

Biological Resources and MSHCP Compliance Report

Riverside Drive/Lincoln Street Commercial

City of Lake Elsinore, California

May 2020

BIOLOGICAL RESOURCES and MSHCP COMPLIANCE REPORT

RIVERSIDE DRIVE/LINCOLN STREET COMMERCIAL LAKE ELSINORE RIVERSIDE COUNTY, CALIFORNIA

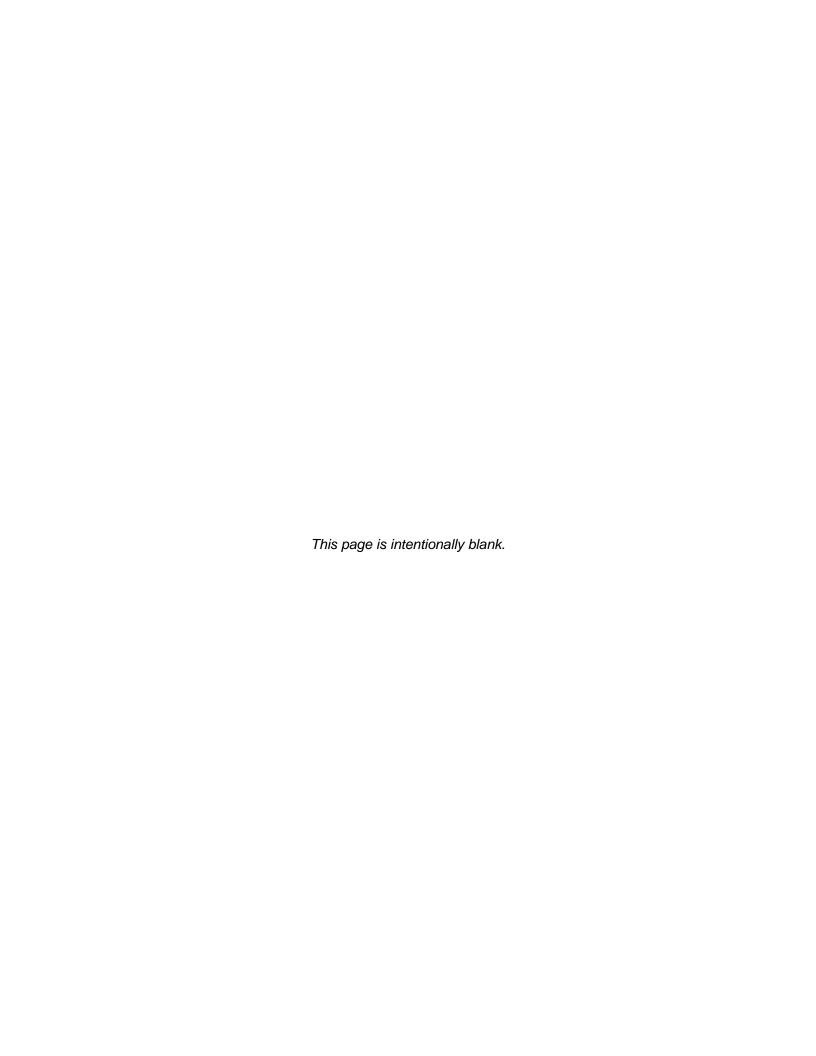
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Appendix A. Plant and Wildlife Species Observed

Appendix B. MSHCP Covered Species Evaluated for Potential to Occur

1 INTRODUCTION

This report transmits the results of an assessment of biological resources in compliance with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) regarding the Riverside Drive/Lincoln Street Commercial Development (project) located in the Lakeview District in the City of Lake Elsinore, Riverside County, California. The proposed project consists of development of a 6.36-acre vacant lot located at the southwest corner of Riverside Drive (Highway 74) and Lincoln Street (APN 379-111-014) for commercial uses (Figure 1).

HDR biologist Aaron Newton reviewed relevant background information and conducted a site reconnaissance to assess existing biological resources in the survey area. Mr. Newton then assessed potential impacts of the proposed project on biological resources.

The project site is located in western Riverside County in the Riverside County General Plan's Elsinore Area Plan. The project is subject to the MSHCP, but the survey area is located outside of the MSHCP's amphibian, burrowing owl, criteria area species, mammal, and narrow endemic plant survey areas and is not adjacent to any land designated for inclusion in the MSHCP Conservation Area.

2 PROJECT LOCATION AND DESCRIPTION

The project site is located in Section 2, Township 6 South, Range 5 West of the U.S. Geological Survey (USGS) 7.5-minute series *Alberhill* and *Lake Elsinore, California* topographic quadrangle maps. The project site is bounded by Lincoln Street on the north, Riverside Drive on the east, Flannery Street (a private drive) on the west, and the Lakeview Apartments on the south (Figure 2).

The project applicant is requesting approval of a General Plan Amendment, rezone, and Conditional Use Permit to construct a commercial project consisting of a convenience store with gas station, a fast food drive-thru restaurant, a self-serve drive-thru car wash, and a self-storage facility. Individual project components are discussed in more detail below.

Convenience Store/Gas Station – A 4,650 square foot (s.f.) convenience store (7-Eleven) with gas station is proposed in the northeast portion of the project site. The gas station area will have 8 pumps with 16 fueling stations under a canopy. The convenience market will be open 24 hours per day and the gas pumps will also be accessible 24 hours per day.

Fast Food Drive-Thru Restaurant – A 4,456 s.f. fast food restaurant (McDonald's) with a drive-thru is proposed to the west of the convenience store/gas station. The drive-thru will have two lanes for queueing and ordering that will lead to two pick-up windows. No outdoor seating is proposed at the fast food restaurant. The drive-thru will be open 24 hours per day.

Car Wash – A self-serve car wash is proposed west of the fast food restaurant. The car wash includes a 4,200 s.f. single-lane car wash tunnel. Two queueing lanes are proposed to allow for more vehicle stacking. Adjacent to the car wash tunnel are 31 parking spaces and selfserve vacuuming machines. Hours of operation of the car wash will be 9 AM to 8 PM.

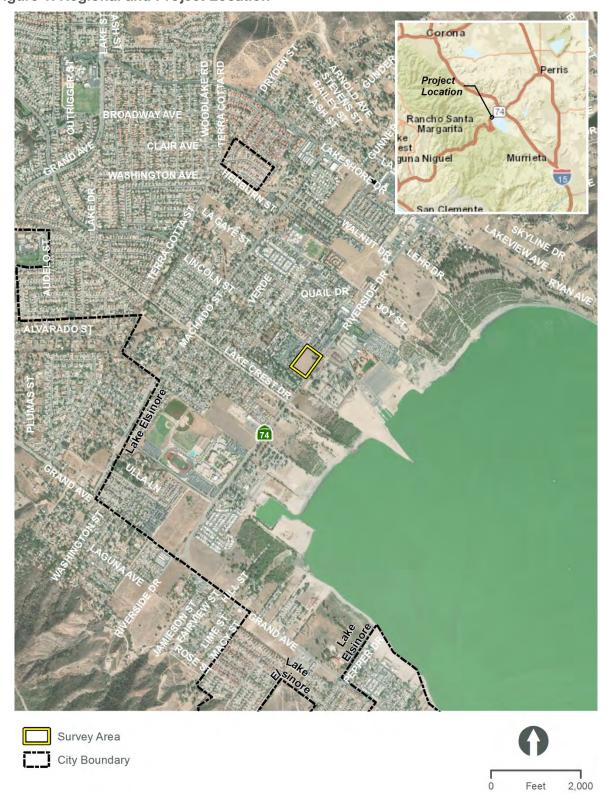


Figure 1. Regional and Project Location

Figure 2. Project Site Location Map



Self-Storage – The project includes 38,185 s.f. of self-storage to be housed in three buildings, one along the northern project boundary (21,546 s.f), which includes an office space, one along the western boundary (10,558 s.f.), and one in the western portion of the project site (6,081 s.f). A total of 286 storage units will be available in 7 different sizes ranging from 5 feet by 5 feet up to 10 feet by 30 feet. Some units will be accessed from the exterior and some will be accessed via interior hallways. All units will be accessible 24 hours per day, seven days a week.

In additional to the components described above, the project will implement a lighting and landscaping plan, parking, frontage/roadway improvements, water quality improvements, and utility improvements.

3 REGULATORY FRAMEWORK

3.1 Federal Laws and Regulations

3.1.1 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) protects threatened and endangered plants and animals and their critical habitat. Candidate species are those proposed for listing; these species are usually treated by resource agencies as if they were actually listed during the environmental review process. Procedures for addressing impacts on federally listed species follow two principal pathways, both of which require consultation with the United States Fish and Wildlife Service (USFWS), which administers FESA for all terrestrial species. The first pathway, a Section 10(a) incidental take permit, applies to situations where a non-federal governmental entity must resolve potential adverse impacts on species protected under FESA. The second pathway, a Section 7 consultation, applies to projects directly undertaken by a federal agency or private projects requiring a federal permit or approval.

3.1.2 Migratory Bird Treaty Act

The Migratory Bird Treaty Act makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 Code of Federal Regulations Part 10, including feathers, or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 Code of Federal Regulations 21).

All raptors and their nests are protected from take or disturbance under the Migratory Bird Treaty Act (16 United States Code, Section 703 et seq.). Golden eagles and bald eagles are also afforded additional protection under the Bald and Golden Eagle Protection Act, amended in 1973 (16 United States Code, Section 669 et seq.).

3.1.3 Clean Water Act – United States Army Corps of Engineers

Section 404 of the Clean Water Act (CWA) establishes a program for the United States Army Corps of Engineers (USACE) to regulate the discharge of dredge and fill material into waters of the United States (U.S.), including wetlands. Activities regulated under this program include fills for development, water resource projects (e.g., dams and levees), infrastructure development (e.g., highways and airports), and conversion of wetlands to uplands for farming and forestry. Either an individual Section 404 permit or authorization to use an existing USACE nationwide permit must be obtained if any portion of an activity will result in dredge or fill impacts on a river or stream that has been determined to be jurisdictional under Section 404 of the CWA. When applying for a permit, a company or organization must show that they would either avoid wetlands where practicable, minimize wetland impacts, or provide compensation for any unavoidable destruction of wetlands.

Navigable Waters Protection Rule

On April 21, 2020, the U.S. Environmental Protection Agency and USACE published the Navigable Waters Protection Rule to define "waters of the U.S." and, thereby, establish federal regulatory authority under the CWA. The rule will become effective June 22, 2020. The CWA permitting for the project will be based upon the definition in place at the time of permit processing.

