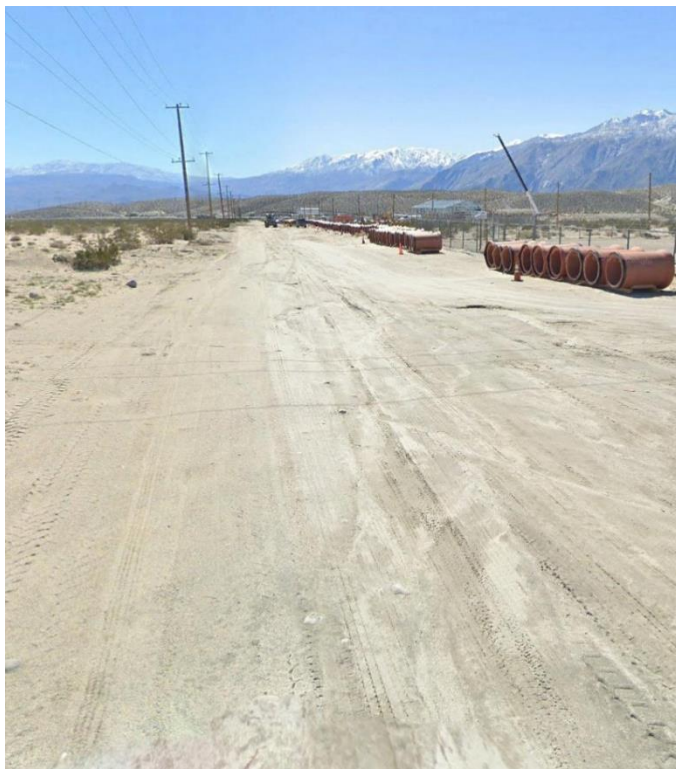


**APPENDIX 3**



# Biological Resources Technical Report

*Mission Springs Water District  
Wright RWRf Street Improvements Project*

*Desert Hot Springs, Riverside County, California*

March 15, 2025



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# 1 Introduction

Mission Springs Water District (MSWD) provides water and sewer services to the communities of Desert Hot Springs, West Garnet, North Palm Springs, and various portions of unincorporated Riverside County. In August of 2019, MSWD certified the Environmental Impact Report (EIR) for the West Valley Water Reclamation Program, which consisted of constructing municipal wastewater collection and treatment systems that would facilitate the elimination of individual septic systems that overlie the Mission Creek aquifer. The West Valley Water Reclamation Program consisted of three components: construction of a wastewater treatment plant (the Nancy Wright Regional Wastewater Reclamation Facility [Wright RWRf]), construction of a conveyance system connection existing sewer areas to the Wright RWRf, and construction a collection system for the GQPP Area M2 (to be served by the Wright RWRf). As part of the MSWD's continued development of the Wright RWRf, the City of Desert Hot Springs conditioned the MSWD to complete paving of the compacted dirt roadways that serve the site. Thus, the MSWD will serve as the California Environmental Quality Act (CEQA) lead agency for the proposed Regional Wastewater Reclamation Facility Street Improvements Project (Project), which would involve installation of asphalt pavement along the Wright RWRf's boundaries on 19<sup>th</sup> Street, Little Morongo Road, and 20<sup>th</sup> Avenue.

On behalf of Tom Dodson & Associates, HDR, Inc. (HDR) has prepared this Biological Resources Assessment (BRA) technical report for the proposed Project, located in the City of Desert Hot Springs, Riverside County, California. The BRA fieldwork was conducted by HDR biologist Eric Weis in February of 2025. The purpose of the BRA survey was to address potential effects of the proposed Project on designated Critical Habitats and/or any species currently listed or formally proposed for listing as endangered or threatened under the federal Endangered Species Act (ESA) and/or the California Endangered Species Act (CESA), as well as any species otherwise designated as sensitive by the California Department of Fish and Wildlife (CDFW [formerly California Department of Fish and Game]) and/or the California Native Plant Society (CNPS).

The Project Area was assessed for sensitive species known to occur locally. Attention was focused on those state and/or federally listed as threatened or endangered species and California Fully Protected species that have been documented in the vicinity of the Project Area, whose habitat requirements are present within or adjacent to the Project Area. Results of the habitat assessment are intended to provide sufficient baseline information to the Project proponent (MSWD), City and County planning officials and, if required, federal and state regulatory agencies, including the U.S. Fish and Wildlife Service (USFWS) and CDFW, respectively, to determine if the Project is likely to result in any adverse effects on sensitive biological resources and to identify mitigation measures to offset those effects.

In addition to the BRA survey, the Project Area was assessed for the presence of state and/or federal jurisdictional aquatic resources potentially subject to regulation by the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA), Regional Water Quality Control Board (RWQCB) under Section 401 of the CWA and Porter Cologne Water Quality Control Act, and CDFW under Section 1602 of the California Fish and Game Code (FGC), respectively.

HDR has also prepared a Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) Consistency Analysis, which is included in the scope of this report. The purpose of this analysis is to assess whether the proposed Project is consistent with the conditions and provisions identified in the CVMSHCP. The MSWD and City of Desert Hot Springs are signatories to the MSHCP Implementing Agreement and thereby permittees responsible for meeting the terms and conditions outlined in the

CVMSHCP and the Biological Opinion issued for the CVMSHCP. Therefore, MSWD and the City of Desert Hot Springs have the responsibility to ensure the projects they approve are consistent with the Conservation Goals and Objectives of the CVMSHCP.

## 1.1 Project Description

The proposed Project involves the installation of 1.08 miles or 5,700 linear feet (LF) of paved roadway along the boundaries of the MSWD's Wright RWRF, in place of the existing roadway condition, which is simply compacted dirt. The purpose of the project is to improve the paved roadway network in the City of Desert Hot Springs to accommodate the Wright RWRF's development, reduce fugitive dust generation from automobiles traveling on the existing dirt roadways, and enhance access to future development in the area that may be served by these roadway improvements.

The roadway would be 32 feet in width, with the whole of the right-of-way (ROW) to be 44 feet in width, accommodating curb, gutter, and future sidewalk construction within the additional 12 feet of ROW. The intersection at Little Morongo Road and 20<sup>th</sup> Avenue, as well as at Little Morongo Road and 19<sup>th</sup> Avenue would require installation of stop signs. The stop signs and other signage will be developed in conformance with City of Desert Hot Springs requirements.

The roadway itself will consist of 6 inches of Class II aggregate base course, over 12 inches of compacted native soil that will then be paved over with 4.5 inches of asphalt concrete. Curb and gutter would be installed utilizing concrete.

Mission Creek is also to the east of Little Morongo Road, and the roadway will be designed to avoid the Mission Creek drainage, as it has historically. In order to maintain flows running south at the intersection of Little Morongo Road and 20<sup>th</sup> Avenue, the proposed vertical street profile design along 20<sup>th</sup> Street is continuing the existing high point at approximately 150-feet east of Little Morongo Road.

## 1.2 Project Location

The MSWD service area is located in southern California within the northwestern portion of the Coachella Valley. The Project site is located within the southeast corner Section 14, Township 3 South and Range 4 East (San Bernardino Base Meridian), in the City of Desert hot Springs, Riverside County, California (Figures 1-2, Pages 3-4). The Project Area is depicted on the *Desert Hot Springs* U. S. Geological Survey's (USGS) 7.5-Minute Series Quadrangle map. The roadway improvements would occur only along existing compacted dirt roadways that border the northern, eastern, and southern boundaries of MSWD's Wright RWRF along 19<sup>th</sup> Street, Little Morongo Road, and 20<sup>th</sup> Avenue (Figures 3-4, Pages 5-6). The approximate GPS coordinates of the Project Area are latitude: 33.907441°, longitude: -116.529286°.

