VALLEY SANITARY DISTRICT REPAIR/REPLACEMENT AND REHABILITATION PROJECT

CITY OF INDIO, RIVERSIDE COUNTY, CALIFORNIA

Habitat Assessment Coachella Valley Multiple Species Habitat Conservation Plan Consistency Analysis

Prepared For:

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September 2020

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

Travis J. McGill
Director

Thomas J. McGill, Ph.D.
Managing Director

September 2020

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EXHIBITS

APPENDIX

Section 1 Introduction

This report contains the findings of ELMT Consulting (ELMT) Habitat Assessment and Coachella Valley Multiple Species Habitat Conservation plan (CVMSHCP) Consistency Analysis for Valley Sanitary District Repair/Replacement and Rehabilitation Project (project site or site) located in the City of Indio, Riverside County, California. ELMT biologists Travis J. McGill and Jacob H. Lloyd Davies conducted a field survey and evaluated the condition of the habitat within the project site on June 1, 2020.

The habitat assessment was conducted to characterize existing site conditions and assess the probability of occurrence of special-status[1] plant and wildlife species that could pose a constraint to implementation of the project. This report provides a detailed assessment of the suitability of the on-site habitat to support special-status plant and wildlife species that were identified by the California Natural Diversity Database (CNDDB) and other electronic databases as potentially occurring in the vicinity of the project site.

1.1 PROJECT LOCATION

The project site is generally located southeast of the City of Palm Springs, northeast of the City of La Quinta, and northwest of the City of Thermal throughout the City of Indio, Riverside County, California (Exhibit 1, *Regional Vicinity*). The project site is depicted on the Indio and La Quinta quadrangles of the United States Geological Survey's (USGS) 7.5-minute topographic map series within Sections 21 through 24 and 27 through 28 of Township 5 South, Range 7 East, and Section 19 of Township 5 South, Range 8 East (Exhibit 2, *Site Vicinity*). Specifically, the project site is located within the boundaries of the Valley Sanitary District throughout the City of Indio (refer to Exhibit 3A, *Project Site -Northern Area,* and Exhibit 3B, *Project Site - Southern Area*).

1.2 PROJECT DESCRIPTION

Valley Sanitary District (VSD) has developed a district-wide pipeline replacement program. The purpose of the program is to identify and repair, rehabilitate or replace aging or defective pipelines and/or segments projected to reach capacity within the foreseeable future. To date, VSD has identified a total of 353 segments or point locations throughout the District's service area that comprise the current repair/replacement program. Additional segments may be identified and added as the program is implemented. The scope of work for any added segments would be the same as described herein for the identified segments and point locations. The pipelines range from 8-inches to 27-inches in diameter. The majority of the segments are vitrified clay pipe ranging from 8- to 10-inches in diameter and were installed as far back as the 1930's. Most of the vitrified clay pipe currently in use was installed in the early 1950's; however, segments installed as recently as 2002 are in use. Other segments are comprised of polyvinyl chloride (PVC) and reinforced plastic which were installed beginning in the 1980's.

[1] As used in this report, "special-status" refers to plant and wildlife species that are federally or State listed, proposed, or candidates; plant species that have been designated a CNPS Rare Plant Rank; and wildlife species that are designated by the CDFW as fully protected, species of special concern, or watch list species.

The vitrified clay pipe decays over time. Thus, these segments are subject to cracks/leaks/breaks which can impact overall service reliability as well as release wastewater into surrounding pipeline bedding material and soils. The PVC and reinforced plastic pipelines are also subject to breakage. Thus, the pipeline segments would be repaired, rehabilitated (i.e., relined) or replaced/realigned.

Specific construction methods used for each segment have been identified and are comprised of the following methods:

Point Repair. This method would involve the repair of a specific location. The contractor would excavate down to the pipeline, locate the defect, repair the defect and replace the backfill and asphalt pavement. All work would occur within disturbed street, alley or easements where the existing pipelines are located. Temporary lane closures may be required when work occurs within street corridors; however, no previously undisturbed areas would be affected by point repair work.

Rehabilitation. This method would consist of accessing the pipeline via existing manholes and installing new lining material. All construction will be completed with motorized hand tools and support equipment. No excavation or surface disturbance would be required. No new areas of disturbance would be required for the rehabilitation work.

Replacement/Realignment. This approach would require excavation down to the existing pipeline. The typical distance is approximately 15 feet below ground surface although the actual segment depth will vary depending on the location. A trench would be excavated, new bedding material would be placed, and the new pipeline would be installed. After installation, the backfill will be replaced and the street surface restored.

The construction limits would be limited to the roadway width – gutter to gutter - to accommodate variations in the final alignment depending on the type of work performed. However, no more than one half the road corridor would be disturbed. When needed, asphalt and soil excavated from the trench would be hauled to a staging area. Soil would be sifted and stored in piles for use as pipeline bedding material and backfill. For longer segments, asphalt would be ground and used as road base prior to placement of a new asphalt concrete road surface as segments are completed.

