

**APPENDIX D**

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**Biological Resources Study**

# **RANCHO MIRAGE**

## **SECTION 31 SPECIFIC PLAN**

CITY OF RANCHO MIRAGE, RIVERSIDE COUNTY, CALIFORNIA

### **Habitat Assessment and Coachella Valley Multiple Species Habitat Conservation Plan Consistency Analysis**

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Prepared For:

**Meridian Consultants, LLC**  
706 S. Hill Street, 12<sup>th</sup> Floor  
Los Angeles, California 90014  
Contact: *Tony Locacciato*

Prepared By:

**ELMT Consulting, Inc.**  
2201 N. Grand Avenue #10098  
Santa Ana, California 92711  
Contact: *Travis J. McGill*  
714.716.5050

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Revised May 2019  
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The undersigned certify that the statements furnished in this report and exhibits present data and information required for this biological evaluation, and the facts, statements, and information presented is a complete and accurate account of the findings and conclusions to the best of our knowledge and beliefs.



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Travis J. McGill  
Director/Biologist



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Thomas J. McGill, Ph.D.  
Managing Director

May 2018  
Revised May 2019

# Table of Contents

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<b>Section 1</b>	<b>Introduction.....</b>	<b>1</b>
1.1	Project Location .....	1
<b>Section 2</b>	<b>Methodology .....</b>	<b>5</b>
2.1	Coachella Valley MSHCP Consistency Analysis.....	5
2.2	Literature Review .....	5
2.3	Field Investigation .....	6
2.4	Soil Series Assessment .....	6
2.5	Plant Communities.....	6
2.6	Plants.....	6
2.7	Wildlife .....	7
2.8	Jurisdictional Drainages and Wetlands.....	7
<b>Section 3</b>	<b>Existing Conditions.....</b>	<b>8</b>
3.1	Local Climate.....	8
3.2	Topography and Soils .....	8
3.3	Surrounding Land Uses .....	8
<b>Section 4</b>	<b>Discussion .....</b>	<b>10</b>
4.1	Site Conditions.....	10
4.2	Vegetation.....	10
4.3	Wildlife .....	10
4.3.1	Fish .....	10
4.3.2	Amphibians.....	10
4.3.3	Reptiles .....	12
4.3.4	Birds.....	12
4.3.5	Mammals .....	12
4.4	Nesting Birds .....	12
4.5	Wildlife Corridors and Linkages .....	12
4.6	State and Federal Jurisdictional Areas.....	13
4.7	Special-Status Biological Resources.....	13
4.7.1	Special-Status Plants.....	14
4.7.2	Special-Status Wildlife .....	16
4.7.3	Special-Status Plant Communities.....	19
4.8	Critical Habitat.....	19

**Section 5**      **CVMSHCP Consistency Analysis ..... 22**

    5.1      Covered Activities outside Conservation Areas ..... 22

    5.2      CVMSHCP Local Development Mitigation Fee ..... 22

**Section 6**      **Conclusion and Recommendations ..... 24**

**Section 7**      **References..... 26**

**EXHIBITS**

Exhibit 1: Regional Vicinity ..... 2  
Exhibit 2: Site Vicinity ..... 3  
Exhibit 3: Project Site ..... 4  
Exhibit 4: Soils ..... 9  
Exhibit 5: Vegetation ..... 11  
Exhibit 6: Critical Habitat ..... 21  
Exhibit 7: CVMSHCP Conservation Areas ..... 23

**APPENDIX**

Appendix A Site Photographs  
Appendix B Potentially Occurring Special-Status Biological Resources  
Appendix C Regulations  
Appendix D CVMSHCP Avoidance, Minimization and Mitigation Measures

# Section 1 Introduction

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This report contains the findings of ELMT Consulting (ELMT) Habitat Assessment and Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) consistency analysis for the Rancho Mirage Section 31 Specific Plan Project (Project) located in the City of Rancho Mirage, Riverside County, California. The habitat assessment was conducted by ELMT biologists Thomas J. McGill, Ph.D. and Travis J. McGill on April 16, May 3, and May 16, 2018 to document baseline conditions and assess the potential for special-status<sup>1</sup> plant and wildlife species to occur on the project site that could pose a constraint to development.

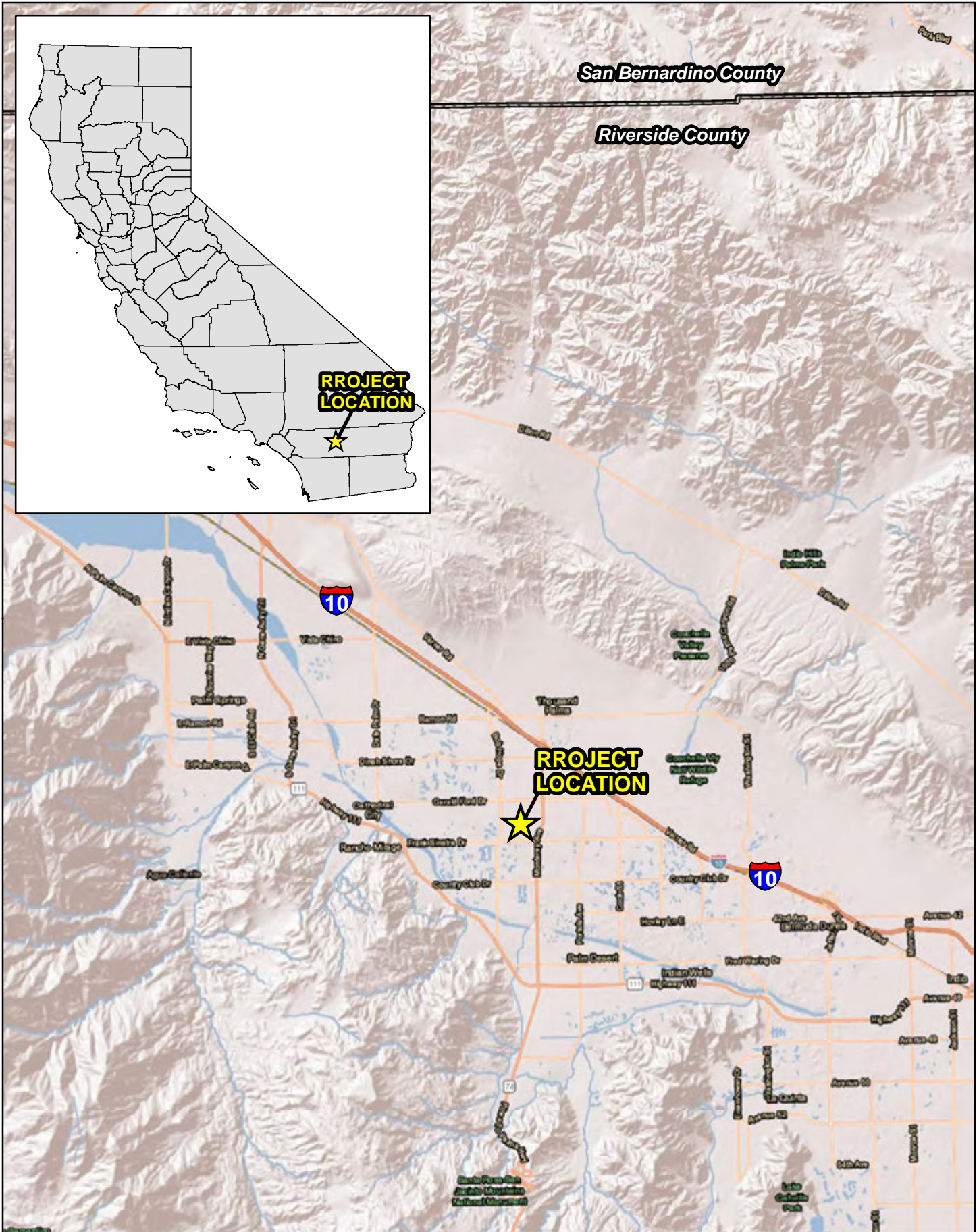
The report provides an in-depth assessment of the suitability of the on-site habitat to support Coachella Valley milk-vetch (*Astragalus lentiginosus* var. *coachellae*), triple-ribbed milk-vetch (*Astragalus tricarinatus*), Coachella Valley giant sand-treader cricket (*Macrobaenetes valgum*), Coachella Valley fringe-toed lizard (*Uma inornata*), flat-tailed horned lizard (*Phrynosoma mcallii*), burrowing owl (*Athene cunicularia*), Coachella Valley round-tailed ground squirrel (*Xerospermophilus tereticaudus chlorus*), and Palm Springs pocket mouse (*Perognathus longimembris bangsi*); as well as several other special-status plant and wildlife species identified by the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDDB), CVMSHCP and other electronic databases as potentially occurring in the vicinity of the project site.

## 1.1 PROJECT LOCATION

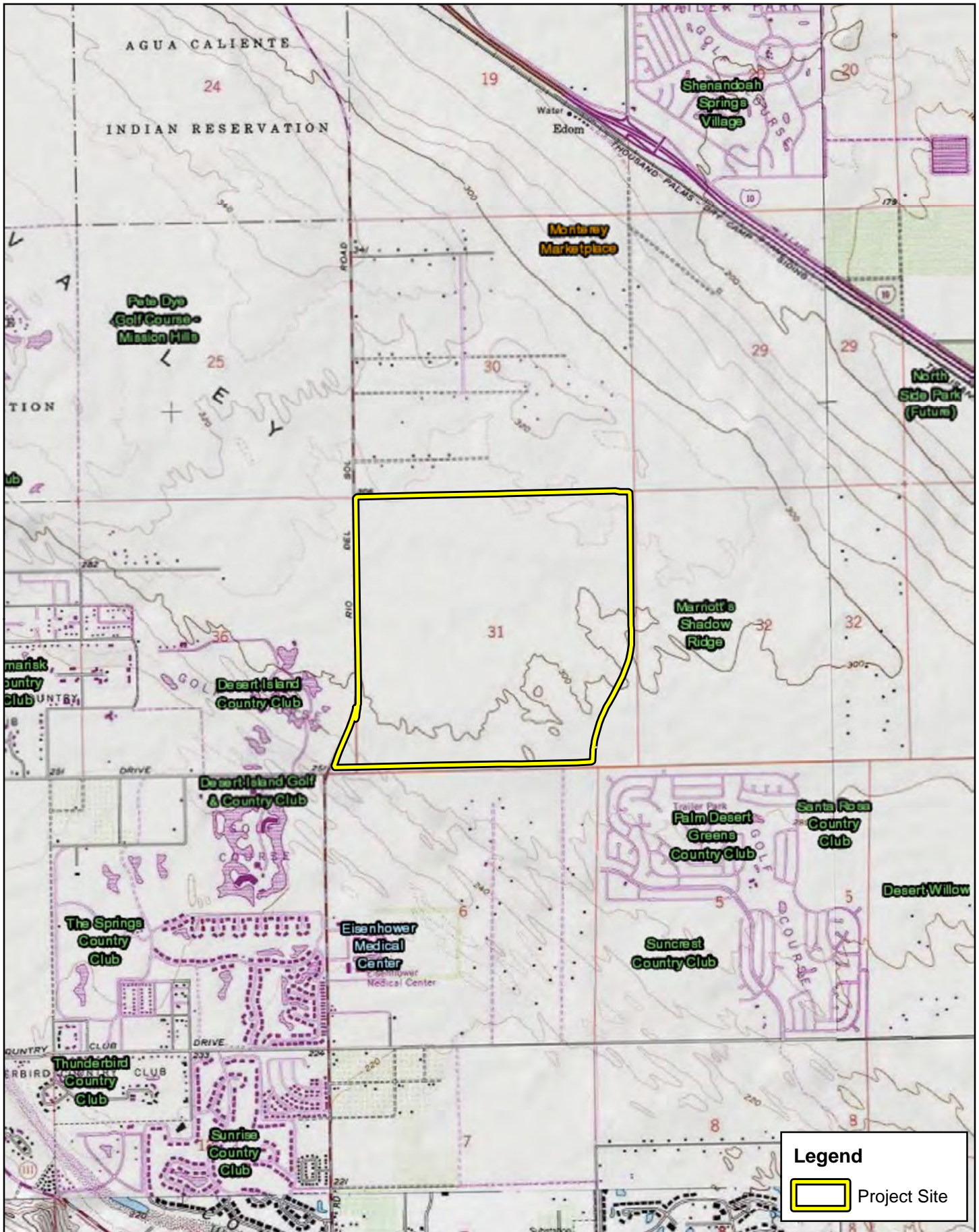
The project site is generally located west of south of Interstate 10, north of State Route 111, west of State Route 86, and east of the San Gorgonio Pass in the City of Rancho Mirage, Riverside County, California (Exhibit 1, *Regional Vicinity*). The project site is depicted on the Cathedral City quadrangle of the United States Geological Survey's (USGS) 7.5-minute topographic map series in Section 31 of Township 4 south, Range 6 east (Exhibit 2, *Site Vicinity*). Specifically, the project site is bordered by Gerald Ford Drive to the north, Frank Sinatra Drive to the south, Bob Hope Drive to the west, and Monterey Avenue to the east within Assessor Parcel Number (APN) 674-430-007 and 685-220-004 (Exhibit 3, *Project Site*).

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<sup>1</sup> As used in this report, "special-status" refers to plant and wildlife species that are federally, State, and MSHCP listed, proposed, or candidates; plant species that have been designated with a California Native Plant Society Rare Plant Rank; wildlife species that are designated by the CDFW as fully protected, species of special concern, or watch list species; and specially protected natural vegetation communities as designated by the CDFW.

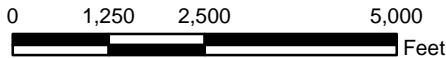






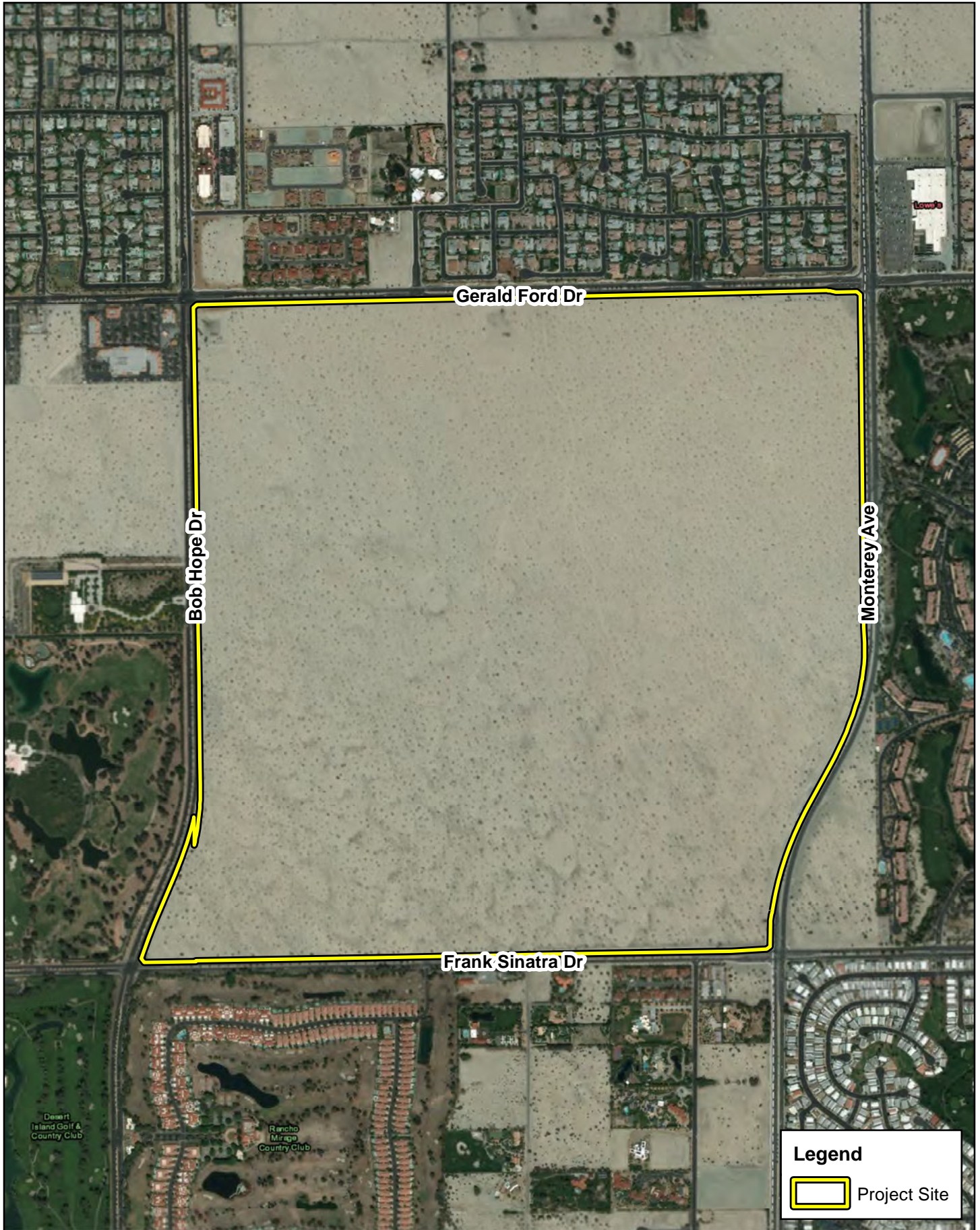
RANCHO MIRAGE SECTION 31

# Site Vicinity



Source: USA Topographic Maps





**Legend**

Project Site

## Section 2 Methodology

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A literature review and records search were conducted to determine which special-status biological resources have the potential to occur on or within the general vicinity of the project site. In addition to the literature review, a general habitat assessment or field investigation of the project site was conducted. The field investigation was conducted to document existing conditions within the project site and assess the potential for special-status biological resources to occur.

