checking suitable habitat within the survey area for suitable burrows, BUOW diagnostic sign (e.g., molted feathers, pellets/castings, or whitewash at or near a burrow entrance), and individual BUOW. Inaccessible areas of the survey area were visually assessed using binoculars. All suitable burrows, burrow surrogates, BUOW sign, and/or BUOW observations were recorded using a handheld Global Positioning System unit (Figure 4, *Suitable Burrow and Transect Locations*).

RESULTS

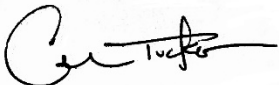
Suitable BUOW habitat was observed within the survey area, including non-native grassland and disturbed habitat (Attachment A). Suitable burrows and burrow surrogates (e.g., concrete slab with a gap between the slab and ground) that could potentially be used by BUOW were observed within the survey area. No BUOW or sign of BUOW occupation were observed during the four focused surveys. Therefore, BUOW does not currently occupy the study area. Observed burrow locations and transects walked are shown in Figure 4.

CONCLUSION

No BUOWs were observed or detected within the survey area during the focused surveys. Burrows with the potential to support BUOW were noted in the survey area, but no sign of BUOW occupation was observed. A pre-construction survey is required 30 days prior to ground disturbance pursuant to the County's survey protocol. If ground-disturbing activities are delayed more than 30 days after the pre-construction survey has been completed, the study area must be resurveyed.

If you have any questions regarding the information presented in this letter report, please contact me at CacheT@helixepi.com or Lauren Singleton at LaurenS@helixepi.com.

Sincerely,



Cache Tucker
Biologist

Attachments:

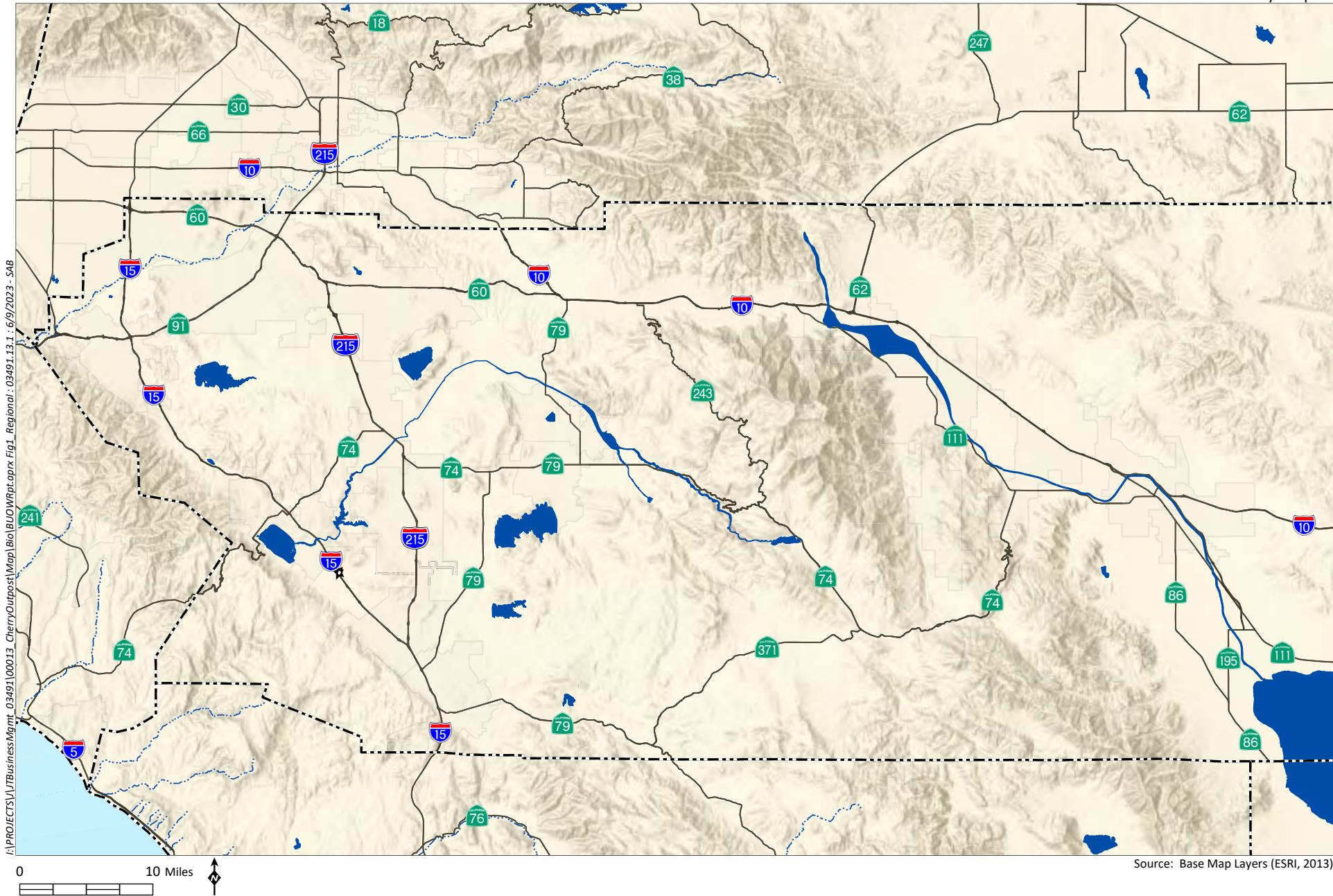
Figure 1: Regional Location

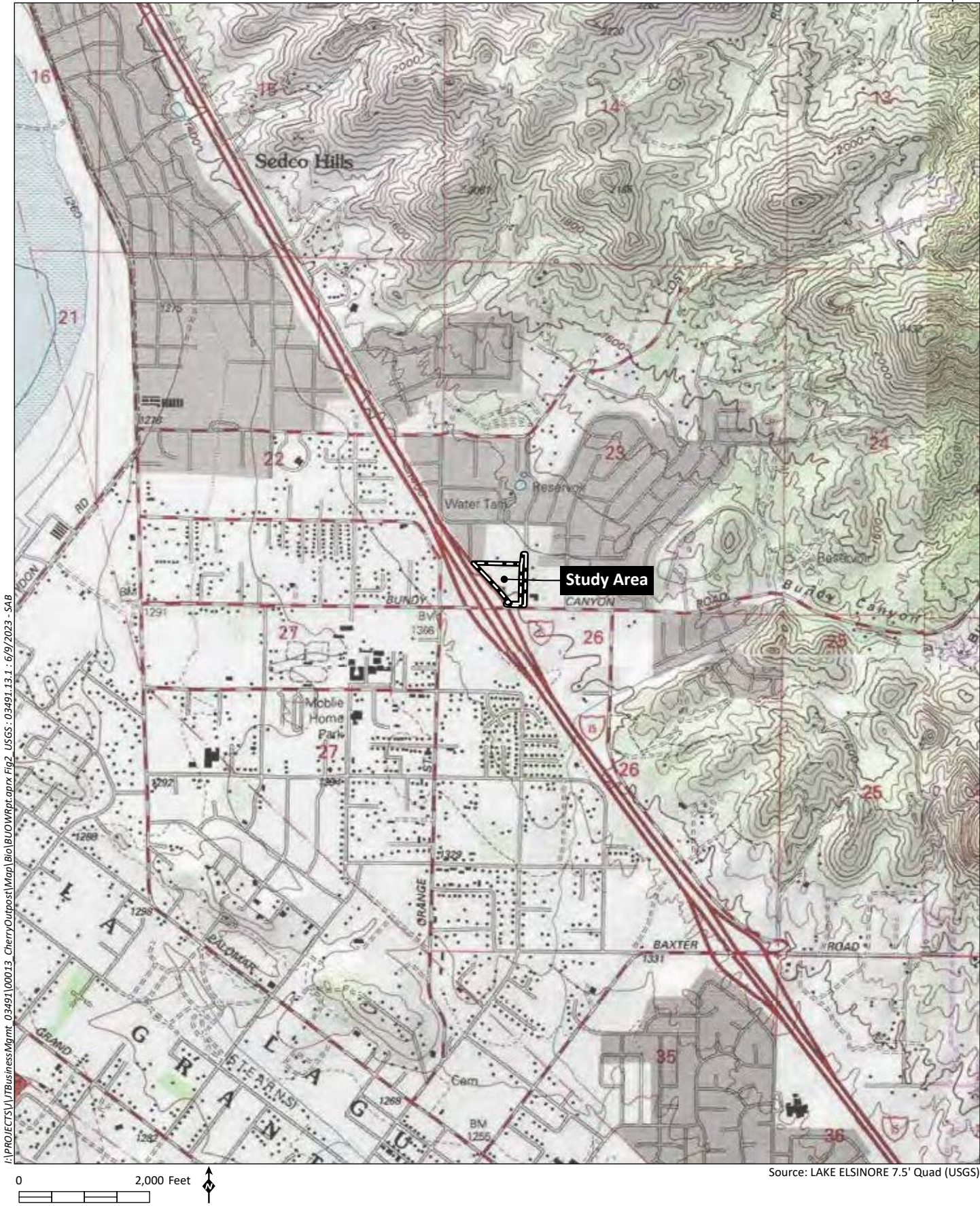
Figure 2: USGS Topography

Figure 3: Aerial Photograph

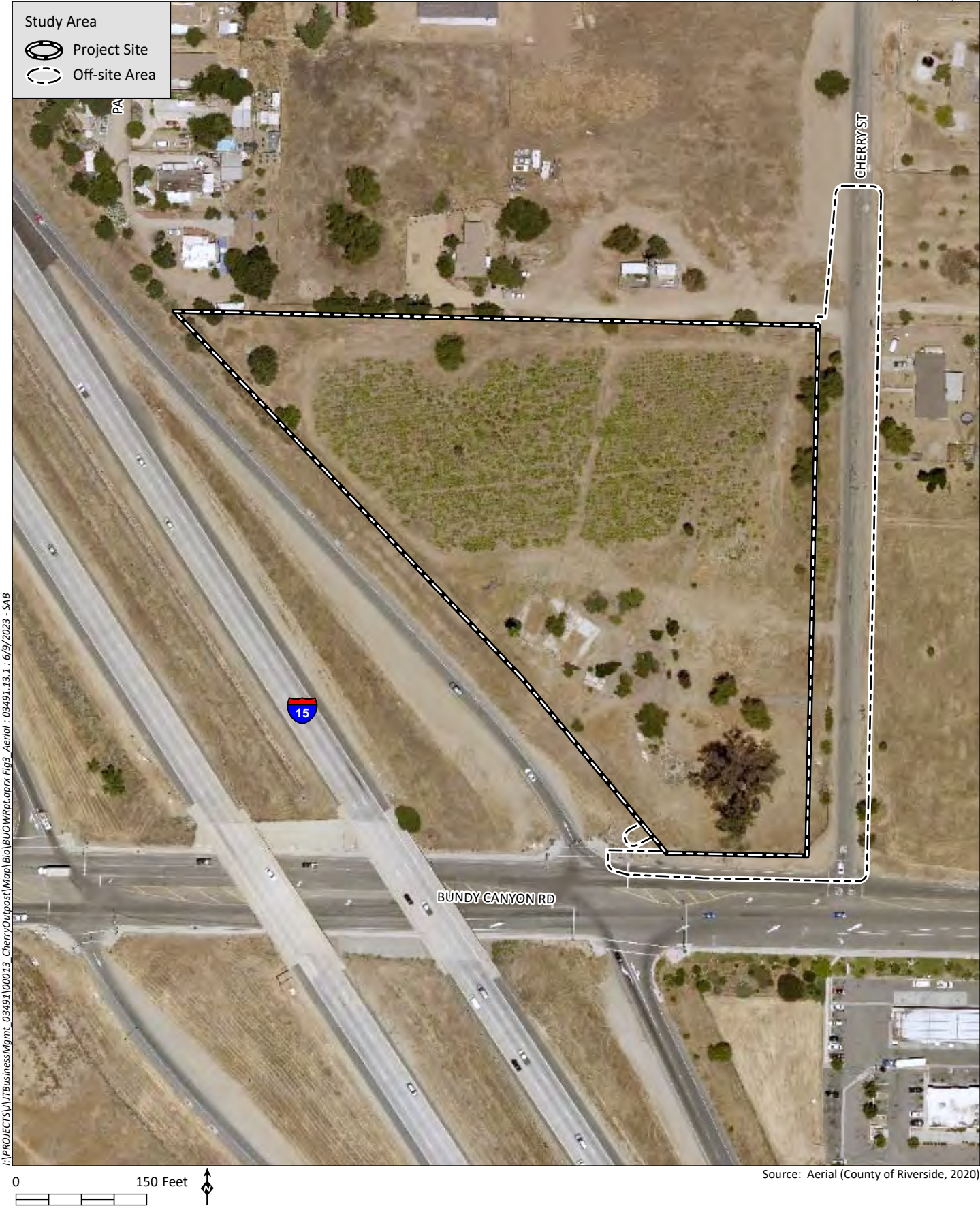
Figure 4: Suitable Burrow and Transect Locations

Attachment A: Representative Site Photographs





Source: LAKE ELSINORE 7.5' Quad (USGS)







Photograph 1: View of wild oats and annual brome grasslands in the northern portion of the study area, facing east.



Photograph 2: View of wild oats and annual brome grasslands and disturbed habitat near the eastern study area boundary, facing north.

Appendix E

Rare Plant Species Potential to Occur

Species Name ¹	Common Name	Status ²	Habitat, Ecology, and Life History	Potential to Occur ³
<i>Allium munzii</i>	Munz's onion	FE/ST CRPR 1B.1 MSHCP Covered Species (b)	Perennial herb. Occurs on clay soils in chaparral, cismontane woodland, coastal sage scrub, pine-juniper woodland, and valley and foothill grasslands. Elevation range 300-900 m. Flowering period Apr-May.	None. The study area does not support clay soils.