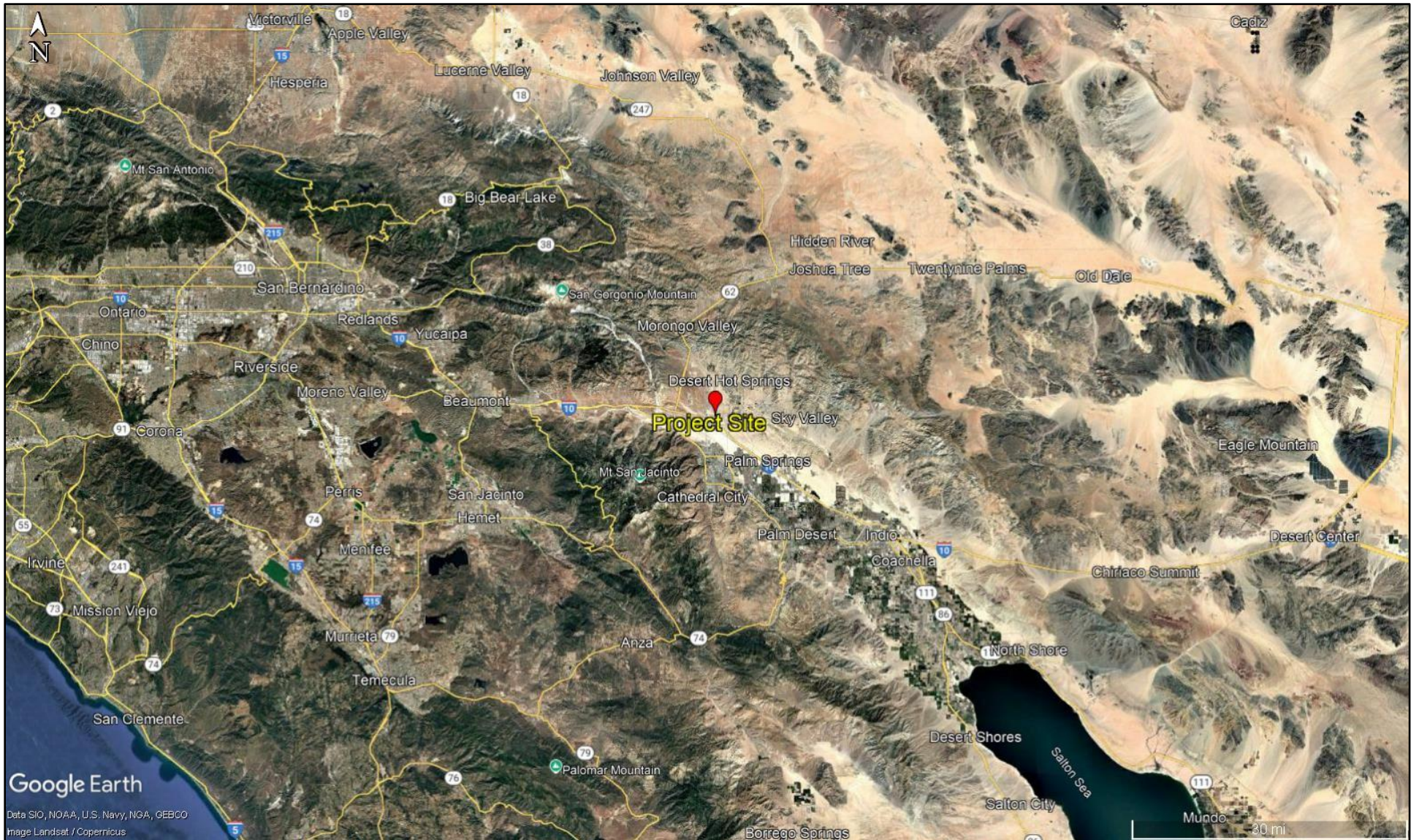


Figure 1. Regional Vicinity Map

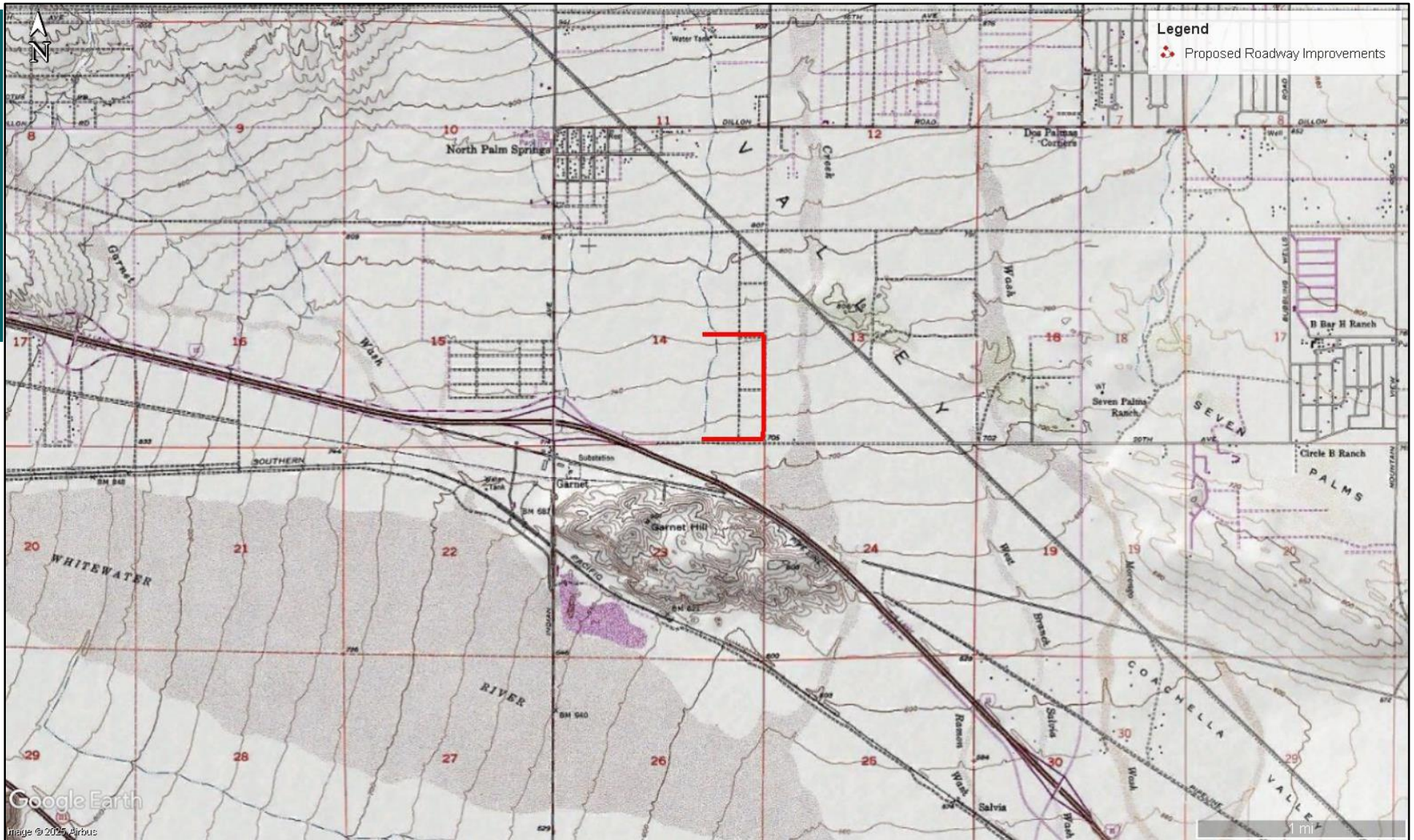


Figure 2. Topographic Map of Project Vicinity



Figure 3. Aerial Photograph of Project Area

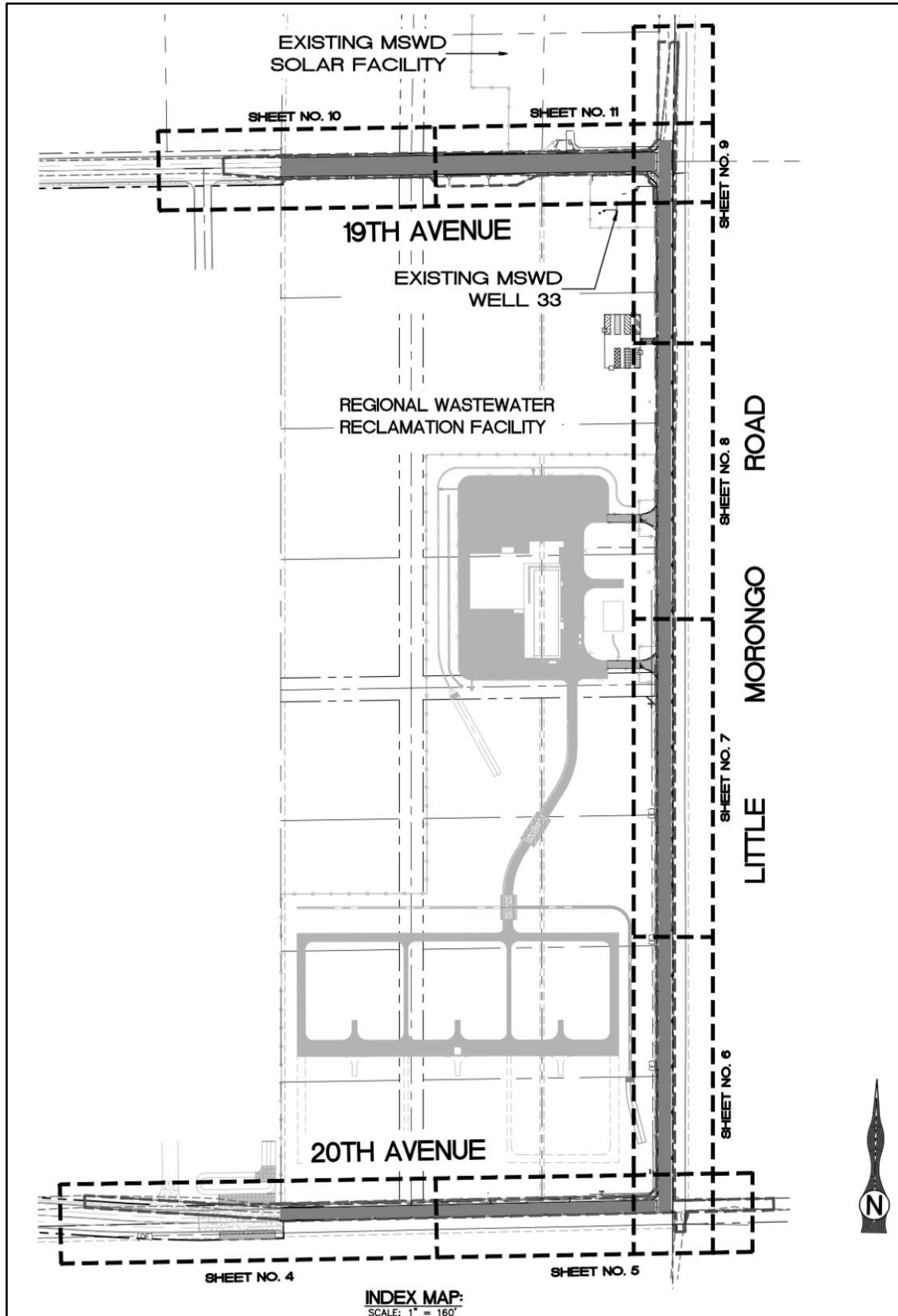


Figure 4. Project Site Plan Overview

## 1.3 Environmental Setting

The Project Area is situated in the geographically based ecological classification known as the Upper Coachella Valley and Hills – Level IV Ecoregion of the Sonoran Basin and Range – Level III Ecoregion (Griffith et al. 2016). Level IV Ecoregions are subregions within the larger Level III Ecoregions. The goal of regional ecological classifications is to reduce variability based on spatial covariance in climate, geology, topography, climax vegetation, hydrology, and soils. The Upper Coachella Valley and Hills Ecoregion (Ecoregion 81e), which is a subregion of Ecoregion 81, is surrounded by mountains, except to the south where it descends toward the agricultural lands and Salton Sea of Ecoregion 81f. Alluvial deposits cover most of the ecoregion, mantled by sand deposits in some areas. The southwestern part of the Ecoregion is mostly urbanized in the Palm Springs/Palm Desert area. It is a transitional desert region with some affinities to the Mojave Basin and Range Ecoregion (14) to the north (Griffith et al. 2016).

The Project Area is situated in the northwestern end of the Coachella Valley, which is bordered on the north and northeast by the Little San Bernardino Mountains, on the east/southeast by the Seven Palms Valley and Edom Hills and on the west by the San Bernardino Mountain foothills. The topography of the Project Area consists of a flat to gently sloped landscape, and the elevation of the Project site ranges from approximately 705 feet above mean sea level (amsl) at the intersection of Little Morongo Road and 20<sup>th</sup> Avenue on the southern end of the Project, to 755 feet amsl at the intersection of Little Morongo Road and 19<sup>th</sup> Avenue on the northern end of the Project.

The Project Area is within a hot desert climate (Koppen-Geiger Climate Classification: BWh), characterized by an average annual temperature equal to or greater than 64.4 degrees Fahrenheit (° F) and too little precipitation to support most plants. Average annual maximum temperatures within the Project Area peak at 108.2° F in July and fall to an average annual minimum temperature of 42.3° F in December and January. Average annual precipitation is greatest from December through March and reaches a peak in January (1.13 inches). Precipitation is lowest in the months of May and June (0.05 inches). Annual total precipitation averages 5.49 inches.

Hydrologically, the Project Area is situated within the Mission Creek Hydrologic Sub-Area (HSA 719.42), which comprises an approximately 73,873-acre drainage area within the larger Whitewater River Watershed (HUC 18100201). The Whitewater River is the major hydrogeomorphic feature within the Whitewater River Watershed. The closest tributary to the Whitewater River is Mission Creek, which flows north to south adjacent the east side of the Project site, bordering the east side of Little Morongo Road.

Soils within the Project Area are comprised of the following:

- *Carsitas fine sand, 0 to 5 percent slopes*: *Carsitas* fine sands consist of fine sand over gravelly sand horizons comprised of sandy alluvium derived from granite. This soil type is excessively drained, with negligible runoff, and has not been identified as a hydric soil.
- *Carsitas gravelly sand, 0 to 9 percent slopes*: *Carsitas* gravelly sands consist solely of gravelly sand horizons comprised of sandy alluvium derived from igneous, metamorphic and sedimentary rock. This soil type is somewhat excessively drained, with very low runoff, and has not been identified as a hydric soil.
- *Myoma fine sand, 0 to 5 percent slopes*: *Myoma* fine sands consist of fine sand over sand horizons comprised of wind-blown sandy alluvium. This soil type is somewhat excessively drained, with negligible runoff, and has not been identified as a hydric soil.

- Carsitas cobbly sand, 2 to 9 percent slopes: Carsitas cobbly sands consist of cobbly sand over gravelly sand horizons comprised of gravelly alluvium derived from granite. This soil type is excessively drained, with very low runoff, and has not been identified as a hydric soil.

Please refer to Appendix D for a soil map of the Project site and surrounding vicinity.

The Project site consists of existing compacted dirt road, surrounded by undeveloped CVMSHCP Conservation Area to the east of Little Morongo Road; existing MSWD facilities and other disturbed areas to the west of Little Morongo Road, between 20<sup>th</sup> Avenue and both sides of 19<sup>th</sup> Avenue; and undeveloped open space south of 20<sup>th</sup> Avenue, between 20<sup>th</sup> Avenue and Interstate 10 (I-10).

## 2 Assessment Methodology

### 2.1 Biological Resources Assessment

Data regarding biological resources in the Project vicinity were obtained through literature review, desktop evaluation, and field investigation. Prior to performing the field survey, available databases, and documentation relevant to the Project Area were reviewed for documented occurrences of sensitive species that could potentially occur in the Project vicinity. The USFWS Information for Planning and Consultation System (IPaC) and the most recent versions of the California Natural Diversity Database (CNDDDB) and California Native Plant Society Electronic Inventory (CNPSEI) databases were searched for sensitive species data in the *Desert Hot Springs, Seven Palms Valley, Palm Springs* and *Cathedral City* USGS 7.5-Minute Series Quadrangles. These databases contain records of reported occurrences of state and federally listed species or otherwise sensitive species and habitats that may occur within the vicinity of the Project site (within approximately 3 miles). Other available technical information on the biological resources of the area was also reviewed including previous surveys and recent findings.

#### 2.1.1 Biological Resources Assessment Field Survey

HDR biologist Eric Weis conducted a BRA and floristic botanical field survey of the Project Area on February 11 and 12, 2025. Wildlife species were detected during field surveys by sight, calls, tracks, scat, and/or other sign. In addition to species observed, expected wildlife usage of the site was determined based on known habitat preferences of regional wildlife species and knowledge of their relative distributions in the area. The focus of the faunal species survey was to identify potential habitat for special status wildlife that may occur within the Project vicinity.