### 2.1 COACHELLA VALLEY MSHCP CONSISTENCY ANALYSIS

The City of Rancho Mirage, who is the lead agency for this s project, is a permittee under the CVMSHCP. Therefore, the proposed project was reviewed to determine consistency with the CVMSHCP. Geographic Information System (GIS) software was utilized to map the project site in relation to CVMSHCP areas including conservation areas, corridors and linkages, and sand transport areas. The CVMSHCP requires that local permittees, such as the City of Rancho Mirage, comply with a number of protection measures for species, communities, essential ecological processes, and biological corridors. In addition, certain projects may be subject to local development mitigation fees, a Joint Project Review Process, or other conservation or implementation measures. These are discussed in greater detail in Section 5.0 of this report.

### 2.2 LITERATURE REVIEW

The first step in determining if a project is consistent with the CVMSHCP is to conduct a literature review and records search for special-status biological resources potentially occurring on or within the vicinity of the project site. Previously recorded occurrences of special-status plant and wildlife species and their proximity to the project site were determined through a query of the CDFW's QuickView Tool in the Biogeographic Information and Observation System (BIOS), CNDDDB Rarefind 5, the California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California, Calflora Database, compendia of special-status species published by CDFW, and the United States Fish and Wildlife Service (USFWS) species listings, and species covered within the MSHCP and associated technical documents.

Literature detailing biological resources previously observed in the vicinity of the project site and historical land uses were reviewed to understand the extent of disturbances to the habitats on-site. Standard field guides and texts on special-status and non-special-status biological resources were reviewed for habitat requirements, as well as the following resources:

- Google Earth Pro historic aerial imagery (1994-2016);
- 2006 Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area;
- United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) Soil Survey;
- USFWS Critical Habitat designations for Threatened and Endangered Species; and

- Habitat requirements for Coachella Valley milk-vetch, triple-ribbed milk-vetch, Coachella Valley giant sand-treader cricket, Coachella Valley Jerusalem cricket, Coachella Valley fringe-toed lizard, flat-tailed horned lizard, burrowing owl, Le Conte's thrasher, Coachella Valley round-tailed ground squirrel, and Palm Springs pocket mouse.

The literature review provided a baseline from which to inventory the biological resources potentially occurring on the subject property. The CNDDDB database was used, in conjunction with ArcGIS software, to locate the nearest recorded occurrences of special-status species and determine the distance from the project site.

## **2.3 FIELD INVESTIGATION**

ELMT biologists Thomas J. McGill, Ph.D. and Travis J. McGill evaluated the extent and conditions of the plant communities found within the boundaries of the project site on April 16, May 3, and May 16, 2018. Plant communities identified on aerial photographs during the literature review were verified in the field by walking meandering transects through the on-site plant communities and along boundaries between plant communities. The plant communities were evaluated for their potential to support special-status plant and wildlife species. In addition, field staff identified any natural corridors and linkages that may support the movement of wildlife through the area. Special attention was given to special-status habitats and/or undeveloped areas, which have higher potentials to support special-status plant and wildlife species. All plant and wildlife species observed, as well as dominant plant species within each plant community, were recorded. Wildlife detections were made through observation of scat, trails, tracks, burrows, nests, and/or visual and aural observation. In addition, site characteristics such as soil condition, topography, hydrology, anthropogenic disturbances, indicator species, condition of on-site plant communities, and presence of potential jurisdictional drainage and/or wetland features were noted.

## **2.4 SOIL SERIES ASSESSMENT**

On-site and adjoining soils were researched prior to the field survey using the USDA NRCS Soil Survey for Coachella Valley Area. In addition, a review of the local geological conditions and historical aerial photographs was conducted to assess the ecological changes that the project site has undergone.

## **2.5 PLANT COMMUNITIES**

Plant communities were mapped using 7.5-minute USGS topographic base maps and aerial photography. The plant communities were delineated on an aerial photograph, classified in accordance with those described in the MSHCP, and then digitized into GIS Arcview. The Arcview application was used to compute the area of each plant community in acres.

## **2.6 PLANTS**

Common plant species observed during the field survey were identified by visual characteristics and morphology in the field and recorded in a field notebook. Unusual and less familiar plants were photographed in the field and identified in the laboratory using taxonomic guides. Taxonomic nomenclature

used in this study follows the 2012 Jepson Manual (Hickman 2012). In this report, scientific names are provided immediately following common names of plant species (first reference only).

## **2.7 WILDLIFE**

Wildlife species detected during field surveys by sight, calls, tracks, scat, or other sign were recorded during surveys in a field notebook. Field guides were used to assist with identification of wildlife species during the survey included The Sibley Field Guide to the Birds of Western North America (Sibley 2003), A Field Guide to Western Reptiles and Amphibians (Stebbins 2003), and A Field Guide to Mammals of North America (Reid 2006). Although common names of wildlife species are fairly well standardized, scientific names are provided immediately following common names in this report (first reference only).

## **2.8 JURISDICTIONAL DRAINAGES AND WETLANDS**

Aerial photography was reviewed prior to conducting a field investigation in order to locate and inspect any potential natural drainage features, ponded areas, or water bodies that may be considered riparian/riverine habitat and/or fall under the jurisdiction of the United States Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), or CDFW. In general, surface drainage features indicated as blue-line streams on USGS maps that are observed or expected to exhibit evidence of flow are considered potential drainage features and are also subject to state and federal regulatory jurisdiction.

## **Section 3 Existing Conditions**

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### **3.1 LOCAL CLIMATE**

Riverside County features a somewhat cooler version of a Mediterranean climate, or semi-arid climate, with warm, sunny, dry summers and cool, rainy, mild winters. Relative to other areas in Southern California, winters are colder with frost and with chilly to cold morning temperatures common. Climatological data obtained for the City of Rancho Mirage indicates the annual precipitation averages 5.23 inches per year. Almost all of the precipitation occurs in the months between December and March, with hardly any occurring between the months of April and November. The wettest month is January, with a monthly average total precipitation of 1.27 inches. The average maximum and minimum temperatures for the City of Cathedral City are 88.9 and 59.0 degrees Fahrenheit (F) respectively with July being the hottest month (monthly average 108.0° F) and December being the coldest (monthly average 43.0° F). Temperatures during the site visits were in the mid- to high 90s (degrees Fahrenheit) with infrequent, light winds and little to no cloud cover.

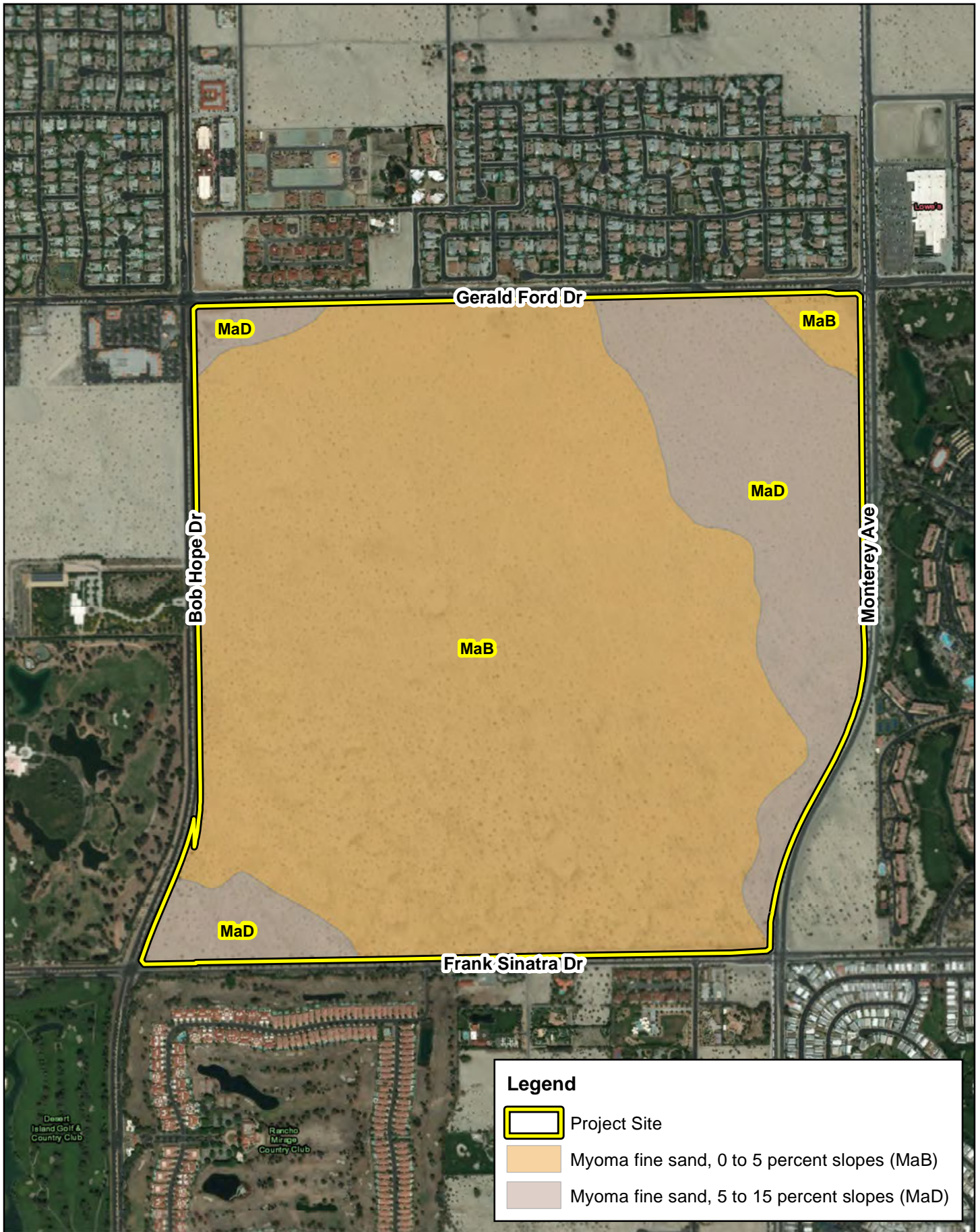
### **3.2 TOPOGRAPHY AND SOILS**

On-site surface elevations range from approximately 285 to 300 feet above mean sea level and generally slopes from north to south. The project site is relatively flat with no areas of significant topographic relief. They only topographic relief consist of sand hummocks or rolling hills that rise from one to four feet above their base. According to the NRCS Custom Soil Resource Report, the subject property is underlain by the following soil units: Myoma fine sand (0 to 5 percent slopes) and Myoma fine sand (5-15 percent slopes), (Exhibit 4, *Soils*).

### **3.3 SURROUNDING LAND USES**

The project site is located in an area that has undergone a conversion from natural habitats to residential, recreational, and commercial developments. The project site is bordered by development to the north, south, east and west. It should be noted that there is a vacant, undeveloped parcel immediately east of the southeastern corner of the project site and a vacant, undeveloped parcel immediately west of the northwestern portion of the site, that are also surrounded by development. Surrounding developments have protected the site from prevailing westerly winds from the San Gorgonio Pass. This reduction in wind caused by surrounding development has resulted in the partial stabilization of sand deposits across the site.





**Legend**

- Project Site
- Myoma fine sand, 0 to 5 percent slopes (MaB)
- Myoma fine sand, 5 to 15 percent slopes (MaD)

RANCHO MIRAGE SECTION 31

**Soils**

Exhibit 4

## Section 4 Discussion

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### 4.1 SITE CONDITIONS

The project site consists of vacant, undeveloped land that relatively undisturbed. However, the project site is surrounded by development, which has isolated the project site from regional wildlife corridors/linkages or natural areas that have long term conservation value.

### 4.2 VEGETATION

One (1) plant community was documented on the project site: Sonoran creosote bush scrub (Exhibit 6, *Vegetation*). This plant community is dominated by creosote bush (*Larrea tridentata*). Other common plant species observed on-site include dyebush (*Psoralea argemone*), indigo bush (*Psoralea schottii*), burrobush (*Ambrosia dumosa*), wire lettuce (*Stephanomeria pauciflora*), Booth's suncup (*Eremothera boothii*), croton (*Croton californicus*), Mediterranean grass (*Schismus* sp.), Saharan mustard (*Brassica tournefortii*), brown-eyed primrose (*Chylismia calviformis*), desert twinbugs (*Dicoria canescens*), brittlebush (*Encelia farinosa*), Spanish needle (*Palafoxia arida*), and coldenia (*Tiquila plicata*).

### 4.3 WILDLIFE

Plant communities provide foraging habitat, nesting and denning sites, and shelter from adverse weather or predation. This section provides a discussion of those wildlife species that were observed during the field survey or that are expected to occur within the project site. The discussion is to be used as a general reference and is limited by the season, time of day, and weather condition in which the field survey was conducted. Wildlife detections were based on calls, songs, scat, tracks, burrows, and direct observation.

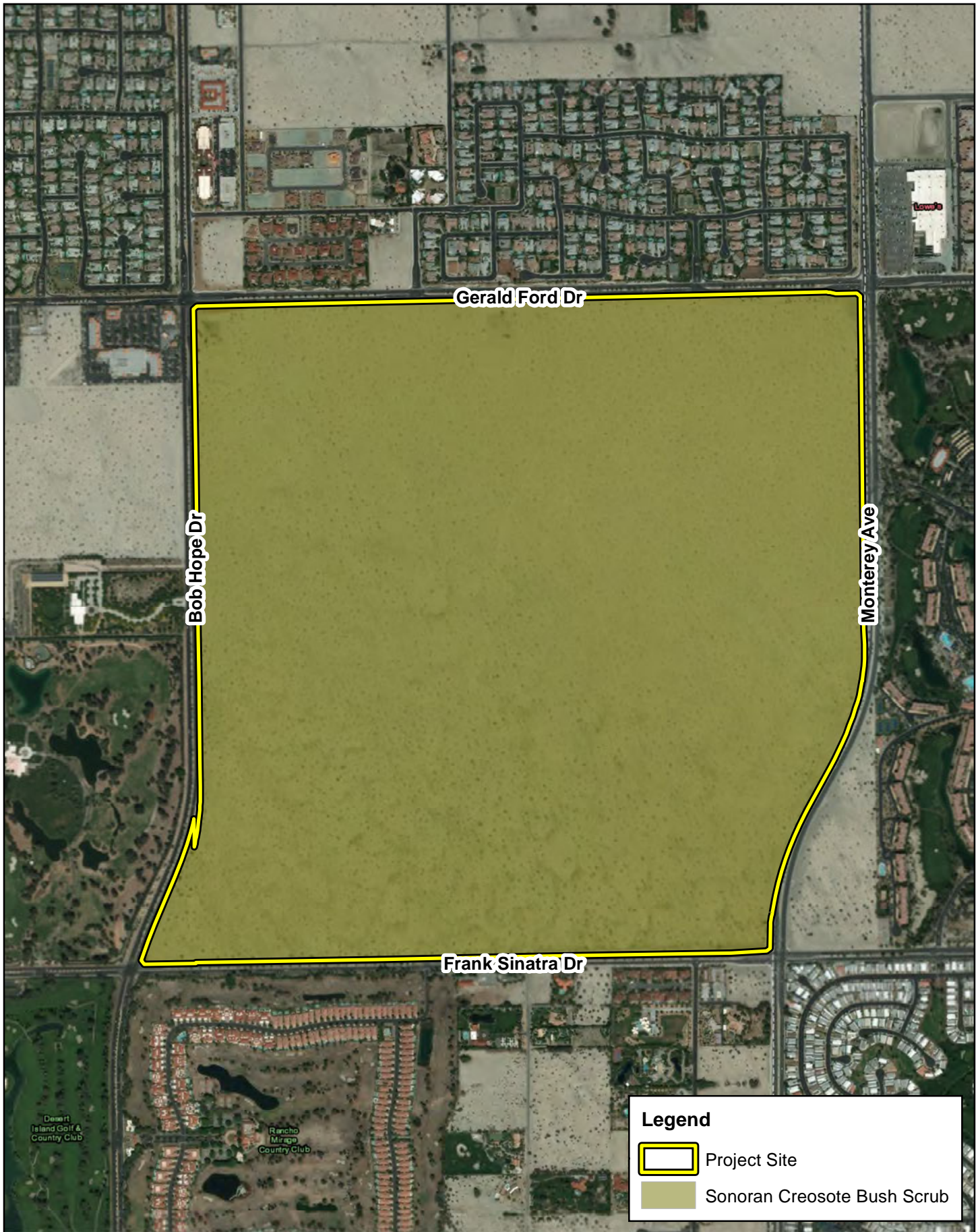
#### 4.3.1 Fish

The CVMSHCP does not identify any covered or special-status fish species as potentially occurring on the project site. Further, no fish or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would provide suitable habitat for fish were observed on or within the vicinity of the project site. Therefore, no fish are expected to occur and are presumed absent from the project site.

#### 4.3.2 Amphibians

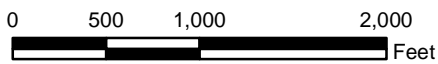
The CVMSHCP does not identify any covered or special-status amphibian species as potentially occurring on the project site. Further, no amphibians or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would provide suitable habitat for amphibian species were observed on or within the vicinity of the project site. Therefore, no amphibians are expected to occur on the project site and are presumed absent.





RANCHO MIRAGE SECTION 31

# Vegetation



Source: USA Topographic Maps

### 4.3.3 Reptiles

Two (2) reptilian species were observed during the habitat assessment, desert iguana (*Dipsosaurus dorsalis*) and zebra-tailed lizard (*Callisaurus draconoides rhodostictus*). Although diversity was low during the survey, habitat on the project site is suitable for a number of reptilian species. Due to the open, sparsely vegetated habitat with fine windblown sands, the site has the potential to support reptiles such as desert horned lizard (*Phrynosoma platyrhinos*), western side-blotched lizard (*Uta stansburiana elegans*), Sonoran gopher snake (*Pituophis catenifer affinis*), red racer (*Coluber flagellum piceus*), and Colorado Desert sidewinder (*Crotalus cerastes laterorepens*).

