APPENDIX 2

Biological Resources Assessment & Jurisdictional Delineation Report

Jacobs

Mission Springs Water District
Areas H and I Sewer Improvements Project

Biological Resources Assessment, Jurisdictional Delineation Report And Land Use Consistency Analysis

Document No. | Final

March 2021

Tom Dodson & Associates

Document history and status

Revision	Date	Description	Author	Checked	Reviewed	Approved

Distribution of copies

Revision	Issue approve	Date issued	Issued to	Comments

Jacobs

Areas H and I Sewer Improvements Project

Project No:	W3X83304 (MS-277)
Document Title:	Biological Resources Assessment & Jurisdictional Delineation Report
Document No.:	Final
Revision:	
Date:	March 2021
Client Name:	Tom Dodson & Associates
Project Manager:	Lisa Patterson
Author:	Daniel Smith
File Name:	2021 MS-277 Areas H and I Sewer Improvements Project BRA

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Executive Summary

Jacobs Engineering Group, Inc. was retained by Tom Dodson and Associates to conduct a Biological Resources Assessment, Jurisdictional Delineation and Land Use Consistency Analysis for the Mission Springs Water District's proposed Areas H and I Sewer Improvements Project located in the City of Desert Hot Springs, Riverside County, California. The Project would consist of installing approximately 30,000 linear feet of 8-inch sewer pipeline to eliminate septic tanks that threaten contamination of groundwater supplies by expanding the District's wastewater collection system.

In November of 2020, Jacobs biologists conducted a Biological Resources Assessment survey to address potential effects of the Project on designated Critical Habitats and/or special status species. Results of the Biological Resources Assessment are intended to provide sufficient baseline information to the Project Proponent and, if required, to City and/or County planning officials and federal and state regulatory agencies 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. Data regarding biological resources in the Project vicinity were obtained through literature review and field investigation. 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, including the U.S. Fish and Wildlife Service designated Critical Habitat online mapper and Information for Planning and Consultation System, as well as the most recent versions of the California Natural Diversity Database (CNDDB) and California Native Plant Society Electronic Inventory. The result of the reconnaissance-level field survey was that no state or federally listed species were identified within the Project Area and the Project is not within any federal Critical Habitat. Due to the environmental conditions on site and the adjacent disturbances, the Project Area is likely not suitable to support any of the special status wildlife species that have been documented in the Project vicinity (within approximately 3 miles).

Jacobs biologists also assessed the Project Area for the presence of state and/or federal jurisdictional waters that may potentially be impacted by the Project. The jurisdictional waters assessment was conducted in accordance with the U.S. Army Corps of Engineers *Wetlands Delineation Manual, Jurisdictional Determination Form Instructional Guidebook, Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* and the Environmental Protection Agency and the Department of the Army's *"Navigable Waters Protection Rule: Definition of 'Waters of the United States,'" April 21, 2020 (effective June 22, 2020)*. The result of the jurisdictional waters assessment is that there are no wetland or non-wetland jurisdictional waters within the Project Area. Therefore, the Project will not impact any jurisdictional waters and no state or federal jurisdictional waters permitting will be required under current regulation.

The Project site falls entirely within the Coachella Valley Multiple Species Habitat Conservation Plan area and the MSWD and City of Desert Hot Springs are both signatories to the CVMSHCP. Therefore, Jacobs also conducted a Land Use Consistency analysis to determine whether the Project is consistent with the Conservation Goals and Objectives of the CVMSHCP.

This report describes delineated resources, provides an aquatic resource delineation map, identifies state and/or federally listed species with potential to occur on site and presents representative site photographs. The delineation results and conclusions presented in this report are considered preliminary and valid under current regulatory context. Additionally, according to protocol and standard practices, the results of the habitat assessment surveys will remain valid for the period of one year, or until November 2021, after which time, if the site has not been disturbed in the interim, another survey may be required to determine the persisting absence of special status species and to verify environmental conditions on site. Regardless of survey results and conclusions given herein, if any state or federally listed species are found on site during Project-related work activities, all activities likely to affect the animal(s) should cease immediately and regulatory agencies should be contacted to determine appropriate management actions.

1. Introduction

Mission Springs Water District (MSWD or District) provides water and sewer services to the communities of Desert Hot Springs, West Garnet, North Palm Springs, and various portions of unincorporated Riverside County. MSWD, as the Lead Agency pursuant to California Environmental Quality Act (CEQA), is proposing to install approximately 30,000 linear feet (LF) of 8-inch sewer pipeline within Areas H and I (refer to Figures 1 and 2) to eliminate septic tanks that threaten contamination of groundwater supplies by expanding MSWD's wastewater collection system. This would also protect hot mineral water, which is the economic basis of the community's spa industry.

In February of 1999, MSWD adopted the MSWD Sewer Improvement Project, which was intended to convert approximately 5,000 existing septic disposal treatment systems to a sewer conveyance and treatment system. The project was approved to develop about 62.8 miles of sewer line and a one million gallon per day (MGD) expansion of the District's Horton Wastewater Treatment Plant. In March of 2011, MSWD adopted an Addendum to the MSWD Sewer Improvement Project titled "Addendum No. 1 for AD-12 Sewer Improvement Project," which would enable the District to install about 57 miles of sewer pipelines and wastewater collection within the District's service area. The proposed Areas H and I Sewer Improvements Project is an extension of the original project from 1999, but because over 20 years have passed since the original project was adopted, and since the checklist as substantially changed, a follow on Initial Study is being prepared to address the potential impacts from installation of the proposed 25,000 LF of sewer pipeline.

The District developed a Groundwater Quality Protection Program (GQPP) to protect and preserve the quality of its most valuable natural resource, groundwater. The overall GQPP is designed to protect groundwater quality from degradation by discharges from septic tank leach-fields. The GQPP would ultimately remove more than 8,100 septic tanks for connection to MSWD's sewer system. The proposed Areas H and I Sewer Improvements Project focuses on Sub Areas H and I and its construction to connect 676 parcels to the MSWD sewer system and abate over 458 on-site septic systems. Additionally, the proposed project would increase wastewater effluent available for treatment to tertiary levels and for reuse as recycled water.

On behalf of Tom Dodson and Associates (TDA), Jacobs Engineering Group, Inc. (Jacobs) has prepared this Biological Resources Assessment (BRA) report for the District's proposed Areas H and I Sewer Improvements Project (Project). The BRA fieldwork was conducted by Jacobs biologist Lisa Patterson in November 2020. The purpose of the BRA survey was to address potential effects of the 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) and, if required, to City, County or other local government planning officials and 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, Jacobs biologists assessed the Project Area for the presence of state and/or federal jurisdictional waters 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 1600 of the California FGC, respectively.

Finally, the Project site falls entirely within the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) area. The MSWD and City of Desert Hot Springs are both signatories to the CVMSHCP. Therefore, Jacobs also conducted a Land Use Consistency analysis to determine whether the Project is consistent with the Conservation Goals and Objectives of the CVMSHCP.