Depending on the segment, the existing pipeline may be removed and the new pipeline installed in its place or the new pipeline will be installed adjacent to the existing pipeline in the same corridor and the existing pipeline abandoned in place. All work would occur in disturbed corridors which are comprised of streets, alleys and existing sewer easements.

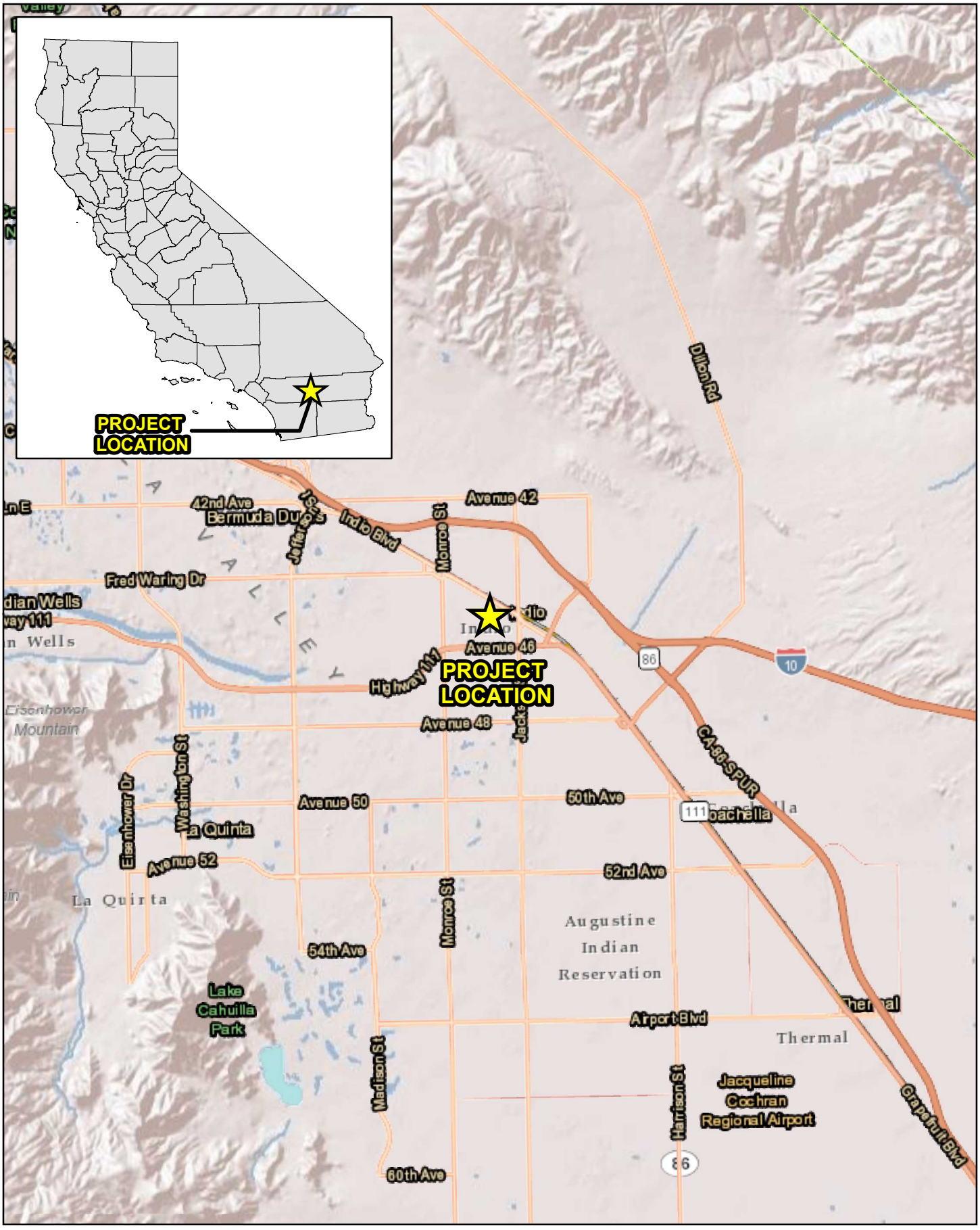
Where realignment is the preferred construction method, a new trench would be constructed within an existing street/alley corridor and a new pipeline segment installed using the methods described above. The realigned segment would eventually be abandoned in place.

Bore and Jack. For segments crossing the UPRR corridor, under canals or in locations where surface disturbance needs to be avoided, bore and jack entrance pits for the boring would be excavated on one

side of each crossing; exit pits would be located on the opposite side. The pipeline segment would be pulled through a bore hole and then connected to the existing pipeline on either end. This work would occur within existing disturbed pipeline corridors.