### 4.3.4 Birds

The project site provides suitable foraging and cover habitat for a variety of resident and migrant bird species. A total of fifteen (15) bird species were detected during the field survey and included cliff swallow (*Petrochelidon pyrrhonota*), barn swallow (*Hirundo rustica*), verdin (*Auriparus flaviceps*), Cassin's kingbird (*Tyrannus vociferans*), black-tailed gnatcatcher (*Polioptila melanura*), mourning dove (*Zenaida macroura*), Wilson's warbler (*Cardellina pusilla*), white-throated swift (*Aeronautes saxatalis*), Anna's hummingbird (*Calypte anna*), Costa's hummingbird (*Calypte costae*), black-throated sparrow (*Amphispiza bilineata*), common raven (*Corvus corax*), northern mockingbird (*Mimus polyglottos*), house finch (*Haemorhous mexicanus*), and rock pigeon (*Columba livia*).

### 4.3.5 Mammals

Only one (1) mammalian species, black-tailed jackrabbit (*Lepus californicus*), was observed during the habitat assessment. The project site provides suitable habitat for a variety of mammalian species. Most mammal species are nocturnal and are difficult to observe during a diurnal field visit. Mammalian species that could occur within the project site include coyote (*Canis latrans*), desert kangaroo rat (*Dipodomys deserti*), and Palm Springs ground squirrel (*Spermophilus tereticaudus chlorus*). No bat species are expected to roost on-site due to a lack of suitable roosting habitat (i.e., trees, crevices, abandoned structures) on the project site, but the site does provide suitable foraging habitat for bat species.

## 4.4 NESTING BIRDS

No active nests or birds displaying nesting behavior were observed during the field survey. The project site and ornamental/landscaped areas surrounding the project site provide foraging and nesting habitat for year-round and seasonal avian residents, as well as migrating songbirds that could occur in the area that area adapted to urban environments. The project site has the potential to provide suitable nesting opportunities for birds. A pre-construction nesting bird clearance survey shall be conducted within three (3) days prior to ground disturbance to ensure no nesting birds will be impacted from site development.

## 4.5 WILDLIFE CORRIDORS AND LINKAGES

Habitat linkages provide links between larger undeveloped habitat areas that are separated by development. Wildlife corridors are similar to linkages, but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of sufficient width to allow

animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species yet inadequate for others. Wildlife corridors are significant features for dispersal, seasonal migration, breeding, and foraging. Additionally, open space can provide a buffer against both human disturbance and natural fluctuations in resources.

The project site is not located within any regional wildlife corridors/linkages, or CVMSHCP conservation areas. The project site is isolated from regional wildlife corridors and linkages, and there are no riparian corridors, creeks, or useful patches of stepping stone habitat (natural areas) within or connecting the project site to the CVMSHCP conservation areas. As such, development of the project site is not expected to impact wildlife movement opportunities in the region. Therefore, impacts to wildlife corridors or linkages are not expected to occur.

#### **4.6 STATE AND FEDERAL JURISDICTIONAL AREAS**

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates discharge of dredge and/or fill materials into “waters of the United States” pursuant to Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the Regional Board regulates discharges into surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act and the CDFW regulates alterations to streambed and associated plant communities pursuant to Section 1602 of the California Fish and Game Code.

No jurisdictional drainage and/or wetland features were observed within the project site during the field survey. Therefore, development of the project site will not result in impacts to Corps, Regional Board, or CDFW jurisdiction and regulatory approvals will not be required.

It should be noted that a small patch of emergent cattails (*Typha* sp.) black willow (*Salix gooddingii*), and cottonwood (*Populus fremontii*) has established in the middle of the northern boundary of the project site. This vegetation has established at the terminus of a culvert that conveys stormwater runoff from the surrounding developments. The culvert was constructed wholly within the upland and does not have surface hydrologic connection to downstream waters. Therefore, the culvert and emergent vegetation will not fall under the regulatory authority of the Corps, Regional Board, or CDFW.

#### **4.7 SPECIAL-STATUS BIOLOGICAL RESOURCES**

The CDFW QuickView Tool in BIOS, CNDDDB Rarefind 5, and the CNPS Electronic Inventory of Rare and Endangered Vascular Plants of California were queried for reported locations of special-status plant and wildlife species as well as special-status natural plant communities in the Cathedral City and Myoma USGS 7.5-minute quadrangles. The habitat assessment evaluated the conditions of the habitat(s) within the boundaries of the project site to determine if the existing plant communities, at the time of the survey, have the potential to provide suitable habitat(s) for special-status plant and wildlife species.

The literature search identified twenty (20) special-status plant species, forty-three (43) special-status wildlife species, and one (1) special-status plant community as having potential to occur within the

Cathedral City and Myoma quadrangles. Special-status plant and wildlife species were evaluated for their potential to occur within the project boundaries based on habitat requirements, availability and quality of suitable habitat, and known distributions. Species determined to have the potential to occur within the general vicinity are presented in *Table B-1: Potentially Occurring Special-Status Biological Resources*, provide in Appendix B. Refer to Table B-1 for a determination regarding the potential occurrence of special-status plant and wildlife species within the project site.

#### 4.7.1 Special-Status Plants

According to the CNDDDB and CNPS, twenty (20) special-status plant species have been recorded in the Cathedral City and Myoma quadrangles (refer to Appendix B). Based on habitat requirements for specific species and the availability and quality of habitats needed by each special-status plant species, it was determined that the project site has a moderate or higher potential to support one (1) CVMSHCP-covered plant species, Coachella Valley milk-vetch, which was observed on-site during the 2018 surveys. In addition, it was determined that the site has a moderate potential to support eight (8) special-status plant species that are not covered under the MSHCP, including Borrego milk-vetch (*Astragalus lentiginosus* var. *borreganus*), ribbed cryptantha (*Johnstonella costata*), winged cryptantha (*Johnstonella holoptera*), pointed dodder (*Cuscuta californica* var. *apiculata*), Abram's spurge (*Euphorbia abramsiana*), Arizona spurge (*Euphorbia arizonica*), flat-seeded spurge (*Euphorbia platysperma*), slender cottenheads (*Nemacaulis denudata* var. *gracilis*). All other special-status plant species covered and non-covered are presumed absent. Descriptions of species determined to have a moderate or higher potential to occur within the project site, as well as of those covered species that are known to occur within the general vicinity of the project site, are provided below.

##### ***Coachella Valley Milk-vetch***

Coachella Valley milk-vetch can be either an annual or perennial herb that blooms between February and May. It is federally listed as endangered and is designated by the CNPS with the Rare Plant Rank 1B.2, indicating that is rare, threatened, or endangered in California and elsewhere, and is considered fairly threatened in California, with 20-80% of its known occurrences threatened. It is covered under the MSHCP. It is endemic to California and is only known from Riverside County. It occurs in sandy soils within desert dunes and Sonoran desert scrub, where it typically grows at elevations between 131 and 2,149 feet. Coachella Valley milk-vetch is known to occur in many locations throughout the Coachella Valley, and the project site is immediately adjacent to designated Critical Habitat for this species (78 Federal Register [FR] 10449 10497).

During the 2018 surveys, several small populations (comprised of approximately 5-20 plants) and several scattered individuals were observed throughout the project site. Since Coachella Valley milk-vetch is a covered species under the CVMSHCP, no further surveys or additional mitigation measures will be required for impacts to this species.

##### ***Borrego Milk-vetch***

Borrego milk-vetch is an annual herb that blooms between February and May. It is not state or federally listed. However, it is designated by the CNPS with the Rare Plant Rank 4.3, indicating that it is a plant of limited distribution and is not very threatened in California, with less than 20% of its known occurrences

threatened. It is not endemic to California, but in California it is known to occur in Imperial, Riverside, San Bernardino, and San Diego Counties, where it can be found in sandy soils in Mojavean and Sonoran desert scrub between 98 and 1,050 feet in elevation. Borrego milk-vetch was determined to have a moderate potential to occur on the project site. However, it was not observed during the 2018 surveys.

### ***Ribbed Cryptantha***

Ribbed cryptantha is an annual herb that blooms between February and May. It is not state or federally listed. However, it is designated by the CNPS with the Rare Plant Rank 4.3, indicating that it is a plant of limited distribution and is not very threatened in California, with less than 20% of its known occurrences threatened. It is not endemic to California, but in California it is known to occur in Imperial, Inyo, Riverside, San Bernardino, and San Diego Counties, where it can be found in sandy soils in desert dunes and Mojavean and Sonoran desert scrub between 197 and 1,640 feet in elevation. Ribbed cryptantha was determined to have a moderate potential to occur on the project site. However, it was not observed during the 2018 surveys.

### ***Winged Cryptantha***

Ribbed cryptantha is an annual herb that blooms between March and April. It is not state or federally listed. However, it is designated by the CNPS with the Rare Plant Rank 4.3, indicating that it is a plant of limited distribution and is not very threatened in California, with less than 20% of its known occurrences threatened. It is not endemic to California, but in California it is known to occur in Imperial, Inyo, Riverside, San Bernardino, and San Diego Counties, where it can be found in Mojavean and Sonoran desert scrub between 328 and 5,545 feet in elevation. Winged cryptantha was determined to have a moderate potential to occur on the project site. However, it was not observed during the 2018 surveys.

### ***Pointed Dodder***

Pointed dodder is an annual parasitic vine that blooms between February and August. It is not state or federally listed. However, it is designated by the CNPS with the Rare Plant Rank 3, indicating that it is under review and that more information about it is needed. It is not endemic to California, but in California it is known to occur in Riverside and San Bernardino Counties, where it can be found in Mojavean and Sonoran desert scrub between 0 and 1,640 feet in elevation. Pointed dodder was determined to have a moderate potential to occur on the project site. However, it was not observed during the 2018 surveys.

### ***Abram's Spurge***

Abram's spurge is an annual herb that blooms between September and November. It is not state or federally listed. However, it is designated by the CNPS with the Rare Plant Rank 2B.2, indicating that it is rare, threatened, or endangered in California and more common elsewhere, and is moderately threatened in California. It is not endemic to California, but in California it is known to occur in Imperial, Riverside, and San Diego Counties, where it can be found in sandy Sonoran Desert scrub. The plant community on the project site was determined to support moderate quality habitat for Abram's spurge. However, Abram's spurge is only known from a couple of historic documented occurrences within the Coachella Valley and are not expected to occur onsite, and as a result are presumed absent.



### ***Arizona Spurge***

Arizona spurge is a perennial herb that blooms between March and April. It is not state or federally listed. However, it is designated by the CNPS with the Rare Plant Rank 2B.3, indicating that it is rare, threatened, or endangered in California and more common elsewhere, but is still not very threatened in California, with less than 20% of its known occurrences threatened. It is not endemic to California, but in California it is known to occur in Imperial, Riverside, and San Diego Counties, where it can be found in sandy Sonoran desert scrub between 164 and 984 feet in elevation. Arizona spurge was determined to have a moderate potential to occur on the project site. However, it was not observed during the 2018 surveys.

### ***Flat-seeded Spurge***

Flat-seeded spurge is an annual herb that blooms between February and September. It is not state or federally listed. However, it is designated by the CNPS with the Rare Plant Rank 1B.1, indicating that it is rare, threatened, or endangered in California and elsewhere, and is seriously threatened in California. It is not endemic to California, but in California it is known to occur in Imperial, Riverside, and San Diego Counties, where it can be found in sandy Sonoran desert scrub between 213 and 328 feet in elevation. Flat-seeded spurge was determined to have a moderate potential to occur on the project site. However, it was not observed during the 2018 surveys.

### ***Slender Cottonheads***

Flat-seeded spurge is a perennial herb that blooms between March and May. It is not state or federally listed. However, it is designated by the CNPS with the Rare Plant Rank 2B.2, indicating that it is rare, threatened, or endangered in California and more common elsewhere, and is moderately threatened in California. It is not endemic to California, but in California it is known to occur in Imperial, Riverside, and San Diego Counties, where it can be found in sandy Sonoran Desert scrub. Slender cottonheads was determined to have a moderate potential to occur on the project site. However, it was not observed during the 2018 surveys.

### ***Triple-ribbed Milk-vetch***

Triple-ribbed milk-vetch is a perennial herb that blooms between February and May. It is federally listed as endangered and is designated by the CNPS with the Rare Plant Rank 1B.2, indicating that it is rare, threatened, or endangered in California and elsewhere, and is considered fairly threatened in California, with 20-80% of its known occurrences threatened. It is covered under the MSHCP. It is endemic to California and is only known from Riverside and San Bernardino Counties. It occurs in sandy or gravelly soils in Joshua tree woodland and Sonoran desert scrub, where it typically grows at elevations between 1,476 and 3,904 feet. The project site is well outside of the known elevation range for this species, and triple-ribbed milk-vetch is presumed absent from the project site.

## **4.7.2 Special-Status Wildlife**

According to the CNDDDB, forty-three (43) special-status wildlife species have been reported in the Cathedral City and Myoma quadrangles (refer to Appendix B). Based on habitat requirements for specific species and the availability and quality of habitats needed by each special-status wildlife species, it was determined that the project site has a moderate or higher potential to support five (5) CVMSHCP-covered

wildlife species, including Coachella giant sand treader cricket, Palm Springs pocket mouse, flat-tailed horned lizard, Coachella Valley fringe-toed lizard, and Coachella Valley round-tailed ground squirrel. In addition, the project site has a moderate or higher potential to support three (3) special-status wildlife species that are not covered under the MSHCP, including loggerhead shrike (*Lanius ludovicianus*), Costa's hummingbird (*Calypte costae*), and black-tailed gnatcatcher (*Polioptila melanura*). All other special-status wildlife species, covered and non-covered, have a low potential to occur or are presumed absent. Descriptions of species determined to have a moderate or higher potential to occur within the project site are provided below.

### ***Coachella Giant Sand Treader Cricket***

The Coachella giant sand treader cricket has no state or federal designation but is covered under the CVMSHCP. Its known range extends through the western Coachella Valley to approximately two miles west of the City of Indio. This species is dependent on active dunes and ephemeral sand fields in the western Coachella Valley. It is strongly correlated with windblown habitats dominated by creosote bush, burrobush (*Ambrosia dumosa*), honey mesquite (*Prosopis glandulosa*), Mormon tea (*Ephedra* spp.), desert willow (*Chilopsis linearis*), and sandpaper bush (*Mortonia scabrella*). Stabilized sandy environments are avoided. Adults are active in early spring and burrow underground again by mid- to late spring, and juveniles emerge in late fall. Coachella giant sand treader cricket was determined to have a moderate to high potential to occur on the project site. Since Coachella giant sand treader cricket is a covered species under the CVMSHP, no further surveys or additional mitigation measures will be required for impacts to this species, if present.

### ***Palm Springs Pocket Mouse***

The Palm Springs pocket mouse is designated by the CDFW as a species of special concern and is also covered under the CVMSHCP. It is endemic to the Coachella Valley, and while its current distribution is not well known, it was historically present from the San Geronio Pass to Joshua Tree National Park and south to Borrego Springs. This species generally occurs in creosote scrub, desert scrub, and grasslands with loose and/or sandy soils and sparse to moderate vegetative cover. Areas dominated by creosote bush, brittlebush (*Encelia farinosa*), burrobush, and ephedra (*Ephedra californica*). They are likely dormant generally between October and March but may emerge periodically to feed on seed caches. Breeding occurs from January to August, peaking between March and May. Palm Springs pocket mouse was determined to have a moderate potential to occur on the project site. Since Palm Springs pocket mouse is a covered species under the CVMSHP, no further surveys or additional mitigation measures will be required for impacts to this species, if present.

### ***Flat-tailed Horned Lizard***

Flat-tailed horned lizard is designated by the CDFW as a candidate for endangered status under the CESA, and also as a species of special concern. It is covered under the CVMSHCP. This species is typically found in open, sandy habitats, usually sparsely vegetated with creosote bush and burrobush. While fine, windblown sands are preferred, excessively loose and unstable sand may also discourage this species from occurring in an area. Adults are typically active anywhere from mid-February to mid-November but are most active between April and September. Mating occurs in May and June, with eggs hatching between July and October. Flat-tailed horned lizard was determined to have a moderate potential to occur on the

project site. Since flat-tailed horned lizard is a covered species under the CVMSHP, no further surveys or additional mitigation measures will be required for impacts to this species, if present.

### ***Coachella Valley Fringe-toed Lizard***

Coachella Valley fringe-toed lizard is designated by the USFWS as threatened under the ESA and by the CDFW as endangered under the CESA. It is covered under the MSHCP. This species is only found in the Coachella Valley, and occurs on areas containing fine, windblown sands. They are rarely, if ever, found outside of this habitat and do not occur on stabilized sands. Vegetative cover is sparse to moderate and is usually dominated by creosote bush, indigo bush, honey mesquite, and four-winged saltbush (*Atriplex canescens*). This species is typically active from spring through fall, especially between April and October. Up to three clutches of eggs are laid between May and September, with juveniles emerging between August and October. Coachella Valley fringe-toed lizard was determined to have a moderate potential to occur on the project site. Since Coachella Valley fringe-toed lizard is a covered species under the CVMSHP, no further surveys or additional mitigation measures will be required for impacts to this species, if present.

### ***Coachella Valley Round-tailed Ground Squirrel***

Coachella Valley round-tailed ground squirrel is designated by the CDFW as a species of special concern. This species is typically found in scrub and wash habitats including mesquite- and creosote-dominated sand dunes, creosote bush scrub, creosote-palo verde scrub, and saltbush/alkali scrub, particularly in sandy floodplains. Ideal habitat seems to be areas where hummocks of sand accumulate at the base of large shrubs, and according to current data as described in the MSHCP, this species seems to particularly favor hummocks that form around mesquite. It is inactive and in its burrows from August until January. The breeding period is generally from early spring through June. Coachella Valley round-tailed ground squirrel was determined to have a moderate potential to occur on the project site. Since Coachella Valley round-tailed ground squirrel is a covered species under the CVMSHP, no further surveys or additional mitigation measures will be required for impacts to this species, if present.