##### *Burrowing Owl Habitat Assessment*

The field survey included a burrowing owl (*Athene cunicularia* [BUOW]) habitat suitability assessment survey and focused burrow survey, which consisted of a pedestrian survey that encompassed the entire Project site and included 100 percent visual coverage of the site and adjacent 500-foot survey buffer around the Project site, where feasible and appropriate. The BUOW habitat assessment survey was conducted in accordance with the “Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area,” the “Burrowing Owl Survey Protocol and Mitigation Guidelines” prepared by the California Burrowing Owl Consortium (1993), and the March 7, 2012 “California Department of Fish and Game Staff Report on Burrowing Owl Mitigation.”

The survey was conducted during peak BUOW activity between the morning hours of 0630 and 1030. Weather conditions during the survey consisted of 0 to 100 percent cloud cover, with no precipitation and temperatures ranging from 51° F to 64° F. Wind speeds during survey ranged from 0 to 15 mph. The survey consisted of walking transects spaced approximately 30 feet apart to provide 100 percent visual coverage of the ground surface within the survey area.

During the pedestrian survey, all suitable habitat was systematically searched for potential owl burrows and suitable surrogate burrows, BUOW individuals, and sign including, molted feathers, cast pellets, prey remains, owl whitewash, and feces or other ornamentation. The survey area was also assessed for soil type and level of friability as well as habitat type and habitat structure. Natural and non-natural substrates were examined for potential burrow sites. All potentially suitable burrows encountered were examined for indications of BUOW presence.

## 2.2 Aquatic Resources Delineation

On February 11 and 12, 2025, HDR also evaluated the Project site for the presence of riverine/riparian/wetland habitat and jurisdictional aquatic resources, i.e., Waters of the U.S. (WOTUS), as regulated by the USACE and RWQCB, and/or jurisdictional streambed and associated riparian habitat as regulated by the CDFW. Prior to the field visit, aerial photographs of the Project Area were viewed and compared with the surrounding USGS 7.5-Minute Topographic Quadrangle maps to identify drainage features within the survey area as indicated from topographic changes, blue-line features, or visible drainage patterns. The USFWS National Wetland Inventory (NWI) and Environmental Protection Agency (EPA) Water Program “My Waters” Google Earth Pro data layers were also reviewed to determine whether any hydrologic features and wetland areas had been documented within the vicinity of the site. Similarly, the United States Department of Agriculture (USDA) – Natural Resources Conservation Service (NRCS) “Web Soil Survey” was reviewed for soil types found within the Project Area to identify the soil series in the area and to check these soils to determine whether they are regionally identified as hydric soils. Upstream and downstream connectivity of waterways (if present) were reviewed on Google Earth Pro aerial photographs and topographic maps to determine jurisdictional status. The lateral extent of potential USACE jurisdiction is measured at the Ordinary High Water Mark (OHWM) in accordance with regulations set forth in 33CFR part 328 and the USACE guidance documents listed below:

- *USACE – Corps of Engineers Wetlands Delineation Manual, Wetlands Research Program Technical Report Y-87-1 (on-line edition), January 1987 - Final Report.*
- *USACE – Jurisdictional Determination Form Instructional Guidebook (JD Form Guidebook), May 30, 2007.*
- *USACE – A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (A Delineation Manual), August 2008.*
- *USACE – Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0), September 2008.*
- *USACE – Minimum Standards for Acceptance of Aquatic Resources Delineation Reports (Minimum Standards), January 2016.*

To be considered a *jurisdictional wetland* under the federal CWA, Section 404, an area must possess three (3) wetland characteristics: hydrophytic *vegetation*, hydric *soils*, and wetland *hydrology*.

- ▶ **Hydrophytic vegetation**: Hydrophytic vegetation is plant life that grows, and is typically adapted for life, in permanently or periodically saturated soils. The hydrophytic vegetation criterion is met if more than 50 percent of the dominant plant species from all strata (tree, shrub, and herb layers) is considered hydrophytic. Hydrophytic species are those included on the 2018 National Wetland Plant Lists for the Arid West Region (USACE 2018). Each species on the lists is rated with a wetland indicator category, as shown in Table 1. To be considered hydrophytic, the species must have *wetland indicator status*, i.e., be rated as OBL, FACW or FAC.

**Table 1. Wetland Indicator Vegetation Categories**

Category	Probability
Obligate Wetland (OBL)	Almost always occur in wetlands (estimated probability >99%)

Facultative Wetland (FACW)	Usually occur in wetlands (estimated probability 67 to 99%)
Facultative (FAC)	Equally likely to occur in wetlands and non-wetlands (estimated probability 34 to 66%)
Facultative Upland (FACU)	Usually occur in non-wetlands (estimated probability 67 to 99%)
Obligate Upland (UPL)	Almost always occur in non-wetlands (estimated probability >99%)

- ▶ **Hydric Soil:** Soil maps from the USDA-NRCS Web Soil Survey (USDA 2023) were reviewed for soil types found within the Project Area. Hydric soils are saturated or inundated long enough during the growing season to develop anaerobic conditions that favor growth and regeneration of hydrophytic vegetation. There are several indirect indicators that may signify the presence of hydric soils including hydrogen sulfide generation, the presence of iron and manganese concretions, certain soil colors, gleying, and the presence of mottling. Generally, hydric soils are dark in color or may be gleyed (bluish, greenish, or grayish), resulting from soil development under anoxic (without oxygen) conditions. Bright mottles within an otherwise dark soil matrix indicate periodic saturation with intervening periods of soil aeration. Hydric indicators are particularly difficult to observe in sandy soils, which are often recently deposited soils of flood plains (entisols) and usually lack sufficient fines (clay and silt) and organic material to allow use of soil color as a reliable indicator of hydric conditions. Hydric soil indicators in sandy soils include accumulations of organic matter in the surface horizon, vertical streaking of subsurface horizons by organic matter, and organic pans.

The hydric soil criterion is satisfied at a location if soils in the area can be inferred or observed to have a high groundwater table, if there is evidence of prolonged soil saturation, or if there are any indicators suggesting a long-term reducing environment in the upper part of the soil profile. Reducing conditions are most easily assessed using soil color. Soil colors are evaluated using the Munsell Soil Color Charts (Munsell 2000). Soil pits are dug (when necessary) to an approximate depth of 16-20 inches to evaluate soil profiles for indications of anaerobic and redoximorphic (hydric) conditions in the subsurface.

- ▶ **Wetland Hydrology:** The wetland hydrology criterion is satisfied at a location based upon conclusions inferred from field observations that indicate an area has a high probability of being inundated or saturated (flooded, ponded, or tidally influenced) long enough during the growing season to develop anaerobic conditions in the surface soil environment, especially the root zone (USACE 1987 and USACE 2008)

Evaluation of CDFW jurisdiction followed guidance in the Fish and Game Code and “A Review of Stream Processes and Forms in Dryland Watersheds” (CDFW, 2010). Specifically, CDFW jurisdiction would occur where a stream has a definite course showing evidence of where waters rise to their highest level and to the extent of associated riparian vegetation.

## 3 Results

### 3.1 Existing Biological and Physical Conditions

The Project Area consists of approximately 5,700 LF of existing unpaved, compacted dirt roads, as well as any adjacent undeveloped areas that may be impacted directly or indirectly by the proposed Project. The proposed Project footprint is along Little Morongo Road, 19<sup>th</sup> Avenue, and 20<sup>th</sup> Avenue (Figures 2-4, Pages 4-6). Existing disturbances within the Project Area include MSWD facility operations and maintenance, utility infrastructure, and vehicular traffic.

#### 3.1.1 Habitat

The proposed Project footprint is completely disturbed. Adjacent habitat consists of *Larrea tridentata* – *Ambrosia dumosa* Shrubland Alliance (creosote bush – white bursage scrub) dominated by creosote bush and white bursage, with cheesebush (*Ambrosia salsola*), six weeks three awn (*Aristida adscensionis*), bladderpod (*Cleomella arborea*), silver cholla (*Cylindropuntia echinocarpa*), brittlebush (*Encelia farinosa*), caterpillar phacelia (*Phacelia cicutaria*), and velvet rosette (*Psathyrotes ramosissima*) present as well. The creosote bush – white bursage scrub habitat surrounding the proposed Project footprint has been severely impacted by non-native, invasive, Saharan mustard (*Brassica tournefortii*), with Russian thistle (*Salsola tragus*) and Mediterranean grass (*Schismus* spp.) present as well.

#### 3.1.2 Wildlife

The only wildlife species observed or otherwise detected during the survey were burrowing owl (*Athene cunicularia*), common raven (*Corvus corax*), house finch (*Haemorhous mexicanus*), mourning dove (*Zenaida macroura*), and black-tailed jackrabbit (*Lepus californicus*).

### 3.2 Special Status Species and Habitats

According to the CNDDDB, 63 sensitive species (30 plant species and 33 animal species) and three sensitive habitats have been documented in the *Desert Hot Springs, Seven Palms Valley, Palm Springs* and *Cathedral City* USGS 7.5-Minute Series Quadrangles. This list of sensitive species and habitats includes any state and/or federally listed or proposed for listing as threatened or endangered species, California Fully Protected species, CDFW designated Species of Special Concern (SSC), and otherwise Special Animals. “Special Animals” is a general term that refers to all the taxa the CNDDDB is interested in tracking, regardless of their legal or protection status. This list is also referred to as the list of “species at risk” or “special status species.” The CDFW considers the taxa on this list to be those of greatest conservation need.

Of the 63 sensitive species identified by the CNDDDB and IPaC queries, 11 are state and/or federally listed or proposed for listing as threatened or endangered species, two are candidate species for listing under CESA, and two are CDFW “Fully Protected” species. However, only the following three have been documented in the Project vicinity (within approximately 3 miles):

- Coachella Valley milk-vetch (*Astragalus lentiginosus* var. *coachellae*)
- Burrowing owl (*Athene cunicularia*)
- Coachella Valley fringe-toed lizard (*Uma inornata*)

An analysis of the likelihood for occurrence of all IPaC, CNDDDB, and CNPSEI sensitive species documented in the *Desert Hot Springs, Seven Palms Valley, Palm Springs* and *Cathedral City* quads is provided in Appendix A. This analysis considers species' range as well as documentation within the vicinity of the Project site and includes the habitat requirements for each species and the potential for their occurrence on site, based on required habitat elements and range relative to the current site conditions.

### 3.2.1 Special Status Species

#### 3.2.2.1 Special Status Plants

##### ***Coachella Valley milk-vetch – Endangered (Federal)***

The federally listed as endangered Coachella Valley milk-vetch is an annual or short-lived perennial plant in the Fabaceae (pea) family. This species is primarily found on loose aeolian (i.e., wind transported) or alluvial (i.e., water transported) sands that are located on dunes or flats, and along disturbed margins of sandy washes in the Coachella Valley, Riverside County, California (USFWS 2009). The number of standing plants at any given time is only a partial indication of population size because the other portion of the population is the seed bank in the substrate that can persist dormant for several years (USFWS 2009). Coachella Valley milk-vetch typically blooms from February through May (Calflora 2025).

***Findings:*** According to the CNDDDB, the nearest documented Coachella Valley milk-vetch occurrence (2017) is approximately 0.26 miles east of the Project site, on sandy soil along Mission Creek and Morongo Wash. The proposed Project footprint is mostly within existing compacted dirt roads that are not suitable for this species. No Coachella Valley milk-vetch were observed within or immediately adjacent the proposed Project footprint during the floristic botanical field survey conducted by HDR on February 11 and 12, 2025. The field survey was conducted during the flowering season for this species and included 100 percent visual coverage of the ground surface within the proposed Project footprint and adjacent suitable habitat (i.e., undeveloped, sandy soils). Therefore, Coachella Valley milk-vetch is considered absent from the proposed Project footprint at the time of survey and this species is not likely to occur in the Project Area.