All material/equipment staging would occur within VSD's Water Reclamation Facility located at 45-500 Van Buren Street provided suitable staging areas are not available in proximity to the construction area.

Individually, the projects identified could be completed using Categorical Exemptions per Section 15301 (Existing Facilities) or Section 15302 (Replacement or Reconstruction) of the CEQA Guidelines. However, rather than file Notices of Exemptions for each project, VSD has elected to evaluate the overall program to expedite construction of the individual projects consistent with the overall implementation goals and timeline and mitigation measures identified herein to avoid or minimize environmental impacts. Construction is expected to begin in early 2021. Completion of the program is anticipated to occur over a ten-year period.



VALLEY SANITARY DISTRICT - REPAIR/REPLACEMENT AND REHABILITATION PROJECT
HABITAT ASSESSMENT AND CVMSHCP CONSISTENCY ANALYSIS

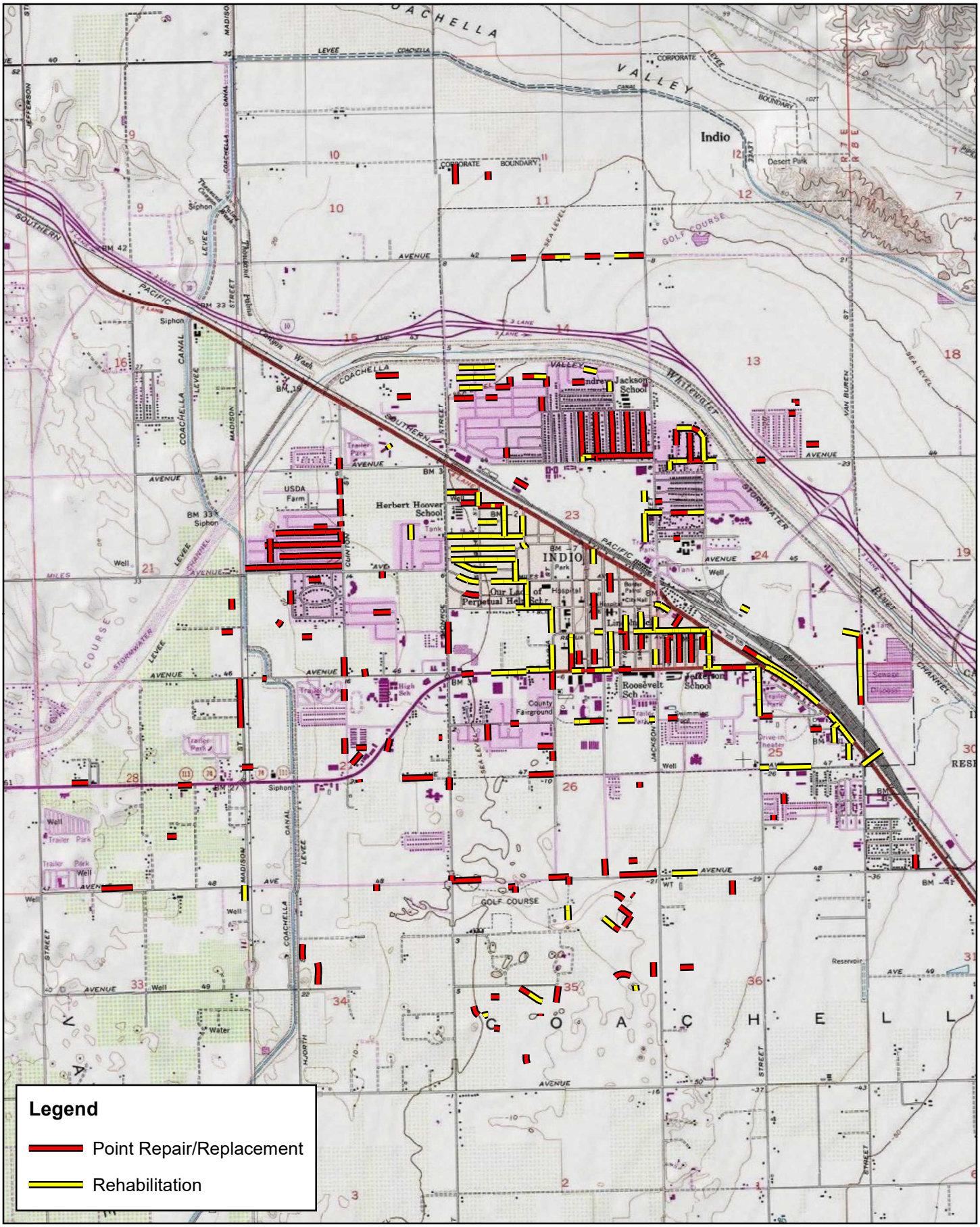
ELMT CONSULTING

0 0.625 1.25 2.5 Miles

Source: World Transportation, World Shaded Relief, Riverside County

Regional Vicinity

Exhibit 1



VALLEY SANITARY DISTRICT - REPAIR/REPLACEMENT AND REHABILITATION PROJECT
HABITAT ASSESSMENT AND CVMSHCP CONSISTENCY ANALYSIS