<i>Ambrosia pumila</i>	San Diego ambrosia	FE CRPR 1B.1 MSHCP Covered Species (b)	Perennial herb. Occurs in coarse soils near drainages, clays soils in upland habitats, marginal wetlands (e.g., river terraces, pools, and alkali playas), and disturbed sites. Elevation range 50-600 m. Flowering period Apr-Jul.	Presumed Absent. The study area supports some low-quality habitat within disturbed areas along the road shoulders. The nearest observation of this species was recorded in 1993, approximately 5.9 miles northwest of the study area. This species was not observed during a survey conducted on April 26, 2023.
<i>Atriplex coronata</i> var. <i>notatior</i>	San Jacinto Valley crownscale	FE CRPR 1B.1 MSHCP Covered Species (d)	Annual herb. Occurs alkaline soils within playas, valleys, vernal pools, and foothill grasslands. Elevation range 130-500 m. Flowering period Apr-Aug.	None. The study area does not support alkaline soils.
<i>Brodiaea filifolia</i>	thread-leaved brodiaea	FT/SE CRPR 1B.1 MSHCP Covered Species (d)	Perennial bulbiferous herb. Occurs in clay soils within chaparral (openings), cismontane woodland, coastal scrub, playas, valley and foothill grassland, and vernal pools. Elevation range 20-860 m. Flowering period Mar-Jun.	None. The study area does not support clay soils.