1.1 Project Description

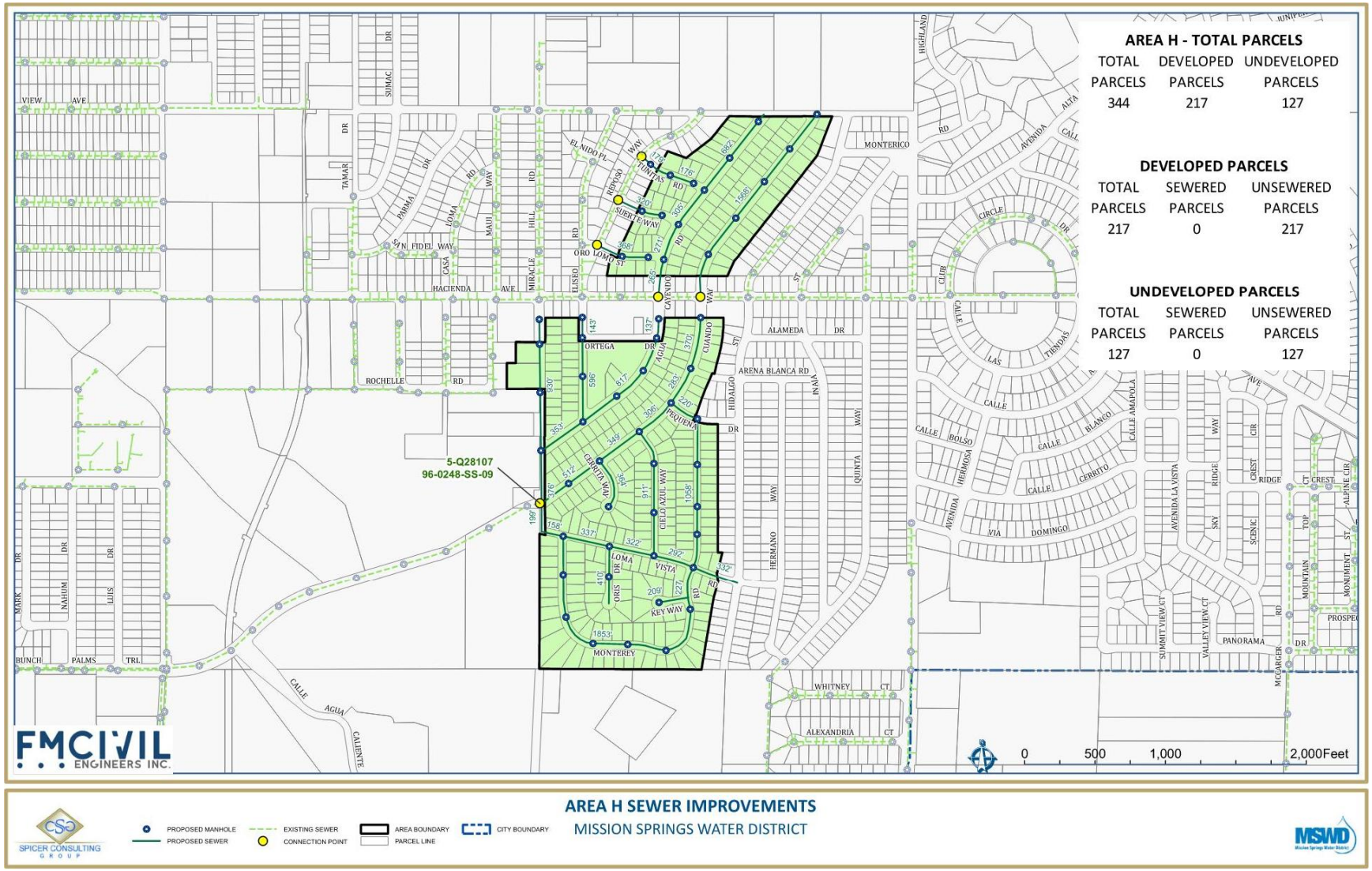
MSWD proposes to construct 30,000 LF of new sewer pipeline that would be 8-inch in diameter within Sub Areas H and I of the District's service area, within an area of approximately 220 acres. All main pipelines will utilize 8" vitrified clay pipe (VCP) and service laterals will utilize 4" VCP piping. Figures 1 and 2 depict Sub Areas H and I and the proposed pipeline alignments. As stated above, the installation of this new sewer pipeline would convert areas within MSWD's service area from septic system to a sewer system. This Project pertains to Sub Areas H and I and would install the pipeline required to connect 676 parcels to the MSWD sewer system and abate over 458 on-site septic systems.

The proposed Project would install pipeline within several existing roadways as they align with Sub Areas H and I (Figures 1 and 2). The proposed Project involves installation of pipeline at one location that is not within a roadway to connect sewer pipeline from Hidalgo Street/Yerxa Rd to Quinta Way. This pipeline will skirt the boundaries of the homes within Sub Area I.

It is assumed that an underground utility installation team can install approximately 200 to 400 lineal feet of sewer, force mains, or recycled water line per day. Therefore, it is anticipated that installation of 30,000 lineal feet (LF) of sewer line will occur over 125 days of construction over a period of about 6 months. The final activity associated with the sewer installation is repaving of roads disturbed by the construction. This is anticipated to occur over a 20-day period. A team consists of the following:

- 1 Excavator
- 1 Backhoe
- 1 Paver
- 1 Roller
- 1 Water truck
- Traffic Control Signage and Devices
- 10 Dump/delivery trucks (80 miles round trip distance)
- Employees (11 members per team)

The Project will utilize open cut trenching and jack and bore techniques. The trench width will be 3 feet maximum with a maximum of 5 feet at the top for pavement cutting. The depth to the invert of the pipe will be approximately 8 feet deep in the open cut trench areas and approximately 13 feet deep under the existing drainage channel between Hidalgo Street and Quinta Way.