#### 3.2.2.2 Special Status Animals

##### ***Burrowing owl – Candidate Endangered (State)***

The BUOW is a ground dwelling owl typically found in arid prairies, fields, and open areas where vegetation is sparse and low to the ground. The BUOW is heavily dependent upon the presence of mammal burrows, with ground squirrel burrows being a common choice, in its habitat to provide shelter from predators, inclement weather and to provide a nesting place (Coulombe 1971). They are also known to make use of human-created structures, such as cement culverts and pipes, for burrows. According to the definition provided in the *2012 CDFG Staff Report on Burrowing Owl Mitigation*, "Burrowing owl habitat generally includes, but is not limited to, short or sparse vegetation (at least at some time of year), presence of burrows, burrow surrogates or presence of fossorial mammal dens, well-drained soils, and abundant and available prey." BUOW spend a great deal of time standing on dirt mounds at the entrance to a burrow or perched on a fence post or other low to the ground perch from which they hunt for prey. They feed primarily on insects such as grasshoppers, June beetles and moths, but will also take small rodents, birds, and reptiles. They are active during the day and night

but are considered a crepuscular owl; generally observed in the early morning hours or at twilight. The breeding season for BUOW is February 1 through August 31.

BUOW have disappeared from significant portions of their range in the last 15 years and, overall, nearly 60 percent of the breeding groups of owls known to have existed in California during the 1980s had disappeared by the early 1990s (Burrowing Owl Consortium 1993). The BUOW is not listed under the federal ESA but is a candidate for state listing as endangered under CESA. Additionally, the BUOW is a USFWS Bird of Conservation Concern (BCC) and a migratory bird protected by the international treaty under the federal Migratory Bird Treaty Act (MBTA) of 1918 and by state law under the California FGC (FGC sections 2074.2, 2085, 3513 & 3503.5).

*Findings:* According to the CNDDDB, BUOW have been documented within 0.5 mile west of the Project Area as recent as 2007. There is suitable BUOW habitat consisting of creosote bush – white bursage scrub adjacent the Project site. The BUOW habitat assessment survey conducted by HDR on February 11 and 12, 2025 was structured, in part, to detect BUOW. The survey consisted of walking transects spaced approximately 10 meters (30 feet) apart to provide 100 percent visual coverage of the ground surface within the survey area, which included all suitable and accessible adjacent undeveloped areas within the 500-foot survey buffer. The survey area was systematically searched for potential owl burrows and suitable surrogate burrows, BUOW individuals, and sign including, molted feathers, cast pellets, prey remains, owl whitewash, and feces or other ornamentation. The result of the habitat assessment and focused burrow survey was that no potential owl burrows or suitable surrogate burrows were observed in the survey area. However, one adult BUOW was observed perched on a small log approximately 400 feet east of the Project site (east of Little Morongo Road). Therefore, BUOW are present in the Project Area and focused BUOW surveys are required to determine if, when, and how the site is used by BUOW, and whether the proposed Project may impact this species.

### ***Coachella Valley fringe-toed lizard – Threatened (Federal)/Endangered (State)***

The Coachella Valley fringe-toed lizard (CVFTL) is a medium-sized lizard that has physical adaptations to keep fine sand out of its eyes, mouth, nose, and ears and is restricted to sand dune habitats on the floor of the Coachella Valley in Riverside County, California (USFWS 2010). CVFTL is specialized to occupy a specific habitat type consisting of accumulations of windblown (aeolian) sand. Deeper sand deposits with more topographic relief are preferred by the species over flatter sand sheets (USFWS 2010). CVFTL are typically active from February to October and dormant from November to January. During the summer months, the lizards escape the heat by “swimming” or burrowing beneath the sand and restricts its activities to the early morning and late afternoon hours (USFWS 2010).

Threats to CVFTL primarily consist of habitat destruction/alteration due to urban and agricultural development, OHV use, windbreaks, exotic vegetation, and other disruptions to the formation of the wind-blown sand drifts this lizard requires. It is estimated that approximately 90-95 percent of historical CVFTL habitat has been lost and currently only 15,000-20,000 acres remain available (USFWS 2010). Thus, the CVFTL was listed as threatened under the federal ESA on September 25, 1980, and as endangered under the CESA that same year. Critical Habitat was designated for this species by the USFWS at the time of listing.

*Findings:* According to the CNDDDB, CVFTL were documented adjacent the southeast corner of the Project site (intersection of Little Morongo Road and 20<sup>th</sup> Avenue) in 1975. However, the habitat conditions present within and adjacent the Project site are not suitable for CVFTL. This species requires aeolian sand dunes, particularly deeper sand deposits with more

topographic relief than flatter sand sheets (USFWS 2010). There is no sand dune habitat within the Project site or immediate surrounding area. Rather, the proposed Project footprint is mostly within existing compacted dirt roads that are surrounded by existing MSWD facilities and relatively flat creosote bush – white bursage scrub. The sandy soils adjacent the proposed Project footprint are stabilized due to a moderately-dense vegetation cover, including non-native, invasive, Saharan mustard (see Appendix B: Site Photos). Furthermore, the CVMSHCP has modeled CVFTL habitat within the Plan Area and the Project site is completely outside of any areas of modeled CVFTL habitat. Therefore, CVFTL is not likely to occur in the Project Area.

### 3.2.2 Special Status Habitats

The Project Area does not contain any sensitive habitats, including any USFWS designated Critical Habitat for any federally listed species. The nearest Critical Habitat unit is approximately 0.25 mile east of the Project site. This Critical Habitat unit is part of the Mission Creek Morongo Wash System Unit (Unit 3) of USFWS designated Critical Habitat for the federally listed as endangered Coachella Valley milk-vetch. However, no portion of the Project site is within or adjacent this Critical Habitat unit, or any other Critical Habitat. According to the CNDDDB, the nearest sensitive habitat is Desert Fan Palm Oasis Woodland located approximately 3.4 miles northeast of the Project site. Therefore, the Project will not result in any loss or adverse modification of USFWS designated Critical Habitat, or any other special status habitats.

## 3.3 Aquatic Resources Delineation

The Project Area is situated within the Mission Creek Hydrologic Sub-Area (HSA 719.42), which comprises an approximately 73,873-acre drainage area within the larger Whitewater River Watershed (HUC 18100201). This watershed is primarily within Riverside County with a small portion of San Bernardino County. The Whitewater River Watershed is bound on the north by the Santa Ana and Southern Mojave Watersheds, on the southeast by the Salton Sea Watershed, on the south by the San Felipe Creek Watershed and on the southwest by the San Jacinto and Santa Margarita Watersheds. The Whitewater River Watershed encompasses a portion of the San Bernardino and Little San Bernardino Mountains to the north and the San Jacinto Mountains to the south and is approximately 1,500 square miles in area. The Whitewater River is the major hydrogeomorphic feature within the Whitewater River Watershed. The closest tributary to the Whitewater River is Mission Creek, which flows north to south adjacent the east side of the Project site, bordering the east side of Little Morongo Road.

### 3.3.1 Waters of the U.S.

The USACE has authority to permit the discharge of dredged or fill material in WOTUS under Section 404 of the CWA. The Environmental Protection Agency (EPA) and USACE currently define WOTUS as:

- *Paragraph (a)(1) Waters* – Traditional navigable waters (TNWs) or those used either currently, previously, or susceptible to future use in interstate or foreign commerce; the territorial seas; and interstate waters (excluding interstate wetlands).
- *Paragraph (a)(2) Waters* – Impoundments of waters otherwise defined as WOTUS, except for impoundments of those WOTUS that are identified in Paragraph (a)(5) below.

- *Paragraph (a)(3) Waters* – Relatively permanent, standing, or continuously flowing tributaries to the WOTUS described in Paragraphs (a)(1) and (a)(2).
- *Paragraph (a)(4) Waters* – Wetlands that are adjacent to waters described in Paragraph (a)(1), or relatively permanent, standing or continuously flowing bodies of water identified in Paragraphs (a)(2) or (a)(3) that have a continuous surface connection with those waters.
- *Paragraph (a)(5) Waters* – Intrastate lakes and ponds not identified in Paragraphs (a)(1) through (a)(4) that are relatively permanent, standing, or continuously flowing bodies of water with a continuous surface connection to the waters identified in Paragraphs (a)(1) or (a)(3).

*Findings:* There are no wetland or non-wetland WOTUS present within the proposed Project footprint. The segment of Mission Creek adjacent the east side of the Project site consists of ephemeral desert dry wash that typically receives surface water flows for only brief durations and in direct response to precipitation. Given that Mission Creek is not a relatively permanent, standing, or continuously flowing tributary to a WOTUS or a wetland, pond, or lake with a continuous surface connection to a WOTUS, no aquatic resources subject to regulation by the USACE or RWQCB under Sections 404/401 of the CWA occur within the proposed Project Area. Furthermore, the proposed Project footprint is entirely outside the lateral extent of Mission Creek.

### 3.3.2 CDFW Streambed and “Waters of the State”

Under Sections 1600 through 1607 of the California FGC, the CDFW has jurisdiction over lakes, rivers, streams, or other aquatic resources, stream-dependent wildlife resources, and riparian habitats. This jurisdiction can include, but is not limited to intermittent and ephemeral streams, rivers, creeks, dry washes, sloughs, USGS blue-line streams, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance that support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife (CDFG 1994).

*Findings:* Mission Creek is an ephemeral desert dry wash subject to regulation by the CDFW under Section 1602 of the FGC, as well as by the RWQCB under the Porter-Cologne Water Quality Control Act (Porter-Cologne). However, the proposed Project footprint is entirely within uplands, outside the lateral extent of Mission Creek, and the Project will not impact any CDFW Streambed or “waters of the State.”

## 3.4 Land Use Designations

### 3.4.1 CVMSHCP

The County of Riverside developed the CVMSHCP to enhance and maintain biological diversity and ecosystem processes while allowing future economic growth. The CVMSHCP sets Conservation Goals and Objectives to ensure the conservation of the Covered Species and conserved natural communities in the MSHCP Reserve System. In addition to setting Conservation Goals and Objectives for the Covered Species and conserved natural communities, the CVMSHCP has designated Core Habitat, Other Conserved Habitat, Essential Ecological Processes, and Biological Corridors and Linkages. The CVMSHCP area is divided into Conservation Areas based on a combination of ecological and jurisdictional factors. The CVMSHCP is intended to satisfy the legal requirements to authorize the “take” of species covered under the Plan during otherwise lawful activities, by providing for the conservation of the Covered Species.

*Findings:* The Project site is not within any Conservation Areas and will not impact any Essential Ecological Processes or Biological Corridors and Linkages. However, the Project site is adjacent (west of) the Willow Hole Conservation Area. Therefore, the Project will need to conform with the Guidelines for projects that are adjacent CVMSHCP Conservation Areas.

## 4 Conclusions and Recommendations

### 4.1 Sensitive Biological Resources

A BRA and floristic botanical field survey of the Project Area was conducted by HDR in February of 2025 to identify potential habitat for special status species within the Project Area. The Project site is completely disturbed and consists of existing compacted dirt roads and adjacent road shoulder. The federally listed Coachella Valley milk-vetch is considered absent from the proposed Project footprint at the time of survey and the habitat conditions in the Project Area are not suitable for the state and federally listed CVFTL. There is some suitable habitat adjacent the proposed Project footprint for BUOW and this species was observed adjacent the Project site during survey. No other special status species were observed in the Project Area during the field survey, and none are expected to occur on site.

#### 4.1.1 Burrowing Owl

BUOW have been documented occurring in the Project vicinity, including within 0.5 mile west of the Project Area as recent as 2007. Therefore, a BUOW habitat suitability assessment and focused burrow survey of the Project Area was conducted by HDR in February of 2025 that included 100 percent visual coverage of the proposed Project footprint and adjacent 500-foot survey buffer within any suitable and accessible adjacent undeveloped areas. The result of the habitat assessment and focused burrow survey was that no potential owl burrows or suitable surrogate burrows were observed in the survey area. However, one adult BUOW was observed approximately 400 feet east of the Project site (east of Little Morongo Road). Therefore, BUOW are present in the Project Area and focused BUOW surveys are required to determine if, when, and how the site is used by BUOW, and whether the proposed Project may impact this species.

- Focused BUOW surveys should consist of site visits on four (4) separate days. The focused burrow survey may count as the first site visit.
- An additional pre-construction survey should be conducted within 30 days prior to ground disturbance to avoid direct take of BUOW.