Species Name ¹	Common Name	Status ²	Habitat, Ecology, and Life History	Potential to Occur ³
<i>Centromadia pungens</i> <i>ssp. laevis</i>	smooth tarplant	CRPR 1B.1 MSHCP Covered Species (d)	Annual herb. Occurs within alkali scrub, alkali playas, riparian woodland, chenopod scrub, meadows and seeps, watercourses, and grasslands near alkaline locales. Elevation range 0-640 m. Flowering period Apr-Sep.	None. The study area does not support alkali scrub, alkali playas, riparian woodland, chenopod scrub, meadows and seeps, watercourses, or grasslands near alkaline locales.
<i>Chorizanthe parryi</i> var. <i>parryi</i>	Parry's spineflower	CRPR 1B.1 MSHCP Covered Species (e)	Annual herb. Occurs in sandy soil on flats and foothills in mixed grassland, coastal sage scrub, cismontane woodland, and chaparral communities. Elevation range 275-1220 m. Flowering period Apr-Jun.	Presumed Absent. The study area supports some low-quality habitat within the non-native grassland habitat. The nearest observation of this species was recorded in 2000, approximately 0.9 mile east of the study area. This species was not observed during a survey conducted on April 26, 2023.
<i>Chorizanthe polygonoides</i> var. <i>longispina</i>	long-spined spineflower	CRPR 1B.2 MSHCP Covered Species	Annual herb. Occurs within Gabbroic clay soil largely devoid of shrubs. Can be occasionally seen on vernal pool, valley and foothill grassland, coastal scrub, chaparral and even montane meadows peripheries near vernal seeps. Elevation range 30-1530 m. Flowering period Apr-Jul.	None. The study area does not support Gabbroic clay soil.
<i>Dodecahema leptoceras</i>	slender-horned spineflower	FE/SE CRPR 1B.1 MSHCP Covered Species (b)	Annual herb. Found in sandy and gravelly soils or alluvial fans in coastal sage scrub, chaparral, and cismontane woodlands. Elevation range 200-760 m. Flowering Period Apr-Jun.	None. The study area does not support sandy and gravelly soils or alluvial fans in coastal sage scrub, chaparral, and cismontane woodlands.

Species Name ¹	Common Name	Status ²	Habitat, Ecology, and Life History	Potential to Occur ³
<i>Dudleya multicaulis</i>	many-stemmed dudleya	CRPR 1B.2 MSHCP Covered Species (b)	Perennial herb succulent. Found in clay soils and sandstone outcrops associated with coastal sage scrub, chaparral, and valley grasslands. Elevation range 15-790 m. Flowering Period Apr-Jul.	None. The study area does not support clay soils or sandstone outcrops.
<i>Hordeum intercedens</i>	vernal barley	CRPR 3.2 MSHCP Covered Species	Annual herb. Occurs in coastal dunes, coastal scrub, saline flats and depressions in grasslands or in vernal pool basins. Elevation range 5-1000 m. Flowering period Mar-Jun.	None. The study area does not support coastal dunes, coastal scrub, or saline flats and depressions.
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Coulter's goldfields	CRPR 1B.1 MSHCP Covered Species (d)	Annual herb. Occurs in coastal salt marsh, swamps, playas, upper end of tidal inundation areas, and vernal pools. Elevation range 1- 1,220 m. Flowering period Feb-Jun.	None. The study area does not support coastal salt marsh, tidal areas, or vernal pools.
<i>Myosurus minimus</i> ssp. <i>apus</i>	little mousetail	CRPR 3.1 MSHCP Covered Species (d)	Annual herb. Vernal pools, valley and foothill grasslands, and alkaline marshes. This cryptic species typically grows in the deeper portions of vernal pool basins, sprouting immediately after the surface water has evaporated. Elevation range 20-640 m. Flowering period Mar-Jun.	None. The study area does not support vernal pools, valley and foothill grasslands, or alkaline marshes.

Species Name ¹	Common Name	Status ²	Habitat, Ecology, and Life History	Potential to Occur ³
<i>Orcuttia californica</i>	California Orcutt grass	FE/SE CRPR 1B.1 MSHCP Covered Species (b)	Annual herb. Occurs in or near vernal pools. This species tends to grow in wetter portions of the vernal pool basin but does not show much growth until the basins become somewhat desiccated. Elevation range 15-660 m. Flowering period Apr-Aug.	None. The study area does not support vernal pools.

Source: HELIX (2024)

¹ Sensitive plant species reported within the Alberhill, Lake Elsinore, Lake Mathews, Romoland, Steele Peak, Sitton Peak, Wildomar, Murrieta, and Perris quadrangles on the CNPS database.

² Listing is as follows: F = Federal; S = State of California; E = Endangered; T = Threatened. CRPR = California Rare Plant Rank: 1A – presumed extinct; 1B – rare, threatened, or endangered in California and elsewhere; 2A – rare, threatened, or endangered in California and elsewhere; 2B – rare, threatened, or endangered in California but more common elsewhere. Extension codes: .1 – seriously endangered; .2 – moderately endangered; .3 – not very endangered. MSHCP Conditionally Covered Species (a) through (f): (a) surveys may be required for species as part of wetland mapping (MSHCP Section 6.1.2); (b) surveys may be required for species within Narrow Endemic Plant Species Survey Area (MSHCP Section 6.1.3); (c) surveys may be required for species within locations shown on survey maps (MSHCP Section 6.3.2); (d) surveys may be required for species within Criteria Area Species Survey Area (MSHCP Section 6.3.2); (e) covered species will be considered to be covered species adequately conserved when conservation requirements identified in species-specific conservation objectives have been met (MSHCP Table 9-3); and (f) covered species will be conserved covered species adequately conserved when a Memorandum of Understanding is executed with the Forest Service that addresses management for these species on Forest Service Land (MSHCP Table 9-3).