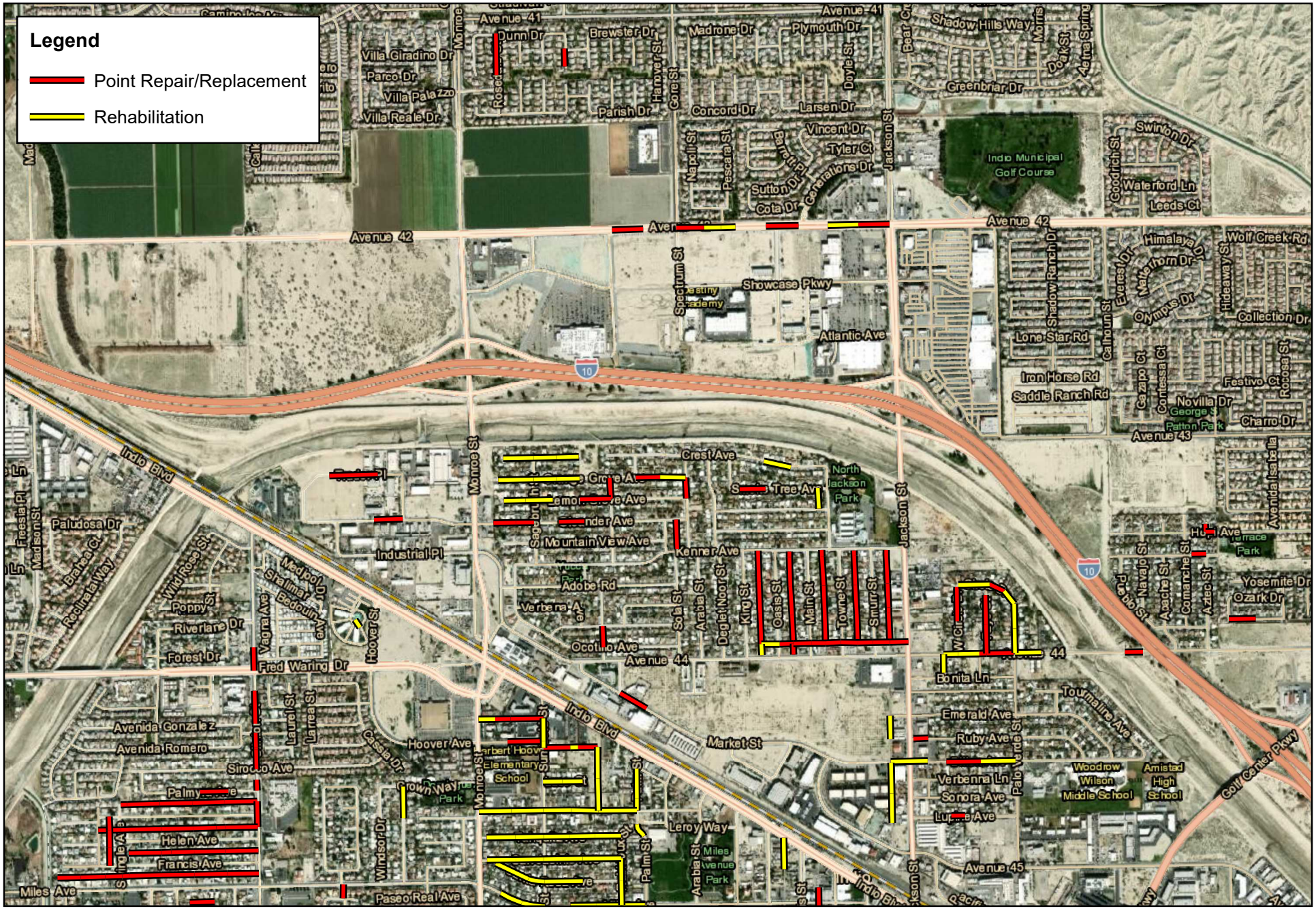
ELMT CONSULTING

0 1,250 2,500 5,000 Feet

Source: USA Topographic Map, Riverside County

Site Vicinity

Exhibit 2



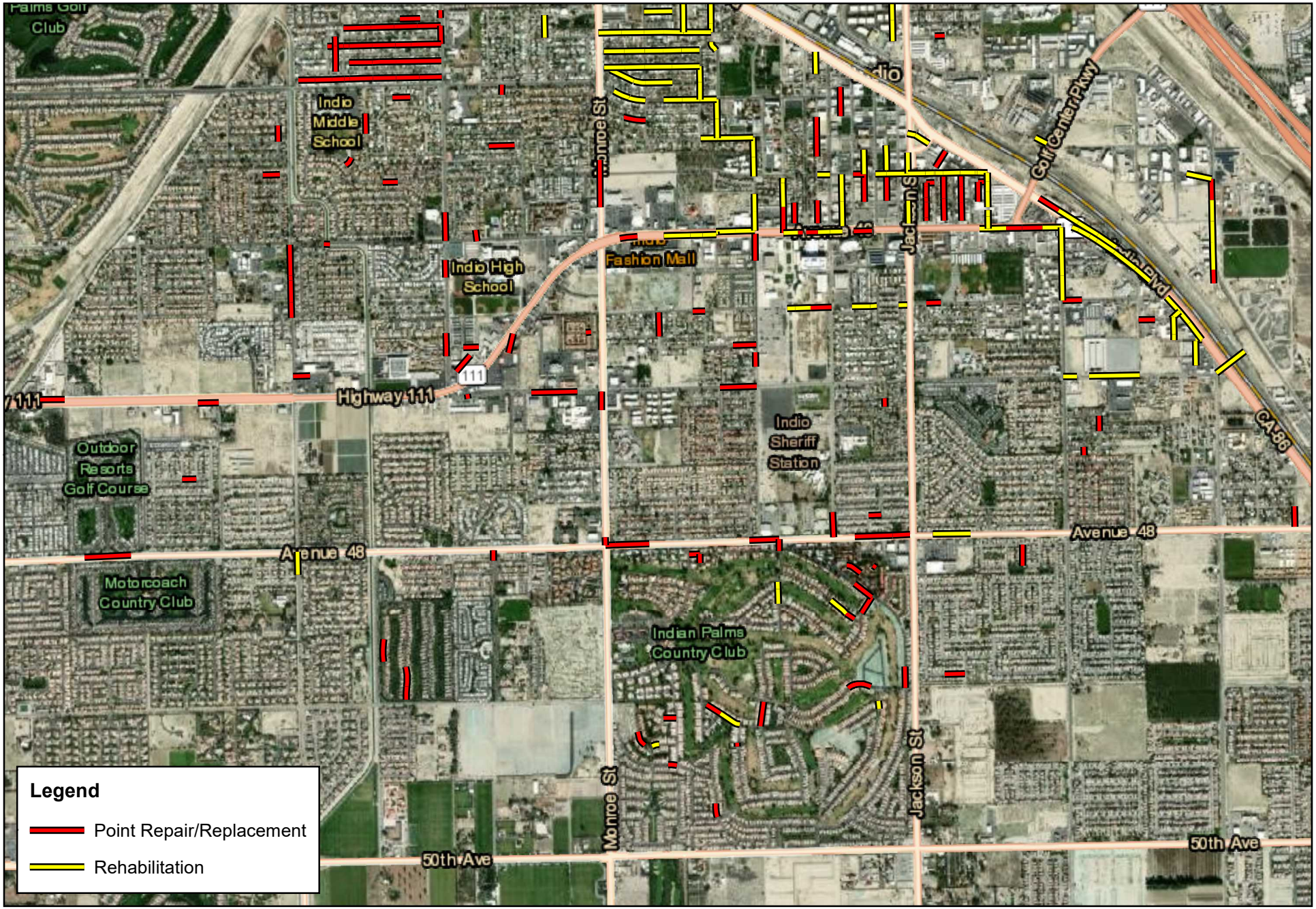
VALLEY SANITARY DISTRICT - REPAIR/REPLACEMENT AND REHABILITATION PROJECT
HABITAT ASSESSMENT AND CVMSHCP CONSISTENCY ANALYSIS

Project Site - Northern Area

ELMT CONSULTING

Source: ESRI Aerial Imagery, World Transportation, Riverside County

Exhibit 3A



VALLEY SANITARY DISTRICT - REPAIR/REPLACEMENT AND REHABILITATION PROJECT
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Project Site - Southern Area

ELMT CONSULTING

0 625 1,250 2,500 Feet

Source: ESRI Aerial Imagery, World Transportation, Riverside County

Exhibit 3B

Section 2 Methodology

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

2.1 LITERATURE REVIEW

Prior to conducting the field investigation, a literature review and records search was conducted for special-status biological resources potentially occurring on or within the vicinity of the project site. Previously recorded occurrences of special-status plant and wildlife species and their proximity to the project site were determined through a query of the CDFW's CNDDB Rarefind 5, the California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California, Calflora Database, compendia of special-status species published by CDFW, and the United States Fish and Wildlife Service (USFWS) species listings.