The Navigable Waters Protection Rule defines "waters of the U.S." to include the territorial seas and traditional navigable waters; perennial and intermittent tributaries that contribute surface water flow to such waters; certain lakes, ponds, and impoundments of jurisdictional waters; and wetlands adjacent to other jurisdictional waters. The final rule excludes from the definition of "waters of the U.S." all waters or features not mentioned above, including the following:

- Groundwater, including groundwater drained through subsurface drainage systems;
- Ephemeral features that flow only in direct response to precipitation, including ephemeral streams, swales, gullies, rills, and pools;
- Diffuse stormwater runoff and directional sheet flow over upland;
- Ditches that are not traditional navigable waters, tributaries, or that are not constructed in adjacent wetlands, subject to certain limitations;
- Prior converted cropland;
- Artificially irrigated areas that would revert to upland if artificial irrigation ceases;
- Artificial lakes and ponds that are not jurisdictional impoundments and that are constructed or excavated in upland or non-jurisdictional waters;
- Water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining or construction activity, and pits excavated in upland or in non-jurisdictional waters for the purpose of obtaining fill, sand, or gravel;
- Stormwater control features constructed or excavated in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater run-off;
- Groundwater recharge, water reuse, and wastewater recycling structures constructed or excavated in upland or in non-jurisdictional waters; and
- Waste treatment systems.

3.1.4 Clean Water Act – Regional Water Quality Control Board

The Regional Water Quality Control Board regulates discharge activities into waters pursuant to Section 401(a)(1) of the CWA. Section 401 of the CWA specifies that certification from the state is required for any applicant requesting a federal license or permit to conduct any activity, including, but not limited to, the construction or operation of facilities that may result in any discharge into navigable waters.

3.1.5 Executive Order 13112

Executive Order 13112 - Invasive Species directs all federal agencies to refrain from authorizing, funding, or carrying out actions or projects that may spread invasive species. The order further directs federal agencies to prevent the introduction of invasive species, control and monitor existing invasive species populations, restore native species to invaded ecosystems, research and develop prevention and control methods for invasive species, and promote public education on invasive species. As part of the project, the USFWS and USACE would issue permits and would, therefore, be responsible for ensuring that the project complies with Executive Order 13112 and does not contribute to the spread of invasive species.

3.2 State and Local Laws and Regulations

3.2.1 California Endangered Species Act

Sections 2050 through 2098 of the California Fish and Game Code outline the protection provided to California's rare, endangered, and threatened species. Section 2080 of the Fish and Game Code prohibits the taking of plants and animals listed under the California Endangered Species Act. Section 2081 established an incidental take permit program for state-listed species. In addition, the Native Plant Protection Act of 1977 (Fish and Game Code Section 1900 et seq.) gives the California Department of Fish and Wildlife (CDFW) authority to designate state endangered, threatened, and rare plants, and provides specific protection measures for designated populations.

The CDFW has also identified "Species of Special Concern" (SSC). Species with this status have limited distribution or the extent of their habitats has been reduced substantially such that their populations may be threatened. Thus, their populations are monitored and they may receive special attention during the environmental review process. While they do not have statutory protection, they may be considered rare under CEQA and are thereby warranted specific protection measures.

Sensitive species that would qualify for listing but are not currently listed are afforded protection under CEQA. CEQA Guidelines Section 15065 ("Mandatory Findings of Significance") identifies a substantial reduction in numbers of a rare or endangered species as a significant effect. CEQA Guidelines Section 15380 ("Rare or Endangered Species") provides for the assessment of unlisted species as rare or endangered under CEQA if the species can be shown to meet the criteria for listing. Plant species that are not state or federally listed, but that occur on the California Native Plant Society's (CNPS) California Rare Plant Rank Lists 1A (plants presumed extirpated in California and either rare or extinct elsewhere), 1B (plants are rare, threatened, or endangered in California and elsewhere), 2A (plants presumed extirpated in California but common elsewhere), and 2B (plants rare, threatened, or endangered in California but more common elsewhere) would typically be considered under CEQA. Plant species that occur on Lists 3 (Review List: plants about which more information is needed) and

4 (Watch List: plants of limited distribution) that meet the definition of Rare or Endangered under CEQA Guidelines Section 15125 (c) and/or Section 15380 would also be considered under CEQA.

3.2.2 Lake and Streambed Alteration Program

CDFW regulates water resources under Sections 1600 et seq. of the California Fish and Game Code. CDFW has the authority to grant Streambed Alteration Agreements under Section 1602, which states:

"An entity may not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake."

CDFW jurisdiction includes ephemeral, intermittent, and perennial watercourses and extends to the top of the bank of a stream or lake if unvegetated, or to the limit of the adjacent riparian habitat located contiguous to the watercourse if the stream or lake is vegetated.

Projects that require a Streambed Alteration Agreement may also require a permit from the USACE under Section 404 of the CWA. In these instances, the conditions of the Section 404 permit and the Streambed Alteration Agreements may overlap.

3.2.3 Fully Protected Species

Sections 3500 to 5500 of the California Fish and Game Code outline protection for fully protected species of mammals, birds, reptiles, amphibians, and fish. Species that are fully protected by these Sections may not be taken or possessed at any time. CDFW cannot issue permits or licenses that authorize the "take" of any fully protected species, except under certain circumstances such as for scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock. Specific sections of the Fish and Game Code pertinent to the project include:

- Section 3503 (prohibits the taking, possession, or needless destruction of the nest or eggs of any bird),
- Section 3503.5 (prohibits the taking, possession, or destruction of any bird in the order *Falconiformes* or *Strigiformes* (birds-of-prey) or the taking, possession, or destruction of the nest or eggs of any such bird), and
- Section 3513 (prohibits the taking or possession of any migratory non-game bird as designated in the Migratory Bird Treaty Act).

3.2.4 Western Riverside County Multiple Species Habitat Conservation Plan

The Western Riverside County MSHCP was adopted on June 17, 2003, and an Implementing Agreement was executed between the federal and state Wildlife Agencies (USFWS and CDFW) and participating entities. The MSHCP is a comprehensive habitat conservation-planning program for western Riverside County. The intent of the MSHCP is to preserve native vegetation and meet the habitat needs of multiple species, rather than focusing preservation efforts on one species at a time. As such, the MSHCP is intended to streamline review of individual projects with respect to the species and habitats addressed in the MSHCP, and to provide for an overall Conservation Area that would be of

greater benefit to biological resources than would result from a piecemeal regulatory approach. The MSHCP provides coverage (including take authorization for listed species) for special-status plant and animal species, as well as mitigation for impacts on special-status species.

The MSHCP serves as a habitat conservation plan pursuant to Section 10(a)(1)(B) of FESA as well as the Natural Communities Conservation Plan under the State of California. The USFWS issued a Biological Opinion for the MSHCP on June 22, 2004. The CDFW also issued the Natural Communities Conservation Plan Approval and Take Authorization for the MSHCP on June 22, 2004.

4 METHODS

4.1 Literature Review

A literature review was conducted to determine the potential for occurrence of special-status plant and animal species on the project site and in the project vicinity. Database record searches of the nine USGS 7.5-minute series quadrangles including and surrounding the project site, *Lake Mathews, Corona South, Steele Peak, Lake Elsinore, Alberhill, Santiago Peak, Cañada Gobernadora, Sitton Peak,* and *Wildomar,* were conducted on April 17, 2020, using the CDFW Natural Diversity Data Base *Rarefind 5* online application (CDFW 2020) and the California Native Plant Society's *Online Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2020). Species information provided by the USFWS Information for Planning and Consultation Online System was also referenced (USFWS 2020). An aerial photograph (Google Earth 2020) was reviewed and GIS maps of USFWS designated critical habitats were used to determine the locations of critical habitats relative to the project site. Volume 1, Parts 1 and 2 of the *Western Riverside County Multiple Species Habitat Conservation Plan* were also used to prepare the biological resources report. Soil information was taken from the USDA's Web Soil Survey Online Application to identify soils occurring within the survey area (USDA 2020).

4.2 Field Surveys

HDR Biologist Aaron Newton conducted a site visit on April 20, 2020, to identify general site conditions, vegetation communities, and suitability of habitat for various special-status species. The entire project site was surveyed on foot. Vegetation communities within the project site were mapped in the field directly onto a 200-scale (1" = 200') aerial photograph (Figure 2). All plant species encountered during the field surveys were identified and recorded following the guidelines adopted by CNPS (2020). Latin and common names of plants follow *Jepson eFlora* (Jepson Flora Project 2020) or *The Vascular Plants of Western Riverside County, California: An Annotated Checklist* (Roberts et al. 2004).

5 RESULTS

5.1 Historic, Existing, and Adjacent Land Uses

Based on a review of historic aerial photographs (Historic Aerials, 1938, 1967, 1978, 1980, 1994, 2002, 2005, 2009, 2010, 2012, 2014, and 2016) and Google Earth (1994-2020), the survey area was cleared of vegetation prior to 1938 for agricultural use. After 1980, the site has been regularly cleared of vegetation. As a result, the site is highly disturbed and supports no native habitat. Table 1 provides a description of existing land uses within and adjacent to the project site.

١	able 1. Existing Early 03e3 Within and Adjacent to 1 Toject of				
Proximity to Site		Existing Land Use			
	On-site	Vacant land			
	North	Commercial Development			
	South	Residential Development			
	East	Launch Pointe Recreation Destination and RV Park			
	West	Residential Development			

Table 1: Existing Land Uses Within and Adjacent to Project Site

5.2 Soils and Topography

The project site has four different mapped soil types (Figure 3), as listed below:

- Cortina cobbly sandy loam (CrD, 2 to 12 percent slopes)
- Garretson very fine sandy loam (GaA, 0 to 2 percent slopes)
- Hanford coarse sandy loam (HcC, 2 to 8 percent slopes)
- Pachappa fine sandy loam (PaC2, 2 to 8 percent slopes, eroded)

Soils within the project site are not listed as hydric and are highly disturbed as a result of historic use for agriculture and current routine mowing/discing. The project site is relatively flat and ranges in elevation from approximately 1,279 feet above mean sea level in the southern portion of the project site to 1,288 feet above mean sea level in the northern portion of the project site. The project site consists of slopes ranging from 0 to 2 percent.

5.3 Vegetation

Vegetation types or plant communities are assemblages of plant species that usually coexist in the same area. The classification of vegetation communities is based upon the life form of the dominant plant species within that community and the associated flora. The vegetation classification system used in this report follows the National Vegetation Classification Standard using the hierarchical classification (Sawyer et al. 2009) to better reflect vegetation communities found within the project site.