SOURCE: Spicer Consulting Group & MSWD

FIGURE 1

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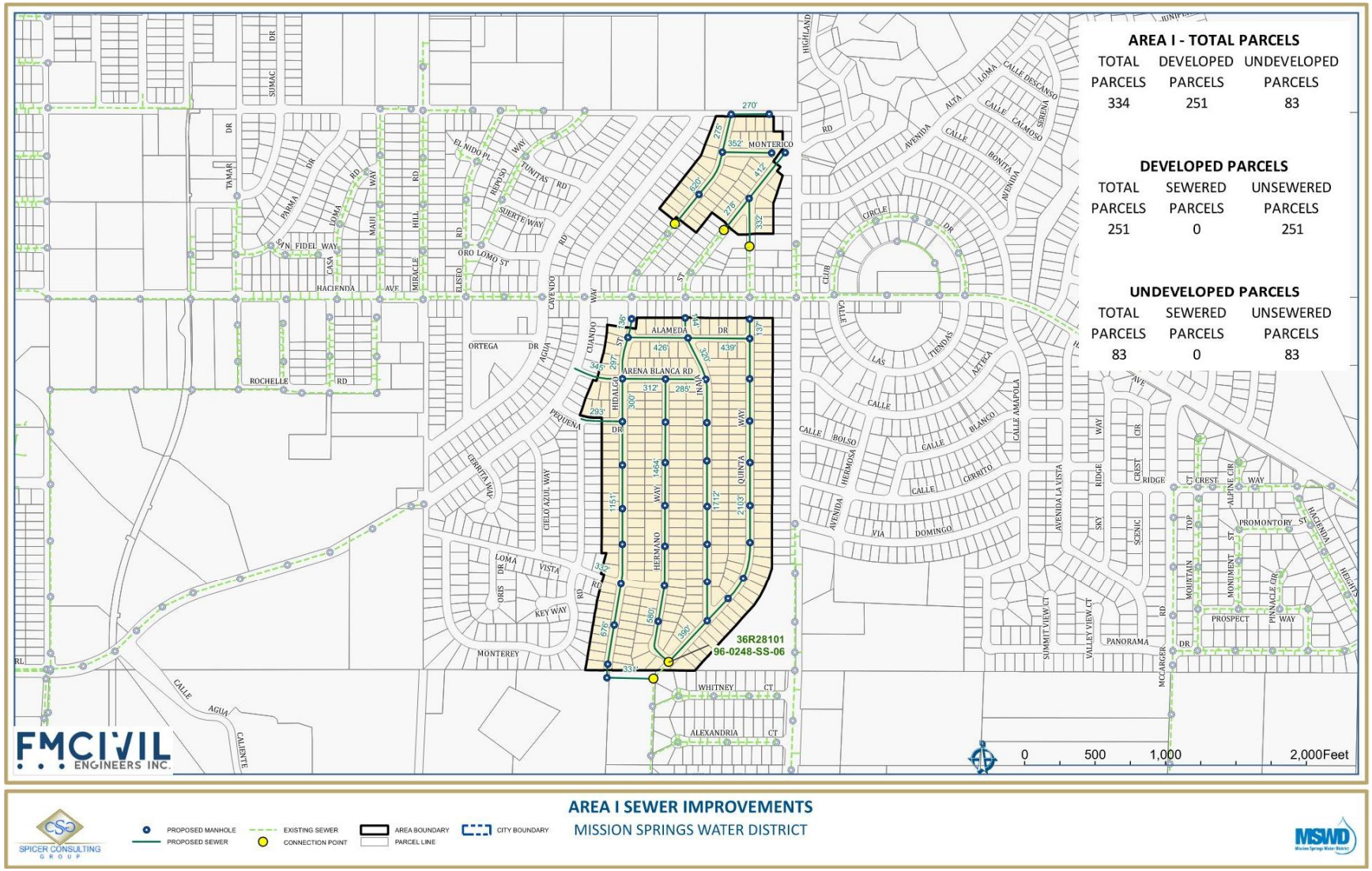
Area H Sewer Improvements
MSWD Areas H and I Sewer Improvements Project



SOURCE: Spicer Consulting Group & MSWD

FIGURE 2

Area I Sewer Improvements
MSWD Areas H and I Sewer Improvements Project

1.2 Location

The proposed Project is generally located in the City of Desert Hot Springs, Riverside County, California, in Section 32 of Township 2 South, Range 5 East, San Bernardino Base Meridian (Figures 3 & 4). The Project Area is depicted on the *Seven Palms Valley* U. S. Geological Survey's (USGS) 7.5-Minute Series Quadrangle map. Specifically, the Project Area is located approximately 4.8 miles northeast of the Interstate 10 (I 10) Exit 123 (Palm Drive, Gene Autry Trail) and is bisected by Hacienda Avenue (Figures 4 & 5). The eastern boundary of the Project Area parallels Mountain View Road to the east; the western boundary extends along Miracle Hill Road, south of Hacienda Avenue; the southern boundary is approximately 0.5 mile south of Hacienda Avenue, between Mountain View Road to the east and Miracle Hill Road to the west; and the northern boundary of the Project Area parallels Desert View Avenue to the north, between Mountain View Road to the east and Reposo Way to the west (Figures 4 & 5).

SOURCE: Google Earth

FIGURE 3

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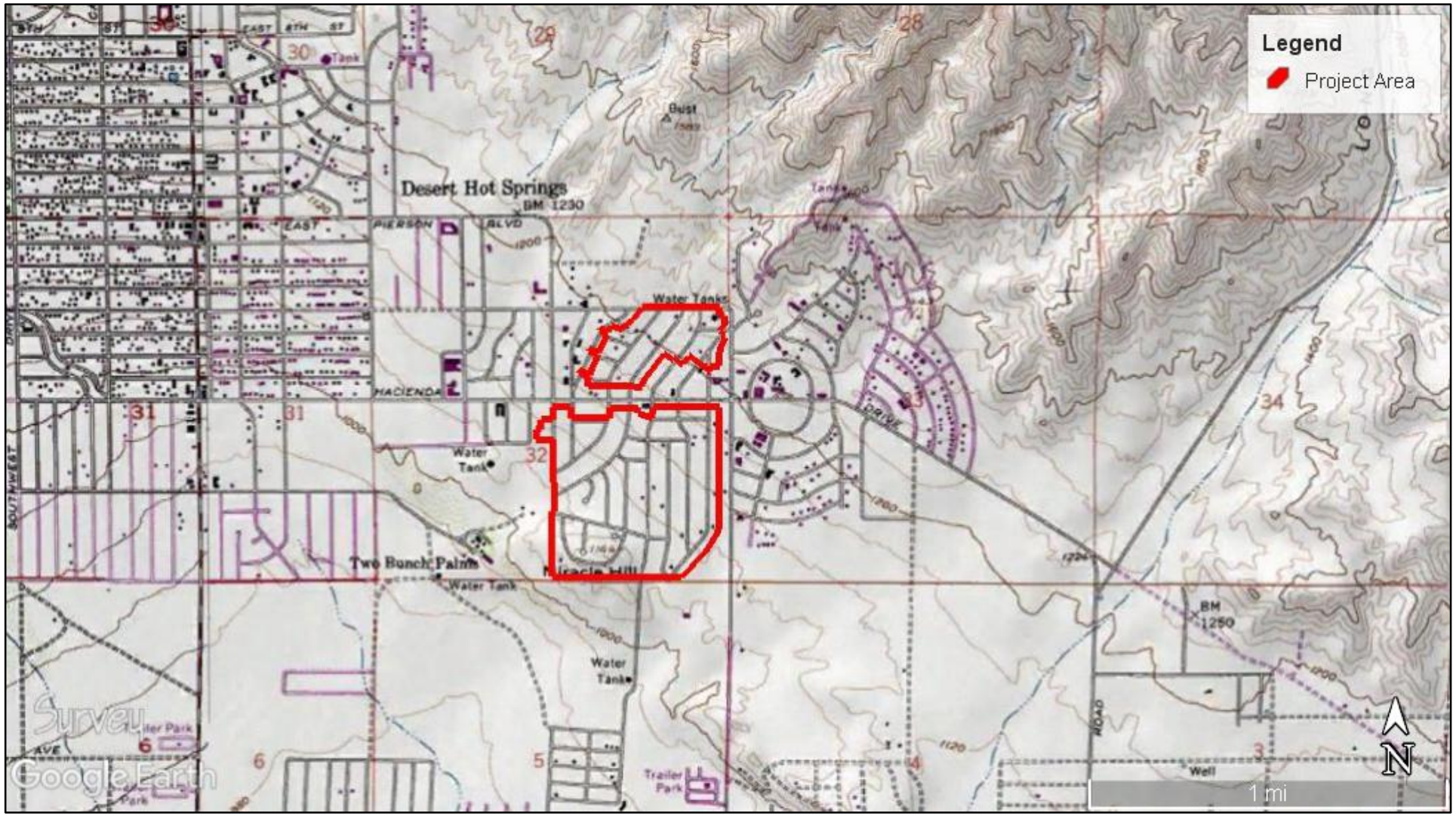
Regional Location
MSWD Areas H and I Sewer Improvements Project