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

- Google Earth Pro historic aerial imagery (1996-2019);
- CDFW 2012 Staff Report on Burrowing Owl Mitigation;
- Coachella Valley Multiple Species Habitat Conservation Plan:
- United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS), Soil Survey; and
- USFWS Critical Habitat designations for Threatened and Endangered Species.

The literature review provided a baseline from which to inventory the biological resources potentially occurring on the project site. Additional recorded occurrences of these species found on or near the project site were derived from database queries. The CNDDB ArcGIS database was used, in conjunction with ArcGIS software, to locate the nearest occurrence and determine the distance from the project site.

2.2 FIELD INVESTIGATION

ELMT biologists Travis J. McGill and Jacob H. Lloyd Davies inventoried and evaluated the extent and conditions of the plant communities found within the boundaries of the project site on June 1, 2020. Plant communities identified on aerial photographs during the literature review were verified by walking meandering transects through the plant communities and along boundaries between plant communities. The plant communities were evaluated for their potential to support special-status plant and wildlife species. In addition, field staff identified any natural corridors and linkages that may

support the movement of wildlife through the area. Special attention was given to special-status habitats and/or undeveloped areas, which have higher potentials to support special-status plant and wildlife species.

All plant and wildlife species observed, as well as dominant plant species within each plant community, were recorded. Wildlife detections were made through observation of scat, trails, tracks, burrows, nests, and/or visual and aural observation. In addition, site characteristics such as soil condition, topography, hydrology, anthropogenic disturbances, indicator species, condition of on-site plant communities, and presence of potential jurisdictional drainage and/or wetland features were noted.

2.3 SOIL SERIES ASSESSMENT

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

2.4 PLANT COMMUNITIES

Plant communities were mapped using 7.5-minute USGS topographic base maps and aerial photography. The plant communities were classified in accordance with Sawyer, Keeler-Wolf and Evens (2009), CDFW (2003), and Holland (1986), delineated on an aerial photograph, and then digitized into GIS Arcview. The Arcview application was used to compute the area of each plant community in acres.

2.5 PLANTS

Common plant species observed during the field survey were identified by visual characteristics and morphology in the field and recorded in a field notebook. Unusual and less-familiar plants were photographed in the field and identified in the laboratory using taxonomical guides. Taxonomic nomenclature used in this study follows the 2012 Jepson Manual (Hickman 2012). In this report, scientific names are provided immediately following common names of plant species (first reference only).

2.6 WILDLIFE

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

2.7 JURISDICTIONAL DRAINAGES AND WETLANDS

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

Section 3 Existing Conditions

3.1 LOCAL CLIMATE

Riverside County features a somewhat cooler version of a Mediterranean climate, or semi-arid climate, with warm, sunny, dry summers and cool, rainy, mild winters. Relative to other areas in Southern California, winters are colder with frost and with chilly to cold morning temperatures common. Climatological data obtained for the City of Indio indicates the annual precipitation averages 3.44 inches per year. Almost all of the precipitation occurs in the months between December and March, with hardly any occurring between the months of April and November, with the exception of heavy monsoonal rains in the summer, with August accumulating the most rainfall (0.54 inches). The wettest month is usually February, with a monthly average total precipitation of 0.64 inches. The average yearly maximum and minimum temperatures for the City of Indio are 89 and 62 degrees Fahrenheit (F) respectively with July and August being the hottest months (monthly average 107° F) and December being the coldest (monthly average 44° F). The temperature during the site visit was in the high 80s ° F with no cloud cover overhead.

3.2 TOPOGRAPHY AND SOILS

On-site surface elevation ranges from approximately -36 to 40 feet above mean sea level. The project site slopes gently to the southeast and is relatively flat with no areas of significant topographic relief. Based on the USDA NRCS Soil Survey, the project site is underlain by the following soil units: Coachella fine sand (0 to 2 percent slopes), Coachella fine sandy loam (0 to 2 percent slopes), fluvents, Gilman fine sandy loam (0 to 2 percent slopes), Gilman fine sandy loam (2 to 5 percent slopes), Gilman loamy fine sand (0 to 2 percent slopes), Gilman silt loam (0 to 2 percent slopes), Indio fine sandy loam, Indio very fine sandy loam, and Myoma fine sand (0 to 5 percent slopes).

3.3 SURROUNDING LAND USES

The project site is located in an area that has undergone a conversion from natural habitats to a mosaic of residential, recreational, commercial, and industrial developments with heavily disturbed/isolated undeveloped parcels spaced throughout. The site is bordered by existing development to the north, east, south, and west. It should be noted that the Whitewater River (Coachella Valley Stormwater Channel) flows generally west to east across the northern and eastern boundaries of the site.

Section 4 Discussion

4.1 SITE CONDITIONS

The project site occurs within a mosaic of existing residential, commercial, recreational, and industrial development and undeveloped, vacant parcels. The site is composed of two (2) land types that would be described as disturbed and developed. No natural vegetation communities were observed within undeveloped portions of the site.