Figure 3. USGS Mapped Soils within Project Site

Photographs of the project site are included on Figure 4. Vegetation on site consists California naturalized annual and perennial grassland with a few scattered mature trees, including one native species, southern California black walnut (*Juglans californica*), and two non-native species, olive (*Olea europaea*) and pepper tree (*Schinus molle*). Dominant herbaceous species included common fiddleneck (*Amsinckia intermedia*), black mustard (*Brassica nigra*), wild oat (*Avena fatua*), wall barley (*Hordeum murinum*), red brome (*Bromus madritensis* subsp. *rubens*), and ripgut brome (*Bromus diandrus*).

A complete list of plant species observed on the site is included as Appendix A.

5.3.1 Mediterranean California naturalized annual and perennial grassland

Mediterranean California naturalized annual and perennial grassland consists of herbaceous vegetation dominated by non-native grasses and forbs such as wild oat, black mustard, red brome, and foxtail barley. Generally, native herbaceous species have insignificant cover in these stands, especially during the active growing season. Stands are found in foothills, rangelands, fallow fields, woodland openings, riparian areas, and disturbed settings. This group occurs throughout the project site, and is typical of disturbed but undeveloped parcels of land. As noted above, on the project site this community is dominated by non-native grasses and herbaceous species, including black mustard, wild oat, foxtail barley, red brome, and ripgut brome.

5.4 Wildlife

Wildlife species common to non-native grasslands and other disturbed areas were observed using the project site, including common raven (*Corvus corax*), American crow (*Corvus brachyrhynchos*), turkey vulture (*Cathartes aura*), European starling (*Sturnus vulgaris*), and mourning dove (*Zenaida macroura*). A complete list of wildlife species observed on the site is included in Appendix A.

5.5 Potential Jurisdictional Wetlands and Streambeds

The project site does not support any areas that would be considered jurisdictional under Sections 401 or 404 of the CWA or Section 1602 of the California Fish and Game Code. No further studies to determine potential USACE, CDFW, and Regional Water Quality Control Board jurisdiction within the project site are required.





Photograph 1: Grassland with foxtail barley in the foreground. View looking north towards Lincoln Street.



Photograph 2: Grassland consisting of black mustard and common fiddleneck. View looking east towards Riverside Drive.

Figure 4 (Sheet 2 of 2): Representative Site Photographs



Photograph 3: View of grassland and Peruvian pepper trees looking north towards Lincoln Street.



Photograph 4: View of grassland looking west towards Flannery Street.

6 MSHCP COMPLIANCE

Specific survey requirements and conservation measures have been developed for the project site in accordance with its location within the MSHCP Planning Area. These survey requirements and conservation measures were identified by conducting a search of the online Western Riverside County Regional Conservation Authority (RCA) MSHCP Information Map and a review of general conservation requirements identified in Volume 1 of the MSHCP. **Table 2** summarizes the MSHCP Project Review Checklist to determine surveys and conservation measures necessary for MSHCP Compliance.

Table 2. MSHCP Project Review Checklist

MSHCP Project Review Checklist				
	Yes	No		
Is the project located in a Criteria Area or Public/Quasi-Public Land?		✓		
Is the project located in a Criteria Area Plant Survey Area?		√		
Is the project located in a Criteria Area Amphibian Survey Area?		✓		
Is the project located in a Criteria Area Mammal Survey Area?		✓		
Is the project located adjacent to MSHCP Conservation Areas?		✓		
Is the project located in a Narrow Endemic Plant Species Survey Area?		✓		
Are riverine/riparian/wetland habitats or vernal pools present?		✓		
Is the project located in a Burrowing Owl Survey Area?		✓		

6.1 Consistency with MSHCP Survey Requirements

6.1.1 Criteria Area/Criteria Cell Requirements

The MSHCP has designated certain lands for inclusion in the MSHCP Criteria Area, based on specified habitat characteristics identified within MSHCP Criteria Cells. If a project is located within a Criteria Cell or any other areas designated as Public/Quasi-Public Land, the project proponent is required to coordinate with the Western Riverside County RCA to negotiate RCA's potential purchase of the land for the purpose of inclusion in the MSHCP Criteria Area.

The project site is not located within an MSHCP Criteria Cell, is not within the MSHCP Criteria Area, and is not located within any Public/Quasi-Public Land. Therefore, no further analysis of the project site for inclusion in the MSHCP Criteria Area is required.

6.2 Riparian/Riverine and Vernal Pool Requirements

Riparian/riverine areas are lands that contain habitat dominated by trees, shrubs, and persistent emergent plant species that occur close to or depend upon soil moisture from a nearby water source; or areas with fresh water flowing during all or a portion of the year. Unvegetated drainages (ephemeral streams) may be included if alterations to that drainage have the potential to affect Covered Species and Conservation Areas. Vernal pools are seasonal wetlands that occur in depression areas that have exhibit all three wetland indicator parameters (soils, vegetation and hydrology) during the wetter portion of the growing season, but typically lack hydrology and/or vegetation wetland indicators during the drier portion of the growing season.

There are no areas that meet the MSHCP's definition of riparian/riverine areas or vernal pools that occur on the project site.

6.3 Narrow Endemic and Criteria Area Plant Species Survey Areas

The MSHCP has two types of designated plant survey areas: Narrow Endemic Plant Species Survey Areas (NEPSSA) and Criteria Area Species Survey Areas (CASSA). Focused plant surveys are required for projects located within the NEPSSA and CASSA if suitable habitat for target plant species occurs on a project site.

The project site is not located within an MSHCP NEPSSA or CASSA. Therefore, no further analysis of NEPSSA or CASSA species is required.

6.4 Cores and Linkages

A Core is a block of habitat that supports the life history requirements of Covered Species. A Linkage is a connection between Core Areas with adequate size, configuration, and vegetation characteristics to generally provide for "Live-In" habitat and/or provide for genetic flow for identified planning species.

The project site is not located within any areas identified for existing or potential use as Cores or Linkages. Because the project site does not fall within any of these identified areas, or support habitat that would contribute to a corridor or linkage area, no preservation is required or proposed. Several wildlife corridors and linkages exist within several miles of the project site. Existing Core E is located less than 1 mile east of the project site, and Existing Core A is located approximately 1.5 miles south of the project site. Proposed Constrained linkage 3 is located approximately 4.25 miles to the east of the project site. While these proposed and existing cores and linkages occur in the general project vicinity, the project site does not contribute to the enhancement of the linkages. In addition, the project site does not currently function as a wildlife corridor or linkage or nursery site based upon conditions onsite and in the surrounding areas, which consist of residential and commercial development.

6.5 Urban/Wildlands Interface Requirements

The MSHCP Conservation Area is intended to be assembled from portions of the Criteria Area and existing Public/Quasi-Public Lands. Any development in proximity to the MSHCP Conservation Area may result in edge effects that could adversely affect biological resources within the MSHCP Conservation Area. In order to reduce the impact of developments adjacent to Conservation Areas,

Section 6.1.4 of the MSHCP provides development guidelines in relation to drainage, toxics, lighting, noise, and invasive species.

The project is not located adjacent to any Criteria Cells or Public/Quasi-Public Lands and implementation of MSHCP Section 6.1.4 Guidelines is not required.

7 CEQA COMPLIANCE

7.1 Adopted Habitat Conservation Plans

The project site is within the MSHCP planning area. In addition to maintaining consistency with the MSHCP's goals and objectives, the Project applicant will be required to pay mitigation fees based on the type of development proposed. The current MSHCP fees (Fiscal Year 2020) for commercial development are \$7,382 per acre. The Project's consistency with MSHCP's goals and objectives is provided in Section 6. The project site is not covered by any other HCPs.

7.2 Threatened and Endangered Species

Appendix B includes a list of federally and/or state-listed threatened or endangered plant and wildlife species that were identified as occurring within the nine USGS quad database search and their potential for occurrence on the project site. Based on the field survey, the project site does not contain suitable habitat to support any federally and/or state-listed plant or wildlife species and none were observed during the site survey.

7.3 Other Special-Status Species

One special-status species, southern California black walnut, was observed on the project site. This species is an MSHCP Covered Species. Therefore, project impacts on this species will be covered through participation in and compliance with the MSHCP.

Table 3 provides the potential for occurrence of special-status plant and wildlife species that are not covered under the MSHCP or are not adequately conserved by the MSHCP at this time. If these species were to occur on the project site, additional avoidance, minimization, and/or mitigation measures may be required to avoid significant impacts on biological resources. As shown in Table 3, one other special-status species not adequately covered by the MSHCP, loggerhead shrike, has low potential to occur on the project site. **Measure BIO-1** will be implemented to avoid potential project impacts on nesting loggerhead shrike:

BIO-1 In order to avoid impacts to nesting birds, vegetation clearing should be scheduled outside of the nesting season (March 15 to August 15). If vegetation clearing is scheduled during the nesting season, a pre-construction survey should be conducted within 3 days prior to the commencement of these activities to ensure that no birds are nesting within the site. If birds are nesting within the site, a biologist will determine necessary steps (i.e., establishment of a buffer zone) to ensure nesting birds are not affected by project activities.

No other species in Table 3 are expected to occur in the project site due to a lack of suitable habitat.

Table 3: Potential for Occurrence of Special-Status Species in the Project Vicinity that are not Adequately Covered by the MSHCP

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
PLANTS				
Bryophytes				
Geothallus tuberosus Campbell's liverwort	US: – CA: 1B.1 MSHCP: NC	Found in mesic conditions in coastal sage scrub and vernal pools from 10 to 600 meters (30 to 2,000 feet) elevation. Known in California only from Riverside and San Diego Counties.	Ephemeral	Not Expected: No mesic conditions on site.
Sphaerocarpos drewei Bottle liverwort	US: – CA: 1B.1 MSHCP: NC	Found within soil openings in chaparral and coastal sage scrub in Riverside and San Diego Counties. Elevation from 90 to 600 meters (300 to 2,000 feet).	Ephemeral	Not Expected: No suitable habitat on site.
Texosporium sancti- jacobi Woven-spored lichen	US: – CA: 3 MSHCP: NC	A small whitish or gray crustose lichen of open sites in chaparral with chamise (<i>Adenostoma fasciculatum</i>), buckwheat (<i>Eriogonum</i> spp.), and spikemoss (<i>Selaginella</i>) from 290 to 660 meters (950 to 2,200 feet). Usually found on decaying organic matter where bioturbation (mixing of the soil profile by plants or animals) is restricted.	Seasonally following rains	Not Expected: No suitable habitat on site.
Tortula californica California screw- moss	US: – CA: 1B.2 MSHCP: NC	Moss of sandy soils in chenopod scrub and valley and foothill grassland from 10 to 1,460 meters (30 to 4,800 feet) elevation. Known only from Modoc, Kern, and western Riverside Counties.	Seasonally following rains	Low Potential: Site contains suitable soils. However, habitat on site is subject to high levels of disturbance.
Dicots				
Abronia villosa var. aurita Chaparral sand- verbena	US: – CA: 1B.1 MSHCP: NC	Sandy areas (generally flats and benches along washes) in chaparral and coastal sage scrub, and improbably in desert dunes (plants reported from desert communities are likely misidentified), or other sandy areas below 1,600 meters (5,300 feet) elevation. In California, reported from Riverside, San Diego, Imperial, Los Angeles, and Ventura Counties. Believed extirpated from Orange County.	Blooms mostly March through August (annual or perennial herb)	Not Expected: No suitable habitat on site.