### ***Loggerhead Shrike***

Loggerhead shrike is designated by the CDFW as a species of special concern. It is a year-round resident of southern California. This species is typically found in open country with short vegetation, including pastures, old orchards, cemeteries, golf courses, agricultural fields, riparian areas, and open woodlands. It utilizes somewhat prominent perching positions for hunting and eating. This species primarily nests in thorny shrubs and trees, but will nest in brush piles or other debris if no shrubs or trees are present. The general nesting season extends from the end of January through the end of July. Loggerhead shrike was determined to have a high potential to occur on the project site. Prior to the start of construction, a pre-construction nesting bird clearance survey shall be conducted to ensure no impacts to loggerhead shrike occur.

### ***Costa's Hummingbird***

Costa's hummingbird does not have any formal protection. It is a year-round resident in southern California and is found in desert and semi-desert, arid brushy foothills and chaparral. This species breeds in the Sonoran and Mojave Deserts, and departs desert heat moving into chaparral, scrub, and woodland habitats. Departs desert heat moving into chaparral, scrub, and woodland habitats. Costa's hummingbird was



observed on the project site. Prior to the start of construction, a pre-construction nesting bird clearance survey shall be conducted to ensure no impacts to Costa's hummingbird occur.

### ***Blacktailed Gnatcatcher***

Black-tailed gnatcatcher is a CDFW Watch List Species that prefers nesting and foraging in densely lined arroyos and washes dominated by creosote bush and saltbush with scattered bursage, burrowed, ocotillo, saguaro, barrel cactus, prickly pear cactus and cholla. The species is a fairly common resident below 300 feet above mean sea level in desert wash habitat from Palm Springs and Joshua Tree National Monument south, and common along the Colorado River. Black-tailed gnatcatcher was observed on the project site. Prior to the start of construction, a pre-construction nesting bird clearance survey shall be conducted to ensure no impacts to black-tailed gnatcatcher occur.

### ***Burrowing Owl***

The burrowing owl is designated by the CDFW as a California species of special concern. It is a grassland specialist distributed throughout western North America where it occupies open areas with short vegetation and bare ground within shrub, desert, and grassland environments. Burrowing owls use a wide variety of arid and semi-arid environments with well-drained, level to gently-sloping areas characterized by sparse vegetation and bare ground. They are dependent upon the presence of burrowing mammals (such as ground squirrels) for roosting and nesting habitat. The presence or absence of colonial mammal burrows is often a major factor that limits the presence of burrowing owls. Where mammal burrows are scarce, burrowing owls have been found occupying man-made cavities, such as buried and non-functioning drain pipes, stand-pipes, and dry culverts. Small mammals may also burrow beneath rocks and debris or large, heavy objects such as abandoned cars, concrete blocks, or concrete pads. This species requires open vegetation allowing line-of-sight observation of the surrounding habitat to forage as well as watch for predators. The burrowing owl nesting season generally extends from mid-March to the end of August. While the open areas on the project site have the potential to provide suitable habitat, no suitable burrows, and very few burrows of any size, were found during the field survey. Burrowing owl was determined to have a low potential to occur on-site. Prior to the start of construction, a pre-construction nesting bird clearance survey shall be conducted to ensure no impacts to burrowing owl occur.

### **4.7.3 Special-Status Plant Communities**

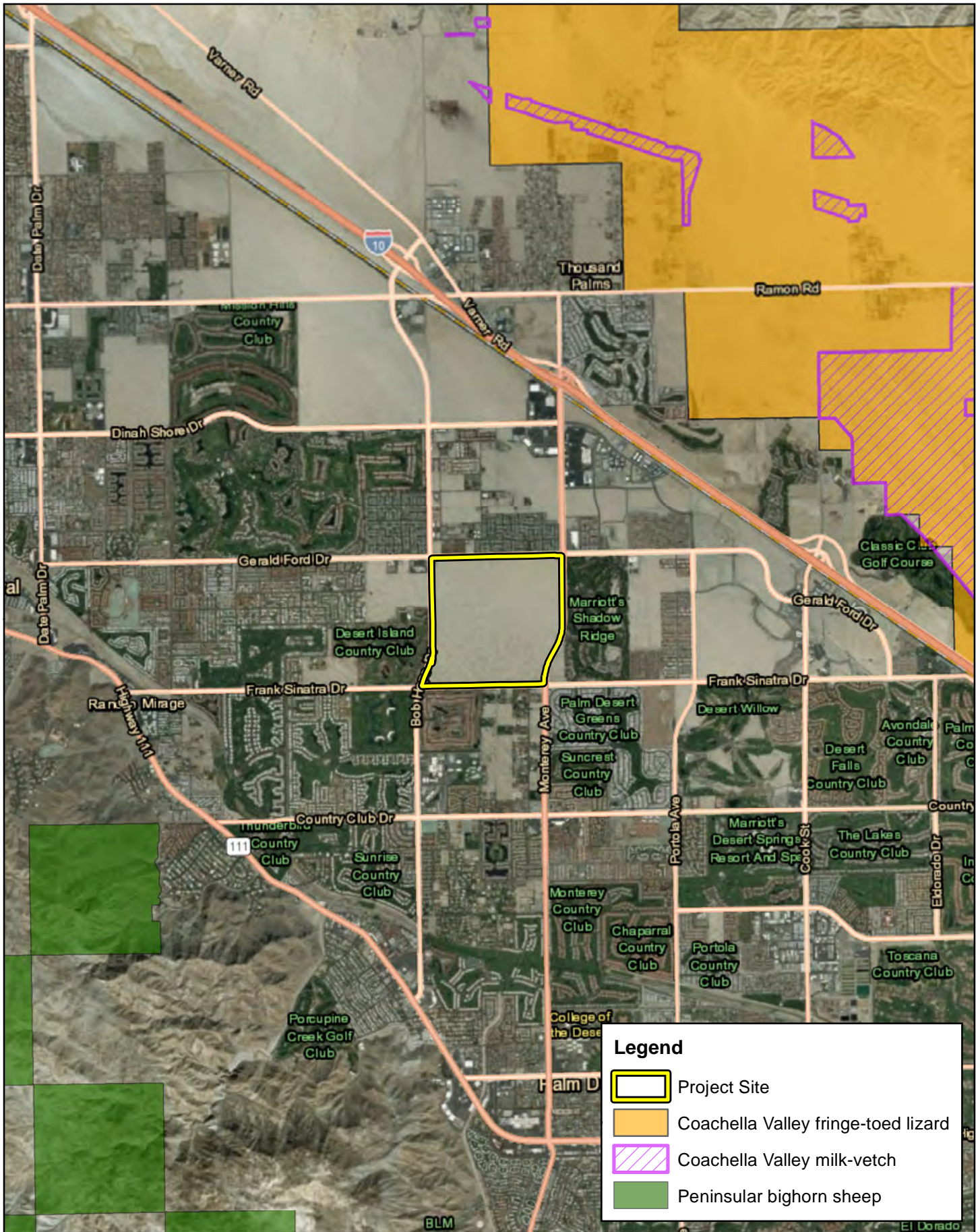
The CNDDDB lists one (1) special-status plant communities as being identified within the Cathedral City and Myoma USGS 7.5-minute quadrangles: Desert Fan Palm Oasis Woodland. This special-status plant community does not occur within the boundaries of the project site.

## **4.8 CRITICAL HABITAT**

Under the federal Endangered Species Act, "Critical Habitat" is designated at the time of listing of a species or within one year of listing. Critical Habitat refers to specific areas within the geographical range of a species at the time it is listed that include the physical or biological features that are essential to the survival and eventual recovery of that species. Maintenance of these physical and biological features requires special management considerations or protection, regardless of whether individuals or the species are present or not. All federal agencies are required to consult with the United States Fish and Wildlife Service (USFWS)

regarding activities they authorize, fund, or permit which may affect a federally listed species or its designated Critical Habitat. The purpose of the consultation is to ensure that projects will not jeopardize the continued existence of the listed species or adversely modify or destroy its designated Critical Habitat. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing is on federal lands, uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highways Administration or a CWA Permit from the Corps). If there is a federal nexus, then the federal agency that is responsible for providing the funding or permit would consult with the USFWS.

The project site is not located within federally designated Critical Habitat. The closest designated Critical Habitat is located approximately 1.5 miles northeast of the project for Coachella Valley fringe-toed lizard and Coachella Valley milk-vetch, and approximately 2 miles southwest of the project site for Peninsular bighorn sheep (Exhibit 6, *Critical Habitat*).

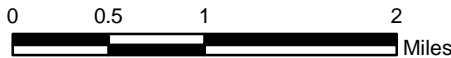


**Legend**

- Project Site
- Coachella Valley fringe-toed lizard
- Coachella Valley milk-vetch
- Peninsular bighorn sheep

RANCHO MIRAGE SECTION 31

# Critical Habitat



Source: USA Topographic Maps

## **Section 5      CVMSHCP Consistency Analysis**

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The project site is located within the boundaries of the CVMSHCP, but is not located within any Conservation Areas, Preserves, Cores, or Linkages (Exhibit 8, *CVMSHCP Conservation Areas*).

### **5.1      COVERED ACTIVITIES OUTSIDE CONSERVATION AREAS**

The proposed project is not listed as a planned “Covered Activity” under the published CVMSHCP, but is still considered to be a current Covered Activity pursuant to Section 7.1 of the CVMSHCP. According to Section 7.1 of the CVMSHCP, take authorization will be provided for certain activities that take place outside of Conservation Areas including “*new projects approved pursuant to county and city general plans, transportation improvement plans for roads in addition to those addressed in Section 7.2, master drainage plans, capital improvement plans, water and waste management plans, the County’s adopted Trails Master Plan, and other plans adopted by the Permittees.*”

As a Covered Activity located outside designated conservation areas, construction of the proposed project is expected to be consistent with the applicable avoidance, minimization, and mitigation measures described in Section 4.4 of the CVMSHCP (refer to Appendix D). Since the proposed project is considered a Covered Activity under Section 7.1 of the CVMSHCP, no further avoidance, minimization, and mitigation measures are required, and the project is in compliance with the CVMSHCP.

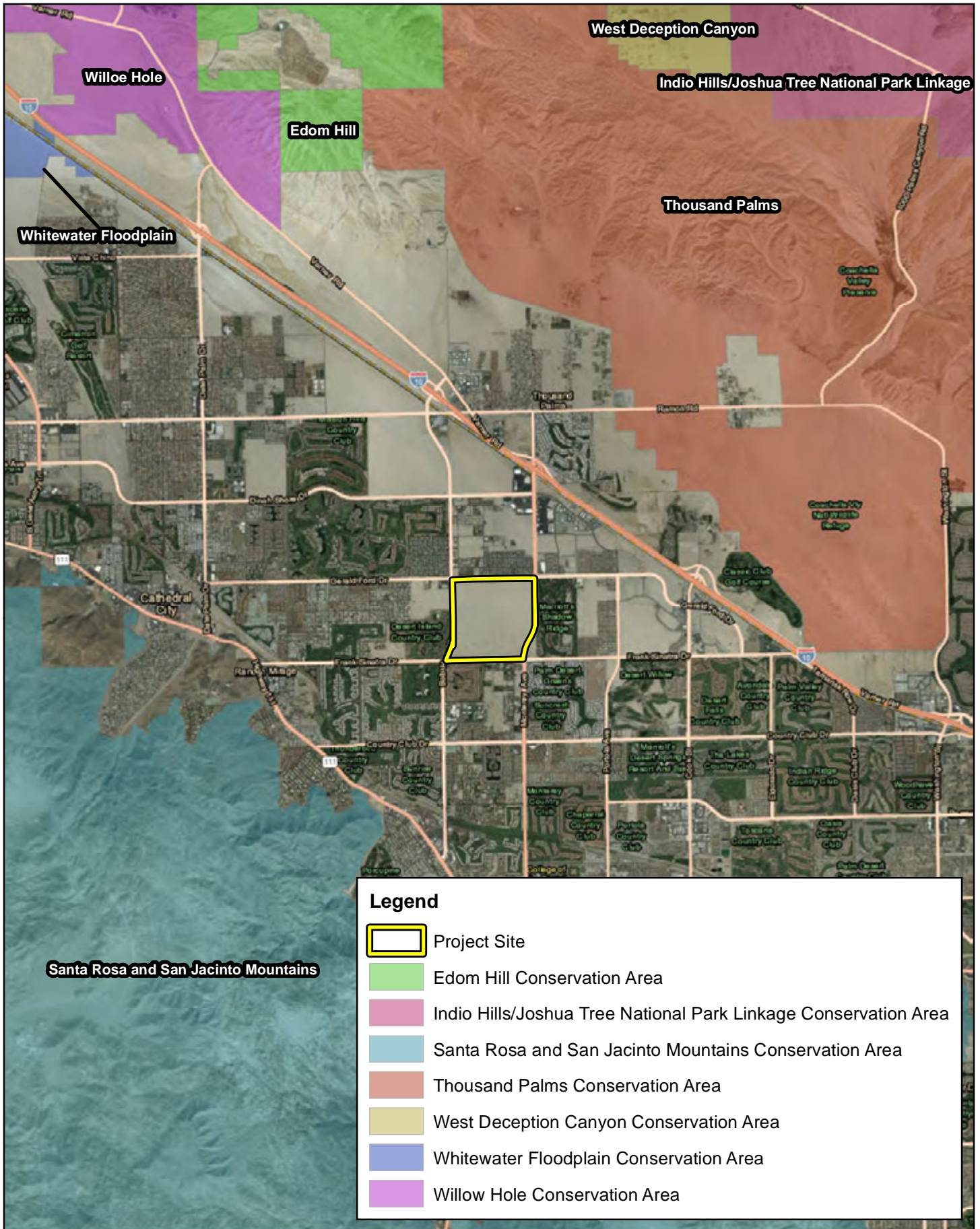
### **5.2      CVMSHCP LOCAL DEVELOPMENT MITIGATION FEE**

Pursuant to Section 5.2.1.1 of the CVMSHCP, four categories of property are required to pay a local development mitigation fee to the County of Riverside in order to provide revenue for the acquisition of land to be set aside for conservation. These five development categories include the following:

1. Residential with a density between 0 and 8.0 dwelling units per acre;
2. Residential with a density between 8.1 and 14.0 dwelling units per acre;
3. Residential with a density greater than 14.0 dwelling units per acre;
4. Commercial; and
5. Industrial.

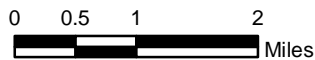
The proposed project would fall into one of these development categories. Therefore, the local development mitigation fee must be paid prior to project implementation.





RANCHO MIRAGE SECTION 31

# CVM SHCP Conservation Areas



Source: ESRI Aerial, CVM SHCP, World Transportation

## Section 6 Conclusion and Recommendations

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The project site consists of vacant, undeveloped land that relatively undisturbed. However, the project site is surrounded by development, which has isolated the project site from regional wildlife corridors/linkages or natural areas that have long term conservation value. One (1) plant community was documented on the project site: Sonoran creosote bush scrub.

Based on habitat requirements for specific species and the availability and quality of habitats needed by each special-status plant species, it was determined that the project site has a moderate or higher potential to support one (1) CVMSHCP-covered plant species, Coachella Valley milk-vetch, which was observed on-site during the 2018 surveys. In addition, it was determined that the site has a moderate potential to support eight (8) special-status plant species that are not covered under the MSHCP, including Borrego milk-vetch, ribbed cryptantha, winged cryptantha, pointed dodder, Abram's spurge, Arizona spurge, flat-seeded spurge, slender cottenheads. All other special-status plant species covered and non-covered are presumed absent. The surveys for the habitat assessment was conducted during the blooming season for the majority of the special-status plant species known to occur in the general vicinity of the project site. Coachella Valley milk-vetch was the only special-status plant species observed within the project site during the surveys.

Based on habitat requirements for specific species and the availability and quality of habitats needed by each special-status wildlife species, it was determined that the project site has a moderate or higher potential to support five (5) CVMSHCP-covered wildlife species, including Coachella giant sand treader cricket, Palm Springs pocket mouse, flat-tailed horned lizard, Coachella Valley fringe-toed lizard, and Coachella Valley round-tailed ground squirrel. In addition, the project site has a moderate or higher potential to support three (3) special-status wildlife species that are not covered under the MSHCP, including loggerhead shrike, Costa's hummingbird, and black-tailed gnatcatcher. All other special-status wildlife species, covered and non-covered, have a low potential to occur or are presumed absent. Costa's hummingbird and black-tailed gnatcatcher were the only special-status wildlife species observed within the project site during the habitat assessment.

No jurisdictional drainage and/or wetland features were observed within the project site during the field survey. Therefore, development of the project site will not result in impacts to Corps, Regional Board, or CDFW jurisdiction and regulatory approvals will not be required.

Based on the proposed project footprint, and with the implementation of the following recommendations, none of the special-status species known to occur in the general vicinity of the project site will be directly or indirectly impacted from implementation of the proposed project. Therefore, it was determined that this project will have "no effect" on federally, State, or CVMSHCP listed species known to occur in the general vicinity of the project site. Additionally, the project will have "no effect" on federally designated Critical Habitats.

### ***Migratory Bird Treaty Act and CDFW Fish and Game Code Compliance***

Nesting birds are protected pursuant to the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (Sections 3503, 3503.3, 3511, and 3513 of the California Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs). If construction occurs between February 1<sup>st</sup> and August 31<sup>st</sup>, a pre-construction clearance survey for nesting birds should be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities should stay outside of a 300-foot buffer around the active nest. For listed and raptor species, this buffer should be expanded to 500 feet. A biological monitor should be present to delineate the boundaries of the buffer area and monitor the active nest to ensure that nesting behavior is not adversely affected by construction activities. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur.