4.2 VEGETATION

The project site is composed of undeveloped/vacant parcels and developed areas, both of which are typically restricted to existing paved streets within the associated right-of-way. No plant communities were observed on-site. Two (2) land cover types that would be classified as disturbed and developed were also observed on-site. Please refer to Appendix A, *Site Photographs*, for representative photographs of the proposed project site. These land cover types are described in further detail below.

4.2.1 Disturbed

The disturbed areas on the project site no longer comprise a native plant community. These areas have been significantly impacted by decades of human disturbance (i.e. agricultural activities, storage/staging activities, ongoing weed abatement activities, on-site development, and surrounding development). Disturbed areas within the site support primarily non-native weedy/early successional plant species. Plant species observed within the disturbed areas of the site include cheeseweed (*Malva parviflora*), horseweed (*Erigeron* sp.), mustard (*Brassica tournefortii*), Mediterranean grass (*Schismus barbatus*), Bermuda grass (*Cynodon dactylon*), mouse barley (*Hordeum murinum*), puncture vine (*Tribulus terrestris*), prickly-lettuce (*Lactuca serriola*), annual sunflower (*Helianthus annuus*), Russian thistle (*Salsola tragus*), London rocket (*Sisymbrium irio*), sow thistle (*Sonchus oleraceus*), tree tobacco (*Nicotiana glauca*), tamarisk (*Tamarix ramosissima*), and castor (*Ricinus communis*).

4.2.2 Developed

Developed areas encompass all building/structures, paved, impervious surfaces. The developed areas within the project site are generally comprised of existing paved road right-of-way and adjacent sidewalks. Vegetation observed within these areas was minimal and consisted of ornamental/landscaped plants associated with surrounding development, if any.

4.3 WILDLIFE

Plant communities provide foraging habitat, nesting and denning sites, and shelter from adverse weather or predation. This section provides a discussion of those wildlife species observed, expected, or not expected to occur on-site. The discussion is to be used as a general reference and is limited by the season, time of day, and weather condition in which the survey was conducted. Wildlife observations were based on calls, songs, scat, tracks, burrows, and actual sightings of animals.

4.3.1 Fish

No fish or hydrogeomorphic features (e.g., creeks, ponds, lakes, reservoirs) that would provide suitable habitat for fish were observed on or within the vicinity of the project site. The Whitewater River, which runs through the northern and eastern boundaries of the site, is subject to ephemeral water sources, and provides a limited amount of habitat for fish species. Since the Whitewater River is fed by urban runoff from surrounding residential and agricultural land uses, any fish that have the potential to occur within are likely to be exotic (e.g., mosquitofish [*Gambusia affinis*]). Native fish are presumed absent. Implementation of the proposed project is not expected to impact the Whitewater River or fish.

4.3.2 Amphibians

No amphibians or hydrogeomorphic features that would provide suitable habitat for amphibian species were observed on or within the vicinity of the project site. The Whitewater River, which runs through the northern and eastern boundaries of the site, is subject to ephemeral water sources, and provides a limited amount of habitat for amphibian species. Amphibians that have the potential to occur with the Whitewater River include Baja California tree frog (*Pseudacris hypochondriaca*), and American bullfrog (*Lithobates catesbeianus*). Implementation of the proposed project is not expected to impact the Whitewater River or amphibians.

4.3.3 Reptiles

The project site provides minimal habitat to support reptilian species adapted to significant human disturbance and development. The only reptilian species observed during the field investigation was western side-blotched lizard (*Uta stansburiana elegans*). Other common reptile species that have the potential to occur on the project site include Great Basin fence lizard (*Sceloporus occidentalis longipes*), southern alligator lizard (*Elgaria multicarinata*), gopher snake (*Pituophis catenifer*), zebra tail lizard (*Callisaurus draconoides rhodostictus*), and coachwhip (*Coluber flagellum piceus*).

4.3.4 Birds

The project site provides minimal foraging and nesting habitat for avian species adapted to significant human disturbance and development. Avian species detected during the field investigation include Costa's hummingbird (*Calypte costae*), lesser goldfinch (*Carduelis psaltria*), common raven (*Corvus corax*), red-tailed hawk (*Buteo jamaicensis*), house finch (*Haemorhous mexicanus*), mourning dove (*Zenaida macroura*), turkey vulture (*Cathartes aura*), rock pigeon (*Columbia liva*) and northern mockingbird (*Mimus polyglottos*).

4.3.5 Mammals

The project site provides suitable foraging and denning habitat for mammalian species adapted to significant human disturbance and development. However, most mammal species are nocturnal and are difficult to observe during a diurnal field visit. Mammals detected during the field assessment included desert cottontail (*Sylvilagus audubonii*), Botta's pocket gopher (*Thomomys bottae*), and California ground squirrel (*Otospermophilus beecheyi*). Other mammalian species that have the potential to occur

on the project site include opossum (*Didelphis virginiana*), and racoon (*Procyon lotor*). No bat species are expected to roost on-site due to a lack of suitable roosting habitat (i.e., trees, crevices, abandoned structures) within and surrounding the project site.