The BUOW is a state candidate for listing as an endangered species under CESA. As such, BUOW currently receive the same legal protection afforded to a state listed threatened or endangered species (FGC sections 2074.2 and 2085). However, given that the BUOW is not yet listed as a threatened or endangered species, the CDFW cannot issue an incidental take permit (ITP) authorizing take of CESA listed species for BUOW at this time. If BUOW are determined to be present within the Project Area prior to Project implementation, then any potential Project related impacts to BUOW would need to be avoided and coordination with the CDFW may be required.

Although there are no potential owl burrows within the proposed Project footprint and the Project is not likely to result in direct take of BUOW, construction related disturbances to nearby nesting BUOW could potentially result in nest failures or other indirect impacts to this species. In general, impacts to BUOW can be avoided by conducting work outside of their breeding season, which is identified as March 1 to September 1. If BUOW are found within the Project Area at the time of construction, all activities likely to affect the animal(s) would need to cease immediately and CDFW would need to be contacted to determine appropriate management actions. Regardless of survey results and conclusions given herein, BUOW are protected by applicable state and federal laws. Importantly,

nothing given in this report is intended to authorize any form of disturbance to BUOW. Such authorization must come from the appropriate regulatory agencies, including CDFW and USFWS.

#### 4.1.2 Nesting Birds

In general, impacts to all bird species (common and special status) can be avoided by conducting work outside of the nesting season, which is generally January 1 to September 15 for raptors and February 1 to September 1 for passerine species. However, if all work cannot be conducted outside of nesting season, the following precautionary measures are recommended to ensure MBTA and FGC compliance:

- Vegetation removal, including any tree removal or pruning, and structure demolition should be conducted outside the typical nesting season (i.e., between September 15 and December 31).
- To avoid impacts to nesting birds (common and special status) during the nesting season, a qualified Avian Biologist should conduct preconstruction nesting bird surveys prior to Project related disturbance to suitable nesting areas to identify any active nests. The nesting bird surveys should be conducted no more than three (3) days prior to Project initiation.
- If no active nests are found, no further action would be required. If an active nest is found, the biologist should set appropriate no-work buffers around the nest which would be based upon the nesting species, its sensitivity to disturbance, nesting stage and expected types, intensity, and duration of disturbance. The nest(s) and buffer zones should be field checked weekly by a qualified biological monitor. The approved no-work buffer zone should be clearly marked in the field, within which no disturbance activity should commence until the qualified biologist has determined the young birds have successfully fledged and the nest is inactive.

### 4.2 Jurisdictional Aquatic Resources

In addition to the BRA field survey, HDR also assessed the Project Area for the presence of any state and/or federally jurisdictional aquatic resources. There are no wetland or non-wetland WOTUS present within the proposed Project footprint. Therefore, no CWA Sections 404/401 permitting through the USACE or RWQCB would be required. Furthermore, the Project will not impact any aquatic resources or habitats subject to regulation by the CDFW under Section 1602 of the California FGC or the RWQCB under the Porter-Cologne Water Quality Control Act, respectively.

### 4.3 Land Use Designations

The Project is within the CVMSHCP boundary. Although the Project site is not within any Conservation Areas and will not impact any Essential Ecological Processes or Biological Corridors and Linkages, the Project site is adjacent (west of) the Willow Hole Conservation Area. Therefore, the Project will need to conform with the Guidelines for projects that are adjacent CVMSHCP Conservation Areas. Section 4.5 of the CVMSHCP identifies guidelines to avoid or minimize indirect effects from development sharing a common boundary with Conservation Areas. These Guidelines Are:

- 1) *Drainage* – Proposed Development adjacent to or within a Conservation Area shall incorporate plans to ensure that the quantity and quality of runoff discharged to the adjacent Conservation Area is not altered in an adverse way when compared with existing conditions. Stormwater systems shall be designed to prevent the release of toxins, chemicals, petroleum products,

exotic plant materials or other elements that might degrade or harm biological resources or ecosystem processes within the adjacent Conservation Area.

- 2) *Toxics* – Land uses proposed adjacent to or within a Conservation Area that use chemicals or generate byproducts such as manure that are potentially toxic or may adversely affect wildlife and plant species, Habitat, or water quality shall incorporate measures to ensure that application of such chemicals does not result in any discharge to the adjacent Conservation Area.
- 3) *Lighting* – For proposed Development adjacent to or within a Conservation Area, lighting shall be shielded and directed toward the developed area. Landscape shielding or other appropriate methods shall be incorporated in project designs to minimize the effects of lighting adjacent to or within the adjacent Conservation Area in accordance with the guidelines to be included in the Implementation Manual.
- 4) *Noise* – Proposed Development adjacent to or within a Conservation Area that generates noise in excess of 75 dBA Leq hourly shall incorporate setbacks, berms, or walls, as appropriate, to minimize the effects of noise on the adjacent Conservation Area in accordance with the guidelines to be included in the Implementation Manual.
- 5) *Invasives* – Invasive, non-native plant species shall not be incorporated in the landscape for land uses adjacent to or within a Conservation Area. Landscape treatments within or adjacent to a Conservation Area shall incorporate native plant materials to the maximum extent Feasible; recommended native species are listed in Table 4-112 [of the CVMSHCP]. The plants listed in Table 4-113 [of the CVMSHCP] shall not be used within or adjacent to a Conservation Area. This list may be amended from time to time through a Minor Amendment with Wildlife Agency Concurrence.
- 6) *Barriers* – Land uses adjacent to or within a Conservation Area shall incorporate barriers in individual project designs to minimize unauthorized public access, domestic animal predation, illegal trespass, or dumping in a Conservation Area. Such barriers may include native landscaping, rocks/boulders, fencing, walls and/or signage.
- 7) *Grading/Land Development* – Manufactured slopes associated with site Development shall not extend into adjacent land in a Conservation Area.

Additionally, the Project proponent should be prepared to pay the CVMSHCP fees and restrict all Project related impacts to existing ROW and/or other areas outside of the adjacent Willow Hole Conservation Area. No other CVMSHCP conservation or avoidance measures are expected.

## 5 References

- California Burrowing Owl Consortium. 1993. Burrowing Owl Survey Protocol and Mitigation Guidelines.
- California Department of Fish and Game (CDFG). 2012. Staff Report on Burrowing Owl Mitigation. State of California Natural Resources Agency. March 7, 2012.
- Calflora: Information on California plants for education, research and conservation. [web application]. 2025. Berkeley, California: The Calflora Database [a non-profit organization]. Available at: <http://www.calflora.org/>. Accessed on March 14, 2025.
- California Native Plant Society, Rare Plant Program. 2025. Inventory of Rare and Endangered Plants of California [online edition, v8-03 0.45]. Available at: <http://www.rareplants.cnps.org>. Accessed on March 14, 2025.
- California Natural Diversity Database (CNDDDB). 2025. *RareFind 5* [Internet]. California Department of Fish and Wildlife, Version 5.3.0. Available at: <https://wildlife.ca.gov/Data/CNDDDB/Maps-and-Data>. Accessed on March 14, 2025.
- Griffith, G.E., Omernik, J.M., Smith, D.W., Cook, T.D., Tallyn, E., Moseley, K., and Johnson, C.B., 2016, Ecoregions of California (poster): U.S. Geological Survey Open-File Report 2016–1021, with map, scale 1:1,100,000, <http://dx.doi.org/10.3133/ofr20161021>.
- Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at the following link: <http://websoilsurvey.sc.egov.usda.gov/>. Accessed on March 14, 2025.
- U.S. Fish and Wildlife Service (USFWS). Information for Planning and Consultation (IPaC). Website: <https://ecos.fws.gov/ipac/>. Accessed on March 14, 2025.
- U.S. Fish and Wildlife Service (USFWS). 2009. *Astragalus lentiginosus* var. *coachellae* (Coachella Valley milk-vetch) 5-Year Review: Summary and Evaluation. Carlsbad Fish and Wildlife Office, Carlsbad, California.
- U.S. Fish and Wildlife Service (USFWS). 2010. Coachella Valley fringe-toed Lizard (*Uma inornata*) 5-Year Review: Summary and Evaluation. Carlsbad Fish and Wildlife Office, Carlsbad, California.
- Western Regional Climate Center (WRCC). 2021. Period of Record Monthly Climate Summary for Palm Springs, California (046635). Available online at: <https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca6635>; Accessed on March 14, 2025.



Appendix A. CNDDDB Species and Habitats  
Documented Within the *Desert Hot Springs*,  
*Seven Palms Valley*, *Palm Springs* and *Cathedral*  
*City* USGS 7.5-Minute Quadrangles



**Special Status Species Occurrence Potential**

Scientific Name	Common Name	Listing Status Federal/ State	Other Status	Habitat	Occurrence Potential
<i>Abronia villosa</i> var. <i>aurita</i>	chaparral sand-verbena	None/ None	G5T2?; S2; CNPS: 1B.1	Chaparral, coastal scrub, desert dunes. Sandy areas. -60-1570 m.	This species is present adjacent the Project site. Occurrence potential is <b>high</b> .
<i>Acmispon haydonii</i>	pygmy lotus	None/ None	G3; S3; CNPS: 1B.3	Sonoran desert scrub, pinyon and juniper woodland. Creosote bush scrub to pinyon and juniper woodland; rocky sites. 180-1280 m.	The microhabitats this species is associated with are absent from the Project site. Occurrence potential is <b>low</b> .
<i>Aimophila ruficeps canescens</i>	southern California rufous-crowned sparrow	None/ None	G5T3; S4; CDFW: WL	Resident in Southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	Suitable habitat for this species is absent from the Project Area. Occurrence potential is <b>low</b> .
<i>Almutaster pauciflorus</i>	alkali marsh aster	None/ None	G4; S1S2; CNPS: 2B.2	Meadow and seeps. Alkaline. 60-765 m.	The habitats this species is associated with are absent from the Project site. Occurrence potential is <b>low</b> .
<i>Ambrosia monogyra</i>	singlewhorl burrobrush	None/ None	G5; S2; CNPS: 2B.2	Chaparral, Sonoran desert scrub. Sandy soils. 5-475 m.	Although some of the habitats this species is associated with are present in the Project Area, this species has not been documented in the project vicinity. Occurrence potential is <b>low</b> .
<i>Aquila chrysaetos</i>	golden eagle	None/ None	G5; S3; CDFW: FP	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	Suitable nesting habitat for this species is absent from the Project Area. Occurrence potential is <b>low</b> .
<i>Astragalus hornii</i> var. <i>hornii</i>	Horn's milk-vetch	None/ None	GUT1; S1; CNPS: 1B.1	Meadows and seeps, playas. Lake margins, alkaline sites. 75-350 m.	The habitats this species is associated with are absent from the Project site. Occurrence potential is <b>low</b> .
<i>Astragalus lentiginosus</i> var. <i>coachellae</i>	Coachella Valley milk-vetch	Endangered/ None	G5T1; S1; CNPS: 1B.2	Sonoran desert scrub, desert dunes. Sandy flats, washes, outwash fans, sometimes on dunes. 35-695 m.	This species is currently <b>absent</b> from the Project site.

Scientific Name	Common Name	Listing Status Federal/ State	Other Status	Habitat	Occurrence Potential
<i>Astragalus tricarinatus</i>	triple-ribbed milk-vetch	Endangered/ None	G2; S2; CNPS: 1B.2	Joshua tree woodland, Sonoran desert scrub. Hot, rocky slopes in canyons and along edge of boulder-strewn desert washes, with <i>Larrea</i> and <i>Encelia</i> . 455-1585 m.	The Project Area is outside the known elevation range and habitat associations for this species. Occurrence potential is <b>low</b> .
<i>Athene cunicularia</i>	burrowing owl	None/ Candidate Endangered	G4; S2; CDFW: SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	This species is <b>present</b> in the Project Area.
<i>Atriplex parishii</i>	Parish's brittle scale	None/ None	G1G2; S1; CNPS: 1B.1	Vernal pools, chenopod scrub, playas. Usually on drying alkali flats with fine soils. 4-1420 m.	The habitats this species is associated with are absent from the Project site. Occurrence potential is <b>low</b> .
<i>Ayenia compacta</i>	California ayenia	None/ None	G4; S3; CNPS: 2B.3	Mojavean desert scrub, Sonoran desert scrub. Sandy and gravelly washes in the desert; dry desert canyons. 60-1830 m.	Although some of the habitats this species is associated with are present in the Project Area, this species has not been documented in the project vicinity. Occurrence potential is <b>low</b> .
<i>Bombus crotchii</i>	Crotch's bumble bee	None/ Candidate Endangered	G2; S2	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include <i>Antirrhinum</i> , <i>Phacelia</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , and <i>Eriogonum</i> .	Suitable habitat for this species is absent from the Project Area. Occurrence potential is <b>low</b> .
<i>Bombus pennsylvanicus</i>	American bumble bee	None/ None	G3G4; S2	Long-tongued; forages on a wide variety of flowers including vetches ( <i>Vicia</i> ), clovers ( <i>Trifolium</i> ), thistles ( <i>Cirsium</i> ), sunflowers ( <i>Helianthus</i> ), etc. Nests above ground under long grass or underground. Queens overwinter in rotten wood or underground.	Suitable habitat for this species is absent from the Project Area. Occurrence potential is <b>low</b> .