Additionally, although focused surveys for burrowing owl are not recommended, it is recommended that a pre-construction burrowing owl clearance survey be conducted prior to any ground disturbance or vegetation removal activities to ensure that burrowing owls remain absent and impacts do not occur to any occupied burrows that may be located on or within 500 feet of the project site. In accordance with the *Staff Report on Burrowing Owl Mitigation* (CDFW 2012), two pre-construction clearance surveys should be conducted 14-30 days and 24 hours prior to any ground disturbance or vegetation removal activities.

### ***CVMSHCP Compliance***

The project site is located within the boundaries of the CVMSHCP Area, but is not located within any Conservation Areas, Preserves, Cores, or Linkages. The proposed project is not listed as a planned “Covered Activity” under the published CVMSHCP, but is still considered to be a current Covered Activity pursuant to Section 7.1 of the CVMSHCP. As a Covered Activity located outside designated conservation areas, construction of the proposed project is expected to implement the applicable avoidance, minimization, and mitigation measures described in Section 4.4 of the CVMSHCP (refer to Appendix D). With implementation of the applicable avoidance and minimization measures, as well as payment of the CVMSHCP local development mitigation fee, the proposed project would be fully consistent with the biological goals and objectives of the CVMSHCP.

## Section 7      References

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## **Appendix A    Site Photographs**

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**Photograph 1:** From the middle of the northern boundary of the boundary of the project site looking west.



**Photograph 2:** From the northwest corner of the project site looking south.



**Photograph 3:** From the southwest corner of the project site looking north.



**Photograph 4:** From the southwest portion of the project site looking east.



**Photograph 5:** Looking at the southern portion of the project site.



**Photograph 6:** From the southeast corner of the project site looking north.





**Photograph 7:** Looking at the northeast corner of the project site.



**Photograph 8:** From the northeast corner of the project site looking west.



**Photograph 9:** Sandy soils found throughout the project site.



**Photograph 10:** Coachella Valley milk-vetch on-site.





**Photograph 11:** Culvert that receives water from surrounding development on the northern boundary of the site that has created a stand of emergent vegetation.



**Photograph 12:** Emergent vegetation on the northern boundary of the project site.

# **Appendix B      Potentially Occurring Special-Status Biological Resources**

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

Scientific Name Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<b>SPECIAL-STATUS WILDLIFE SPECIES</b>				
<i>Accipiter cooperii</i> Cooper's hawk	Fed: None CA: WL CVMHCP: Not Covered	Generally found in forested areas up to 3,000 feet in elevation, especially near edges and rivers. Prefers hardwood stands and mature forests, but can be found in urban and suburban areas where there are tall trees for nesting. Common in open areas during nesting season.	No	<b>Low.</b> The project site provides suitable foraging opportunities, but no suitable nesting opportunities.
<i>Accipiter striatus</i> sharp-shinned hawk	Fed: None CA: WL CVMHCP: Not Covered	Found in pine, fir and aspen forests. They can be found hunting in forest interior and edges from sea level to near alpine areas. Can also be found in rural, suburban and agricultural areas, where they often hunt at bird feeders. Typically found in southern California in the winter months.	No	<b>Low.</b> The project site provides suitable foraging opportunities, but no suitable nesting opportunities.
<i>Athene cunicularia</i> burrowing owl	Fed: None CA: CSC CVMHCP: Covered	Primarily a grassland species, but it persists and even thrives in some landscapes highly altered by human activity. Occurs in open, annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. The overriding characteristics of suitable habitat appear to be burrows for roosting and nesting and relatively short vegetation with only sparse shrubs and taller vegetation.	No	<b>Low.</b> There is marginal habitat for this species on-site. No suitable burrows (>4 inches in diameter) were observed onsite and no sign of owls was observed.
<i>Calypte costae</i> Costa's hummingbird	Fed: None CA: None CVMHCP: Not Covered	Desert and semi-desert, arid brushy foothills and chaparral. A desert hummingbird that breeds in the Sonoran and Mojave Deserts. Departs desert heat moving into chaparral, scrub, and woodland habitats.	Yes	<b>Present.</b> The project site provides suitable habitat for this species.
<i>Chaetodipus fallax pallidus</i> pallid San Diego pocket mouse	Fed: None CA: CSC CVMHCP: Not Covered	Common resident of sandy herbaceous areas, usually in association with rocks or coarse gravel in southwestern California. Occurs mainly in arid coastal and desert border areas. Habitats include coastal scrub, chamise-redshank chaparral, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon-juniper, and annual grassland.	No	<b>Low.</b> There is marginal habitat for this species on-site.
<i>Chaetura vauxi</i> Vaux's swift	Fed: None CA: CSC CVMHCP: Not Covered	Prefers redwood and Douglas-fir habitats with nest-sites in large hollow trees and snags, especially tall, burned-out stubs.	No	<b>Presumed absent.</b> This species is not usually found over open desert habitats. Local records are mostly in urban or forested areas.
<i>Circus cyaneus</i> northern harrier	Fed: None CA: CSC CVMHCP: Not Covered	Frequents meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands; seldom found in wooded areas. Mostly found in flat, or hummocky, open areas of tall, dense grasses moist or dry shrubs, and edges for nesting, cover, and feeding.	No	<b>Low.</b> The project site provides suitable foraging opportunities, but no suitable nesting opportunities.

Scientific Name Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<i>Contopus cooperi</i> olive-sided flycatcher	Fed: None CA: CSC CVMHCP: Not Covered	Uncommon to common, summer resident in a wide variety of forest and woodland habitats below 9,000 ft throughout California exclusive of the deserts, the Central Valley, and other lowland valleys and basins. Preferred nesting habitats include mixed conifer, montane hardwood-conifer, Douglas-fir, redwood, red fir, and lodgepole pine.	No	<b>Presumed absent.</b> No suitable habitat is present on-site.
<i>Crotalus ruber</i> red-diamond rattlesnake	Fed: None CA: CSC CVMHCP: Not Covered	It can be found from the desert, through dense chaparral in the foothills (it avoids the mountains above around 4,000 feet), to warm inland mesas and valleys, all the way to the cool ocean shore. It is most commonly associated with heavy brush with large rocks or boulders. Dense chaparral in the foothills, cactus or boulder associated coastal sage scrub, oak and pine woodlands, and desert slope scrub associations are known to carry populations of the northern red-diamond rattlesnake; however, chamise and red shank associations may offer better structural habitat for refuges and food resources for this species than other habitats.	No	<b>Presumed absent.</b> No suitable habitat is present on-site.
<i>Cyprinodon macularius</i> desert pupfish	Fed: <b>END</b> CA: <b>END</b> CVMHCP: Covered	In California, this species historically occurred in several springs, seeps and slow-moving streams in the Salton Sink Basin, as well as in backwaters and sloughs along the lower Colorado River. Now relegated to remnants of their former habitats, which generally are too harsh for most introduced species to exist.	No	<b>Presumed absent.</b> No suitable habitat is present on-site.
<i>Dinacoma caseyi</i> Casey's June beetle	Fed: <b>END</b> CA: None CVMHCP: Not Covered	All <i>Dinacoma</i> populations are associated with alluvial sediments occurring in or contiguous with bases of desert alluvial fans, and the broad, gently sloping, depositional surfaces at the base of the Santa Rosa mountain ranges in the dry Coachella valley region. Most commonly associated with the Carsitas series soil.	No	<b>Presumed absent.</b> No suitable habitat is present on-site.
<i>Dipodomys merriami collinus</i> Earthquake Merriam's kangaroo rat	Fed: None CA: None CVMHCP: Not Covered	Typically found in Riversidean alluvial fan sage scrub habitat, but may also be found in Riversidean sage scrub, chaparral and grassland vegetation in adjacent to upland areas. Often associated with sandy-loam soils that are common throughout the designated core drainages.	No	<b>Presumed absent.</b> No suitable habitat is present on-site.
<i>Dipodomys merriami parvus</i> San Bernardino kangaroo rat	Fed: <b>END</b> CA: CSC CVMHCP: Not Covered	Primarily found in Riversidean alluvial fan sage scrub and sandy loam soils, alluvial fans and flood plains, and along washes with nearby sage scrub. May occur at lower densities in Riversidean upland sage scrub, chaparral and grassland in uplands and tributaries in proximity to Riversidean alluvial fan sage scrub habitats. Tend to avoid rocky substrates and prefer sandy loam substrates for digging of shallow burrows.	No	<b>Presumed absent.</b> No suitable habitat is present on-site.

Scientific Name Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<i>Empidonax traillii brewsteri</i> little willow flycatcher	Fed: None CA: <b>END</b> CVMHCP: Not Covered	A rare to locally uncommon, summer resident in wet meadow and montane riparian habitats (2,000 to 8,000 feet) in the Sierra Nevada and Cascade Range. Most often occurs in broad, open river valleys or large mountain meadows with lush growth of shrubby willows.	No	<b>Presumed absent.</b> No suitable habitat is present on-site.
<i>Empidonax traillii extimus</i> southwestern willow flycatcher	Fed: <b>END</b> CA: <b>END</b> CVMHCP: Covered	Occurs in riparian woodlands in southern California. Typically requires large areas of willow thickets in broad valleys, canyon bottoms, or around ponds and lakes. These areas typically have standing or running water, or are at least moist.	No	<b>Presumed absent.</b> No suitable habitat is present on-site.
<i>Eremophila alpestris actia</i> California horned lark	Fed: None CA: WL CVMHCP: Not Covered	Generally found in shortgrass prairies, grasslands, disturbed fields, or similar habitat types. Flocks in groups.	No	<b>Low.</b> There is marginal habitat for this species on-site.
<i>Euphydryas editha quino</i> quino checkerspot butterfly	Fed: None CA: WL CVMHCP: Not Covered	Characterized by patchy shrub or small tree landscapes with openings of several meters between large plants, or a landscape of open swales alternating with dense patches of shrubs. Frequently perch on vegetation or other substrates to mate or bask and require open areas to facilitate movement. Host plant needed for egg deposits include <i>Plantago erecta</i> (erect or dwarf plantain), <i>Plantago patagonica</i> (Patagonian plantain), and <i>Anterrhinum coulterianum</i> (white snapdragon).	No	<b>Presumed absent.</b> No suitable habitat is present on-site.
<i>Falco mexicanus</i> prairie falcon	Fed: None CA: WL CVMHCP: Not Covered	Commonly occur in arid and semiarid shrubland and grassland community types. Also occasionally found in open parklands within coniferous forests. During the breeding season, they are found commonly in foothills and mountains which provide cliffs and escarpments suitable for nest sites.	No	<b>Low.</b> The project site provides suitable foraging opportunities, but no suitable nesting opportunities.
<i>Icteria virens</i> yellow-breasted chat	Fed: None CA: CSC CVMHCP: Covered	Primarily found in tall, dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories. Nesting areas are associated with streams, swampy ground, and the borders of small ponds. Breeding habitat must be dense to provide shade and concealment. It winters south the Central America.	No	<b>Presumed absent.</b> No suitable habitat is present on-site.
<i>Lanius ludovicianus</i> loggerhead shrike	Fed: None CA: CSC CVMHCP: Not Covered	Often found in broken woodlands, shrublands, and other habitats. Prefers open country with scattered perches for hunting and fairly dense brush for nesting.	No	<b>High.</b> The project site provides suitable nesting and foraging habitat.
<i>Lasiurus xanthinus</i> western yellow bat	Fed: None CA: CSC CVMHCP: Not Covered	Roosts in palm trees in foothill riparian, desert wash, and palm oasis habitats with access to water for foraging.	No	<b>Presumed absent.</b> No suitable habitat is present on-site.
<i>Macrobaenetes valgum</i> Coachella giant sand treader cricket	Fed: None CA: None CVMHCP: Covered	Nocturnal and moisture sensitive insects. Emergence occurs with winter rains and appear at maximum densities in January-February. Can be detected via their characteristic delta-shaped burrow excavations.	No	<b>Moderate/High.</b> There is suitable habitat throughout the project site.

Scientific Name Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<i>Neotoma lepida intermedia</i> San Diego desert woodrat	Fed: None CA: CSC CVMHCP: Not Covered	Occurs in coastal scrub communities between San Luis Obispo and San Diego Counties. Prefers moderate to dense canopies, and especially rocky outcrops.	No	<b>Presumed absent.</b> No suitable habitat is present on-site. Woodrat sign (middens, scat) was not observed during the survey.
<i>Oliarces clara</i> cheeseweed owlfly	Fed: None CA: None CVMHCP: Not Covered	Occur on or near bajadas, adults aggregate at local high topographic features to mate.	No	<b>Presumed absent.</b> No suitable habitat is present on-site.
<i>Ovis canadensis nelsoni</i> pop. 2 Peninsular bighorn sheep DPS	Fed: <b>END</b> CA: <b>THR;FP</b> CVMHCP: Covered	Preferred habitat is near mountainous terrain above the desert floor that is visually open, as well as steep and rocky. Most Mojave Desert mountain ranges satisfy these requirements well. Surface water is another element that is considered important to population health. Found mainly in the Peninsular Ranges.	No	<b>Presumed absent.</b> No suitable habitat is present on-site.
<i>Passerculus sandwichensis alaudin</i> Bryant's savannah sparrow	Fed: None CA: CSC CVMHCP: Not Covered	Occupies tidally influenced habitats, adjacent ruderal areas, moist grasslands within and just above the fog belt, and infrequently drier grasslands.	No	<b>Presumed absent.</b> No suitable habitat is present on-site.
<i>Passerculus sandwichensis rostratus</i> large-billed savannah sparrow	Fed: None CA: CSC CVMHCP: Not Covered	Non-breeding visitor occurring primarily from late August to early March along the southern coast and from late July to mid-February at the Salton Sea. Breeding habitat is limited to open, low salt marsh vegetation, including grasses, pickleweed, and iodine bush.	No	<b>Presumed absent.</b> No suitable habitat is present on-site.
<i>Perognathus longimembris bangsi</i> Palm Springs pocket mouse	Fed: None CA: CSC CVMHCP: Covered	Inhabits areas having flat to gently sloping topography, sparse to moderate vegetative cover, and loosely packed or sandy soils on slopes ranging from 0% to approximately 15%. Remaining habitat in the Coachella Valley and environs is about 142,000 acres.	No	<b>Moderate/High.</b> There is suitable habitat throughout the project site. The Whitewater Floodplain Conservation Area has been designated as a core habitat area for this species.
<i>Perognathus longimembris brevinasus</i> Los Angeles pocket mouse	Fed: None CA: CSC CVMHCP: Not Covered	Resides in lower elevation grasslands and coastal sage scrub communities in and around the Los Angeles Basin. Prefers open ground with fine sandy soils. May not dig extensive burrows, but instead will seek refuge under weeds and dead leaves instead.	No	<b>Presumed absent.</b> No suitable habitat is present on-site.
<i>Phrynosoma mcallii</i> flat-tailed horned lizard	Fed: None CA: CSC CVMHCP: Covered	Typical habitat is sandy desert hardpan or gravel flats with scattered sparse vegetation of low species diversity. Most common in areas with high density of harvester ants and fine windblown sand, but rarely occurs on dunes.	No	<b>Moderate.</b> There is suitable habitat throughout the site. The site is at the northern end of this species' range.

Scientific Name Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<i>Piranga rubra</i> summer tanager	Fed: None CA: CSC CVMHCP: Covered	Breed in gaps and edges of open deciduous or pine-oak forests across the southern and mid-Atlantic U.S. Uncommon (formerly common) summer resident and breeder in desert riparian habitat along lower Colorado River. Breeds in mature, desert riparian habitat dominated by cottonwoods and willows.	No	<b>Presumed absent.</b> No suitable habitat is present on-site.
<i>Polioptila californica californica</i> coastal California gnatcatcher	Fed: <b>THR</b> CA: CSC CVMHCP: Not Covered	Obligate resident of sage scrub habitats that are dominated by California sagebrush. This species generally occurs below 750 feet elevation in coastal regions and below 1,500 feet inland. It prefers habitat with more low-growing vegetation.	No	<b>Presumed absent.</b> No suitable habitat is present on-site. Project site is not located in typical range of this species.
<i>Polioptila melanura</i> black-tailed gnatcatcher	Fed: None CA: WL CVMHCP: Not Covered	In Mojave, Great Basin, Colorado and Sonoran desert communities, prefers nesting and foraging in densely lined arroyos and washes dominated by creosote bush and salt bush with scattered bursage, burrowed, ocotillo, saguaro, barrel cactus, nipple cactus, and prickly pear and cholla.	Yes	<b>Present.</b> The project site provides suitable habitat for this species.
<i>Setophaga petechia</i> yellow warbler	Fed: None CA: CSC CVMHCP: Covered	Nests over all of California except the Central Valley, the Mojave Desert region, and high altitudes and the eastern side of the Sierra Nevada. Winters along the Colorado River and in parts of Imperial and Riverside Counties. Nests in riparian areas dominated by willows, cottonwoods, sycamores, or alders or in mature chaparral. May also use oaks, conifers, and urban areas near stream courses.	No	<b>Presumed absent.</b> No suitable habitat is present on-site.
<i>Spinus lawrencei</i> Lawrence's goldfinch	Fed: None CA: None CVMHCP: Not Covered	Typical habitats include valley foothill hardwood, valley foothill hardwood-conifer, and, in southern California, desert riparian, palm oasis, pinyon-juniper, and lower montane habitats. Nearby herbaceous habitats often used for feeding. Open woodlands, chaparral, and weedy fields. Closely associated with oaks. Nests in open oak or other arid woodland and chaparral near water.	No	<b>Presumed absent.</b> No suitable habitat is present on-site.
<i>Stenopelmatus cahuilaensis</i> Coachella Valley Jerusalem cricket	Fed: None CA: None CVMHCP: Covered	Restricted to desert dunes.	No	<b>Presumed absent.</b> No suitable habitat is present on-site.
<i>Toxostoma crissale</i> Crissal thrasher	Fed: None CA: CSC CVMHCP: Covered	Year round resident in California. Occupies a relatively large variety of desert riparian and scrub habitats from below sea level to over 6,000 feet. The common factor, regardless of habitat type and species of shrub, is dense, low scrubby vegetation. Primarily occupies riparian scrub or woodland at lower elevations.	No	<b>Low.</b> There is marginal habitat for this species on-site.