³ Potential to Occur is assessed as follows: **None:** Habitat suitable for species survival does not occur on the study area, the study area is not within geographic range of the species, and/or the study area is not within the elevation range of the species; **Low:** Suitable habitat is present on the study area but of low quality and/or small extent. The species has not been recorded recently on or near the study area. Although the species was not observed during surveys for the current project, the species cannot be excluded with certainty; **Moderate:** Suitable habitat is present on the study area and the species was recorded recently near the study area; however, the habitat is of moderate quality and/or small extent. Although the species was not observed during surveys for the current project, the species cannot be excluded with certainty; **High:** Suitable habitat of sufficient extent is present on the study area and the species has been recorded recently on or near the study area, but was not observed during surveys for the current project. However, focused/protocol surveys are not required or have not been completed; **Presumed Present:** The species was observed during focused surveys for the current project and is assumed to occupy the study area; **Presumed Absent:** Suitable habitat is present on the study area but focused surveys for the species were negative.

Appendix F

Sensitive Animal Species Potential to Occur

Species Name ¹	Common Name	Status ²	Habitat, Ecology, and Life History	Potential to Occur ³
Invertebrates				
<i>Bombus crotchii</i>	Crotch's bumble bee	SCE	Coastal California east to the Sierra-Cascade crest and south into Mexico and is associated with grassland and scrub habitats near the coast. Species' food genera include <i>Antirrhinum</i> spp., <i>Clarkia</i> spp., <i>Dendromecon</i> spp., <i>Eriogonum</i> spp., <i>Eschscholzia</i> spp., <i>Lupinus</i> spp., <i>Medicago</i> spp., <i>Phacelia</i> spp., and <i>Salvia</i> spp. Nests are underground and commonly consist of abandoned rodent nests.	None. The study area supports mostly non-native tree and grass species, with only a few scattered <i>Eriogonum californica</i> individuals. No other potential food genera were recorded within the study area. There is not suitable habitat adjacent to the study area. The most recent record of this species within five miles of the project site was recorded in iNaturalist ⁴ in 2023, approximately 3.5 miles southeast of the project site.
<i>Branchinecta lynchi</i>	vernal pool fairy shrimp	FT MSHCP Covered Species (a)	Mostly found in swale, earth slump, or basal-flow depression pools in unplowed grasslands. Requires cool-water pools.	None. The study area does not support vernal pools or other depressional areas.
<i>Branchinecta sandiegoensis</i>	San Diego fairy shrimp	FE MSHCP Covered Species (a)	Mostly found in swale, earth slump, or depression pools in unplowed grasslands. Requires cool-water pools.	None. The study area does not support vernal pools or other depressional areas.
<i>Euphydryas editha quino</i>	quino checkerspot butterfly	FE MSHCP Covered Species	Open, sunny areas within chaparral and coastal sage scrub. Host plants are <i>Plantago</i> spp., <i>Antirrhinum coulterianum</i> , and <i>Cordylanthus rigidus</i> .	None. The study area does not support chaparral or coastal sage scrub habitat. Host plants were not recorded within the study area.
<i>Streptocephalus woottoni</i>	Riverside fairy shrimp	FE MSHCP Covered Species (a)	Typically deep vernal pools and seasonal wetlands at least 30 centimeters deep.	None. The study area does not support vernal pools or other depressional areas.

Species Name ¹	Common Name	Status ²	Habitat, Ecology, and Life History	Potential to Occur ³
Fish				
<i>Gila orcuttii</i>	arroyo chub	SSC MSHCP Covered Species	Arroyo chub are adapted to survive in cool to warm (10 – 24°C) streams that fluctuate between large winter storm flows, and low summer flows, and the low dissolved oxygen and wide temperature fluctuations associated with this flow regime. They are most common in slow flowing or backwater areas with sand or mud substrate but may also inhabit areas with velocities in excess of 80 cm/s over coarse substrate.	None. The study area does not support perennial streams.
<i>Oncorhynchus mykiss irideus</i> pop. 10	steelhead - southern California DPS	FE	The southern California population segment occurs in Pacific coast streams, from the Santa Maria River to the Tijuana River. They are anadromous – living in the ocean but spawning in freshwater.	None. The study area does not support perennial streams.
Amphibians				
<i>Anaxyrus californicus</i>	arroyo toad	FE, SSC MSHCP Covered Species (c)	Found on banks with open-canopy riparian forest characterized by willows, cottonwoods, or sycamores; breeds in areas with shallow, slowly moving streams, but burrows in adjacent uplands during dry months.	None. The study area does not support suitable riparian habitat.
<i>Rana draytonii</i>	California red-legged frog	FT, SSC MSHCP Covered Species (c)	Suitable habitat is characterized by dense, shrubby riparian vegetation with deep, slow-moving water. Readily displaced by introduced aquatic predators, including bullfrogs (<i>Lithobates catesbiana</i>) or crayfish (<i>Procambarus</i> spp.).	None. The study area does not support suitable riparian habitat.