Table 3: Potential for Occurrence of Special-Status Species in the Project Vicinity that are not Adequately Covered by the MSHCP

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Arctostaphylos rainbowensis Rainbow manzanita	US: – CA: 1B.1 MSHCP: P	Generally in gabbro chaparral in northwestern San Diego and southwestern Riverside Counties from 205 to 790 meters (670 to 2,600 feet) elevation. Known only from Riverside and San Diego Counties, California.	Blooms December through March (evergreen shrub)	Not Expected: No suitable habitat on site.
Atriplex coulteri Coulter's saltbush	US: – CA: 1B.2 MSHCP: NC	Alkaline or clay soils in ocean bluffs and ridge tops and alkaline low places in coastal bluff scrub, coastal dunes, coastal sage scrub, and valley and foothill grasslands below 460 meters (1,500 feet) elevation. In California, known only from Los Angeles, Orange, Santa Barbara, San Bernardino, San Luis Obispo, Ventura, and San Diego Counties. Reports of this species from Riverside County are based on misidentification of Davidson's saltscale (<i>Atriplex serenana</i> var. davidsonii) (Roberts et al. 2004).	Blooms March through October (perennial herb)	Not Expected: No suitable habitat on site and site is outside known geographic range.
Ayenia compacta California ayenia	US: – CA: 2B.3 MSHCP: NC	Rocky canyons and sandy and gravelly washes from 150 to 1,095 meters (500 to 3,600 feet) elevation in desert scrub. In California, occurs in Providence Mountains, Eagle Mountains, and the western edge of the Sonoran Desert.	Blooms March through April (subshrub)	Not Expected: No suitable habitat on site and site is outside known geographic range.
Calochortus weedii var. intermedius intermediate mariposa lily	US: – CA: 1B.2 MSHCP: P	Dry, open rocky slopes and rock outcrops in chaparral, coastal sage scrub, and grassland from 105 to 855 meters (340 to 2,800 feet) elevation. Known only from Los Angeles, Orange, Riverside, and San Bernardino Counties. In western Riverside County, this species is known from the hills and valleys west of Lake Skinner and Vail Lake (Roberts et al. 2004). Appears to intergrade with Plummer's mariposa lily (Calochortus plummerae), which occurs mostly east and north of the Santa Ana Mountains.	Blooms May through July (perennial bulbiferous herb)	Not Expected: Site contains grassland habitat. However, suitable rocky substrate is absent.

Table 3: Potential for Occurrence of Special-Status Species in the Project Vicinity that are not Adequately Covered by the MSHCP

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Centromadia parryi subsp. australis Southern tarplant	US: – CA: 1B.1 MSHCP: NC	In vernally wet areas such as the edges of marshes and vernal pools, the edges of roads and trails, and in other areas of compacted, poorly drained, or alkaline soils where competition from other plants is limited, often due to disturbance, below 425 meters (1,400 feet) elevation. In California, known only from Santa Barbara, Ventura, Los Angeles, Orange, and San Diego Counties.	Blooms May through November (annual herb)	Not Expected: No suitable habitat on site and site is outside known geographic range.
Chorizanthe parryi var. parryi Parry's spineflower	US: – CA: 1B.1 MSHCP: P	Sandy or rocky soils in chaparral, coastal scrub, or woodlands from 40 to 1,705 meters (100 to 5,600 feet) elevation. Known only from Los Angeles, Riverside, and San Bernardino Counties.	Blooms April through June (annual herb)	Not Expected: No suitable habitat on site.
Chorizanthe xanti var. leucotheca White-bracted spineflower	US: – CA: 1B.2 MSHCP: NC	Sandy to gravelly places in Mojave desert scrub, pinyon and juniper woodland, or coastal scrub from 300 to 1,200 meters (980 to 3,900 feet) elevation. Reported from Los Angeles, Riverside, and San Bernardino Counties.	Blooms April through June (annual herb)	Not Expected: No suitable habitat on site.
Comarostaphylis diversifolia subsp. diversifolia Summer holly	US: – CA: 1B.2 MSHCP: NC	Chaparral or cismontane woodland from 30 to 790 meters (100 to 2,600 feet). In California, known only from Orange, Riverside, and Santa Barbara, and San Diego Counties.	Blooms April through June (perennial evergreen shrub)	Not Expected: No suitable habitat on site.
Dudleya cymosa subsp. ovatifolia Santa Monica dudleya	US: FT CA: 1B.1 MSHCP: NC	Cracks and crevices of rock outcrops and cliff faces (volcanic or sedimentary) in canyons (primarily on north-facing slopes) in chaparral and coastal scrub from 150 to 1,700 meters (500 to 5,500 feet) elevation. Known only from Los Angeles and Orange Counties.	Blooms March through June (perennial herb)	Not Expected: No suitable habitat on site and site is outside known geographic range.
Dudleya viscida Sticky dudleya	US: – CA: 1B.2 MSHCP: P	Rocky areas in coastal bluff scrub, chaparral, coastal sage scrub, and cismontane woodland from 10 to 550 meters (30 to 1,800 feet) elevation. Known only from Orange and San Diego Counties.	Blooms May through June (perennial herb)	Not Expected: No suitable habitat on site and site is outside known geographic range.

Table 3: Potential for Occurrence of Special-Status Species in the Project Vicinity that are not Adequately Covered by the MSHCP

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Hesperocyparis forbesii Tecate cypress	US: – CA: 1B.1 MSHCP: NC	Evergreen tree found in closed- cone coniferous forest and chaparral at elevations from 255 to 1,500 meters (800 to 5,000 feet). In California, known from Orange and San Diego Counties. Trees known from Riverside County are planted.	Year-round (evergreen tree)	Not Expected: No suitable habitat on site.
Horkelia cuneata subsp. puberula Mesa horkelia	US: – CA: 1B.1 MSHCP: NC	Sandy or gravelly soils in chaparral, or rarely in cismontane woodland or coastal scrub from 70 to 825 meters (200 to 2,700 feet) elevation. Known only from San Luis Obispo, Santa Barbara, Ventura, Los Angeles, Orange, and San Bernardino Counties. Believed extirpated from Riverside and San Diego Counties.	Blooms February through July (sometimes to September) (perennial herb)	Not Expected: No suitable habitat on site and site is outside current known geographic range.
Imperata brevifolia California satintail	US: – CA: 2B.1 MSHCP: NC	Desert seeps, springs, moist canyons, canals, alkaline sinks, and similar wet areas below 500 meters (1,600 feet) elevation. Widespread in California and the western U.S.	Blooms September through May (perennial rhizomatous herb)	Not Expected: No suitable habitat on site.
Juncus luciensis Santa Lucia dwarf rush	US: – CA: 1B.2 MSHCP: NC	Chaparral, Great Basin scrub, lower montane coniferous forest, meadows and seeps, and vernal pools from 300 to 2,040 meters (984 to 6,693 feet) elevation. Widespread throughout California.	Blooms April through July (annual herb)	Not Expected: No suitable habitat on site.
Monardella hypoleuca subsp. intermedia Intermediate monardella	US: – CA: 1B.3 MSHCP: NC	Often found in the understory in steep, brushy areas in chaparral, cismontane woodland, and sometimes in lower montane coniferous forests from 200 to 1,250 meters (660 to 4,100 feet). Endemic to California, only known from Orange, Riverside, and San Diego Counties.	Blooms April through September (perennial rhizomatous herb)	Not Expected: No suitable habitat on site.
Monardella hypoleuca subsp. lanata felt-leaved monardella	US: – CA: 1B.2 MSHCP: NC	Chaparral and cismontane woodland from 300 to 1,575 meters (1,000 to 5,200 feet) elevation. Known from Peninsular Ranges in Orange and San Diego Counties and from northern Baja California.	Blooms June through August (perennial rhizomatous herb)	Not Expected: No suitable habitat on site and site is outside known geographic range.

Table 3: Potential for Occurrence of Special-Status Species in the Project Vicinity that are not Adequately Covered by the MSHCP

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Nolina cismontana Chaparral nolina	US: – CA: 1B.2 MSHCP: NC	Sandstone or gabbro in chaparral and coastal sage scrub from 140 to 1,275 meters (500 to 4,200 feet) elevation. Known from Orange, Riverside, San Diego, and Ventura Counties.	Blooms May through July (perennial shrub)	Not Expected: No suitable habitat on site.
Pentachaeta aurea subsp. allenii Allen's pentachaeta	US: – CA: 1B.1 MSHCP: NC	Grasslands and openings in coastal scrub from 75 to 520 meters (250 to 1,700 feet) elevation. Known only from Orange County.	Blooms March through June (annual herb)	Not Expected: No suitable habitat on site and site is outside known geographic range.
Phacelia keckii Santiago Peak phacelia	US: – CA: 1B.3 MSHCP: NC	Closed-cone coniferous forest and chaparral at elevations from 545 to 1,600 meters (1,800 to 5,200 feet). Known from Orange and Riverside Counties. In western Riverside County, this species is scarce and known from higher elevations in the Santa Ana Mountains, Agua Tibia Mountains, and Arroyo Seco Creek (Roberts et al. 2004).	Blooms May through June (annual herb)	Not Expected: No suitable habitat on site and site is outside known geographic range.
Pseudognaphalium leucocephalum White rabbit-tobacco	US: – CA: 2B.2 MSHCP: NC	Sand and gravel at the edges of washes or mouths of steep canyons below 2,100 meters (7,000 feet) elevation. In California, known from Los Angeles, Orange, Riverside, Santa Barbara, San Diego, San Luis Obispo, and Ventura Counties.	Blooms August through November (perennial herb)	Not Expected: No washes or steep canyons on site.
Quercus dumosa Nuttall's scrub oak	US: – CA: 1B.1 MSHCP: NC	On sandy and clay loam soils near the coast within closed-cone coniferous forest, chaparral, and coastal scrub from 15 to 400 meters (50 to 1,300 feet) elevation. In California, known only from western Orange, Santa Barbara, and San Diego Counties.	Blooms February through August (perennial evergreen shrub)	Not Expected: No suitable habitat on site and site is outside known geographic range.
Scutellaria bolanderi subsp. austromontana Southern mountains skullcap	US: – CA: 1B.2 MSHCP: NC	Mesic areas in gravelly soils of stream banks or in oak or pine woodland (rarely chaparral) from 425 to 2,000 meters (1,400 to 6,600 feet) elevation. Known from Riverside and San Diego Counties. Believed extirpated from San Bernardino County and perhaps Los Angeles County.	Blooms June through August (perennial herb)	Not Expected: No mesic areas or stream banks on site.