Scientific Name	Common Name	Listing Status Federal/ State	Other Status	Habitat	Occurrence Potential
<i>Calileptoneta oasa</i>	Andreas Canyon leptonetid spider	None/ None	G1; S1	Known only from the type locality, Andreas Canyon, Palm Springs, Riverside County.	The Project Area is outside the known locality for this species. Occurrence potential is <b>low</b> .
<i>Caulanthus simulans</i>	Payson's jewelflower	None/ None	G4; S4; CNPS: 4.2	Chaparral, coastal scrub. Frequently in burned areas, or in disturbed sites such as streambeds; also on rocky, steep slopes. Sandy, granitic soils. 90- 2200 m.	The habitats this species is associated with are absent from the Project site. Occurrence potential is <b>low</b> .
<i>Chaetodipus fallax pallidus</i>	pallid San Diego pocket mouse	None/ None	G5T3T4; S3S4	Desert border areas of San Diego, Riverside, San Bernardino, and Los Angeles counties in desert wash, desert scrub, desert succulent scrub, pinyon-juniper, etc. Sandy, herbaceous areas, usually in association with rocks or coarse gravel.	Suitable habitat for this species is absent from the Project site. Occurrence potential is <b>low</b> .
<i>Chorizanthe parryi var. parryi</i>	Parry's spineflower	None/ None	G3T2; S2; CNPS: 1B.1	Coastal scrub, chaparral, cismontane woodland, valley and foothill grassland. Dry slopes and flats; sometimes at interface of 2 vegetation types, such as chaparral and oak woodland. Dry, sandy soils. 90-1220 m.	The habitats this species is associated with are absent from the Project site. Occurrence potential is <b>low</b> .
<i>Chorizanthe xanti var. leucotheca</i>	white-bracted spineflower	None/ None	G4T3; S3; CNPS: 1B.2	Mojavean desert scrub, pinyon and juniper woodland, coastal scrub (alluvial fans). Sandy or gravelly places. 365-1830 m.	The Project Area is outside the known habitat associations for this species. Occurrence potential is <b>low</b> .
<i>Corynorhinus townsendii</i>	Townsend's big- eared bat	None/ None	G4; S2; CDFW: SSC	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	Suitable roosting habitat for this species is absent from the Project Area and the Project Area is subject to a significant level of human disturbance. Occurrence potential is <b>low</b> .

Scientific Name	Common Name	Listing Status Federal/ State	Other Status	Habitat	Occurrence Potential
<i>Crotalus ruber</i>	red-diamond rattlesnake	None/ None	G4; S3; CDFW: SSC	Chaparral, woodland, grassland, and desert areas from coastal San Diego County to the eastern slopes of the mountains. Occurs in rocky areas and dense vegetation. Needs rodent burrows, cracks in rocks or surface cover objects.	Suitable nesting habitat for this species is absent from the Project Area. Occurrence potential is <b>low</b> .
<i>Cypseloides niger</i>	black swift	None/ None	G4; S3; CDFW: SSC	Coastal belt of Santa Cruz and Monterey counties; central and southern Sierra Nevada; San Bernardino and San Jacinto mountains. Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea-bluffs above the surf; forages widely.	Suitable nesting habitat for this species is absent from the Project Area. Occurrence potential is <b>low</b> .
	Desert Fan Palm Oasis Woodland	None/ None	G3; S3.2		This habitat is <b>absent</b> from the Project site.
<i>Dinacoma caseyi</i>	Casey's June beetle	Endangered/ None	G1; S1	Found only in two populations in a small area of southern Palm Springs. Found in sandy soils; the females live underground and only come to the ground surface to mate.	The Project Area is outside the known range for this species. Occurrence potential is <b>low</b> .
<i>Dodecahema leptoceras</i>	slender-horned spineflower	Endangered/ Endangered	G1; S1; CNPS: 1B.1	Chaparral, cismontane woodland, coastal scrub (alluvial fan sage scrub). Flood deposited terraces and washes; associates include <i>Encelia</i> , <i>Dalea</i> , <i>Lepidospartum</i> , etc. Sandy soils. 200-765 m.	The Project Area is outside the known range and habitat associations for this species. Occurrence potential is <b>low</b> .
<i>Eriastrum harwoodii</i>	Harwood's eriastrum	None/ None	G2; S2; CNPS: 1B.2	Desert dunes. Sandy soils. 15-1100m.	Although some of the habitats this species is associated with are present in the Project Area, this species has not been documented in the project vicinity. Occurrence potential is <b>low</b> .

Scientific Name	Common Name	Listing Status Federal/ State	Other Status	Habitat	Occurrence Potential
<i>Euphorbia arizonica</i>	Arizona spurge	None/ None	G5; S3; CNPS: 2B.3	Sonoran desert scrub. Sandy soils. 150-900 m.	Although some of the habitats this species is associated with are present in the Project Area, this species has not been documented in the project vicinity. Occurrence potential is <b>low</b> .
<i>Euphorbia misera</i>	cliff spurge	None/ None	G5; S2; CNPS: 2B.2	Coastal bluff scrub, coastal scrub, Mojavean desert scrub. Rocky sites. 3-430 m.	The microhabitats this species is associated with are absent from the Project site. Occurrence potential is <b>low</b> .
<i>Euphorbia platysperma</i>	flat-seeded spurge	None/ None	G3; S1; CNPS: 1B.2	Mojavean desert scrub, desert dunes. Sandy places or shifting dunes. Possibly a waif in California; more common in Arizona and Mexico. 60-960 m.	Although some of the habitats this species is associated with are present in the Project Area, this species has not been documented in the project vicinity. Occurrence potential is <b>low</b> .
<i>Falco mexicanus</i>	prairie falcon	None/ None	G5; S4; CDFW: WL	Inhabits dry, open terrain, either level or hilly. Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.	Suitable nesting habitat for this species is absent from the Project Area. Occurrence potential is <b>low</b> .
<i>Gopherus agassizii</i>	desert tortoise	Threatened/ Threatened	G3; S2S3	Most common in desert scrub, desert wash, and Joshua tree habitats; occurs in almost every desert habitat. Require friable soil for burrow and nest construction. Creosote bush habitat with large annual wildflower blooms preferred.	Some suitable habitat for this species is present in the Project Area. However, this species has not been documented in the Project vicinity. Occurrence potential is <b>low</b> .
<i>Heuchera hirsutissima</i>	shaggy-haired alumroot	None/ None	G3; S3; CNPS: 1B.3	Subalpine coniferous forest, upper montane coniferous forest. Often near large rocks. Granitic substrate. 1065-3200 m.	The Project Area is outside the known elevation range and habitat associations for this species. Occurrence potential is <b>low</b> .
<i>Imperata brevifolia</i>	California satintail	None/ None	G3; S3; CNPS: 2B.1	Coastal scrub, chaparral, riparian scrub, Mojavean desert scrub, meadows and seeps (alkali), riparian scrub. Mesic sites, alkali seeps, riparian areas. 3-1495 m.	The microhabitats this species is associated with are absent from the Project site. Occurrence potential is <b>low</b> .

Scientific Name	Common Name	Listing Status Federal/ State	Other Status	Habitat	Occurrence Potential
<i>Lasiurus xanthinus</i>	western yellow bat	None/ None	G4G5; S3; CDFW: SSC	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	Suitable roosting habitat for this species is absent from the Project Area. Occurrence potential is <b>low</b> .
<i>Lilium parryi</i>	lemon lily	None/ None	G3; S3; CNPS: 1B.2	Lower montane coniferous forest, meadows and seeps, riparian forest, upper montane coniferous forest. Wet, mountainous terrain; generally in forested areas; on shady edges of streams, in open boggy meadows and seeps. 625-2930 m.	The Project Area is outside the known elevation range and habitat associations for this species. Occurrence potential is <b>low</b> .
<i>Linanthus jaegeri</i>	San Jacinto linanthus	None/ None	G2; S2; CNPS: 1B.2	Subalpine coniferous forest, upper montane coniferous forest. Dry rocky granitic outcrops; sheer, vertical habitat. 1985-3050 m.	The Project Area is outside the known elevation range and habitat associations for this species. Occurrence potential is <b>low</b> .
<i>Linanthus maculatus</i> <i>ssp. maculatus</i>	Little San Bernardino Mtns. linanthus	None/ None	G2T2; S2; CNPS: 1B.2	Desert dunes, Sonoran desert scrub, Mojavean desert scrub, Joshua tree woodland. Sandy places. Usually in light-colored quartz sand; often in wash or bajada. 135-1220 m.	Although some of the habitats this species is associated with are present in the Project Area, this species has not been documented in the project vicinity. Occurrence potential is <b>low</b> .
<i>Macrobaenetes valgum</i>	Coachella giant sand treader cricket	None/ None	G1G2; S2	Known from the sand dune ridges in the vicinity of Coachella Valley. Population size regulated by amount of annual rainfall; some spots favor permanent habitation where springs dampen sand.	Suitable habitat for this species is absent from the Project Area. Occurrence potential is <b>low</b> .
<i>Mentzelia tricuspis</i>	spiny-hair blazing star	None/ None	G4; S2; CNPS: 2B.1	Mojavean desert scrub. Sandy or gravelly slopes and washes. 150-1280 m.	Although some of the habitats this species is associated with are present in the Project Area, this species has not been documented in the project vicinity. Occurrence potential is <b>low</b> .
	Mesquite Bosque	None/ None	G3; S2.1		This habitat is <b>absent</b> from the Project site.

Scientific Name	Common Name	Listing Status Federal/ State	Other Status	Habitat	Occurrence Potential
<i>Nemacaulis denudata</i> var. <i>gracilis</i>	slender cottonheads	None/ None	G3G4T3?; S2; CNPS: 2B.2	Coastal dunes, desert dunes, Sonoran desert scrub. In dunes or sand. -45-745 m.	Although some of the habitats this species is associated with are present in the Project Area, this species has not been documented in the project vicinity. Occurrence potential is <b>low</b> .
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	None/ None	G5T3T4; S3S4; CDFW: SSC	Coastal scrub of Southern California from San Diego County to San Luis Obispo County. Moderate to dense canopies preferred. They are particularly abundant in rock outcrops, rocky cliffs, and slopes.	Suitable habitat for this species is absent from the Project Area. Occurrence potential is <b>low</b> .
<i>Nyctinomops femorosaccus</i>	pocketed free-tailed bat	None/ None	G5; S3; CDFW: SSC	Variety of arid areas in Southern California; pine-juniper woodlands, desert scrub, palm oasis, desert wash, desert riparian, etc. Rocky areas with high cliffs.	Suitable roosting habitat for this species is absent from the Project Area. Occurrence potential is <b>low</b> .
<i>Nyctinomops macrotis</i>	big free-tailed bat	None/ None	G5; S3; CDFW: SSC	Low-lying arid areas in Southern California. Need high cliffs or rocky outcrops for roosting sites. Feeds principally on large moths.	Suitable roosting habitat for this species is absent from the Project Area. Occurrence potential is <b>low</b> .
<i>Ovis canadensis nelsoni</i>	desert bighorn sheep	None/ None	G4T3; S3; CDFW: FP	Widely distributed from the White Mtns in Mono Co. to the Chocolate Mts in Imperial Co. Open, rocky, steep areas with available water and herbaceous forage.	Suitable habitat for this species is absent from the Project Area. Occurrence potential is <b>low</b> .
<i>Ovis canadensis nelsoni</i> pop. 2	Peninsular bighorn sheep DPS	Endangered/ Threatened	G4T3Q; S2; CDFW: FP	Eastern slopes of the Peninsular Ranges below 4,600 ft elevation. This DPS of the subspecies inhabits the Peninsular Ranges in southern California from the San Jacinto Mountains south to the US-Mexico International Border. Optimal habitat includes steep walled canyons and ridges bisected by rocky or sandy washes, with available water.	Suitable habitat for this species is absent from the Project Area. Occurrence potential is <b>low</b> .