SOURCE: Google Earth

FIGURE 4

Topographic Map of Project Location
MSWD Areas H and I Sewer Improvements Project

SOURCE: Google Earth

FIGURE 5

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Aerial Photograph of Project Area
MSWD Areas H and I Sewer Improvements Project

1.3 Environmental Setting

The Project Area lies in the geographically based ecological classification known as the Upper Coachella Valley and Hills of the Sonoran Basin and Range in southern California (Griffith et al. 2016). 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 is a transitional desert region with some affinities to the Mojave Basin and Range ecoregion to the north and is surrounded by mountains, except to the south where it descends toward the agricultural lands and Salton Sea (Griffith et al. 2016).

The Desert Hot Springs area is situated in the northwestern end of the Coachella Valley and 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 an urban landscape that slopes downward from northeast to southwest, built over naturally occurring alluvial fans and bajadas. The elevation of the Project Area ranges from approximately 1,040 feet above mean sea level (amsl) near the southwestern limits of the Project Area to 1,250 feet amsl near the northeastern-most limits.

The Project Area is within a hot desert climate (BWh), characterized by year-round high temperatures, low humidity, and considerable variation in the occurrence, intensity, and distribution of precipitation. Average annual maximum temperatures within the Project Area peak at 108.2 degrees Fahrenheit (° F) in July and fall to an average annual minimum temperature of 42.3° F in December and January. Average total annual precipitation is approximately 5.49 inches and reaches a peak in January (1.13 inches). Precipitation is lowest in the months of June and July (0.05 inches per month).

Hydrologically, the Project Area is situated within the Miracle Hill Hydrologic Sub-Area (HSA 719.43). The Miracle Hill HSA comprises a 44,525-acre drainage area, within the larger Whitewater River Watershed (HUC 18100201). The Whitewater River is the major hydrogeomorphic feature within the Whitewater River Watershed and is one of the main tributaries to the Salton Sea. The nearest tributary to the Whitewater River is Morongo Wash, which is approximately 2 miles west of the Project Area at its closest point.

Soils within the Project Area are comprised mostly of Carsitas gravelly sand, 0 to 9 percent slopes, and Carsitas gravelly sand, 9 to 30 percent slopes. Carsitas family soils consist of gravelly sand that is comprised of gravelly alluvium derived from granite. This soil type is excessively drained, with a low to very low runoff class and does not have a hydric soil rating.

The City of Desert Hot Springs is a desert community situated north of the City of Palms Springs, along the southern foothills of the Little San Bernardino Mountains, that consists of a mix of urban landscapes and undeveloped desert scrub habitats (Figure 5). The Project Area is entirely within an urban environment consisting of single-family residential development and is surrounded by residential development and undeveloped land. Habitat within the surrounding undeveloped areas consist mostly of Mojave mixed woody scrub and Sonoran mixed woody and succulent scrub plant communities.

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 designated Critical Habitat online mapper, USFWS Information for Planning and Consultation System (IPaC) and the most recent versions of the California Natural Diversity Database (CNDDB) and California Native Plant Society Electronic Inventory (CNPSEI) databases were searched for sensitive species data in the *Seven Palms Valley* and *Desert Hot Springs* USGS 7.5-Minute Series Quadrangles. The Project Area is situated within the *Seven Palms Valley* quad and the sites' proximity to the *Desert Hot Springs* quad lead to its inclusion in the review. 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 (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

Jacobs biologist Lisa Patterson conducted a biological resources assessment of the Project Area on November 2, 2020. The reconnaissance-level field survey area encompassed the entire proposed Project Area and consisted of a pedestrian survey of the proposed Project footprint, as well as the immediate surrounding area where feasible and appropriate (i.e. no adjacent private properties were accessed without prior authorization from the property owners). 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.

2.2 Jurisdictional Delineation

On November 2, 2020, Ms. Patterson also evaluated the Project Area for the presence of riverine/riparian/wetland habitat and jurisdictional waters, 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 was 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.*
- *The Environmental Protection Agency (EPA) and the Department of the Army's "Navigable Waters Protection Rule: Definition of 'Waters of the United States,'" April 21, 2020 (effective June 22, 2020) (85 FR 22250).*

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 2021) 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 were 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 the approximately 172-acre area that encompasses the entire extent of the proposed temporary footprint of the new sewer line, which includes all anticipated construction ground disturbance and physical location of new sewer line. Existing disturbances within the immediate Project Area primarily consist of residential development and paved roadways. Habitat intactness within the surrounding undeveloped areas is highly fragmented. Land cover within Project Area consists of urban development, and surrounding land cover consists of a mix of urban and Mojave mixed woody scrub and Sonoran mixed woody and succulent scrub habitats.

The proposed impact area is completely disturbed, consisting of paved streets and previously graded, compact bare ground (see attached Site Photos). The Project Area no longer supports any undisturbed habitat and the only species expected to occur within the Project Area are those adapted to an urban environment. Birds were the only wildlife group observed during survey and species observed or otherwise detected in the Project Area during the reconnaissance-level survey included:

- red-tailed hawk (*Buteo jamaicensis*)
- Gambel's quail (*Callipepla gambelii*)
- Costa's hummingbird (*Calypte costae*)
- rock pigeon (*Columba livia*)
- common raven (*Corvus corax*)
- house finch (*Haemorhous mexicanus*)
- northern mockingbird (*Mimus polyglottos*)
- house sparrow (*Passer domesticus*)
- black phoebe (*Sayornis nigricans*)
- white-winged dove (*Zenaida asiatica*)
- mourning dove (*Zenaida macroura*)
- white-crowned sparrow (*Zonotrichia leucophrys*)

3.2 Special Status Species and Habitats

According to the CNDDB, CNPSEI, and other relevant literature and databases, 29 sensitive species (11 plant species, 18 animal species) and two sensitive habitats have been documented in the *Seven Palms Valley* and *Desert Hot Springs* USGS 7.5-Minute Series Quadrangles. This list of sensitive species and habitats includes any state and/or federally listed 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 CNDDB 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 seven state and/or federally listed species documented within the *Seven Palms Valley* and *Desert Hot Springs* quads, the following three state and/or federally listed species have been documented in the Project vicinity (within approximately 3 miles):