Table 3: Potential for Occurrence of Special-Status Species in the Project Vicinity that are not Adequately Covered by the MSHCP

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Sidalcea neomexicana salt spring checkerbloom	US: – CA: 2B.2 MSHCP: NC	Alkaline springs and brackish marshes below 1,530 meters (5,000 feet) elevation. In California, known only from Kern, Orange, Riverside, San Bernardino, San Diego, and Ventura Counties. Believed extirpated from Los Angeles County.	Blooms March through June (perennial herb)	Not Expected: No suitable habitat on site.
Symphyotrichum defoliatum San Bernardino aster	US: – CA: 1B.2 MSHCP: NC	Vernally wet sites (such as ditches, streams, and springs) in many plant communities below 2,040 meters (6,700 feet) elevation. In California, known from Ventura, Kern, San Bernardino, Los Angeles, Orange, Riverside, and San Diego Counties. May also occur in San Luis Obispo County. In the western Riverside County area, this species is scarce, and documented only from Temescal and San Timoteo Canyons (Roberts et al. 2004).	Blooms July through November (perennial herb)	Not Expected: No vernally wet areas on site.
Tetracoccus dioicus Parry's tetracoccus	US: – CA: 1B.2 MSHCP: NC	Dry stony slopes in chaparral and coastal sage scrub from 165 to 1,000 meters (500 to 3,300 feet) elevation. Known in California only from Orange, Riverside, and San Diego Counties.	Blooms April through May (perennial deciduous shrub)	Not Expected: No dry stony slopes on site.
Viguiera purisimae La Purisima viguiera	US: – CA: 2B.3 MSHCP: NC	Dry, rocky places in coastal bluff scrub and chaparral from 365 to 425 meters (1,200 to 1,400 feet) elevation. Known in California only from Camp Pendleton in San Diego County.	Blooms April through September (shrub)	Not Expected: No suitable habitat on site and site is outside known geographic range.
Reptiles				

Table 3: Potential for Occurrence of Special-Status Species in the Project Vicinity that are not Adequately Covered by the MSHCP

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Anniella stebbinsi Southern California legless lizard	US: – CA: SSC MSHCP: NC	Little is known about this species and this information is based on California legless lizard (<i>Anniella pulchra</i>) before it was split into five species. Occurs in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodland, desert scrub, sandy washes, and stream terraces (Papenfuss and Parham 2013). Found throughout southern California south of the Transverse Ranges into northern Baja California, Mexico. Populations in the Tehachapi and Piute Mountains of Kern County are disjunct from the main distribution of this species to the south. Therefore, the distribution of southern California legless lizard is presumably bisected by southern populations of California legless lizard ranging from the Santa Barbara region into the Antelope Valley (Nafis 2012).	Year-round	Not Expected: Site does not contain suitable habitat.
Arizona elegans occidentalis California glossy snake	US: – CA: SSC MSHCP: NC	Ranges in the cismontane portion of southern California, the southern portion of the Central Coast Ranges, and in isolated pockets up to the Alameda and San Joaquin County border. Generally found in open desert, grasslands, shrublands, chaparral, and woodlands. Some evidence of open and sandy habitat preference exists, but specific habitat requirements for this species aren't known (Thomson et al. 2016).	Year-round	Not Expected: Site does not contain suitable habitat.
Salvadora hexalepis virgultea Coast patch-nosed snake	US: – CA: SSC MSHCP NC	Coastal chaparral, washes, sandy flats, and rocky areas. Widely distributed throughout lowlands of Southern California from coast to the eastern border up to 2,130 meters (7,000 feet) elevation.	Active diurnally throughout most of the year	Not Expected: Site is outside of this species' range.
Thamnophis hammondii Two-striped garter snake	US: – CA: SSC MSHCP: NC	Highly aquatic. Only in or near permanent sources of water. Streams with rocky beds supporting willows (<i>Salix</i> spp.) or other riparian vegetation. From Monterey County to northwest Baja California.	Diurnal Year- round	Not Expected: No water sources on site to support this species.

Table 3: Potential for Occurrence of Special-Status Species in the Project Vicinity that are not Adequately Covered by the MSHCP

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Birds	Otatus	Trabitat and Distribution	Activity Feriou	Trobability
Asio otus Long-eared owl	US: – CA: SSC MSHCP: NC	Scarce and local in forests and woodlands throughout much of the Northern Hemisphere. Rare resident in coastal southern California. Nests and roosts in dense willow-riparian woodland and oak woodland, but forages over wider areas. Breeds from valley foothill hardwood up to ponderosa pine habitat.	Nocturnal Year- round	Not Expected: Site does not contain suitable habitat.
Charadrius alexandrinus nivosus (nesting) Western snowy plover	US: FT (coastal population) CA: SSC MSHCP: NC	Sandy coastal beaches, lakes, alkaline playas. Scattered locations along coastal California and Channel Islands, inland at Salton Sea, and at various alkaline lakes.	Coast: Year- round Inland lakes: April through September	Not Expected: Site does not contain any water bodies.
Lanius Iudovicianus Loggerhead shrike	US: – CA: SSC MSHCP: NC	Prefers open habitats with scattered small trees and with fences, utility lines, or other perches. Inhabits open country with short vegetation, pastures, old orchards, cemeteries, golf courses, riparian areas, and open woodlands. Highest density occurs in open-canopied valley foothill hardwood-conifer, valley foothill riparian, pinyon-juniper, juniper, desert riparian, and Joshua tree habitats. Occurs only rarely in heavily urbanized areas, but often found in open cropland. Found in open country in much of North America.	Year-round	Moderate: Habitat on site is highly degraded, but contains grassland areas preferred by this species for foraging and trees for nesting.
Crustaceans				
Branchinecta sandiegonensis San Diego fairy shrimp	US:FE CA: – MSHCP: NC	Small, shallow (usually less than 30 centimeters deep), relatively clear but unpredictable vernal pools on coastal terraces. Pools must retain water for a minimum of 13 days for this species to reproduce (3 to 8 days for hatching, and 10 to 20 days to reach reproductive maturity). Known from Orange and San Diego Counties, and Baja California.	Seasonally following rains in late fall, winter, and spring	Not Expected: Site does not contain suitable habitat.
Mammals				

Table 3: Potential for Occurrence of Special-Status Species in the Project Vicinity that are not Adequately Covered by the MSHCP

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Antrozous pallidus Pallid bat	US: – CA: SSC MSHCP: NC	Most common in open, dry habitats with rocky areas for roosting. Day roosts in caves, crevices, rocky outcrops, tree hollows or crevices, mines and occasionally buildings, culverts, and bridges. Night roosts may be more open sites, such as porches and open buildings. Grasslands, shrublands, woodlands, and forest in western North America.	Year-round; nocturnal	Not Expected: No roosting areas on site. No water sources to support foraging.
Eumops perotis californicus Western mastiff bat	US: – CA: SSC MSHCP: NC	Occurs in many open, semi-arid to arid habitats, including coniferous and deciduous woodlands, coastal scrub, grasslands, chaparral, and others; roosts in crevices in vertical cliff faces, high buildings, and tunnels, and travels widely when foraging.	Year-round; nocturnal	Not Expected: No roosting habitat. No water sources to support foraging.
Lasiurus blossevillii Western red bat	US: – CA: SSC MSHCP: NC	Roosts in the foliage of trees and shrubs, commonly in edge habitats along streams or open fields, and sometimes in orchards or urban areas. Often associated with riparian habitats, particularly those containing sycamores and cottonwoods.	Year-round; nocturnal	Not Expected: No roosting habitat. No water sources to support foraging.
Myotis yumanensis Yuma myotis	US: – CA: SA MSHCP: NC	Optimal habitats are open forests and woodlands with sources of water over which to feed. Common and widespread in California. Uncommon in the Mojave and Colorado Desert regions, except for mountains. Ranging generally from sea level to 2,440 meters (8,000 feet). Roosts in buildings, mines, caves or crevices, occasionally in swallow nests and under bridges.	Primarily the warmer months	Not Expected: No roosting habitat. No water sources to support foraging.
Nyctinomops femorosaccus Pocketed free- tailed bat	US: – CA: SSC MSHCP: NC	Usually associated with cliffs, rock outcrops, or slopes. May roost in buildings (including roof tiles) or caves. Rare in California, where it is found in Riverside, San Diego, Imperial, and possibly Los Angeles Counties.	Year-round; nocturnal	Not Expected: No roosting habitat. No water sources to support foraging.

Legend

US: Federal Classifications

FE Taxa listed as Endangered.
FT Taxa listed as Threatened.

CA: State Classifications				
SE	Taxa State-listed as Endangered.			
SSC	California Species of Special Concern. Refers to animals with vulnerable or seriously declining populations.			
SA	Special Animal. Refers to any other animal monitored by the Natural Diversity Data Base, regardless of its legal or protection status.			
1B	California Rare Plant Rank 1B: Rare, threatened, or endangered in California and elsewhere.			
2	California Rare Plant Rank 2: Rare, threatened, or endangered in California, but more common elsewhere.			
3	California Rare Plant Rank 3: A review list of plants about which more information is needed.			
0.1	Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)			
0.2	Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)			
0.3	Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)			
MSHCP: Classifications				
NC	Species is not covered under the MSHCP.			

California Rare Plant Ranks are assigned by a committee of government agency and non-governmental botanical experts and are not official State designations of rarity status.