Scientific Name Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<i>Toxostoma lecontei</i> Le Conte's thrasher	Fed: None CA: CSC CVMHCP: Covered	An uncommon to rare, local resident in southern California deserts from southern Mono Co. south to the Mexican border, and in western and southern San Joaquin Valley. Occurs primarily in open desert wash, desert scrub, alkali desert scrub, and desert succulent shrub habitats; also occurs in Joshua tree habitat with scattered shrubs.	No	<b>Low.</b> There is marginal habitat for this species on-site.
<i>Uma inornata</i> Coachella Valley fringe-toed lizard	Fed: <b>THR</b> CA: <b>END</b> CVMHCP: Covered	Sparsely-vegetated arid areas with fine wind-blown sand, including dunes, washes, and flats with sandy hummocks formed around the bases of vegetation. Needs fine, loose sand for burrowing.	No	<b>Moderate.</b> There is suitable habitat throughout much of the site. Although isolated, sandy habitat within the site is still generally sufficient for this species.
<i>Xerospermophilus tereticaudus chlorus</i> Coachella Valley round-tailed ground squirrel	Fed: None CA: CSC CVMHCP: Covered	Inhabits sandy arid regions of Lower Sonoran Life Zone. Its scrub and wash habitats include mesquite and creosote dominated sand dunes, creosote bush scrub, creosote palo verde and saltbush/alkali scrub.	No	<b>Moderate.</b> There is suitable habitat throughout the site.
<b>SPECIAL-STATUS PLANT SPECIES</b>				
<i>Abronia villosa var. aurita</i> chaparral sand-verbena	Fed: None CA: None CNPS: 1B.1 CVMHCP: Not Covered	Found on the coastal side of the southern California mountains in chaparral and coastal sage scrub plant communities in areas of full sun and sandy soils. Found at elevations ranging from 262 to 5,249 feet. Blooming period is from January to September.	No	<b>Presumed absent.</b> No suitable habitat is present.
<i>Astragalus lentiginosus var. borreganus</i> Borrego milk-vetch	Fed: None CA: None CNPS: 4.3 CVMHCP: Not Covered	Grows in sandy soils within Mojavean desert scrub and Sonoran desert scrub. Found at elevations ranging from 98 to 1,050 feet in elevation. Blooming period is from February to May.	No	<b>Moderate.</b> The project site provides marginal habitat.
<i>Astragalus lentiginosus var. coachellae</i> Coachella Valley milk-vetch	Fed: <b>END</b> CA: None CNPS: 1B.2 CVMHCP: Covered	Preferred habitat includes desert dunes and sandy Sonoran desert scrub. Found at elevations ranging from 131 to 2,149 feet in elevation. Blooming period is from February to May.	Yes	<b>Present.</b> Species was documented on-site during the 2018 surveys.
<i>Astragalus tricarinatus</i> triple-ribbed milk-vetch	Fed: <b>END</b> CA: None CNPS: 1B.2 CVMHCP: Covered	Found in sandy or gravelly soils within Joshua tree woodland and Sonoran desert scrub habitats. Found at elevations ranging from 1,476 to 3,904 feet. Blooming period is from February to May.	No	<b>Presumed absent.</b> The project site is outside of the typical known elevation for this species.
<i>Cuscuta californica var. apiculata</i> pointed dodder	Fed: None CA: None CNPS: 3 CVMHCP: Not Covered	Occurs in Mojavean desert scrub and Sonoran desert scrub habitats. Found at elevations ranging from 0 to 1640 feet. Blooming period is from February to August.	No	<b>Moderate.</b> The project site provides marginal habitat.

Scientific Name Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<i>Eremothera boothii ssp. boothii</i> Booth's evening primrose	Fed: None CA: None CNPS: 2B.3 CVMSHCP: Not Covered	Joshua tree woodland, pinyon and juniper woodland. Blooming period is from June to August.	No	<b>Presumed absent.</b> No suitable habitat is present.
<i>Eschscholzia androuxii</i> Joshua Tree poppy	Fed: None CA: None CNPS: 4.3 CVMSHCP: Not Covered	Grows in desert washes, flats, and slopes; sandy, gravelly and/or rocky within Joshua tree woodland and Mojavean desert scrub habitats. Found at elevations ranging from 1,919 to 5,528 feet. Blooming period is from February to June.	No	<b>Presumed absent.</b> The project site is outside of the typical known elevation for this species.
<i>Euphorbia abramsiana</i> Abram's spurge	Fed: None CA: None CNPS: 2B.2 CVMSHCP: Not Covered	Found on sandy soils in Mojavean desert scrub and Sonoran Desert scrub. Blooming period is from September to November.	No	<b>Moderate.</b> The project site provides marginal habitat.
<i>Euphorbia arizonica</i> Arizona spurge	Fed: None CA: None CNPS: 2B.3 CVMSHCP: Not Covered	Preferred habitat includes sandy, Sonoran desert scrub habitat. Found at elevations ranging from 164 to 984 feet. Blooming period is from March to April.	No	<b>Moderate.</b> The project site provides marginal habitat.
<i>Euphorbia platysperma</i> flat-seeded spurge	Fed: None CA: None CNPS: 1B.2 CVMSHCP: Not Covered	Occurs within desert scrub and sandy Sonoran desert scrub habitats. Found at elevations ranging from 213 to 328 feet. Blooming period is from February to September.	No	<b>Moderate.</b> The project site provides marginal habitat.
<i>Johnstonella costata</i> ribbed cryptantha	Fed: None CA: None CNPS: 4.3 CVMSHCP: Not Covered	Preferred habitat includes desert dunes, Mojavean desert scrub, and Sonoran desert scrub habitats on sandy soil. Found at elevations ranging from 197 to 1,640 feet. Blooming period is from February to May.	No	<b>Moderate.</b> The project site provides marginal habitat.
<i>Johnstonella holoptera</i> winged cryptantha	Fed: None CA: None CNPS: 4.3 CVMSHCP: Not Covered	Found in Mojavean desert scrub and Sonoran desert scrub habitats. Found at elevations ranging from 328 to 5,545 feet. Blooming period is from March to April.	No	<b>Moderate.</b> The project site provides marginal habitat.
<i>Juncus acutus ssp. leopoldii</i> southwestern spiny rush	Fed: None CA: None CNPS: 4.2 CVMSHCP: Not Covered	Found in coastal dunes (mesic), meadows and seeps (alkaline), and marshes and swamps (coastal salt). Found at elevations ranging from 0 to 3,115 feet. Blooming period is from May to June.	No	<b>Presumed absent.</b> No suitable habitat is present.
<i>Juncus cooperi</i> Cooper's rush	Fed: None CA: None CNPS: 4.3 CVMSHCP: Not Covered	Found in meadows and seeps (mesic, alkaline, or saline). Found at elevations ranging from -250 to 2,855 feet. Blooming period is from April to May.	No	<b>Presumed absent.</b> No suitable habitat is present.
<i>Lycium torreyi</i> Torrey's box-thron	Fed: None CA: None CNPS: 4.2 CVMSHCP: Not Covered	Found in sandy, rocky, washes, streambanks and desert valleys in association with Mojavean and Sonoran Desert scrub habitats. Found at elevations ranging from 130 to 3,575 feet. Blooming period is from March to May.	No	<b>Presumed absent.</b> No suitable habitat is present.

Scientific Name Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<i>Nemacaulis denudata</i> var. <i>gracilis</i> slender cottonheads	Fed: None CA: None CNPS: 2B.2 CVMSHCP: Not Covered	Occurs in coastal dunes, desert dunes, and Sonoran desert scrub habitats. Found at elevations ranging from 164 to 1,312 feet. Blooming period is from March to May.	No	<b>Moderate.</b> The project site provides marginal habitat.
<i>Petalonyx linearis</i> narrow-leaf sandpaper plant	Fed: None CA: None CNPS: 2B.3 CVMSHCP: Not Covered	Found in sandy or rocky canyons in association with Mojavean or Sonoran Desert scrub habitats. Found at elevations ranging from 260 to 2,855 feet. Blooming period is from March to May.	No	<b>Presumed absent.</b> No suitable habitat is present.
<i>Selaginella eremophila</i> desert spike-moss	Fed: None CA: None CNPS: 2B.2 CVMSHCP: Not Covered	Found in chaparral and Sonoran desert scrub habitats within gravelly or rocky soil. Found at elevations ranging from 656 to 2,953 feet. Blooming period is from May to July.	No	<b>Presumed absent.</b> No suitable habitat is present.
<i>Stemodia durantifolia</i> purple stemodia	Fed: None CA: None CNPS: 2B.1 CVMSHCP: Not Covered	Occurs in Sonoran desert scrub habitats. Found at elevations ranging from 591 to 984 feet. Blooming period is from January to December.	No	<b>Presumed absent.</b> This species is presumed extirpated in Riverside County.
<i>Xylorhiza cognata</i> Mecca-aster	Fed: None CA: None CNPS: 1B.2 CVMSHCP: Covered	Occurs in Sonoran desert scrub habitat. Found at elevations ranging from 66 to 1,312 feet. Blooming period is from January to June.	No	<b>Presumed absent.</b> No suitable habitat is present.
<b>CDFW SENSITIVE HABITATS</b>				
Desert Fan Palm Oasis Woodland	CDFW Sensitive Habitat	Rare plant community that is one of the most unusual biological resources located within the Coachella Valley. Found within canyons and along the San Andreas Fault Zone, where water occurs naturally. Generally characterized by open to dense groves of native desert fan palms, which are the most massive native palm in North America, growing more than 66 feet.	No	<b>Absent.</b>

**U.S. Fish and Wildlife Service (Fed) - Federal**  
 END – Federal Endangered  
 THR – Federal Threatened

**California Department of Fish and Wildlife (CA) - California**  
 END – California Endangered  
 THR – California Threatened  
 FP – California Fully Protected  
 CSC – California Species of Special Concern  
 WL – California Watch List

**California Native Plant Society (CNPS)**  
**California Rare Plant Rank**  
 1B Plants Rare, Threatened, or Endangered in California and Elsewhere  
 2B Plants Rare, Threatened, or Endangered in California, but More Common Elsewhere  
 3 More Information Needed  
 4 Plants of Limited Distribution – A Watch List

**Threat Ranks**  
 0.1- Seriously threatened in California  
 0.2- Moderately threatened in California  
 0.3- Not very threatened in California

## **Appendix C    Regulations**

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*Special status species are native species that have been afforded special legal or management protection because of concern for their continued existence. There are several categories of protection at both federal and state levels, depending on the magnitude of threat to continued existence and existing knowledge of population levels.*

## **Federal Regulations**

### ***Endangered Species Act of 1973***

Federally listed threatened and endangered species and their habitats are protected under provisions of the Federal Endangered Species Act (ESA). Section 9 of the ESA prohibits “take” of threatened or endangered species. “Take” under the ESA is defined as to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any of the specifically enumerated conduct.” The presence of any federally threatened or endangered species that are in a project area generally imposes severe constraints on development, particularly if development would result in “take” of the species or its habitat. Under the regulations of the ESA, the United States Fish and Wildlife Service (USFWS) may authorize “take” when it is incidental to, but not the purpose of, an otherwise lawful act.

Critical Habitat is designated for the survival and recovery of species listed as threatened or endangered under the ESA. Critical Habitat includes those areas occupied by the species, in which are found physical and biological features that are essential to the conservation of an ESA listed species and which may require special management considerations or protection. Critical Habitat may also include unoccupied habitat if it is determined that the unoccupied habitat is essential for the conservation of the species.

Whenever federal agencies authorize, fund, or carry out actions that may adversely modify or destroy Critical Habitat, they must consult with USFWS under Section 7 of the ESA. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highway Administration or a permit from the U.S. Army Corps of Engineers (Corps)).

If USFWS determines that Critical Habitat will be adversely modified or destroyed from a proposed action, the USFWS will develop reasonable and prudent alternatives in cooperation with the federal institution to ensure the purpose of the proposed action can be achieved without loss of Critical Habitat. If the action is not likely to adversely modify or destroy Critical Habitat, USFWS will include a statement in its biological opinion concerning any incidental take that may be authorized and specify terms and conditions to ensure the agency is in compliance with the opinion.

### ***Migratory Bird Treaty Act***

The Migratory Bird Treaty Act (MBTA) (16 U.S. Government Code [USC] 703) makes it unlawful to pursue, capture, kill, possess, or attempt to do the same to any migratory bird or part, nest, or egg of any such bird listed in wildlife protection treaties between the United States, Great Britain, Mexico, Japan, and the countries of the former Soviet Union, and authorizes the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. It establishes seasons and bag limits for hunted species and protects migratory birds, their occupied nests, and their eggs (16 USC 703; 50 CFR 10, 21).

The MBTA covers the taking of any nests or eggs of migratory birds, except as allowed by permit pursuant to 50 CFR, Part 21. Disturbances causing nest abandonment and/or loss of reproductive effort (i.e., killing or abandonment of eggs or young) may also be considered “take.” This regulation seeks to protect migratory birds and active nests.

In 1972, the MBTA was amended to include protection for migratory birds of prey (e.g., raptors). Six families of raptors occurring in North America were included in the amendment: Accipitridae (kites, hawks, and eagles); Cathartidae (New World vultures); Falconidae (falcons and caracaras); Pandionidae (ospreys); Strigidae (typical owls); and Tytonidae (barn owls). The provisions of the 1972 amendment to the MBTA protects all species and subspecies of the families listed above. The MBTA protects over 800 species including geese, ducks, shorebirds, raptors, songbirds and many relatively common species.

### **State Regulations**

#### ***California Environmental Quality Act (CEQA)***

The California Environmental Quality Act (CEQA) provides for the protection of the environment within the State of California by establishing State policy to prevent significant, avoidable damage to the environment through the use of alternatives or mitigation measures for projects. It applies to actions directly undertaken, financed, or permitted by State lead agencies. If a project is determined to be subject to CEQA, the lead agency will be required to conduct an Initial Study (IS); if the IS determines that the project may have significant impacts on the environment, the lead agency will subsequently be required to write an Environmental Impact Report (EIR). A finding of non-significant effects will require either a Negative Declaration or a Mitigated Negative Declaration instead of an EIR. Section 15380 of the CEQA Guidelines independently defines “endangered” and “rare” species separately from the definitions of the California Endangered Species Act (CESA). Under CEQA, “endangered” species of plants or animals are defined as those whose survival and reproduction in the wild are in immediate jeopardy, while “rare” species are defined as those who are in such low numbers that they could become endangered if their environment worsens.

#### ***California Endangered Species Act (CESA)***

In addition to federal laws, the state of California implements the CESA which is enforced by CDFW. The CESA program maintains a separate listing of species beyond the FESA, although the provisions of each act are similar.

State-listed threatened and endangered species are protected under provisions of the CESA. Activities that may result in “take” of individuals (defined in CESA as; “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill”) are regulated by CDFW. Habitat degradation or modification is not included in the definition of “take” under CESA. Nonetheless, CDFW has interpreted “take” to include the destruction of nesting, denning, or foraging habitat necessary to maintain a viable breeding population of protected species.

The State of California considers an endangered species as one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is considered as one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the

absence of special protection or management. A rare species is one that is considered present in such small numbers throughout its range that it may become endangered if its present environment worsens. State threatened and endangered species are fully protected against take, as defined above.

The CDFW has also produced a species of special concern list to serve as a species watch list. Species on this list are either of limited distribution or their habitats have been reduced substantially, such that a threat to their populations may be imminent. Species of special concern may receive special attention during environmental review, but they do not have formal statutory protection. At the federal level, USFWS also uses the label species of concern, as an informal term that refers to species which might be in need of concentrated conservation actions. As the Species of Concern designated by USFWS do not receive formal legal protection, the use of the term does not necessarily ensure that the species will be proposed for listing as a threatened or endangered species.

### ***Fish and Game Code***

Fish and Game Code Sections 3503, 3503.5, 3511, and 3513 are applicable to natural resource management. For example, Section 3503 of the Code makes it unlawful to destroy any birds' nest or any birds' eggs that are protected under the MBTA. Further, any birds in the orders Falconiformes or Strigiformes (Birds of Prey, such as hawks, eagles, and owls) are protected under Section 3503.5 of the Fish and Game Code which makes it unlawful to take, possess, or destroy their nest or eggs. A consultation with CDFW may be required prior to the removal of any bird of prey nest that may occur on a project site. Section 3511 of the Fish and Game Code lists fully protected bird species, where the CDFW is unable to authorize the issuance of permits or licenses to take these species. Pertinent species that are State fully protected by the State include golden eagle (*Aquila chrysaetos*) and white-tailed kite (*Elanus leucurus*). Section 3513 of the Fish and Game Code makes it unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

### ***Native Plant Protection Act***

Sections 1900–1913 of the Fish and Game Code were developed to preserve, protect, and enhance Rare and Endangered plants in the state of California. The act requires all state agencies to use their authority to carry out programs to conserve Endangered and Rare native plants. Provisions of the Native Plant Protection Act prohibit the taking of listed plants from the wild and require notification of the CDFW at least ten days in advance of any change in land use which would adversely impact listed plants. This allows the CDFW to salvage listed plant species that would otherwise be destroyed.

### ***California Native Plant Society Rare and Endangered Plant Species***

Vascular plants listed as rare or endangered by the CNPS, but which have no designated status under FESA or CESA are defined as follows:

#### California Rare Plant Rank

- 1A- Plants Presumed Extirpated in California and either Rare or Extinct Elsewhere
- 1B- Plants Rare, Threatened, or Endangered in California and Elsewhere

- 2A- Plants Presumed Extirpated in California, But More Common Elsewhere
- 2B- Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
- 3- Plants about Which More Information is Needed - A Review List
- 4- Plants of Limited Distribution - A Watch List

#### Threat Ranks

- .1- Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
- .2- Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
- .3- Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known).