- Coachella Valley milk-vetch (*Astragalus lentiginosus* var. *coachellae*)
- Mojave desert tortoise (*Gopherus agassizii*)
- Coachella Valley fringe-toed lizard (*Uma inornata*)

However, the Project Area consists entirely of urban landscape and the habitat requirements for these species are absent from the proposed impact area. The habitat within the undeveloped portions of the surrounding area is disturbed and highly fragmented, and the aeolian sand dune habitat that Coachella Valley fringe-toed lizard require are absent from the Project Area and immediate vicinity. Therefore, the Project Area is not suitable to support Mojave desert tortoise or Coachella Valley fringe-toed lizard and these species are not expected to occur within or adjacent the Project Area. Furthermore, and the soils within the unpaved portions of the proposed impact area consist of previously graded, compact ground that is not suitable for Coachella Valley milk-vetch.

Although not a state or federally listed as threatened or endangered species, burrowing owl (*Athene cunicularia* [BUOW]) are considered a State and federal SSC and this species is protected by the international treaty under the Migratory Bird Treaty Act of 1918 and by State law under the California FGC (FGC #3513 & #3503.5). This species has been documented approximately 0.5 mile northwest of the Project Area. However, there is no suitable BUOW habitat within or adjacent the Project Area, due to existing human disturbance and habitat fragmentation.

3.2.1 Special Status Species

No state and/or federally listed threatened or endangered species, or other sensitive species were observed within the Project Area during the reconnaissance-level field survey and due to the environmental conditions within and adjacent the proposed Project footprint, none are expected to occur. An analysis of the likelihood for occurrence of all CNDDB sensitive species documented in the *Seven Palms Valley* and *Desert Hot Springs* quads is provided in Appendix A. This analysis considers species' range as well as documentation within the vicinity of the Project Area 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.

3.2.2 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 1.5 mile west of the Project Area. This Critical Habitat unit is part of the Mission Creek Morongo Wash System (Unit 3) of USFWS designated Critical Habitat for the federally listed as endangered Coachella Valley milk-vetch. However, no portion of the Project Area is within or adjacent this Critical Habitat unit, or any other sensitive habitats. 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 Jurisdictional Delineation

The Project Area is within the Miracle Hill Hydrologic Sub-Area (HSA 719.43). The Miracle Hill HSA comprises a 44,525-acre drainage area, within the larger Whitewater River Watershed (HUC 18100201). This watershed is primarily within Riverside County, with a small portion in 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 southwest by the San Felipe Creek and Santa Margarita Watersheds, and on the west by the San Jacinto Watershed. 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 nearest tributary to the Whitewater River is Morongo Wash, which is approximately 2 miles west of the Project Area at its closest point.

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. According to the EPA and the Department of the Army's April 21, 2020 (effective June 22, 2020) "Navigable Waters Protection Rule: Definition of 'Waters of the United States,'" WOTUS are defined as: "The territorial seas and traditional navigable waters; perennial and intermittent tributaries that contribute surface water flow to such waters; certain lakes, ponds, and impoundments of jurisdictional waters; and wetlands adjacent to other jurisdictional waters." (85 FR 22250). The Navigable Waters Protection Rule (NWPR) specifically excludes from the definition of WOTUS:

- "Groundwater, including groundwater drained through subsurface drainage systems;
- ephemeral features that flow only in direct response to precipitation, including ephemeral streams, swales, gullies, rills, and pools;
- diffuse stormwater runoff and directional sheet flow over upland;
- ditches that are not traditional navigable waters, tributaries, or that are not constructed in adjacent wetlands, subject to certain limitations;
- prior converted cropland;
- artificially irrigated areas that would revert to upland if artificial irrigation ceases;
- artificial lakes and ponds that are not jurisdictional impoundments and that are constructed or excavated in upland or non-jurisdictional waters;
- water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining or construction activity, and pits excavated in upland or in non-jurisdictional waters for the purpose of obtaining fill, sand, or gravel;
- stormwater control features constructed or excavated in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater run-off;
- groundwater recharge, water reuse, and wastewater recycling structures constructed or excavated in upland or in non-jurisdictional waters; and
- waste treatment systems." (85 FR 22250).

Areas meeting all three wetland parameters (i.e. hydrophitic vegetation, hydric soils and wetland hydrology) and are adjacent to other jurisdictional waters would be designated as USACE wetlands.

There are no wetland or non-wetland WOTUS within the Project Area. Therefore, the Project will not result in any permanent or temporary impacts to WOTUS.

State Lake/Streambed

There are no lake, river, stream or aquatic resources, stream-dependent wildlife resources or riparian habitats within the Project Area. Therefore, the Project will not result in any permanent or temporary impacts to jurisdictional waters of the State.