Species is covered and will be adequately conserved when MSHCP specified requirements are met.

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7.3.1 Migratory Bird Treaty Act

Utility poles adjacent to the project site may support suitable nesting habitat for raptors. The Mediterranean California naturalized annual and perennial grassland dominated by non-native plants and the mature trees on the project site provide suitable nesting and foraging habitat for avian species protected under the Migratory Bird Treaty Act. In addition, CDFW prohibits the take, possession, or destruction of birds, their nests or eggs under California Fish and Game Code Sections 3500 - 5500. **Measure BIO-1** will be implemented to avoid potential project impacts on birds protected under the Migratory Bird Treaty Act and California Fish and Game Code Sections 3500 - 5500.

7.4 Wildlife Movement Corridors and Nursery Sites

Habitat used for wildlife movement includes areas used for seasonal migration along corridors, as well as daily movements for foraging and reaching water sources. Migrational corridors may include areas of unobstructed movement for deer, riparian corridors providing cover for migrating birds, routes between breeding waters and upland habitat for amphibians, and between roosting and feeding areas for birds.

The project site is not located within or adjacent to any identified MSHCP Cores or Linkages and does not currently function as a wildlife corridor or linkage or nursery site based upon conditions onsite and in the surrounding areas, which consist of residential and commercial development. In addition, the Mediterranean California naturalized annual and perennial grassland habitat does not function as a nursery site for wildlife. Therefore, the proposed project will not interfere with wildlife movement corridors or nursery sites.

7.5 Natural Communities of Interest

The project site supports Mediterranean California naturalized annual and perennial grassland habitat, which is not considered sensitive or of special concern to the MSHCP, CDFW, or USFWS.

7.6 Wetlands and Other Jurisdictional Features

There are no jurisdictional wetlands or other jurisdictional features within the proposed project activity limits. Therefore, the proposed project will not result in any impacts on potentially jurisdictional wetlands or other potentially jurisdictional features.

7.7 Local Policies and Ordinances Protecting Biological Resources

County General Plans and development ordinances may include regulations or policies governing biological resources. For example, policies may include tree preservation, locally designated species survey areas, local species of interest, and significant ecological areas.

There are no local ordinances applicable to biological resources that apply to the project site except for code provisions related to the MSHCP. The project will not be in conflict with any local policies or ordinances applicable to existing biological resources on site.

7.8 Indirect Impacts

Indirect impacts on surrounding areas as a result of the project may include, but are not limited to, increased dust, noise, lighting, traffic, and storm water runoff. The project would implement Best Management Practices as part of the required Stormwater Pollution and Prevention Plan, which would minimize these potential project impacts. The project is surrounded by developed or disturbed land; therefore, no other indirect impacts on biological resources are anticipated.

7.9 Cumulative Impacts

Cumulative impacts as a result of development of the proposed project contribute incrementally to the conversion of vacant land to developed areas. However, the site is already disturbed and is surrounded by development and, therefore, does not currently contribute substantial habitat value to plants or wildlife.

The intent of the MSHCP is to preserve native vegetation and meet the habitat needs of multiple species, rather than focusing preservation efforts on one species at a time. The MSHCP provides coverage (including take authorization for listed species) for special-status plant and animal species, as well as mitigation for impacts on special-status species and associated native habitats. The MSHCP will result in an MSHCP Conservation Area in excess of 500,000 acres and focuses on the conservation of 146 species. Section 5.1.1 of the MSHCP Final EIR/EIS states that "implementation of the MSHCP and Covered Projects will not result in a cumulative adverse effect, either directly or through habitat modifications, on any of the Covered Species, including the 31 species that are currently listed as threatened or endangered and the one species that is currently proposed for listing. Implementation of the MSHCP will benefit the Covered Species by preserving their habitat in order to address their life cycle needs. Thus, based on the features of the Plan itself, impacts to Covered Species are mitigated below a level of significance."

Since the proposed project will be in compliance with the MSHCP, cumulative impacts on covered species and habitat will be mitigated by participation in the MSHCP.

8 REFERENCES

- California Department of Fish and Wildlife. 2020. RareFind 5 California Natural Diversity Database Online Search. Accessed April 17, 2020. https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data.
- California Department of Fish and Game. 2003. List of California Terrestrial Natural Communities Recognized by the Natural Diversity Data Base. September.
- California Native Plant Society, Rare Plant Program. 2020. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Accessed April 17, 2020. http://www.rareplants.cnps.org.
- California, State of. *California Fish and Game Code*. Office of Legislative Counsel online legislation database access. http://leginfo.legislature.ca.gov/.
- Google Earth. 2020. *Aerial imagery for the survey area*. Imagery dated: August 13, 2018. Accessed: April 2020.
- Jepson Flora Project (eds.). 2020. Jepson eFlora. Accessed April 2020. http://ucjeps.berkeley.edu/eflora/.
- Nafis, Gary. 2012. California Herps: A Guide to Reptiles and Amphibians of California. Available online: http://www.californiaherps.com/.
- Papenfuss, T.J., and J.F. Parham. 2013. Four New Species of California Legless Lizards (Anniella). Breviora. Number 536:1-17.
- Riverside County Transportation and Land Management Agency. 2003. Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Final MSHCP—Volumes 1 and 2. Approved June 17, 2003.
- Riverside, County of. 2019. Metadata for Western Riverside County Multiple Species Habitat Conservation Plan provided by County GIS Department. Riverside, California.
- Roberts Jr, F. M., White, S. D., Sanders, A.C., Bramlet, D. E., Boyd, S. 2004. *The Vascular Plants of Western Riverside County, California*. F.M. Roberts Publications. San Luis Rey, CA. 192 pp.
- Sawyer, J., T. Keeler-Wolf, and J. Evens. 2009. *A Manual of California Vegetation*. California Native Plant Society, Second Edition. Sacramento, California.
- Thomson, Robert C., Wright, Amber N., and Shaffer H. Bradley. 2016. California Amphibian and Reptile Species of Special Concern. University of California Press Berkeley, CA. United States

- Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS). 2020. Web Soil Survey. Accessed April 24, 2020. http://websoilsurvey.nrcs.usda.gov/.
- United States Fish and Wildlife Service. 2018. Federal Endangered Species Act. Website last updated January 30, 2020. Accessed April 24, 2020. https://www.fws.gov/endangered/laws-policies/esa.html.
- ——— 2020. Information for Planning and Consultation. Carlsbad Fish and Wildlife office. Accessed April 17, 2020. https://ecos.fws.gov/ipac/.
- Western Riverside County Regional Conservation Authority MSHCP Information Map. Accessed April 24, 2020.
 - http://wrcrca.maps.arcgis.com/apps/webappviewer/index.html?id=a73e69d2a64d41c29ebd3acd67467abd).

Appendix A. Plant and Wildlife Species Observed

Inventory of Plant Species Observed

Scientific Name	Common Name	Status Federal/State/CRPR
DICOTYLEDONES - "DICOTS"		
Amaranthaceous – Family		
Amaranthus albus	tumbleweed	none
Anacardiaceae – Cashew or Sumac I	Family	
*Schinus molle	pepper tree	none
Brassicaceae – Mustard Family		
*Brassica nigra	black mustard	none
Boraginaceae Borage Family		
Amsinckia intermedia	common fiddleneck	none
Fabaceae – Pea Family		
Melilotus indicus	sourclover	none
Juglandaceae – Walnut Family		
Juglans californica	southern California black walnut	CRPR 4.2
Malvaceae – Mallow Family		
*Malva parviflora	cheeseweed	none
Oleaceae – Olive Family		
*Olea europaea	olive	none
Urticaceae – Stinging Nettle Family		
*Urtica sp.	stinging nettle	none
MONOCOTS		
Poaceae – Grass Family		
*Avena fatua	wild oat	none
*Bromus diandrus	ripgut brome	none
*Bromus madritensis subsp. rubens	red brome	none
*Hordeum murinum	foxtail barley	none

^{*}Non-native species

Inventory of Wildlife Species Observed

Common Name	Scientific Name	Status
CLASS: AVES (Birds)		·
Accipitriformes		
Cathartidae		
Turkey vulture	Cathartes aura	-
Columbiformes		
Columbidae		
Mourning dove	Zenaida macroura	-
Passeriformes		
Corvidae		
American crow	Corvus brachyrhynchos	-
Common raven	Corvus corax	-
Sturnidae		
European starling	Sturnus vulgaris	-
Tyrannidae		
Black phoebe	Sayornis nigricans	-
Western kingbird	Tyrannus verticalis	-
Piciformes		
Picidae		
Acorn woodpecker	Melanerpes formicivorus	-
CLASS: MAMMALIA (MAMMALS)		
Rodentia (Rodents)		
California ground squirrel	Spermophilus beecheyi	-

Appendix B: Special-Status Species Potentially Occurring in the Project Vicinity that are Adequately Covered by the MSHCP

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Monocot			1	
Allium munzii Munz's onion	US: FE CA: CT, 1B.1 MSHCP: S	Seasonally moist sites on clay soils (generally) or within rocky outcrops (pyroxenite) on rocky-sandy loams (such as Cajalco, Las Posas, and Vallecitos) with clay subsoils, in openings within coastal sage scrub, pinyon juniper woodland, chaparral, and grassland from 1,000 to 3,500 feet (300 to 1,070 meters) above mean seal level (AMSL). Known only from western Riverside County in the greater Perris Basin (Temescal Canyon-Gavilan Hills/Plateau, Murrieta-Hot Springs areas) and within the Elsinore Peak (Santa Ana Mountains) and Domenigoni Hills regions.	Blooms March through May (perennial bulbiferous herb)	Not Expected: No suitable habitat on site.
Orcuttia californica California Orcutt grass	US: FE CA: CE, 1B.1 MSHCP: S	Vernal pools from 15 to 660 meters (50 to 2,200 feet) elevation. In California, known from Los Angeles, Ventura, Riverside, and San Diego Counties.	Blooms April through August (annual herb)	Not Expected: No suitable habitat on site.
Dicots				
Ambrosia pumila San Diego ambrosia	US: FE CA: 1B.1 MSHCP: S	Occurs in open, seasonally wet, generally low areas in floodplains or at edges of vernal pools or playas, usually in sandy loam or on clay (including upland clay slopes) from 70 to 1,360 feet (20 to 415 meters) AMSL. Known from western Riverside and western San Diego Counties.	Blooms April through October (perennial rhizomatous herb)	Not Expected: No suitable habitat on site.
Atriplex coronata var. notatior San Jacinto Valley crownscale	US: FE CA: 1B.1 MSHCP: S	Alkaline flats in playas, chenopod scrub, valley and foothill grasslands, and vernal pools from 365 to 520 meters (1,200 to 1,700 feet) elevation. Endemic to the San Jacinto River Valley area of western Riverside County.	Blooms April through August (annual herb)	Not Expected: No suitable habitat on site.