Scientific Name	Common Name	Listing Status Federal/ State	Other Status	Habitat	Occurrence Potential
<i>Pelazoneuron puberulum</i> var. <i>sonorensis</i>	Sonoran maiden fern	None/ None	G5T4; S2; CNPS: 2B.2	Meadows and seeps. Along streams, seepage areas. 60-930 m.	The habitats this species is associated with are absent from the Project site. Occurrence potential is <b>low</b> .
<i>Perognathus longimembris bangsi</i>	Palm Springs pocket mouse	None/ None	G5T2; S1; CDFW: SSC	Desert riparian, desert scrub, desert wash and sagebrush habitats. Most common in creosote-dominated desert scrub. Rarely found on rocky sites. Occurs in all canopy coverage classes.	Some suitable habitat for this species is present in the Project Area. However, this species has not been documented in the Project vicinity. Occurrence potential is <b>low</b> .
<i>Phrynosoma blainvillii</i>	coast horned lizard	None/ None	G4; S4; CDFW: SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	The Project Area is outside the known range and habitat associations for this species. Occurrence potential is <b>low</b> .
<i>Phrynosoma mcallii</i>	flat-tailed horned lizard	None/ None	G3; S3; CDFW: SSC	Restricted to desert washes and desert flats in central Riverside, eastern San Diego, and Imperial counties. Critical habitat element is fine sand, into which lizards burrow to avoid temperature extremes; requires vegetative cover and ants.	Some suitable habitat for this species is present in the Project Area and this species has been documented in the Project vicinity. Occurrence potential is <b>moderate</b> .
<i>Poliophtila californica californica</i>	coastal California gnatcatcher	Threatened/ None	G4G5T3Q; S2; CDFW: SSC	Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California. Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	The Project Area is outside the known range and habitat associations for this species. Occurrence potential is <b>low</b> .

Scientific Name	Common Name	Listing Status Federal/ State	Other Status	Habitat	Occurrence Potential
<i>Polioptila melanura</i>	black-tailed gnatcatcher	None/ None	G5; S3S4; CDFW: WL	Primarily inhabits wooded desert wash habitats; also occurs in desert scrub habitat, especially in winter. Nests in desert washes containing mesquite, palo verde, ironwood, acacia; absent from areas where salt cedar introduced.	Some suitable habitat for this species is present in the Project Area. However, this species has not been documented in the Project vicinity. Occurrence potential is <b>low</b> .
<i>Rana draytonii</i>	California red-legged frog	Threatened/ None	G2G3; S2S3; CDFW: SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	The aquatic habitats this species requires are absent from the Project Area. Therefore, this species is presumed <b>absent</b> from the Project Area.
<i>Rana muscosa</i>	southern mountain yellow-legged frog	Endangered/ Endangered	G1; S2; CDFW: WL	Disjunct populations known from southern Sierras (northern DPS) and San Gabriel, San Bernardino, and San Jacinto Mtns (southern DPS). Found at 1,000 to 12,000 ft in lakes and creeks that stem from springs and snowmelt. May overwinter under frozen lakes. Often encountered within a few feet of water. Tadpoles may require 2 - 4 yrs to complete their aquatic development.	The aquatic habitats this species requires are absent from the Project Area. Therefore, this species is presumed <b>absent</b> from the Project Area.
<i>Saltugilia latimeri</i>	Latimer's woodland-gilia	None/ None	G3; S3; CNPS: 1B.2	Chaparral, Mojavean desert scrub, pinyon and juniper woodland. Rocky or sandy substrate; sometimes in washes, sometimes limestone. 120-2200 m.	Although some of the habitats this species is associated with are present in the Project Area, this species has not been documented in the project vicinity. Occurrence potential is <b>low</b> .
<i>Selaginella eremophila</i>	desert spike-moss	None/ None	G4; S2S3; CNPS: 2B.2	Sonoran desert scrub, chaparral. Shaded sites, gravelly soils; crevices or among rocks. 225-1570 m.	The microhabitats this species is associated with are absent from the Project site. Occurrence potential is <b>low</b> .
	Southern Riparian Forest	None/ None	G4; S4		This habitat is <b>absent</b> from the Project site.

Scientific Name	Common Name	Listing Status Federal/ State	Other Status	Habitat	Occurrence Potential
<i>Stemodia durantifolia</i>	purple stemodia	None/ None	G5; S2; CNPS: 2B.1	Sonoran desert scrub. Sandy soils; mesic sites. 35-385 m.	The microhabitats this species is associated with are absent from the Project site. Occurrence potential is <b>low</b> .
<i>Stenopelmatus cahuilensis</i>	Coachella Valley jerusalem cricket	None/ None	G1G2; S2	Inhabits a small segment of the sand and dune areas of the Coachella Valley, in the vicinity of Palm Springs. Found in the large, undulating dunes piled up at the north base of Mt San Jacinto.	Suitable habitat for this species is absent from the Project Area. Occurrence potential is <b>low</b> .
<i>Streptanthus campestris</i>	southern jewelflower	None/ None	G3; S3; CNPS: 1B.3	Chaparral, lower montane coniferous forest, pinyon and juniper woodland. Open, rocky areas. 605-2590 m.	The Project Area is outside the known elevation range and habitat associations for this species. Occurrence potential is <b>low</b> .
<i>Toxostoma crissale</i>	Crissal thrasher	None/ None	G5; S2; CDFW: SSC	Resident of southeastern deserts in desert riparian and desert wash habitats. Nests in dense vegetation along streams/washes; mesquite, screwbean mesquite, ironwood, catclaw, acacia, arrowweed, willow.	Some suitable habitat for this species is present in the Project Area. However, this species has not been documented in the Project vicinity. Occurrence potential is <b>low</b> .
<i>Toxostoma lecontei</i>	Le Conte's thrasher	None/ None	G4; S3; CDFW: SSC	Desert resident; primarily of open desert wash, desert scrub, alkali desert scrub, and desert succulent scrub habitats. Commonly nests in a dense, spiny shrub or densely branched cactus in desert wash habitat, usually 2-8 feet above ground.	Some suitable habitat for this species is present in the Project Area. However, this species has not been documented in the Project vicinity. Occurrence potential is <b>low</b> .
<i>Uma inornata</i>	Coachella Valley fringe-toed lizard	Threatened/ Endangered	G1Q; S1	Limited to sandy areas in the Coachella Valley, Riverside County. Requires fine, loose, windblown sand (for burrowing), interspersed with hardpan and widely-spaced desert shrubs.	Suitable habitat for this species is absent from the Project Area. Occurrence potential is <b>low</b> .

Scientific Name	Common Name	Listing Status Federal/ State	Other Status	Habitat	Occurrence Potential
<i>Vireo bellii pusillus</i>	least Bell's vireo	Endangered/ Endangered	G5T2; S3	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2,000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	Suitable habitat for this species is absent from the Project Area. Occurrence potential is <b>low</b> .
<i>Xerospermophilus tereticaudus chlorus</i>	Palm Springs round-tailed ground squirrel	None/ None	G5T2; S2; CDFW: SSC	Restricted to the Coachella Valley. Prefers desert succulent scrub, desert wash, desert scrub, alkali scrub, and levees. Prefers open, flat, grassy areas in fine-textured, sandy soil. Density correlated with winter rainfall.	Some suitable habitat for this species is present in the Project Area. However, this species has not been documented in the Project vicinity. Occurrence potential is <b>low</b> .
<i>Xylorhiza cognata</i>	Mecca-aster	None/ None	G2; S2; CNPS: 1B.2	Sonoran desert scrub. Steep canyon slopes, in sandstone and clay. 20-305 m.	The microhabitats this species is associated with are absent from the Project site. Occurrence potential is <b>low</b> .

## Coding and Terms

**E = Endangered    T = Threatened    C = Candidate    FP = Fully Protected    SSC = Species of Special Concern    R = Rare**

**State Species of Special Concern:** An administrative designation given to vertebrate species that appear to be vulnerable to extinction because of declining populations, limited acreages, and/or continuing threats. Raptor and owls are protected under section 3502.5 of the California Fish and Game code: "It is unlawful to take, possess or destroy any birds in the orders Falconiformes or Strigiformes or to take, possess or destroy the nest or eggs of any such bird."

**State Fully Protected:** The classification of Fully Protected was the State's initial effort in the 1960's to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, mammals, amphibians and reptiles. Fully Protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

**Global Rankings (Species or Natural Community Level):**

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

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

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

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

G5 = Secure – Common; widespread and abundant.

**Subspecies Level:** Taxa which are subspecies or varieties receive a taxon rank (T-rank) attached to their G-rank. Where the G-rank reflects the condition of the entire species, the T-rank reflects the global situation of just the subspecies. For example: the Point Reyes mountain beaver, *Aplodontia rufa* ssp. *phaea* is ranked G5T2. The G-rank refers to the whole species range i.e., *Aplodontia rufa*. The T-rank refers only to the global condition of ssp. *phaea*.

**State Ranking:**

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

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

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

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

S5 = Secure – Common, widespread, and abundant in the State.

**California Rare Plant Rankings (CNPS List):**

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 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 (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

## Appendix B. Site Photos





Photo 1. Looking E along 19<sup>th</sup> Avenue toward Little Morongo Road.



Photo 2. Looking W along 19<sup>th</sup> Avenue from intersection of 19<sup>th</sup> Avenue and Little Morongo Road.



Photo 3. Looking S along Little Morongo Road from intersection of 19<sup>th</sup> Avenue and Little Morongo Road.



Photo 4. Looking N along Little Morongo Road from intersection of 20<sup>th</sup> Avenue and Little Morongo Road.



Photo 5. Looking W along 20<sup>th</sup> Avenue from intersection of 20<sup>th</sup> Avenue and Little Morongo Road.



Photo 6. Looking E along 20<sup>th</sup> Avenue toward Little Morongo Road.



# Appendix C. Plant Species List

### List of Plant Species Observed within the Project Site

Scientific Name	Common Name	Life Form
<b>Asteraceae</b>	<b>Aster Family</b>	
<i>Ambrosia dumosa</i>	White bursage	Shrub
<i>Ambrosia salsola</i>	Cheesebush	Shrub
<i>Encelia farinosa</i>	Brittlebush	Shrub
<i>Psathyrotes ramosissima</i>	Velvet rosette	Annual or perennial herb
<b>Hydrophyllaceae</b>	<b>Waterleaf Family</b>	
<i>Phacelia cicutaria</i>	Caterpillar phacelia	Annual herb
<b>Brassicaceae</b>	<b>Mustard Family</b>	
<i>Brassica tournefortii**</i>	Saharan mustard**	Annual herb
<b>Cactaceae</b>	<b>Cactus Family</b>	
<i>Cylindropuntia echinocarpa</i>	Silver cholla	Shrub (stem succulent)
<b>Chenopodiaceae</b>	<b>Goosefoot Family</b>	
<i>Salsola tragus**</i>	Russian thistle**	Annual herb
<b>Cleomaceae</b>	<b>Cleome Family</b>	
<i>Cleomella arborea</i>	Bladderpod	Shrub
<b>Euphorbiaceae</b>	<b>Spurge Family</b>	
<i>Croton californicus</i>	Desert croton	Perennial herb
<b>Nyctaginaceae</b>	<b>Four o'clock Family</b>	
<i>Abronia villosa</i>	Hairy sand verbena	Annual herb
<b>Poaceae</b>	<b>Grass Family</b>	
<i>Aristida adscensionis</i>	Six weeks three awn	Annual grass
<i>Schismus spp.**</i>	Mediterranean grass**	Annual grass
<b>Zygophyllaceae</b>	<b>bean-caper family</b>	
<i>Larrea tridentata</i>	Creosote bush	shrub

\*Non-native

\*\*Invasive, non-native

# Appendix D. Soil Map

Soil Map—Riverside County, Coachella Valley Area, California  
(MSWD Wright RWRf Street Improvements Project)