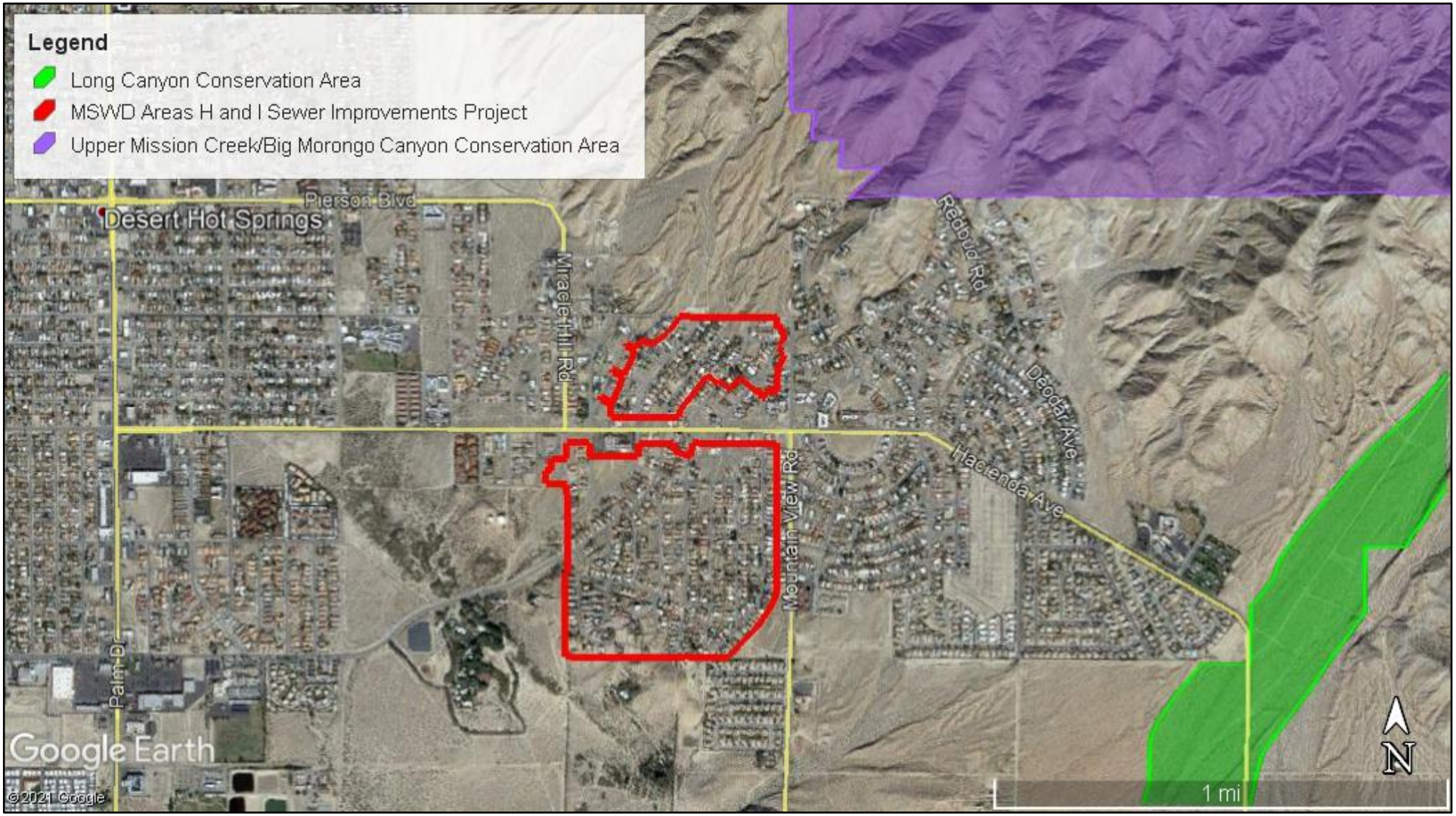
3.4 Land Use Designations

Coachella Valley MSHCP

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 MSHCP 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.

The Project Area is outside any CVMSHCP Conservation Areas and the nearest Conservation Areas are approximately 0.4 mile northeast (Upper Mission Creek/Big Morongo Canyon Conservation Area) and 0.9 mile southeast (Long Canyon Conservation Area) of the Project Area, respectively (Figure 6). Therefore, no conservation or avoidance measures are expected, and the Project as described, would be consistent with the Conservation Goals and Objectives set forth in the CVMSHCP.



SOURCE: Google Earth and CVMSHCP Conservation Area GIS Layer

FIGURE 6

CVMSHCP Conservation Areas
MSWD Areas H and I Sewer Improvements Project

4. Conclusions and Recommendations

4.1 Sensitive Biological Resources

No sensitive species were observed within the Project Area during the reconnaissance-level field survey and due to the environmental conditions on site, none are expected to occur. The Project Area is completely disturbed, consisting of paved streets and previously graded, compact bare ground (see attached Site Photos). Existing disturbances within the immediate Project Area primarily consist of residential development and paved roadways and habitat intactness within the surrounding undeveloped areas is highly fragmented. Due to the environmental conditions on site and the adjacent disturbances, the Project Area is likely not suitable to support any of the special status wildlife species that have been documented in the Project vicinity (within approximately 3 miles), including the federally listed as endangered Coachella Valley milk-vetch, the state and federally listed as threatened Mojave desert tortoise, the state listed as endangered and federally listed as threatened Coachella Valley fringe-toed lizard, and the California SSC BUOW.

The Project Area does not contain any sensitive habitats, including any USFWS designated Critical Habitat for any federally listed species, and the Project will not result in any loss or adverse modification of Critical Habitat. Additionally, the Project will not impact any MSHCP Conservation Areas. The Coachella Valley milk-vetch, Mojave desert tortoise, and Coachella Valley fringe-toed lizard are all CVMSHCP Covered Species (CVAG 2007). The CVMSHCP provides "take" authorization for Covered Species during otherwise lawful activities, by providing for the conservation of the Covered Species. The District and the City of Desert Hot Springs are both signatories to the CVMSHCP. Since the Coachella Valley milk-vetch, Mojave desert tortoise, and Coachella Valley fringe-toed lizard are all Covered Species under the CVMSHCP and the Project will not impact any MSHCP Conservation Areas or USFWS designated Critical Habitat for Coachella Valley milk-vetch, "take" authorization is provided for any potential Project-related impacts to these species.

Nesting Birds

There is habitat within the Project Area that is suitable to support nesting birds, including both vegetation and man-made structures. Most native bird species are protected from unlawful take by the MBTA (Appendix C). In December 2017, the Department of the Interior (DOI) issued a memorandum concluding that the MBTA's prohibitions on take apply "[…] only to affirmative actions that have as their purpose the taking or killing of migratory birds, their nests, or their eggs" (DOI 2017). Then in April 2018, the USFWS issued a guidance memorandum that further clarified that the take of migratory birds or their active nests (i.e., with eggs or young) that is incidental to, and not the purpose of, an otherwise lawful activity does not constitute a violation of the MBTA (USFWS 2018).

However, the State of California provides additional protection for native bird species and their nests in the FGC (Appendix A). Bird nesting protections in the FGC include the following (Sections 3503, 3503.5, 3511, 3513 and 3800):

- 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 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).

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 February 1st through August 31st. However, if all work cannot be conducted outside of nesting season, the following is recommended:

Ø To avoid impacts to nesting birds (common and special status) during the nesting season, a qualified Avian Biologist should conduct pre-construction nesting bird surveys prior to Project-related disturbance to suitable nesting areas to identify any active nests. 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 Waters

In addition to the BRA and focused botanical field survey, Jacobs also assessed the Project Area for the presence of any state and/or federal jurisdictional waters. The result of the jurisdictional waters assessment is that there are no wetland or non-wetland WOTUS or waters of the State potentially subject to regulation by the USACE under Section 404 of the CWA, the RWQCB under Section 401 of the CWA and/or Porter Cologne Water Quality Control Act, or the CDFW under Section 1602 of the California Fish and Game Code (FGC), respectively. Therefore, the Project will not impact any jurisdictional waters and no state or federal jurisdictional waters permitting will be required.

4.3 Land Use Designations

The Project is within the CVMSHCP boundary but is outside any CVMSHCP Conservation Areas. The nearest Conservation Areas are approximately 0.4 mile northeast (Upper Mission Creek/Big Morongo Canyon Conservation Area) and 0.9 mile southeast (Long Canyon Conservation Area) of the Project Area, respectively (Figure 6). The Project Proponent should be prepared to pay the MSHCP fees and restrict all Project related impacts to existing right-of-way and/or other areas outside of the Conservation Areas. No other conservation or avoidance measures are expected, and the Project as described, would be consistent with the Conservation Goals and Objectives set forth in the CVMSHCP.