Species Name ¹	Common Name	Status ²	Habitat, Ecology, and Life History	Potential to Occur ³
<i>Spea hammondi</i>	western spadefoot	SSC MSHCP Covered Species	Occurs in open coastal sage scrub, chaparral, and grassland, along sandy or gravelly washes, floodplains, alluvial fans, or playas; require temporary pools for breeding and friable soils for burrowing; generally excluded from areas with bullfrogs (<i>Rana catesbiana</i>) or crayfish (<i>Procambarus</i> spp.)	None. The study area does not occur along a wash, floodplain, alluvial fan, or playa. Suitable depressional habitat is not present.
<i>Taricha torosa</i>	Coast Range newt	SSC MSHCP Covered Species	Breeds in ponds, reservoirs, and slow-moving stream pools; often found in riparian forest, woodlands, chaparral, or grassland within one kilometer of breeding habitat.	None. Suitable breeding habitat is not present within one kilometer of the study area.
Reptiles				
<i>Anniella stebbinsi</i>	Southern California legless lizard	SSC	Broad-leaved upland forest, chaparral, coastal dunes and coastal scrub. Occurs in sandy or loose soils under sparse vegetation. Generally, prefers soils with a high moisture content.	None. The study area does not support broad-leaved upland forest, chaparral, coastal, or coastal scrub habitats. High soil moisture content is not present.
<i>Arizona elegans occidentalis</i>	California glossy snake	SSC	Occurs in arid scrub, rocky washes, grasslands, chaparral, barren desert, and pinyon-juniper, oak, or pine woodlands. Generally, prefers open areas and loose soil within these habitats.	Low. The study area supports some suitable grassland habitat. The surrounding area is highly developed and is not adjacent to open areas. The nearest CNDDB occurrence was recorded in 2016, approximately 21 miles northwest of the study area.

Species Name ¹	Common Name	Status ²	Habitat, Ecology, and Life History	Potential to Occur ³
<i>Aspidoscelis tigris stejnegeri</i>	coastal whiptail	SSC MSHCP Covered Species	Open coastal sage scrub, chaparral, and woodlands. Frequently found along the edges of dirt roads traversing its habitats. Important habitat components include open, sunny areas, shrub cover with accumulated leaf litter, and an abundance of insects, spiders, or scorpions.	Low. The study area supports suitable habitat with accumulated leaf litter. The nearest CNDDB occurrence was recorded in 2017, approximately 16 miles northwest of the study area.
<i>Crotalus ruber</i>	red-diamond rattlesnake	SSC MSHCP Covered Species	This snake occurs in a wide variety of arid and semiarid habitats that provide dense vegetation or rocky cover. It also occurs in rocky areas and in dense vegetation. It retreats into rodent burrows, into cracks in rocks or under surface cover objects.	None. The study area does not support dense vegetation or rocky cover, and is surrounded by development.
<i>Emys marmorata</i>	western pond turtle	SSC MSHCP Covered Species	Almost entirely aquatic; occurs in freshwater marshes, creeks, ponds, rivers and streams, particularly where basking sites, deep water retreats, and egg laying areas are readily available.	None. The study area does support suitable aquatic habitat.
<i>Phrynosoma blainvillii</i>	coast horned lizard	SSC MSHCP Covered Species	Coastal sage scrub and open areas in chaparral, oak (<i>Quercus</i> sp.) woodlands, and coniferous forests with sufficient basking sites, adequate scrub cover, and areas of loose soil; require native ants, especially harvester ants (<i>Pogonomyrmex</i> spp.), and are generally excluded from areas invaded by Argentine ants (<i>Linepithema humile</i>).	None. The study area does not support suitable chaparral, oak woodland, or coniferous forest habitat. Harvester ants were not observed on the site.

Species Name ¹	Common Name	Status ²	Habitat, Ecology, and Life History	Potential to Occur ³
<i>Salvadora hexalepis virgultea</i>	coast patch-nosed snake	SSC	This snake is found in the desert scrub, grassland, chaparral, sagebrush plains, and pinyon-juniper woodlands in the southwestern United States south into Baja California and Mexico, from below sea level to 7,000 feet.	Low. The study area supports some suitable grassland habitat. The surrounding area is highly developed and is not adjacent to open areas. The nearest CNDDDB occurrence was recorded in 2004, approximately 12 miles northwest of the study area.
<i>Thamnophis hammondi</i>	two-striped gartersnake	SSC	Occurs along permanent and intermittent streams bordered by dense riparian vegetation, but occasionally associated with vernal pools or stock ponds.	None. The study area does not support permanent or intermittent streams.
Birds				
<i>Agelaius tricolor</i>	tricolored blackbird	SCE/SSC MSHCP Covered Species	Breeds in dense stands of cattails (<i>Typha</i> sp.) or bulrushes (<i>Schoenoplectus</i> sp./ <i>Scirpus</i> sp.) located within large freshwater marshes. Forages in adjacent open habitats, such as agricultural fields, pastures, or grasslands.	None. The study area and adjacent areas do not support freshwater marsh habitat.
<i>Aquila chrysaetos</i>	golden eagle	SFP MSHCP Covered Species	Typical foraging habitat includes grassy and open, shrubby habitats. Generally, nests on remote cliffs; requires areas of solitude at a distance from human habitation.	None. The study area does not support suitable nesting or foraging habitat.