Brodiaea filifolia Thread-leaved brodiaea	US: FT CA: CE, 1B.1 MSHCP: S	Usually on clay or associated with vernal pools or alkaline flats; occasionally in vernally moist sites in fine soils (clay loam, silt loam, fine sandy loam, loam, loamy fine sand). Typically associated with needlegrass or alkali grassland or vernal pools. Occurs from 25 to 1,120 meters (80 to 3,700 feet) elevation. Known only from Los Angeles, Orange, Riverside, San Bernardino, San Diego, and San Luis Obispo Counties, California.	Blooms March through June (perennial bulbiferous herb)	Not Expected: No suitable habitat on site.
Brodiaea orcuttii Orcutt's brodiaea	US: – CA: 1B.1 MSHCP: C	Clay and some serpentine soils, usually associated with streams or vernal pools, from 30 to 1,700 meters (100 to 5,600 feet) elevation. In California, known only from Riverside and San Diego Counties.	Blooms May through July (perennial bulbiferous herb)	Not Expected: No suitable habitat on site.
Centromadia pungens subsp. laevis Smooth tarplant	US: – CA: 1B.1 MSHCP: S	Generally alkaline areas in chenopod scrub, meadows, playas, riparian woodland, valley and foothill grassland below 480 meters (1,600 feet) elevation. Known from Riverside and San Bernardino Counties, extirpated from San Diego County.	Blooms April through September (annual herb)	Not Expected: No suitable habitat on site.
Chorizanthe polygonoides var. longispina Long-spined spineflower	US: – CA: 1B.2 MSHCP: C	Generally clay soils in chaparral, coastal sage scrub, and grassland from 30 to 1,530 meters (100 to 5,000 feet) elevation. In California, known only from Orange, Riverside, Santa Barbara, and San Diego Counties.	Blooms April through July (annual herb)	Not Expected: No suitable soils on site.
Clinopodium chandleri San Miguel savory	US: – CA: 1B.2 MSHCP: S	Rocky moist sites in oak woodland or tall dense chaparral or at the margins of these communities in coastal sage scrub or grassland from 110 to 1,210 meters (400 to 4,000 feet) elevation. Prefers moist rocky canyons with trees or large shrubs. Known only from Orange, Riverside, and San Diego Counties, and Baja California, Mexico. In western Riverside County, restricted to the Santa Ana Mountains.	Blooms March through July (perennial shrub)	Not Expected: No suitable habitat on site.

Dodecahema leptoceras	US: FE	In the Vail Lake area, occurs in gravel soils of	Blooms April through	Not Expected: No
Slender-horned spineflower	CA: CE, 1B.1 MSHCP: S	Temecula arkose deposits in openings in chamise chaparral. In other areas, occurs in sandy cobbly riverbed alluvium in alluvial fan sage scrub (usually late seral stage), on floodplain terraces and benches that receive infrequent overbank deposits from generally large washes or rivers, where it is most often found in shallow silty depressions dominated by leather spineflower (<i>Lastarriaea coriacea</i>) and other native annual species, and is often associated with cryptogamic soil crusts composed of bryophytes, algae and/or lichens. Occurs at 200 to 760 meters (600 to 2,500 feet) elevation. Known only from Los Angeles, Riverside, and San Bernardino Counties.	June (annual herb)	suitable habitat on site.
Dudleya multicaulis Many-stemmed dudleya	US: – CA: 1B.2 MSHCP: S	Heavy, often clay soils or around granitic outcrops in chaparral, coastal sage scrub, and grassland below 790 meters (2,600 feet) elevation. Known only from Los Angeles, Orange, Riverside, San Bernardino, and San Diego Counties.	Blooms April through July (perennial herb)	Not Expected: No suitable habitat on site.
Eryngium aristulatum var. parishii San Diego button-celery	US: FE CA: CE, 1B.1 MSHCP: C	Vernal pools and similar mesic habitats in coastal scrub and grassland from 15 to 620 meters (50 to 2,000 feet) elevation. In California, known only from Riverside and San Diego Counties. In Riverside County, this species is known only from the Santa Rosa Plateau.	Blooms April through June (annual/perennial herb)	Not Expected: No suitable habitat on site.
Hordeum intercedens Vernal barley	US: – CA: 3.2 MSHCP: C	Vernal pools and saline flats and depressions below 1,000 meters (3,300 feet) elevation. Known from many California Counties.	Blooms March through June (annual herb)	Not Expected: No suitable habitat on site.
Lasthenia glabrata subsp. coulteri Coulter's goldfields	US: – CA: 1B.1 MSHCP: S	Usually alkaline soils in marshes, playas, vernal pools, and valley and foothill grassland below 1,400 meters (4,600 feet) elevation. Known from Colusa, Merced, Tulare, Orange, Riverside, Santa Barbara, San Diego, San Luis Obispo, and Ventura Counties. Believed extirpated from Kern, Los Angeles, San Bernardino Counties, and possibly Tulare Counties.	Blooms February through June (annual herb)	Not Expected: No suitable habitat on site.

Lepechinia cardiophylla Heart-leaved pitcher sage	US: – CA: 1B.2 MSHCP: S	Closed cone coniferous forest, chaparral, and cismontane woodland from 550 to 1,370 meters (1,800 to 4,500 feet) elevation. Occurs in the Santa Ana Mountains in Riverside and Orange Counties. Also reported from San Diego County and Baja California.	Blooms April through July (perennial shrub)	Not Expected: No suitable habitat on site.
Myosurus minimus subsp. apus Little mousetail	US: – CA: 3.1 MSHCP: S	Alkaline areas in vernal pools from 20 to 640 meters (70 to 2,100 feet) elevation. In California, known only from the Central Valley and the coastal and inland areas of Southern California.	Blooms March through June (annual herb)	Not Expected: No suitable habitat on site.
Nama stenocarpa Mud nama	US: – CA: 2B.2 MSHCP: S	Lake shores, riverbanks, and similar intermittently wet areas from 5 to 500 meters (20 to 1,600 feet) elevation. Known in California from San Diego, Orange, and Riverside Counties and from San Clemente Island. Believed extirpated from Los Angeles and Imperial Counties.	Blooms January through July (annual/perennial herb)	Not Expected: No suitable habitat on site.
Navarretia prostrata Prostrate vernal pool navarretia	US: – CA: 1B.1 MSHCP: S	Vernal pools, usually alkaline, from 15 to 1,210 meters (50 to 4,000 feet) elevation. Known only from Alameda, Fresno, Los Angeles, Merced, Monterey, Orange, Riverside, San Benito, San Diego, and San Luis Obispo Counties. Presumed extirpated from San Bernardino County.	Blooms April through July (annual herb)	Not Expected: No suitable habitat on site.
Amphibians				
Anaxyrus californicus Arroyo toad	US: FT CA: SSC MSHCP: S	Washes and arroyos with open water; sand or gravel beds; for breeding, pools with sparse overstory vegetation. Coastal and a few desert streams from Santa Barbara County to Baja California.	March through July	Not Expected: No water sources on site to support this species.
Rana draytonii California red-legged frog	US: FT CA: SSC MSHCP: S	Deep, quiet pools of streams, marshes, and occasionally ponds, with dense, shrubby vegetation at edges, usually below 1,200 meters (4,000 feet). Foothills surrounding the Sacramento Valley and coastal streams from Marin County to northwestern Baja California. Believed to be extirpated between Los Angeles County and the Mexican border.	December through April	Not Expected: No water sources on site to support this species.

US: – CA: SSC MSHCP: C	Grasslands and occasionally hardwood woodlands; largely terrestrial but requires rain pools or other ponded water persisting at least three weeks for breeding; burrows in loose soils during dry season. Occurs in the Central Valley and adjacent foothills, the non-desert areas of southern California, and Baja California.	October through April (following onset of winter rains)	Not Expected: No water sources on site to support this species.
US: – CA: SSC MSHCP: C	Breeds in ponds, reservoirs, and slow-moving streams with long-lasting (at least through July) clean water; uses nearby upland areas including grassland, chaparral, and woodland; coastal drainages from Mendocino County south to San Diego County, with populations from San Luis Obispo County south designated as sensitive.	October through May	Not Expected: No water sources on site to support this species.
US: – CA: SSC MSHCP: C	Wide variety of habitats including coastal sage scrub, sparse grassland, and riparian woodland; coastal and inland valleys and foothills; Ventura County to Baja California.	April through August	Not Expected: Site does not contain suitable habitat.
US: – CA: SSC MSHCP: C	Inhabits permanent or nearly permanent water. Absent from desert regions, except in the Mojave Desert along the Mojave River and its tributaries. Requires basking sites such as partially submerged logs, rocks, or open mud banks.	Year-round with reduced activity November through March	Not Expected: No water sources on site to support this species.
US: – CA: SSC MSHCP: C	Primarily in sandy soil in open areas, especially washes and floodplains, in many plant communities. Requires open areas for sunning, bushes for cover, patches of loose soil for burial, and an abundant supply of ants or other insects. Occurs west of the deserts from northern Baja California north to Shasta County below 2,400 meters (8,000 feet) elevation.	April through July with reduced activity August through October	Not Expected: Site is outside of this species' range.
US: – CA: FP MSHCP: C	Generally open country of the Temperate Zone worldwide. Nesting primarily in rugged mountainous country. Uncommon resident in Southern California.	Year-round diurnal	Not Expected: Site does not contain suitable habitat.
	US: - CA: SSC MSHCP: C	CA: SSC MSHCP: C Woodlands; largely terrestrial but requires rain pools or other ponded water persisting at least three weeks for breeding; burrows in losse soils during dry season. Occurs in the Central Valley and adjacent foothills, the nondesert areas of southern California, and Baja California. US: — CA: SSC MSHCP: C Wide variety of habitats including coastal drainages from Mendocino County south to San Diego County, with populations from San Luis Obispo County south designated as sensitive. US: — CA: SSC MSHCP: C Wide variety of habitats including coastal sage scrub, sparse grassland, and riparian woodland; coastal and inland valleys and foothills; Ventura County to Baja California. US: — CA: SSC MSHCP: C Inhabits permanent or nearly permanent water. Absent from desert regions, except in the Mojave Desert along the Mojave River and its tributaries. Requires basking sites such as partially submerged logs, rocks, or open mud banks. US: — CA: SSC MSHCP: C Primarily in sandy soil in open areas, especially washes and floodplains, in many plant communities. Requires open areas for sunning, bushes for cover, patches of loose soil for burial, and an abundant supply of ants or other insects. Occurs west of the deserts from northern Baja California north to Shasta County below 2,400 meters (8,000 feet) elevation. US: — Generally open country of the Temperate Zone worldwide. Nesting primarily in rugged	CA: SSC MSHCP: C Woodlands; largely terrestrial but requires rain pools or other ponded water persisting at least three weeks for breeding; burrows in loose soils during dry season. Occurs in the Central Valley and adjacent foothills, the nondesert areas of southern California, and Baja California. US: — CA: SSC MSHCP: C Wide variety of habitats including coastal sage scrub, sparse grassland, and riparian woodland; coastal drainages from Mendocino County south designated as sensitive. US: — CA: SSC MSHCP: C Wide variety of habitats including coastal sage scrub, sparse grassland, and riparian woodland; coastal and inland valleys and foothills; Ventura County to Baja California. US: — CA: SSC MSHCP: C Inhabits permanent or nearly permanent water. Absent from desert regions, except in the Mojave Desert along the Mojave River and its tributaries. Requires basking sites such as partially submerged logs, rocks, or open mud banks. US: — CA: SSC MSHCP: C Wise permanent or nearly permanent expensed by the model of the permanent of the Mojave Desert along the Mojave River and its tributaries. Requires basking sites such as partially submerged logs, rocks, or open mud banks. US: — CA: SSC MSHCP: C Primarily in sandy soil in open areas, especially washes and floodplains, in many plant communities. Requires open areas for sunning, bushes for cover, patches of loose soil for burial, and an abundant supply of ants or other insects. Occurs west of the deserts from northern Baja California north to Shasta County below 2,400 meters (8,000 feet) elevation. US: — Generally open country of the Temperate Zone worldwide. Nesting primarily in rugged