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Appendix A. CNDDB Species and Habitats Documented Within the *Seven Palms Valley* and *Desert Hot Springs* USGS 7.5-Minute Quadrangles

Special Status Species Occurrence Potential Analysis

Scientific Name	Common Name	Listing Status Federal/ State	Other Status	Habitat	Occurrence Potential
Aquila chrysaetos	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.	The Project Area is within an urban environment and there are no suitable nesting sites for this species within the Project Area. Occurrence potential is low.
Astragalus lentiginosus var. *coachellae*	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.	The proposed Project footprint is within existing paved roads and previously graded, compact bare ground. Occurrence potential is low.
Astragalus tricarinatus	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 *Larrea* and *Encelia*. 455-1585 m.	The proposed Project footprint is within existing paved roads and previously graded, compact bare ground. Occurrence potential is low.
Athene cunicularia	burrowing owl	None/ None	G4; S3; 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.	The Project Area is within an urban environment and due to existing human disturbances and poor habitat quality, this species not expected to occur within or adjacent the Project Area. Occurrence potential is low.
Chaetodipus fallax pallidus	pallid San Diego pocket mouse	None/ None	G5T3T4; S3S4; CDFW: SSC	Desert border areas in eastern San Diego County in desert wash, desert scrub, desert succulent scrub, pinyon-juniper, etc. Sandy, herbaceous areas, usually in association with rocks or coarse gravel.	The Project Area is within an urban environment and due to existing human disturbances and poor habitat quality, this species not expected to occur within or adjacent the Project Area. Occurrence potential is low.
Chorizanthe xanti var. *leucotheca*	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 proposed Project footprint is within existing paved roads and previously graded, compact bare ground. Occurrence potential is low.

Scientific Name	Common Name	Listing Status Federal/ State	Other Status	Habitat	Occurrence Potential
Corynorhinus townsendii	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.	The Project Area is within an urban environment and there are no suitable roosting sites for this species within the Project Area. Occurrence potential is low.
Crotalus ruber	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.	The Project Area is within an urban environment and due to existing human disturbances and poor habitat quality, this species not expected to occur within or adjacent the Project Area. Occurrence potential is low.
	Desert Fan Palm Oasis Woodland	None/ None	G3; S3.2		This habitat is absent from the Project Area.
Dodecahema leptoceras	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 *Encelia, Dalea, Lepidospartum*, etc. Sandy soils. 200-765 m.	The proposed Project footprint is within existing paved roads and previously graded, compact bare ground. Furthermore, the Project Area is outside the current known range of this species. Occurrence potential is low.
Eriastrum harwoodii	Harwood's eriastrum	None/ None	G2; S2; CNPS: 1B.2	Desert dunes. Sandy soils. 15-1100m.	The proposed Project footprint is within existing paved roads and previously graded, compact bare ground. Occurrence potential is low.
Euphorbia arizonica	Arizona spurge	None/ None	G5; S3; CNPS: 2B.3	Sonoran desert scrub. Sandy soils. 150-900 m.	The proposed Project footprint is within existing paved roads and previously graded, compact bare ground. Occurrence potential is low.
Euphorbia misera	cliff spurge	None/ None	G5; S2; CNPS: 2B.2	Coastal bluff scrub, coastal scrub, Mojavean desert scrub. Rocky sites. 3-430 m.	The proposed Project footprint is within existing paved roads and previously graded, compact bare ground. Occurrence potential is low.

Scientific Name	Common Name	Listing Status Federal/ State	Other Status	Habitat	Occurrence Potential
Falco mexicanus	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.	The Project Area is within an urban environment and there are no suitable nesting sites for this species within the Project Area. Occurrence potential is low.
Gopherus agassizii	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.	The Project Area is within an urban environment and due to existing human disturbances and poor habitat quality, this species not expected to occur within or adjacent the Project Area. Occurrence potential is low.
Linanthus maculatus ssp. *maculatus*	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.	The proposed Project footprint is within existing paved roads and previously graded, compact bare ground. Occurrence potential is low.
Mentzelia tricuspis	spiny-hair blazing star	None/ None	G4; S2; CNPS: 2B.1	Mojavean desert scrub. Sandy or gravelly slopes and washes.150-1280 m.	The proposed Project footprint is within existing paved roads and previously graded, compact bare ground. Occurrence potential is low.
	Mesquite Bosque	None/ None	G3; S2.1		This habitat is absent from the Project Area.
Nemacaulis denudata var. *gracilis*	slender cottonheads	None/ None	G3G4T3?; S2; CNPS: 2B.2	Coastal dunes, desert dunes, Sonoran desert scrub. In dunes or sand. -45-745 m.	The proposed Project footprint is within existing paved roads and previously graded, compact bare ground. Occurrence potential is low.
Neotoma lepida intermedia	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.	The Project Area is within an urban environment and due to existing human disturbances and poor habitat quality, this species not expected to occur within or adjacent the Project Area. Occurrence potential is low.

Scientific Name	Common Name	Listing Status Federal/ State	Other Status	Habitat	Occurrence Potential
Ovis canadensis nelsoni	desert bighorn sheep	None/ None	G4T4; S3; CDFW: FP	Widely distributed from the White Mountains in Mono County, to the Chocolate Mountains in Imperial County. Open, rocky, steep areas with available water and herbaceous forage.	No suitable habitat for this species exists in the Project Area or immediate vicinity. Occurrence potential is low.
Ovis canadensis nelsoni pop. 2	Peninsular bighorn sheep DPS	Endangered/ Threatened	G4T3Q; S2; CNPS: 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.	No suitable habitat for this species exists in the Project Area or immediate vicinity. Occurrence potential is low.
Perognathus longimembris bangsi	Palm Springs pocket mouse	None/ None	G5T2; S2; 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.	The Project Area is within an urban environment and due to existing human disturbances and poor habitat quality, this species not expected to occur within or adjacent the Project Area. Occurrence potential is low.
Phrynosoma blainvillii	coast horned lizard	None/ None	G3G4; S3S4; 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 within an urban environment and due to existing human disturbances and poor habitat quality, this species not expected to occur within or adjacent the Project Area. Occurrence potential is low.

Scientific Name	Common Name	Listing Status Federal/ State	Other Status	Habitat	Occurrence Potential
Phrynosoma mcallii	flat-tailed horned lizard	None/ None	G3; S2; 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.	The Project Area is within an urban environment and due to existing human disturbances and poor habitat quality, this species not expected to occur within or adjacent the Project Area. Occurrence potential is low.
Selaginella eremophila	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 proposed Project footprint is within existing paved roads and previously graded, compact bare ground. Occurrence potential is low.
Stenopelmatus cahuilaensis	Coachella Valley jerusalem cricket	None/ None	G1G2; S1S2	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.	No suitable habitat for this species exists in the Project Area or immediate vicinity. Occurrence potential is low.
Toxostoma lecontei	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.	The Project Area is within an urban environment and due to existing human disturbances and poor habitat quality, this species not expected to occur within or adjacent the Project Area. Occurrence potential is low.
Uma inornata	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.	No suitable habitat for this species exists in the Project Area or immediate vicinity. Occurrence potential is low.
Vireo bellii pusillus	least Bell's vireo	Endangered/ Endangered	G5T2; S2	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.	No suitable habitat for this species exists in the Project Area or immediate vicinity. Occurrence potential is low.