Species Name ¹	Common Name	Status ²	Habitat, Ecology, and Life History	Potential to Occur ³
<i>Asio otus</i>	long-eared owl	SSC	Riparian habitat is required but it also uses other live oak thickets with small, densely canopied trees required for roosting and nesting.	None. The study area does not support riparian habitat or live oak thickets.
<i>Athene cunicularia</i>	burrowing owl	SSC MSHCP Covered Species (c)	Occurs in open, treeless areas with low, sparse vegetation, usually on gently sloping terrain. The owls can be found in grasslands, deserts, and steppe environments; on golf courses, pastures, agricultural fields, airport medians, and road embankments; in cemeteries and urban vacant lots. They are often associated with high densities of burrowing mammals such as prairie dogs, ground squirrels, and tortoises.	Absent. The study area supports some limited areas of suitable habitat. This species was recorded in eBird ⁵ in 2010, approximately 0.5 mile west of the study area. Focused surveys were conducted during the 2023 breeding season and survey results were negative.
<i>Buteo swainsoni</i>	Swainson's hawk	ST MSHCP Covered Species	Breeds in grasslands and shrublands with scattered trees, riparian areas, and agricultural areas with groves or lines of trees. Requires adjacent grasslands or agricultural fields supporting rodent populations for foraging.	None. This species is not known to nest in southern California except for populations in the Antelope Valley and Mojave Desert. The study area may provide low-quality foraging habitat. This species recorded in eBird in 2022, approximately 2.3 miles southeast of the Study Area.
<i>Charadrius alexandrinus nivosus</i>	western snowy plover	FT/SSC	Requires sandy, gravelly, or friable soils for nesting at beaches, dunes, salt flats, and large lakes.	None. The study area does not support beaches, dunes, salt flats, or large lakes.

Species Name ¹	Common Name	Status ²	Habitat, Ecology, and Life History	Potential to Occur ³
<i>Coturnicops noveboracensis</i>	yellow rail	SSC	Breeds in shallow freshwater grass- and sedge- dominated marshes and wetlands. Prefer habitat where they can move beneath a later of vegetation. Winters in wet meadows and mature salt marshes above the water line, having cordgrass, saltgrass, sedges, and other low vegetation. Not found in deeper water with tall vegetation, such as cattail marshes.	None. The study area does not support freshwater marsh are wetland habitat.
<i>Elanus leucurus</i>	white-tailed kite	SFP MSHCP Covered Species	Nests in trees with dense canopies within open grasslands, woodlands, and marshes. Forages for small mammals within lightly grazed/ungrazed pastures and grasslands.	Low. The study area supports pepper trees (<i>Schinus</i> spp.) and red gum (<i>Eucalypts camaldulensis</i>) that could be used for nesting habitat, although this is considered low quality nesting habitat since the study area is directly adjacent to Interstate 15. Undeveloped land on the study area could provide low quality foraging habitat. This species recorded in eBird in 2012, approximately one mile southwest of the study area.
<i>Haliaeetus leucocephalus</i>	bald eagle MSHCP Covered Species	SE	Typically nests in trees within lower montane coniferous forests, although will occasionally nest on cliff faces or on the ground when trees are not present. Feeds primarily on fish and are usually within close proximity to lakes or other water bodies.	None. The study area does not support suitable breeding habitat (e.g., lower montane coniferous forest) or foraging habitat (e.g., lakes or other water bodies) for this species.

Species Name ¹	Common Name	Status ²	Habitat, Ecology, and Life History	Potential to Occur ³
<i>Icteria virens</i>	yellow-breasted chat	SSC MSHCP Covered Species	Summer resident of mature riparian woodlands. Nests are placed in low, dense vegetation, such as willows (<i>Salix</i> sp.), blackberry (<i>Rubus</i> sp.), and wild grape (<i>Vitis californica</i>).	None. The study area does not support riparian habitat.
<i>Lanius ludovicianus</i>	loggerhead shrike	SSC MSHCP Covered Species	Nests in dense, often thorny shrubs or trees. Will nest within brush piles or tumbleweeds when trees or shrubs are not present. Feeds on a wide variety of animals, including arthropods, amphibians, reptiles, small mammals, and small songbirds within open habitats such as grasslands, agricultural fields, pastures, shrublands, and ruderal areas with adequate perching locations.	None. The study area does not support dense thorny shrubs or trees.
<i>Poliioptila californica californica</i>	coastal California gnatcatcher	FT/SSC MSHCP Covered Species	Occurs in coastal sage scrub and very open chaparral.	None. The study area does not support coastal sage scrub or chaparral.
<i>Vireo bellii pusillus</i>	least Bell's vireo	FE/SE MSHCP Covered Species (a)	Inhabits riparian woodland and is most frequent in areas that combine an understory of dense, young willows or mule fat with a canopy of tall willows.	None. The study area does not support riparian habitat.
Mammals				
<i>Dipodomys merriami parvus</i>	San Bernardino kangaroo rat	FE, SSC MSHCP Covered Species (c)	Generally associated with alluvial fan sage scrub, but also occurs in sage scrub, chaparral, and grassland in proximity to alluvial fan sage scrub habitats.	None. The study area and adjacent areas do not support alluvial fan sage scrub habitat.