116° 32' 0" W

116° 31' 30" W

33° 54' 41" N

33° 54' 41" N

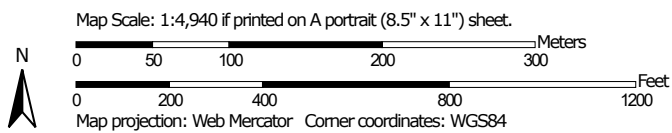


33° 54' 8" N

33° 54' 8" N

116° 32' 0" W


116° 31' 30" W



Soil Map—Riverside County, Coachella Valley Area, California  
(MSWD Wright RWRf Street Improvements Project)

### MAP LEGEND

**Area of Interest (AOI)**

 Area of Interest (AOI)




















**Soils**







 Soil Map Unit Polygons

 Soil Map Unit Lines


 Soil Map Unit Points

**Special Point Features**






-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features


**Water Features**

 Streams and Canals

**Transportation**

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

**Background**

 Aerial Photography

### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

**Warning:** Soil Map may not be valid at this scale.  
Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL:  
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Riverside County, Coachella Valley Area, California  
Survey Area Data: Version 17, Sep 10, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 15, 2022—May 28, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CdC	Carsitas gravelly sand, 0 to 9 percent slopes	1.1	5.8%
ChC	Carsitas cobbly sand, 2 to 9 percent slopes	0.3	1.8%
CkB	Carsitas fine sand, 0 to 5 percent slopes	16.6	88.1%
MaB	Myoma fine sand, 0 to 5 percent slopes	0.8	4.3%
<b>Totals for Area of Interest</b>		<b>18.8</b>	<b>100.0%</b>



# Appendix E. Regulatory Framework

## **Federal Regulations**

### ***Clean Water Act***

The purpose of the Clean Water Act (CWA) of 1977 is to “restore and maintain the chemical, physical, and biological integrity of the nation’s waters.” Section 404 of the CWA prohibits the discharge of dredged or fill material into “waters of the United States” (WOTUS) without a permit from the United States Army Corps of Engineers (USACE). The definition of waters of the United States includes rivers, streams, estuaries, territorial seas, ponds, lakes, and wetlands. Wetlands are defined as those areas “that are inundated or saturated by surface or ground water 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” (33 Code of Federal Regulations [CFR] 328.3 7b). The U.S. Environmental Protection Agency (EPA) also has authority over wetlands and may override a USACE permit. Substantial impacts to wetlands may require an individual permit. Projects that only minimally affect wetlands may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; in California this certification or waiver is issued by the Regional Water Quality Control Board (RWQCB).

### ***Federal Endangered Species Act (ESA)***

The federal Endangered Species Act (ESA) of 1973 protects plants and wildlife that are listed by the United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) as endangered or threatened. Section 9 of the ESA (USA) prohibits the taking of endangered wildlife, where taking is defined as any effort to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct” (50 CFR 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any endangered plant on federal land and removing, cutting, digging up, damaging, or destroying any endangered plant on non-federal land in knowing violation of state law (16 United States Code [USC] 1538). Under Section 7 of the ESA, federal agencies are required to consult with the USFWS if their actions, including permit approvals or funding, could adversely affect an endangered species (including plants) or its Critical Habitat. Through consultation and the issuance of a biological opinion, the USFWS may issue an incidental take statement allowing take of the species that is incidental to an otherwise authorized activity, provided the action will not jeopardize the continued existence of the species. The ESA specifies that the USFWS designate habitat for a species at the time of its listing in which are found the physical or biological features “essential to the conservation of the species,” or which may require “special Management consideration or protection...” (16 USC § 1533[a][3].2; 16 USC § 1532[a]). This designated Critical Habitat is then afforded the same protection under the ESA as individuals of the species itself, requiring issuance of an Incidental Take Permit prior to any activity that results in “the destruction or adverse modification of habitat determined to be critical” (16 USC § 1536[a][2]).

### ***Interagency Consultation and Biological Assessments***

Section 7 of ESA provides a means for authorizing the “take” of threatened or endangered species by federal agencies, and applies to actions that are conducted, permitted, or funded by a federal agency. The statute requires federal agencies to consult with the USFWS or National Marine Fisheries Service (NMFS), as appropriate, to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of Critical Habitat for these species. If a Proposed Project “may affect” a listed species or destroy or modify Critical Habitat, the lead agency is required to prepare a biological assessment evaluating the nature and severity of the potential effect.

### ***Habitat Conservation Plans***

Section 10 of the federal ESA requires the acquisition of an Incidental Take Permit (ITP) from the USFWS by non-federal landowners for activities that might incidentally harm (or “take”) endangered or threatened wildlife on their land. To obtain a permit, an applicant must develop a Habitat Conservation Plan that is designed to offset any harmful impacts the proposed activity might have on the species.

### ***Fish and Wildlife Coordination Act***

The Fish and Wildlife Coordination Act (16 U.S.C. Sections 661 to 667e et seq.) applies to any federal Project where any body of water is impounded, diverted, deepened, or otherwise modified. Project proponents are required to consult with the USFWS and the appropriate state wildlife agency.

### ***Bald and Golden Eagle Protection Act***

The Bald and Golden Eagle Protection Act (The Eagle Act) (1940), amended in 1962, was originally implemented for the protection of bald eagles (*Haliaeetus leucocephalus*). In 1962, Congress amended the Eagle Act to cover golden eagles (*Aquila chrysaetos*), a move that was partially an attempt to strengthen protection of bald eagles, since the latter were often killed by people mistaking them for golden eagles. This act makes it illegal to import, export, take (molest or disturb), sell, purchase, or barter any bald eagle or golden eagle or part thereof. The golden eagle, however, is accorded somewhat lighter protection under the Eagle Act than that of the bald eagle.

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

The Migratory Bird Treaty Act (MBTA) of 1918 implements international treaties between the United States and other nations created to protect migratory birds, any of their parts, eggs, and nests from activities, such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. As authorized by the MBTA, the USFWS issues permits to qualified applicants for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits can be found in 50 CFR Part 13 General Permit Procedures and 50 CFR part 21 Migratory Bird Permits. The State of California has incorporated the protection of birds of prey in Sections 3800, 3513, and 3503.5 of the California Fish and Game Code (CFGC).

### ***Executive Orders (EO)***

*Invasive Species – EO 13112 (1999)*: Issued on February 3, 1999, promotes the prevention and introduction of invasive species and provides for their control and minimizes the economic, ecological, and human health impacts that invasive species cause through the creation of the Invasive Species Council and Invasive Species Management Plan.

*Migratory Bird – EO 13186 (2001)*: Issued on January 10, 2001, promotes the conservation of migratory birds and their habitats and directs federal agencies to implement the Migratory Bird Treaty Act. Protection and Enhancement of Environmental Quality – EO 11514 (1970a), issued on March 5, 1970, supports the purpose and policies of the National Environmental Policy Act (NEPA) and directs federal agencies to take measures to meet national environmental goals.

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

The Migratory Bird Treaty Reform Act (Division E, Title I, Section 143 of the Consolidated Appropriations Act, 2005, PL 108–447) amends the Migratory Bird Treaty Act (16 U.S.C. Sections 703 to 712) such that nonnative birds or birds that have been introduced by humans to the United States or its territories are excluded from protection under the Act. It defines a native migratory bird as a species present in the United States and its territories as a result of natural biological or ecological processes. This list excluded two additional species commonly observed in the United States, the rock pigeon (*Columba livia*) and domestic goose (*Anser domesticus*).

### ***Birds of Conservation Concern***

Birds of Conservation Concern (BCC) is a USFWS list of bird species identified to have the highest conservation priority, and with the potential for becoming candidates for listing as federally threatened or endangered. The chief legal authority for BCC is the Fish and Wildlife Conservation Act of 1980 (FWCA). Other authorities include the FESA, the Fish and Wildlife Act of 1956, and the Department of the Interior U.S Code (16 U.S.C. § 701). The 1988 amendment to the FWCA (Public Law 100-653, Title VIII) requires the Secretary of the Interior, through the USFWS, to “identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act of 1973” (USFWS, 2008a).

## **State Regulations**

### ***California Fish and Game Code Sections 1600 through 1607 of the CFGC***

This section requires that a Streambed Alteration Application be submitted to the CDFW for “any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake.” The CDFW reviews the proposed actions and, if necessary, submits to the applicant a proposal for measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by the Department and the applicant is the Streambed Alteration Agreement. Often, Projects that require a Streambed Alteration Agreement also require a permit from the USACE under Section 404 of the CWA. In these instances, the conditions of the Section 404 permit and the Streambed Alteration Agreement may overlap.

### ***California Porter-Cologne Water Quality Control Act***

The Porter-Cologne Act is the principal law governing water quality in California. It establishes a comprehensive program to protect water quality and the beneficial uses of water. Unlike the federal CWA, Porter-Cologne applies to both surface water and ground water. Porter-Cologne designated the State Water Resources Control Board (State Board) as the statewide water quality planning agency, and also gave authority to the RWQCB. Beyond establishment of a state framework, this act has been revised to comply with the federal CWA.

The State Board is responsible for developing statewide water quality plans (e.g., Ocean Plan, Inland Surface Waters Plan), while the RWQCB is responsible for developing Regional Water Quality Plans (basin plans). The basin plans in turn are approved by the State Board and EPA. Amendments to basin plans, such as Total Maximum Daily Loads (TMDLs), must also be approved by the Office of Administrative Law. These plans, both statewide and basin, include the identification of beneficial uses, water quality objectives, and implementation plans. The RWQCB has the primary responsibility for implementing the provisions in both statewide and basin plans.

### ***California Endangered Species Act***

The California Endangered Species Act (CESA) (Sections 2050 to 2085) establishes the policy of the state to conserve, protect, restore, and enhance threatened or endangered species and their habitats by protecting “all native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation.” Animal species are listed by the CDFW as threatened or endangered, and plants are listed as rare, threatened, or endangered. However, only those plant species listed as threatened or endangered receive protection under the California ESA.

CESA mandates that state agencies do not approve a Project that would jeopardize the continued existence of these species if reasonable and prudent alternatives are available that would avoid a jeopardy finding. There are no state agency consultation procedures under the California ESA. For Projects that would affect a species that is federally and state listed, compliance with ESA satisfies the California ESA if the California Department of Fish and Wildlife (CDFW) determines that the federal incidental take authorization is consistent with the CESA under Section 2080.1. For Projects that would result in take of a species that is state listed only, the Project sponsor must apply for a take permit, in accordance with Section 2081(b).

### ***Fully Protected Species***

Four sections of the California Fish and Game Code (CFGc) list 37 fully protected species (CFGc Sections 3511, 4700, 5050, and 5515). These sections prohibit take or possession "at any time" of the species listed, with few exceptions, and state that "no provision of this code or any other law will be construed to authorize the issuance of permits or licenses to 'take' the species," and that no previously issued permits or licenses for take of the species "shall have any force or effect" for authorizing take or possession.

### ***Bird Nesting Protections***

Bird nesting protections (Sections 3503, 3503.5, 3511, 3513 and 3800) in the CFGc include the following:

- Section 3503 prohibits the take, possession, or needless destruction of the nest or eggs of any bird.
- Section 3503.5 prohibits the take, possession, or needless destruction of any nests, eggs, or birds in the orders Falconiformes (new world vultures, hawks, eagles, ospreys, and falcons, among others), and Strigiformes (owls).
- Section 3511 prohibits the take or possession of Fully protected birds.
- Section 3513 prohibits the take or possession of any migratory nongame bird or part thereof, as designated in the MBTA. To avoid violation of the take provisions, it is generally required that Project-related disturbance at active nesting territories be reduced or eliminated during the nesting cycle.
- Section 3800 prohibits the take of any non-game bird (i.e., bird that is naturally occurring in California that is not a gamebird, migratory game bird, or fully protected bird).

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

The Native Plant Protection Act (NPPA) (1977) (CFGc Sections 1900-1913) was created with the intent to “preserve, protect, and enhance rare and endangered plants in this State.” The NPPA is

administered by CDFW. The Fish and Game Commission has the authority to designate native plants as endangered or rare and to protect endangered and rare plants from take. CESA (CFGC 2050-2116) provided further protection for rare and endangered plant species, but the NPPA remains part of the Fish and Game Code.