### **Local Policies**

#### ***Coachella Valley MSHCP***

A Multiple Species Habitat Conservation Plan (Plan) was prepared for the entire Coachella Valley and surrounding mountains to address current and potential future state and federal Endangered Species Act issues in the Plan Area. A Memorandum of Understanding (“Planning Agreement”) was developed to govern the preparation of the Plan. In late 1995 and early 1996, under the auspices of CVAG, the cities of Cathedral City, Coachella, Desert Hot Springs, Indian Wells, Indio, La Quinta, Palm Desert, Palm Springs, and Rancho Mirage; County of Riverside (County); U.S. Fish and Wildlife Service (USFWS); California Department of Fish and Game (CDFG); Bureau of Land Management (BLM); U.S. Forest Service (USFS); and National Park Service (NPS) signed the Planning Agreement to initiate the planning effort. Subsequently, Caltrans, Coachella Valley Water District (CVWD), Imperial Irrigation District (IID), Riverside County Flood Control and Water Conservation District (County Flood Control), Riverside County Regional Park and Open Space District (County Parks), Riverside County Waste Resources Management District (County Waste), California Department of Parks and Recreation (State Parks), and CVMC decided to participate in the Plan.

The Plan balances environmental protection and economic development objectives in the Plan Area and simplifies compliance with endangered species related laws. The Plan is intended to satisfy the legal requirements for the issuance of Permits that will allow the Take of species covered by the Plan in the course of otherwise lawful activities. The Plan will, to the maximum extent practicable, minimize and mitigate the impacts of the Taking and provide for Conservation of the Covered Species.

The Conservation Plan includes the establishment of an MSHCP Reserve System, setting Conservation Objectives to ensure the Conservation of the Covered Species and conserved natural communities in the MSHCP Reserve System, provisions for management of the MSHCP Reserve System, and a Monitoring Program, and Adaptive Management. The MSHCP Reserve System will be established from lands within



21 Conservation Areas. Because some Take Authorization is provided under the Plan for Development in Conservation Areas, the actual MSHCP Reserve System will be somewhat smaller than the total acres in the Conservation Areas. When assembled, the Reserve System will provide for the Conservation of the Covered Species in the Plan Area.

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates activities pursuant to Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the CDFG regulates activities under the Fish and Game Code Section 1600-1616, and the Regional Board regulates activities pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

## **Federal Regulations**

### ***Section 404 of the Clean Water Act***

Since 1972, the Corps and U.S. Environmental Protection Agency (EPA) have jointly regulated the filling of “waters of the U.S.,” including wetlands, pursuant to Section 404 of the Clean Water Act (CWA). The Corps has regulatory authority over the discharge of dredged or fill material into the waters of the United States under Section 404 of the CWA. The Corps and EPA define “fill material” to include any “material placed in waters of the United States where the material has the effect of: (i) replacing any portion of a water of the United States with dry land; or (ii) changing the bottom elevation of any portion of the waters of the United States.” Examples include, but are not limited to, sand, rock, clay, construction debris, wood chips, and “materials used to create any structure or infrastructure in the waters of the United States.” In order to further define the scope of waters protected under the CWA, the Corps and EPA published the Clean Water Rule on June 29, 2015. Pursuant to the Clean Water Rule, the term “waters of the United States” is defined as follows:

- (i) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.
- (ii) All interstate waters, including interstate wetlands<sup>1</sup>.
- (iii) The territorial seas.
- (iv) All impoundments of waters otherwise defined as waters of the United States under the definition.
- (v) All tributaries<sup>2</sup> of waters identified in paragraphs (i) through (iii) mentioned above.
- (vi) All waters adjacent<sup>3</sup> to a water identified in paragraphs (i) through (v) mentioned above, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters.

<sup>1</sup> The term *wetlands* means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

<sup>2</sup> The terms *tributary* and *tributaries* each mean a water that contributes flow, either directly or through another water (including an impoundment identified in paragraph (iv) mentioned above), to a water identified in paragraphs (i) through (iii) mentioned above, that is characterized by the presence of the physical indicators of a bed and banks and an ordinary high water mark.

<sup>3</sup> The term *adjacent* means bordering, contiguous, or neighboring a water identified in paragraphs (i) through (v) mentioned above, including waters separated by constructed dikes or barriers, natural river berms, beach dunes, and the like.

- (vii) All prairie potholes, Carolina bays and Delmarva bays, Pocosins, western vernal pools, Texas coastal prairie wetlands, where they are determined, on a case-specific basis, to have a significant nexus to a water identified in paragraphs (i) through (iii) mentioned above.
- (viii) All waters located within the 100-year floodplain of a water identified in paragraphs (i) through (iii) mentioned above and all waters located within 4,000 feet of the high tide line or ordinary high water mark of a water identified in paragraphs (i) through (v) mentioned above, where they are determined on a case-specific basis to have a significant nexus to a waters identified in paragraphs (i) through (iii) mentioned above.

The following features are not defined as “waters of the United States” even when they meet the terms of paragraphs (iv) through (viii) mentioned above:

- (i) Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act.
- (ii) Prior converted cropland.
- (iii) The following ditches:
  - (A) Ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary.
  - (B) Ditches with intermittent flow that are not a relocated tributary, excavated in a tributary, or drain wetlands.
  - (C) Ditches that do not flow, either directly or through another water, into a water of the United States as identified in paragraphs (i) through (iii) of the previous section.
- (iv) The following features:
  - (A) Artificially irrigated areas that would revert to dry land should application of water to that area cease;
  - (B) Artificial, constructed lakes and ponds created in dry land such as farm and stock watering ponds, irrigation ponds, settling basins, fields flooded for rice growing, log cleaning ponds, or cooling ponds;
  - (C) Artificial reflecting pools or swimming pools created in dry land;
  - (D) Small ornamental waters created in dry land;
  - (E) Water-filled depressions created in dry land incidental to mining or construction activity, including pits excavated for obtaining fill, sand, or gravel that fill with water;
  - (F) Erosional features, including gullies, rills, and other ephemeral features that do not meet the definition of a tributary, non-wetland swales, and lawfully constructed grassed waterways; and
  - (G) Puddles.
- (v) Groundwater, including groundwater drained through subsurface drainage systems.
- (vi) Stormwater control features constructed to convey, treat, or store stormwater that are created in dry land.

- (vii) Wastewater recycling structures constructed in dry land; detention and retention basins built for wastewater recycling; groundwater recharge basins; percolation ponds built for wastewater recycling; and water distributary structures built for wastewater recycling.

### ***Section 401 of the Clean Water Act***

Pursuant to Section 401 of the CWA, any applicant for a federal license or permit to conduct any activity which may result in any discharge to waters of the United States must provide certification from the State or Indian tribe in which the discharge originates. This certification provides for the protection of the physical, chemical, and biological integrity of waters, addresses impacts to water quality that may result from issuance of federal permits, and helps insure that federal actions will not violate water quality standards of the State or Indian tribe. In California, there are nine Regional Water Quality Control Boards (Regional Board) that issue or deny certification for discharges to waters of the United States and waters of the State, including wetlands, within their geographical jurisdiction. The State Water Resources Control Board assumed this responsibility when a project has the potential to result in the discharge to waters within multiple Regional Boards.

### **State Regulations**

#### ***Fish and Game Code***

Fish and Game Code Sections 1600 et. seq. establishes a fee-based process to ensure that projects conducted in and around lakes, rivers, or streams do not adversely impact fish and wildlife resources, or, when adverse impacts cannot be avoided, ensures that adequate mitigation and/or compensation is provided.

Fish and Game Code Section 1602 requires any person, state, or local governmental agency or public utility to notify the CDFW before beginning any activity that will do one or more of the following:

- (1) substantially obstruct or divert the natural flow of a river, stream, or lake;
- (2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake;  
or
- (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake.

Fish and Game Code Section 1602 applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State. CDFW's regulatory authority extends to include riparian habitat (including wetlands) supported by a river, stream, or lake regardless of the presence or absence of hydric soils and saturated soil conditions. Generally, the CDFW takes jurisdiction to the top of bank of the stream or to the outer limit of the adjacent riparian vegetation (outer drip line), whichever is greater. Notification is generally required for any project that will take place in or in the vicinity of a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life and watercourses having a surface or subsurface flow that support or have supported riparian vegetation. A Section 1602 Streambed Alteration Agreement would be required if impacts to identified CDFW jurisdictional areas occur.

***Porter Cologne Act***

The California *Porter-Cologne Water Quality Control Act* gives the State very broad authority to regulate waters of the State, which are defined as any surface water or groundwater, including saline waters. The Porter-Cologne Act has become an important tool in the post SWANCC and Rapanos regulatory environment, with respect to the state’s authority over isolated and insignificant waters. Generally, any person proposing to discharge waste into a water body that could affect its water quality must file a Report of Waste Discharge in the event that there is no Section 404/401 nexus. Although “waste” is partially defined as any waste substance associated with human habitation, the Regional Board also interprets this to include fill discharged into water bodies.



# **Appendix D      CVMSHCP Avoidance, Minimization and Mitigation Measures**

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## ***4.4 Required Avoidance, Minimization, and Mitigation Measures***

This section describes certain avoidance, minimization, and mitigation requirements for Covered Activities within the Conservation Area, in addition to Conservation Area specific measures described in the Conservation Area subsections in Section 4.3. The measures described in this section do not apply to single-family homes, emergency response activities, and any non-commercial accessory uses and structures including but not limited to second units on an existing legal lot. To assist Permittees with implementation of these measures, CVCC will maintain maps of modeled Habitat and a natural communities map and will provide them to each of the Permittees. CVCC will also maintain a list of Acceptable Biologists who may be used to conduct surveys for specified Covered Species identified in this section. Any Permittee may submit the names of biologists for inclusion in the initial list of Acceptable Biologists. The list shall be updated at least annually. CVCC will develop procedures for individual biologists to submit their name for inclusion on the list. Individuals conducting survey activities for listed endangered or threatened species or species for which a state or federal protocol exists must have the appropriate permit (i.e., in accordance with the federal Endangered Species Act, Section 10(a)(1)(A), or state Endangered Species Act, California Fish and Game Code, Section 2081(a)) to conduct such surveys. Annually, or whenever the list is revised, CVCC shall submit the list to the Wildlife Agencies for review. The Wildlife Agencies shall have thirty (30) days to provide input on the qualifications of any biologists on the list. If the Wildlife Agencies have not responded within thirty days (30) of receipt of the list from CVCC, the biologists on the list shall be deemed acceptable.

In the event that a survey of a parcel is required pursuant to the MSHCP, it will be conducted by an Acceptable Biologist. The survey shall be conducted in the appropriate season, in accordance with established accepted protocols if they exist. Within one (1) year of Permit issuance, the Wildlife Agencies and the MPA, in consultation with CVCC, shall develop survey protocols for those species for which a protocol is required. CVCC will maintain a list of accepted survey protocols. For those species for which protocols do not exist at the time surveys are needed, the Acceptable Biologist shall use a survey protocol generally accepted by biologists familiar with the species. Survey results shall be documented in both mapped and text form and shall be presented for review by the appropriate Permittee and CVCC. Wildlife Agencies' concurrence or acceptance of the surveys and/or the results contained therein is not required by the MSHCP.

**Biological Corridors.** Specific roads in Conservation Areas, where culverts or undercrossings are required to maintain Biological Corridors, are delineated in the Section 4.3 subsections on individual Conservation Areas.

**Burrowing Owl.** This measure does not apply to single-family residences and any non-commercial accessory uses and structures including but not limited to second units on an existing legal lot, or to O&M of Covered Activities other than levees, berms, dikes, and similar features that are known to contain burrowing owl burrows. O&M of

roads is not subject to this requirement. For other projects that are subject to CEQA, the Permittees will require burrowing owl surveys in the Conservation Areas using an accepted protocol (as determined by the CVCC in coordination with the Permittees and the Wildlife Agencies). Prior to Development, the construction area and adjacent areas within 500 feet of the Development site, or to the edge of the property if less than 500 feet, will be surveyed by an Acceptable Biologist for burrows that could be used by burrowing owl. If a burrow is located, the biologist will determine if an owl is present in the burrow. If the burrow is determined to be occupied, the burrow will be flagged and a 160-foot buffer during the non-breeding season and a 250-foot buffer during the breeding season, or a buffer to the edge of the property boundary if less than 500 feet, will be established around the burrow. The buffer will be staked and flagged. No Development or O&M activities will be permitted within the buffer until the young are no longer dependent on the burrow.

If the burrow is unoccupied, the burrow will be made inaccessible to owls, and the Covered Activity may proceed. If either a nesting or escape burrow is occupied, owls shall be relocated pursuant to accepted Wildlife Agency protocols. A burrow is assumed occupied if records indicate that, based on surveys conducted following protocol, at least one burrowing owl has been observed occupying a burrow on site during the past three years. If there are no records for the site, surveys must be conducted to determine, prior to construction, if burrowing owls are present. Determination of the appropriate method of relocation, such as eviction/passive relocation or active relocation, shall be based on the specific site conditions (e.g., distance to nearest suitable habitat and presence of burrows within that habitat) in coordination with the Wildlife Agencies. Active relocation and eviction/passive relocation require the preservation and maintenance of suitable burrowing owl habitat determined through coordination with the Wildlife Agencies.

Within one (1) year of Permit issuance, CVCC will cooperate with County Flood Control, CVWD and IID to conduct an inventory of levees, berms, dikes, and similar features in the Plan Area maintained by those Permittees. Burrowing owl burrow locations will be mapped and each of these Permittees will incorporate the information into its O&M practices to avoid impacts to the burrowing owl to the maximum extent Feasible. CVCC in cooperation with County Flood Control, CVWD, and IID will prepare a manual for maintenance staff, educating them about the burrowing owl and appropriate actions to take when owls are encountered to avoid impacts to the maximum extent Feasible. The manual will be submitted to the Wildlife Agencies for review and comment within two (2) years of Permit issuance. In conjunction with the Monitoring Program, the maps of the burrowing owl locations along the above-described levees, berms, dikes, and similar features will be periodically updated.

**Covered Riparian Bird Species.** This measure does not apply to single-family residences and any non-commercial accessory uses and structures including but not limited to second units on an existing legal lot. Riparian Habitat here refers to the following natural communities: southern arroyo willow riparian forest, Sonoran cottonwood-willow riparian forest, desert fan palm oasis woodland, and southern sycamore-alder riparian woodland in the Cabazon, Stubbe and Cottonwood Canyons,

*Final Recirculated Coachella Valley MSHCP – September 2007*

Whitewater Canyon, Upper Mission Creek/Big Morongo Canyon, Thousand Palms, Indio Hills Palms, Joshua Tree National Park, Mecca Hills and Orocopia Mountains, Dos Palmas, Coachella Valley Stormwater Channel and Delta, and Santa Rosa and San Jacinto Mountains Conservation Areas. Covered Activities, including O&M of facilities and construction of permitted new projects, in riparian Habitat will be conducted to the maximum extent Feasible outside of the March 15 – September 15 nesting season for least Bell's vireo, and the May 1 – September 15 nesting season for southwestern willow flycatcher, summer tanager, yellow warbler, and yellow-breasted chat. If Covered Activities must occur during the nesting season, surveys shall be conducted to determine if any active nests are present. If active nests are identified, the Covered Activity shall not be conducted within 200 feet of an active nest. If surveys conducted during the nesting season document that Covered nesting riparian bird Species are not present, the Covered Activity may proceed.

**Crissal Thrasher.** This measure does not apply to single-family residences and any non-commercial accessory uses and structures including but not limited to second units on an existing legal lot, or to O&M of Covered Activities. In modeled crissal thrasher Habitat in the Willow Hole, Thousand Palms, Indio Hills Palms, East Indio Hills, Dos Palmas, and Coachella Valley Stormwater Channel and Delta Conservation Areas, surveys will be conducted by an Acceptable Biologist prior to the start of construction activities during the nesting season, January 15 – June 15, to determine if active nest sites for this species occur on the construction site and/or within 500 feet of the construction site, or to the edge of the property boundary if less than 500 feet. If nesting crissal thrashers are found, a 500-foot buffer, or a buffer to the edge of the property boundary if less than 500 feet, will be established around the nest site. The buffer will be staked and flagged. No construction activities will be permitted within the buffer during the breeding season of January 15 – June 15 or until the young have fledged.

**Desert tortoise.** This measure does not apply to single-family residences and any non-commercial accessory uses and structures, including but not limited to second units on an existing legal lot, or to O&M of Covered Activities for Permittee infrastructure facilities. Within Conservation Areas, the Permittees will require surveys for desert tortoise for Development in modeled desert tortoise Habitat. Prior to Development, an Acceptable Biologist will conduct a presence/absence survey of the Development area and adjacent areas within 200 feet of the Development area, or to the property boundary if less than 200 feet and permission from the adjacent landowner cannot be obtained, for fresh sign of desert tortoise, including live tortoises, tortoise remains, burrows, tracks, scat, or egg shells. The presence/absence survey must be conducted during the window between February 15 and October 31. Presence/absence surveys require 100% coverage of the survey area. If no sign is found, a clearance survey is not required. A presence/absence survey is valid for 90 days or indefinitely if tortoise-proof fencing is installed around the Development site.

If fresh sign is located, the Development area must be fenced with tortoise-proof fencing and a clearance survey conducted during the clearance window. Desert tortoise clearance surveys shall be conducted during the clearance window from February 15 to

*Final Recirculated Coachella Valley MSHCP – September 2007*

June 15 and September 1 to October 31 or in accordance with the most recent Wildlife Agency protocols. Clearance surveys must cover 100% of the Development area. A clearance survey must be conducted during different tortoise activity periods (morning and afternoon). All tortoises encountered will be moved from the Development site to a specified location. Prior to issuance of the Permits, CVCC will either use the *Permit Statement Pertaining to High Temperatures for Handling Desert Tortoises* and *Guidelines for Handling Desert Tortoises During Construction Projects*, revised July 1999, or develop a similar protocol for relocation and monitoring of desert tortoise, to be reviewed and approved by the Wildlife Agencies. Thereafter, the protocol will be revised as needed based on the results of monitoring and other information that becomes available.