Species Name ¹	Common Name	Status ²	Habitat, Ecology, and Life History	Potential to Occur ³
<i>Dipodomys stephensi</i>	Stephens' kangaroo rat	FT, ST MSHCP Covered Species	Primarily occurs in sparsely vegetated areas within grassland habitats, but also found in open coastal scrub habitat. Feeds on filaree (<i>Erodium</i> sp.) and brome (<i>Bromus</i> sp.) seeds. Dig burrows in firm soil or use abandoned pocket gopher burrows.	Low. The study area supports suitable sparsely vegetated areas for this species. The nearest CNDDDB occurrence was recorded in 2011 approximately 23 miles northwest of the study area.
<i>Eumops perotis californicus</i>	western mastiff bat	SSC	Roosts under exfoliating rock slabs on cliff faces and occasionally in large boulder crevices and building cracks. Forages in a variety of open areas, including washes, floodplains, chaparral, coastal sage scrub, woodlands, ponderosa pine forests, grassland, and agricultural areas.	Low. The study area does not support suitable roosting habitat (e.g., cliff faces, boulder crevices, building cracks). The study area supports some potentially suitable foraging habitat. The nearest CNDDDB occurrence was recorded in 2011 approximately 23 miles northwest of the study area.
<i>Lasiurus xanthinus</i>	western yellow bat	SSC	Found in desert regions in wooded areas and desert scrub, but expanding their range due to ornamental palm trees in landscaping. Roosts in foliage, particularly in thorny vegetation, palms, and other desert riparian habitats.	None. Although the study area supports ornamental palm trees, these trees would not be suitable for roosting since they are former nursery trees approximately three to four feet tall.
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	SSC MSHCP Covered Species	Occurs in open chaparral and coastal sage scrub, often building large, stick nests in rock outcrops, boulders, around clumps of cactus or yucca, or in dense undergrowth.	None. The study area does not support open chaparral or coastal sage scrub habitat.
<i>Nyctinomops femorosaccus</i>	pocketed free-tailed bat	SSC	Roosts in crevices within high rocky cliffs, caverns, or buildings. Typically forages over water and among trees within arid habitats, such as pine-juniper woodlands, desert scrub, palm oasis, desert wash, and desert riparian.	None. The study area does not support roosting habitat (e.g., rocky cliffs, caverns, buildings) or foraging habitat (e.g., water within pine-juniper woodlands, desert scrub, desert wash, and desert riparian).

Species Name ¹	Common Name	Status ²	Habitat, Ecology, and Life History	Potential to Occur ³
<i>Onychomys torridus ramona</i>	southern grasshopper mouse	SSC	Sandy valley floors within desert scrub habitat with low to moderate shrub cover and friable soils, but also found in coastal scrub and chaparral habitats.	None. The study area does not support desert scrub, coastal scrub, or chaparral habitats.
<i>Perognathus longimembris brevinasus</i>	Los Angeles pocket mouse	SSC MSHCP Covered Species (c)	Occurs in gravelly soils in desert areas, often in rolling terrain or in areas with ravines or rock outcroppings. Associated with sage scrub plants and yucca. Favors the interface between sage scrub and grassland.	None. The study area and adjacent areas do not support coastal scrub habitat
<i>Taxidea taxus</i>	American badger	SSC	Occurs in open plains and prairies, farmland, and sometimes edges of woods.	None. The study area does not support woodland edge habitat. Suitably sized burrows were not observed within the study area.

Source: HELIX (2024)

¹ Sensitive species reported within the Lake Elsinore, Lake Mathews, Steele Peak, Perris, Alberhill, Romoland, Sitton Peak, Wildomar and/or Murrieta quadrangles on the CNDDB database.

² Listing is as follows: F = Federal; S = State of California; E = Endangered; T = Threatened; CE = Candidate Endangered; CT = Candidate Threatened; FP = Fully Protected; SSC = State Species of Special Concern. MSHCP Conditionally Covered Species (a) through (f): (a) surveys may be required for species as part of wetland mapping (MSHCP Section 6.1.2); (b) surveys may be required for species within Narrow Endemic Plant Species Survey Area (MSHCP Section 6.1.3); (c) surveys may be required for species within locations shown on survey maps (MSHCP Section 6.3.2); (d) surveys may be required for species within Criteria Area Species Survey Area (MSHCP Section 6.3.2); (e) covered species will be considered to be covered species adequately conserved when conservation requirements identified in species-specific conservation objectives have been met (MSHCP Table 9-3); and (f) covered species will be conserved covered species adequately conserved when a Memorandum of Understanding is executed with the Forest Service that addresses management for these species on Forest Service Land (MSHCP Table 9-3).

³ Potential to Occur is assessed as follows. **None:** Species is so limited to a particular habitat that it cannot disperse across unsuitable habitat (e.g., aquatic organisms), and habitat suitable for its survival does not occur on the study area; **Low:** Suitable habitat is present on the study area but of low quality and/or small extent. The species has not been recorded recently on or near the study area. Although the species was not observed during surveys for the current project, the species cannot be excluded with certainty; **Moderate:** Suitable habitat is present on the study area and the species was recorded recently near the study area; however, the habitat is of moderate quality and/or small extent. Although the species was not observed during surveys for the current project, the species cannot be excluded with certainty; **High:** Suitable habitat of sufficient extent for residence or breeding is present on the study area and the species has been recorded recently on or near the study area, but was not observed during surveys for the current project. However, focused/protocol surveys are not required or have not been completed; **Presumed Present:** The species was observed during biological surveys for the current project and is assumed to occupy the study area; **Presumed Absent:** Suitable habitat is present on the study area but focused/protocol surveys for the species were negative.

⁴ iNaturalist. 2024. Explore Observation, Crotch's Bumble Bee. Available from: https://www.inaturalist.org/observations?place_id=158630&subview=map&taxon_id=271451. Accessed August 7, 2024.

⁵ eBird. 2024. eBird: an online database of bird distribution and abundance. Species Maps. eBird, Ithaca, New York. Available from: <http://www.ebird.org>. Accessed August 7, 2024.