Scientific Name	Common Name	Listing Status Federal/ State	Other Status	Habitat	Occurrence Potential
Xerospermophilus tereticaudus chlorus	Palm Springs round-tailed ground squirrel	None/ None	G5T2Q; 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.	The Project Area is within an urban environment and due to existing human disturbances and poor habitat quality, this species not expected to occur within or adjacent the Project Area. Occurrence potential is low.

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

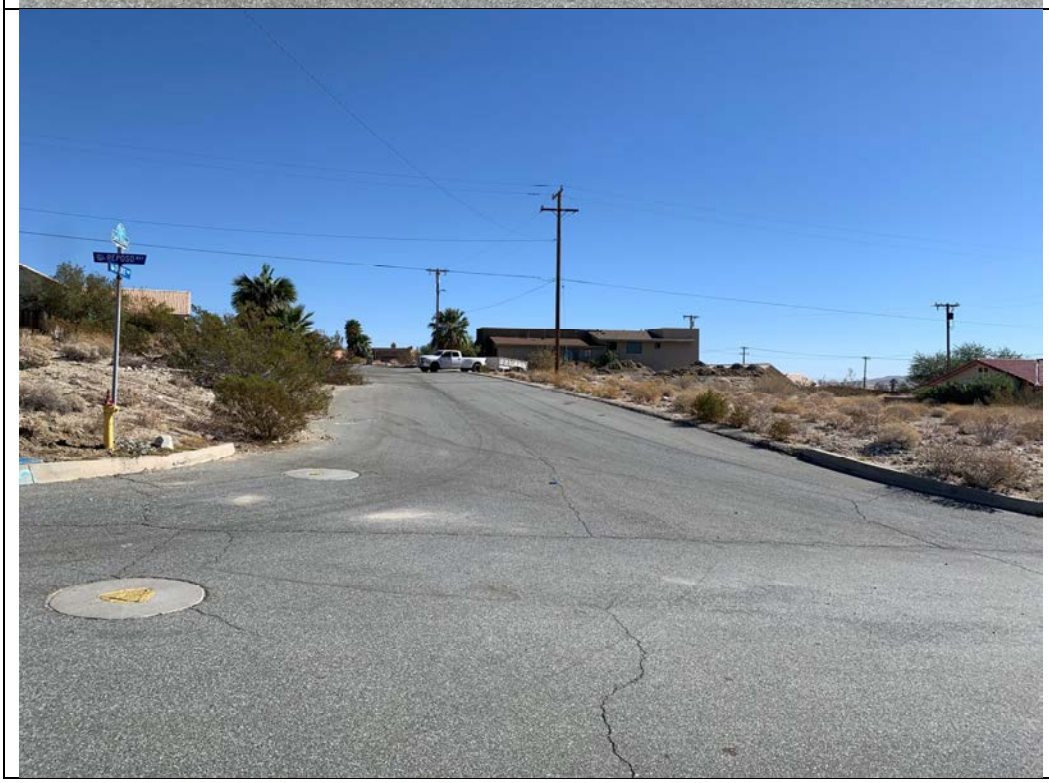
	Photo 1. Looking southeast along the proposed Project alignment from the intersection of Tunitas Road and Reposo Way. Northwest portion of the Project Area; north of Hacienda Avenue.
	Photo 2. Looking southeast along the proposed Project alignment from the intersection of Suerte Way and Reposo Way. Northwest portion of the Project Area; north of Hacienda Avenue.

	Photo 3. Looking north along the proposed Project alignment from the intersection of Agua Cayendo Road and Oro Loma Street. Northwest portion of the Project Area; north of Hacienda Avenue.
	Photo 5. Looking south along the proposed Project alignment from the intersection of Cuando Way and Desert View Avenue. Northeast corner of the Project Area; north of Hacienda Avenue.

	Photo 5. Project alignment near the northeastern portion of the Project Area; south of Hacienda Avenue.
	Photo 6. Project alignment near the northeastern portion of the Project Area; south of Hacienda Avenue.

	Photo 7. Project alignment near the eastern portion of the Project Area; south of Hacienda Avenue.
	Photo 8. Project alignment near the soutwest portion of the Project Area; south of Hacienda Avenue.

Appendix C. 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).

Navigable Waters Protection Rule

The USACE has authority to permit the discharge of dredged or fill material in WOTUS under Section 404 of the CWA. According to the EPA and the Department of the Army's April 21, 2020 (effective June 22, 2020) "Navigable Waters Protection Rule: Definition of 'Waters of the United States,'" WOTUS are defined as: "The territorial seas and traditional navigable waters; perennial and intermittent tributaries that contribute surface water flow to such waters; certain lakes, ponds, and impoundments of jurisdictional waters; and wetlands adjacent to other jurisdictional waters." (85 FR 22250). The Navigable Waters Protection Rule specifically excludes from the definition of WOTUS:

- "Groundwater, including groundwater drained through subsurface drainage systems;
- ephemeral features that flow only in direct response to precipitation, including ephemeral streams, swales, gullies, rills, and pools;
- diffuse stormwater runoff and directional sheet flow over upland;
- ditches that are not traditional navigable waters, tributaries, or that are not constructed in adjacent wetlands, subject to certain limitations;
- prior converted cropland;
- artificially irrigated areas that would revert to upland if artificial irrigation ceases;
- artificial lakes and ponds that are not jurisdictional impoundments and that are constructed or excavated in upland or non-jurisdictional waters;
- water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining or construction activity, and pits excavated in upland or in non-jurisdictional waters for the purpose of obtaining fill, sand, or gravel;

- stormwater control features constructed or excavated in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater run-off;

- groundwater recharge, water reuse, and wastewater recycling structures constructed or excavated in upland or in non-jurisdictional waters; and

- waste treatment systems." (85 FR 22250).

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).

However, on December 22, 2017 the U.S. Department of the Interior (DOI) issued a memorandum concluding that MBTA's prohibitions on take apply "[…] only to affirmative actions that have as their purpose the taking or killing of migratory birds, their nests, or their eggs" (DOI 2017). Therefore, take of migratory birds or their active nests (i.e., with eggs or young) that is incidental to, and not the purpose of, an otherwise lawful activity does not constitute a violation of the MBTA. Then, on April 11, 2018, the USFWS issued a guidance memorandum that provided further clarification on their interpretation:

> "We interpret the M-Opinion to mean that the MBTA's prohibitions on take apply when the purpose of an action is to take migratory birds, their eggs, or their nests. Conversely, the take of birds, eggs or nests occurring as the result of an activity, the purpose of which is not to take birds, eggs or nests, is not prohibited by the MBTA" (USFWS 2018).

Therefore, the MBTA is currently interpreted to prohibit the take of birds, nests or eggs when the *purpose* or *intent* of the action is to take birds, eggs or nests, not when the take of birds, eggs or nests is incidental to but not the intended purpose of an otherwise lawful action.

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.
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> *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 1606 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 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 California ESA 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 Protect 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.