For O&M activities in the Conservation Areas, the Permittees shall ensure that personnel conducting such activities are instructed to be alert for the presence of desert tortoise. If a tortoise is spotted, activities adjacent to the tortoise's location will be halted and the tortoise will be allowed to move away from the activity area. If the tortoise is not moving, it will be relocated by an Acceptable Biologist to nearby suitable Habitat and placed in the shade of a shrub. To the maximum extent Feasible, O&M activities will avoid the period from February 15 and October 31.

Utility development protocols have been developed to avoid or minimize potential adverse impacts to the desert tortoise in the Conservation Areas from utility and road right-of-way projects, such as the installation and maintenance of water, sewer, and electric lines and roadway maintenance. The objectives of these protocols are to provide reliable and consistent direction on utility development within the Conservation Areas. Two utility development protocols, inactive and active season, provide specific direction on site preparation and construction phases of utility projects in the Conservation Areas. The protocols include steps to be followed during the desert tortoise active and/or inactive season. The inactive season protocol must be used for utility maintenance or development within the November 1 to February 14 time frame; the active season protocol must be used for utility maintenance or development within the February 15 to October 31 time frame. Deviations from these time frames must be presented to the RMOC.

***Inactive Season Protocol.*** This protocol is applicable to pre-construction and construction phases of utility Covered Activity projects occurring between November 1 and February 14. These protocols apply only to the site preparation and construction phases of projects. The project proponent must follow the eight pre-construction protocol requirements listed below.

1. A person from the entity contracting the construction shall act as the contact person with the representative of the appropriate RMUC. He/she will be responsible for overseeing compliance with the protective stipulations as stated in this protocol.
2. Prior to any construction activity within the Conservation Areas, the contact person will meet with the representative of the appropriate RMUC to review the



*Final Recirculated Coachella Valley MSHCP – September 2007*

- plans for the project. The representative of the appropriate RMUC will review alignment, pole spacing, clearing limits, burrow locations, and other specific project plans which have the potential to affect the desert tortoise. He or she may recommend modifications to the contact person to further avoid or minimize potential impacts to desert tortoise.
3. The construction area shall be clearly fenced, marked, or flagged at the outer boundaries to define the limits of construction activities. The construction right-of-way shall normally not exceed 50 feet in width for standard pipeline corridors, access roads and transmission corridors, and shall be minimized to the maximum extent Feasible. Existing access roads shall be used when available, and rights-of-way for new and existing access roads shall not exceed 20 feet in width unless topographic obstacles require greater road width. Other construction areas including well sites, storage tank sites, substation sites, turnarounds, and laydown/staging sites which require larger areas will be determined in the pre-construction phase. All construction workers shall be instructed that their activities shall be confined to locations within the fenced, flagged, or marked areas.
  4. An Acceptable Biologist shall conduct pre-construction clearance surveys of all areas potentially disturbed by the proposed project. Any winter burrows discovered in the Conservation Areas during the pre-construction survey shall be avoided or mitigated. The survey shall be submitted to the representative of the appropriate RMUC as part of plan review.
  5. All site mitigation criteria shall be determined in the pre-construction phase, including but not limited to seeding, barrier fences, leveling, and laydown/staging areas, and will be reviewed by the representative of the appropriate RMUC prior to implementation.
  6. A worker education program shall be implemented prior to the onset of each construction project. All construction employees shall be required to read an educational brochure prepared by the representative of the appropriate RMUC and/or the RMOC and attend a tortoise education class prior to the onset of construction or site entry. The class will describe the sensitive species which may be found in the area, the purpose of the MSHCP Reserve System, and the appropriate measures to take upon discovery of a sensitive species. It will also cover construction techniques to minimize potential adverse impacts.
  7. All pre-construction activities which could Take tortoises in any manner (e.g., driving off an established road, clearing vegetation, etc.) shall occur under the supervision of an Acceptable Biologist.
  8. If there are unresolvable conflicts between the representative of the appropriate RMUC and the contact person, then the matter will be arbitrated by the RMOC and, if necessary, by CVCC.

*Final Recirculated Coachella Valley MSHCP – September 2007*

The following terms are established to protect the desert tortoise during utility-related construction activities in the Conservation Areas and are to be conducted by an Acceptable Biologist.

- An Acceptable Biologist shall oversee construction activities to ensure compliance with the protective stipulations for the desert tortoise.
- Desert tortoises found above ground inside the project area during construction shall be moved by an Acceptable Biologist out of harm's way and placed in a winter den (at a distance no greater than 250 feet). If a winter den cannot be located, the USFWS or CDFG shall determine appropriate action with respect to the tortoise. Tortoises found above ground shall be turned over to the Acceptable Biologist
- No handling of tortoises will occur when the air temperature at 15 centimeters above ground exceeds 90 degrees Fahrenheit.
- Desert tortoise burrows shall be avoided to the maximum extent Feasible. An Acceptable Biologist shall excavate any burrows which cannot be avoided and will be disturbed by construction. Burrow excavation shall be conducted with the use of hand tools only, unless the Acceptable Biologist determines that the burrow is unoccupied immediately prior to burrow destruction.
- Only burrows within the limits of clearing and surface disturbance shall be excavated. Burrows outside these limits, but at risk from accidental crushing, shall be protected by the placement of deterrent barrier fencing between the burrow and the construction area. Installation and removal of such barrier fencing shall be under the direction and supervision of an Acceptable Biologist.
- For electrical transmission line and road construction projects, only burrows within the right-of-way shall be excavated. Burrows outside the right-of-way, but at risk from accidental crushing, shall be protected by the placement of deterrent barrier fencing between the burrow and the right-of-way. Installation and removal of such barrier fencing shall be under the direction and supervision of an Acceptable Biologist.
- Tortoises in the Conservation Areas are not to be removed from burrows until appropriate action is determined by USFWS or CDFG with respect to the tortoise. The response shall be carried out within 72 hours.
- Blasting is not permissible within 100 feet of an occupied tortoise burrow.

During construction, contractors will comply with the mitigation and minimization measures contained within this protocol. These measures are:

- All trenches, pits, or other excavations shall be inspected for tortoises by an Acceptable Biologist prior to filling.
- All pipes and culverts stored within desert tortoise Habitat shall have both ends capped to prevent entry by desert tortoises. During construction, all open ended pipeline segments that are welded in place shall be capped during periods of

*Final Recirculated Coachella Valley MSHCP – September 2007*

construction inactivity to prevent entry by desert tortoises.

- Topsoil removed during trenching shall be re-spread on the pipeline construction area following compaction of the backfill. The area shall be restored as determined during the environmental review.
- All test pump water will be routed to the nearest wash or natural drainage. The route will be surveyed by an Acceptable Biologist. If tortoises are found in the drainage area the Acceptable Biologist will remove the tortoises.
- Powerlines associated with water development, such as to provide power for pumps, should be buried underground adjacent to the pipe. All above ground structures deemed to be necessary shall be equipped with functional anti-perching devices that would prevent their use by ravens and other predatory birds, and shall adhere to the electrical distribution protocol which follows.
- In order to perform routine O&M of the water systems such as wells, pumps, water lines and storage tanks, etc., employees are to be trained in the area of desert tortoise education. This training will be performed on a regular basis by an Acceptable Biologist for those personnel not previously trained. The training will include at a minimum the following: identification of tortoises, burrows, and other sign; and instructions on installing tortoise barrier fencing. During the course of basic O&M, desert tortoise will be avoided. Untrained employees shall not perform maintenance operations within the reserve.
- All disturbance areas around poles or concrete pads will be reduced to a size just large enough for the construction activity.
- Areas disturbed around poles or construction pads will be restored as determined during the pre-construction process.
- Poles or other above ground structures necessary for electrical distribution development shall be minimized as much as possible. All above ground structures shall be equipped with functional anti-perching devices that would prevent their use by ravens and other predatory birds.
- In order to perform routine O&M of the electrical distribution systems such as transmission lines and poles, substations, etc., employees are to be trained in the area of desert tortoise education. This training will be performed on a regular basis by a qualified biologist for those personnel not previously trained. The training will include at a minimum the following: identification of tortoises, burrows, and other sign; and instructions on installing tortoise barrier fencing. During the course of basic O&M, desert tortoise will be avoided. Untrained employees shall not perform maintenance operations within the non-Take areas.
- All trash and food items shall be promptly contained and removed daily from the project site to reduce the attractiveness of the area to common ravens and other desert tortoise predators.
- Construction activities which occur between dusk and dawn shall be limited to areas which have already been cleared of desert tortoises by the Acceptable Biologist and graded or located in a fenced right-of-way. Construction activities

*Final Recirculated Coachella Valley MSHCP – September 2007*

shall not be permitted between dusk and dawn in areas not previously graded.

**Active Season Protocol.** This protocol is applicable to pre-construction and construction phases of utility development projects occurring between February 15 and November 1. It is identical to the Inactive Season Protocol with the following additions:

- Work areas shall be inspected for desert tortoises within 24 hours of the onset of construction. To facilitate implementation of this condition, burrow inspection and excavation may begin no more than seven (7) days in advance of construction activities, as long as a final check for desert tortoises is conducted at the time of construction.
- All pre-construction activities which could Take tortoises in any manner (e.g., driving off an established road, clearing vegetation, etc.) shall occur under the overall supervision of an Acceptable Biologist. Any hazards to tortoises created by this activity, such as drill holes, open trenches, pits, other excavations, or any steep-sided depressions, shall be checked three times a day for desert tortoises. These hazards shall be eliminated each day prior to the work crew leaving the site, which may include installing a barrier that will preclude entry by tortoises. Open trenches, pits or other excavations will be backfilled within 72 hours, whenever possible. A 3:1 slope shall be left at the end of every open trench to allow trapped desert tortoises to escape. Trenches not backfilled within 72 hours shall have a barrier installed around them to preclude entry by desert tortoises. All trenches, pits, or other excavations shall be inspected for tortoises by a biological monitor trained and approved by the Acceptable Biologist prior to filling.
- If a desert tortoise is found, the biological monitor shall notify the Acceptable Biologist who will remove the animal as soon as possible.
- Only burrows within the limits of clearing and surface disturbance shall be excavated. Burrows outside these limits, but at risk from accidental crushing, shall be protected by the placement of deterrent barrier fencing between the burrow and the construction area. The barrier fence shall be at least 20 feet long and shall be installed to direct the tortoise leaving the burrow away from the construction area. Installation and removal of such barrier fencing shall be under the direction and supervision of the biological monitor.
- If blasting is necessary for construction, all tortoises shall be removed from burrows within 100 feet of the blast area.

**Disposition of Sick, Injured, or Dead Specimens.** Upon locating dead, injured, or sick desert tortoises under any utility or road project, initial notification by the contact representative or Acceptable Biologist must be made to the USFWS or CDFG within three (3) working days of its finding. Written notification must be made within five (5) calendar days with the following information: date; time; location of the carcass; photograph of the carcass; and any other pertinent information. Care must be taken in handling sick or injured animals to ensure effective treatment and care. Injured animals shall be taken care of by the Acceptable Biologist or an appropriately trained

*Final Recirculated Coachella Valley MSHCP – September 2007*

veterinarian. Should any treated tortoises survive, USFWS or CDFG should be contacted regarding the final disposition of the animals.

**Fluvial Sand Transport.** Activities, including O&M of facilities and construction of permitted new projects, in fluvial sand transport areas in the Cabazon, Stubbe and Cottonwood Canyons, Snow Creek/Windy Point, Whitewater Canyon, Whitewater Floodplain, Upper Mission Creek/Big Morongo Canyon, Mission Creek/Morongo Wash, Willow Hole, Long Canyon, Edom Hill, Thousand Palms, West Deception Canyon, and Indio Hills/Joshua Tree National Park Linkage Conservation Areas will be conducted in a manner to maintain the fluvial sand transport capacity of the system.

**Le Conte's Thrasher.** This measure does not apply to single-family residences and any non-commercial accessory uses and structures including but not limited to second units on an existing legal lot, or to O&M of Covered Activities. In modeled Le Conte's thrasher Habitat in all the Conservation Areas, during the nesting season, January 15 - June 15, prior to the start of construction activities, surveys will be conducted by an Acceptable Biologist on the construction site and within 500 feet of the construction site, or to the property boundary if less than 500 feet. If nesting Le Conte's thrashers are found, a 500 foot buffer, or to the property boundary if less than 500 feet, will be established around the nest site. The buffer will be staked and flagged. No construction will be permitted within the buffer during the breeding season of January 15 - June 15 or until the young have fledged.

**Mesquite Hummocks and Mesquite Bosque Natural Communities.** This measure does not apply to single-family residences and any non-commercial accessory uses and structures including but not limited to second units on an existing legal lot, or to O&M of Covered Activities. Construction activities in the Cabazon, Willow Hole, Thousand Palms, Indio Hills Palms, East Indio Hills, Dos Palmas, Coachella Valley Stormwater Channel and Delta, and Santa Rosa and San Jacinto Mountains Conservation Areas will avoid mesquite hummocks and mesquite bosque to the maximum extent Feasible.

**Peninsular Bighorn Sheep Habitat.** Completion of Covered Activities in Peninsular bighorn sheep Habitat in the Cabazon, Snow Creek/Windy Point, and Santa Rosa and San Jacinto Mountains Conservation Areas will be conducted outside of the January 1 - June 30 lambing season unless otherwise authorized through a Minor Amendment to the Plan with concurrence from the Wildlife Agencies. O&M of Covered Activities, including but not limited to refinishing the inside of water storage tanks, shall be scheduled to avoid the lambing season, but may extend into the January 1 – June 30 period if necessary to complete the activity, upon concurrence with the Wildlife Agencies.

For new projects in the above listed Conservation Areas, no toxic or invasive plant species may be used for landscaping. For existing public infrastructure facilities which have landscaping in Peninsular bighorn sheep Habitat in the Cabazon, Snow Creek/Windy Point, and Santa Rosa and San Jacinto Mountains Conservation Areas, the



*Final Recirculated Coachella Valley MSHCP – September 2007*

Permittees who have such facilities will, with respect to those facilities, develop and implement a plan and schedule to remove or prevent access to oleander and any other plants known to be toxic to Peninsular bighorn sheep. The plan and schedule will be prepared within one (1) year of Permit issuance.

**Triple-ribbed milkvetch.** This measure does not apply to single-family residences and any non-commercial accessory uses and structures including but not limited to second units on an existing legal lot, or to O&M of Covered Activities. It is understood that O&M for infrastructure developed as part of a private development approved in compliance with the MSHCP that is later transferred to a public entity is included as a Covered Activity. For Covered Activities within modeled triple-ribbed milkvetch Habitat in the Whitewater Canyon, Whitewater Floodplain, Upper Mission Creek/Big Morongo Canyon, and Santa Rosa and San Jacinto Mountains Conservation Areas, surveys by an Acceptable Biologist will be required for activities during the growing and flowering period from February 1 - May 15. Any occurrences of the species will be flagged and public infrastructure projects shall avoid impacts to the plants to the maximum extent Feasible. In particular, known occurrences on a map maintained by CVCC shall not be disturbed.

**Palm Springs Pocket Mouse.** To avoid impacts to the Palm Springs pocket mouse and its habitat in the Upper Mission Creek/Big Morongo Canyon and Willow Hole Conservation Areas, Flood Control-related construction activities will comply with the following avoidance and minimization measures.

- **Clearing:** For construction that would involve disturbance to Palm Springs pocket mouse habitat, activity should be phased to the extent feasible and practicable so that suitable habitat islands are no farther than 300 feet apart at any given time to allow pocket mice to disperse between habitat patches across non-suitable habitat (i.e., unvegetated and/or compacted soils). Prior to project construction, a biological monitor familiar with this species should assist construction crews in planning access routes to avoid impacts to occupied habitat as much as feasible (i.e., placement of preferred routes on project plans and incorporation of methods to avoid as much suitable habitat/soil disturbance as possible). Furthermore, during construction activities, the biological monitor will ensure that connected, naturally vegetated areas with sandy soils and typical native vegetation remain intact to the extent feasible and practicable. Finally, construction that involves clearing of habitat should be avoided during the peak breeding season (approximately March to May), and activity should be limited as much as possible during the rest of the breeding season (January to February and June to August).
- **Revegetation:** Clearing of native vegetation (e.g., creosote, rabbitbrush, burrobush, cheesebush) should be followed by revegetation, including natural reestablishment and other means, resulting in habitat types of equal or superior biological value for Palm Springs pocket mouse.
- **Trapping/Holding:** All trapping activity should be conducted in accordance with accepted protocols and by a qualified biologist who possesses a Memorandum of

Understanding with CDFG for live-trapping of heteromyid species in Southern California.

- **Translocation:** Should translocation between distinct population groups be necessary, as determined through the Adaptive Management and Monitoring Program, activity should be conducted by a qualified biologist who possesses a Memorandum of Understanding with CDFG for live-trapping of heteromyid species in Southern California. Trapping and subsequent translocation activity should be conducted in accordance with accepted protocols. Translocation programs should be coordinated by or conducted by the CVCC and/or RMOC to determine the appropriate trapping, holding, marking, and handling methods and potential translocation sites.

**Little San Bernardino Mountains Linanthus.** This measure does not apply to single-family residences and any non-commercial accessory uses and structures, including but not limited to second units on an existing legal lot, or to O&M of Covered Activities. To avoid and minimize impacts to this species as much as possible, the following avoidance and minimization effort shall occur:

- **Salvage:** Salvage of top soil and/or seeds should occur prior to ground disturbance in accordance with Section 6.6.1. Salvage should be conducted by or in cooperation with the CVCC.