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Athene cunicularia (burrow sites) Burrowing owl	US: – CA: SSC (breeding) MSHCP: S	Open country in much of North and South America. Usually occupies ground squirrel burrows in open, dry grasslands, agricultural and range lands, railroad rights-of-way, and margins of highways, golf courses, and airports. Often utilizes man-made structures, such as earthen berms, cement culverts, cement, asphalt, rock, or wood debris piles. They avoid thick, tall vegetation, brush, and trees, but may occur in areas where brush or tree cover is less than 30 percent.	Year-round	Not Expected: Site does not contain suitable habitat.
Campylorhynchus brunneicapillus sandiegensis coastal cactus wren	US: – CA: SSC MSHCP: C	Inhabits coastal sage scrub, nesting almost exclusively in thickets of cholla (<i>Opuntia prolifera</i>) and prickly pear (<i>Opuntia littoralis</i> and <i>Opuntia oricola</i>), typically below 150 meters (500 feet) elevation. Found in coastal areas of Orange County and San Diego Counties, and extreme northwestern Baja California, Mexico.	Year-round (non- migratory)	Not Expected: Site does not contain suitable habitat.
Circus hudsonius northern harrier	US: – CA: SSC MSHCP: C	Marshy habitats, grassland, and other open country; uncommon in open desert and brushlands. Nests on the ground in open (treeless) wetland and upland areas, including cultivated cropland and dry grassland. Nests usually constructed in tall, dense clumps of vegetation. Found in the Temperate Zone worldwide.	Year-round	Not Expected: Site does not contain suitable habitat.
Haliaeetus leucocephalus Bald eagle	US: – CA: SE MSHCP: C	Winters locally at deep lakes and reservoirs feeding on fish and waterfowl. Locally rare throughout North America.	November through February	Not Expected: Site does not contain suitable habitat.
Icteria virens yellow-breasted chat	US: – CA: SSC MSHCP: C	Riparian thickets of willow, brushy tangles near watercourses. Nests in riparian woodland throughout much of western North America. Winters in Central America.	Summer in California	Not Expected: Site does not contain suitable habitat.
Polioptila californica californica Coastal California gnatcatcher	US: FT CA:SSC MSHCP: C	Inhabits coastal sage scrub in low-lying foothills and valleys up to about 500 meters (1,640 feet) elevation in cismontane southwestern California and Baja California.	Year-round	Not Expected: Site is outside of species' range.

Vireo bellii pusillus Least Bell's vireo	US: FE CA: SE MSHCP: S	Riparian forests and willow thickets. The most critical structural component of least Bell's vireo habitat in California is a dense shrub layer 2 to 10 feet (0.6 to 3.0 meters) above ground. Nests from central California to northern Baja California. Winters in southern Baja California.	April through September	Not Expected: Site does not contain suitable habitat.
Streptocephalus woottoni Riverside fairy shrimp	US:FE CA: – MSHCP: S	Warm-water vernal pools (i.e., large, deep pools that retain water into the warm season) with low to moderate dissolved solids, in annual grassland areas interspersed through chaparral or coastal sage scrub vegetation. Suitable habitat includes some artificially created or enhanced pools, such as some stock ponds, that have vernal pool-like hydrology and vegetation. Known from areas within about 50 miles of the coast from Ventura County south to San Diego County	Seasonally following rains; typically January through April	Not Expected: Site does not contain suitable habitat.
Fish		and Baja California.		
Gila orcuttii arroyo chub	US: – CA: SSC MSHCP: C	Perennial streams or intermittent streams with permanent pools; slow water sections of streams with mud or sand substrates; spawning occurs in pools. Native to Los Angeles, San Gabriel, San Luis Rey, Santa Ana, and Santa Margarita River systems; introduced in Santa Ynez, Santa Maria, Cuyama, and Mojave River systems and smaller coastal streams.	Year-round	Not Expected: No water sources to onsite.
Mammals				
Chaetodipus fallax fallax Northwestern San Diego pocket mouse	US: – CA: SSC MSHCP: C	Found in sandy herbaceous areas, usually associated with rocks or coarse gravel in coastal scrub, chaparral, grasslands, and sagebrush, from Los Angeles County through southwestern San Bernardino, western Riverside, and San Diego Counties to northern Baja California.	Year-round	Not Expected: Site does not contain suitable habitat.

Dipodomys merriami	US: FE	Gravelly and sandy soils of alluvial fans,	Nocturnal, active Year-	Not Expected: Site does
parvus	CA: SSC	braided river channels, active channels, and	round	not contain suitable
	MSHCP: S	terraces; San Bernardino Valley (San		habitat.
		Bernardino County) and San Jacinto Valley		
		(Riverside County). In San Bernardino County,		
San Bernardino kangaroo		this species occurs primarily in the Santa Ana		
rat		River and its tributaries north of Interstate 10,		
		with small remnant populations in the		
		Etiwanda alluvial fan, the northern portion of		
		the Jurupa Mountains in the south		
		Bloomington area, and in Reche Canyon. In		
		Riverside County, this species occurs along the		
		San Jacinto River east of approximately		
		Sanderson Avenue, and along Bautista Creek.		
		Remnant populations may also occur within		
		Riverside County in Reche Canyon, San		
		Timoteo Canyon, Laborde Canyon, the Jurupa		
		Mountains, and the Santa Ana River Wash		
		north of State Route 60.		
Dipodomys stephensi	US: FE	Found in plant communities transitional	Nocturnal, active Year-	Not Expected: Site does
, ,	CA: ST	between grassland and coastal sage scrub,	round	not contain suitable
	MSHCP: C	with perennial vegetation cover of less than		habitat.
		50%. Most commonly associated with big		
Stephens' kangaroo rat		sagebrush (Artemisia tridentata), California		
		buckwheat (<i>Eriogonum fasciculatum</i>), and		
		filaree (Erodium). Requires well-drained soils		
		with compaction characteristics suitable for		
		burrow construction (neither sandy nor too		
		hard). Not found in soils that are highly rocky		
		or sandy, less than 20 inches deep, or heavily		
		alkaline or clay, or in areas exceeding 25%		
		slope. Occurs only in western Riverside		
		County, northern San Diego County, and		
		extreme southern San Bernardino County,		
		below 915 meters (3,000 feet) elevation. In		
		northwestern Riverside County, known only		
		from east of Interstate 15. Reaches its		
		northwest limit in south Norco, southeast		
		Riverside, and in the Reche Canyon area of		
		Riverside and extreme southern San		
		Bernardino Counties.		

Lepus californicus bennettii San Diego black-tailed jackrabbit	US: – CA: SSC MSHCP: C	Variety of habitats including herbaceous and desert scrub areas, early stages of open forest, and chaparral. Most common in relatively open habitats. Restricted to the cismontane areas of southern California, extending from the coast to the Santa Monica, San Gabriel, San Bernardino, and Santa Rosa Mountain ranges.	Year-round, diurnal and crepuscular activity	Not Expected: Site does not contain suitable habitat.
Neotoma lepida	US: –	Found in desert scrub and coastal sage scrub habitat, especially in association with cactus patches. Builds stick nests around cacti, or on rocky crevices. Occurs along the Pacific slope from San Luis Obispo County to northwest Baja California.	Year-round, mainly	Not Expected: Site does
intermedia	CA: SSC		nocturnal, occasionally	not contain suitable
San Diego desert woodrat	MSHCP: C		crepuscular and diurnal	habitat.

Legend

US: Federal Classifications

FE Taxa listed as Endangered.

FT Taxa listed as Threatened.

CA: State Classifications

- SE Taxa State-listed as Endangered.
- SSC California Species of Special Concern. Refers to animals with vulnerable or seriously declining populations.
- SA Special Animal. Refers to any other animal monitored by the Natural Diversity Data Base, regardless of its legal or protection status.
- 1B California Rare Plant Rank 1B: Rare, threatened, or endangered in California and elsewhere.
- 2 California Rare Plant Rank 2: Rare, threatened, or endangered in California, but more common elsewhere.
- 3 California Rare Plant Rank 3: A review list of plants about which more information is needed.
- 0.1 Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
- 0.2 Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
- 0.3 Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

MSHCP: Classifications

- C Species is covered and adequately conserved under the MSHCP.
- S Species is covered and adequately conserved under the MSHCP, but surveys are required within indicated habitats and/or survey areas.

California Rare Plant Ranks are assigned by a committee of government agency and non-governmental botanical experts and are not official State designations of rarity status.