4.4 NESTING BIRDS

The project site provides minimal foraging and cover habitat for year-round/seasonal avian residents, migrating songbirds, and raptors that occur in the area. Vegetation within the project site provides marginal nesting opportunities for avian species; however, ornamental vegetation within the greater area provides higher quality nesting potential. Further, the open unvegetated areas within the disturbed portions of the site provide suitable nesting opportunity for ground-nesting birds such as killdeer (*Charadrius vociferans*). Despite the field investigation occurring during nesting season, no actively breeding bird species or birds displaying nesting behaviors were observed.

4.5 MIGRATORY CORRIDORS AND LINKAGES

Habitat linkages provide links between larger habitat areas that are separated by development. Wildlife corridors are similar to linkages, but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of sufficient width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species yet inadequate for others. Wildlife corridors are significant features for dispersal, seasonal migration, breeding, and foraging. Additionally, open space can provide a buffer against both human disturbance and natural fluctuations in resources.

The majority of the project is confined to existing disturbed and/or developed areas, which have removed natural plant communities from the project site. Further, the majority of the project site is surrounded by existing developments, which have eliminated connection to nearby wildlife movement corridors.

The Whitewater River, that generally extends west to east through the northern boundary and north to south through the eastern boundary of the project site, has not been identified in the CVMSHCP as a habitat linkage or migration corridor. Although channelized, the Whitewater River has the potential to provide local wildlife movement opportunities for a limited variety of wildlife species Further, the riparian and emergent vegetation along the active channel of the Whitewater River has the potential to provide stopover habitat for migrating avian species. However, the project is expected to be confined within the boundaries of existing developed right-of-way and the Whitewater River is not expected to be impacted. As a result, implementation of the proposed project will not disrupt or have any adverse effects on any migratory corridors or linkages in the surrounding area.

4.6 JURISDICTIONAL AREAS

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates discharge of dredge and/or fill materials into "waters of the United States" pursuant to Section 404 of the CWA and Section 10 of the Rivers and

Harbors Act. Of the State agencies, the CDFW regulates alterations to streambed and associated plant communities pursuant to Section 1602 of the Fish and Game Code, and the Regional Board regulates discharges into surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act. A formal jurisdictional delineation of the project site was prepared under separate cover.

No jurisdictional drainage and/or wetland features were observed within the project site during the field survey. It should be noted that the Whitewater River runs along the northern and eastern boundaries of the project site, however, all activities related to project implementation will be confined to existing developed right-of-way and the Whitewater River is not expected to be impacted. Therefore, development of the project site will not result in impacts to Corps, Regional Board, or CDFW jurisdiction and regulatory approvals will not be required.

4.7 SPECIAL-STATUS BIOLOGICAL RESOURCES

The CNDDB was queried for reported locations of special-status plant and wildlife species as well as special-status natural plant communities in the Indio and La Quinta USGS 7.5-minute quadrangles. A search of published records of these species was conducted within this quadrangle using the CDFW's CNDDB Rarefind 5 online software and CNDDB Quickview Tool. The CNPS Inventory of Rare and Endangered Vascular Plants of California supplied information regarding the distribution and habitats of vascular plants in the vicinity of the project site. The field investigation was used to assess the ability of the plant communities found on-site to provide suitable habitat for relevant special-status plant and wildlife species.

The literature search identified twenty-three (23) special-status plant species and thirty-four (34) special-status wildlife species as having potential to occur within the Indio and La Quinta quadrangle. No special-status habitats have been documented within the Indio and La Quinta quadrangles. Special-status plant and wildlife species were evaluated for their potential to occur within the project boundaries based on habitat requirements, availability and quality of suitable habitat, and known distributions. Species determined to have the potential to occur within the general vicinity of the project site are presented in Appendix B, *Potentially Occurring Special-Status Biological Resources*, and discussed below.

4.7.1 Special-Status Plants

Twenty-three (23) special-status plant species have been recorded in the CNDDB and CNPS in the Indio and La Quinta quadrangles (refer to Appendix B). No special-status plant species were observed on-site during the field investigation. The project site consists of heavily disturbed and developed land that have been subject to a variety of anthropogenic disturbances. These disturbances have reduced, if not eliminated, the ability of the project site to provide suitable habitat for special-status plant species. Based on habitat requirements for the identified special-status species, and known distributions, it was determined that the project site does not have potential to support any of the special-status species documented as occurring within the vicinity of the project site and all are presumed absent.

4.7.2 Special-Status Wildlife

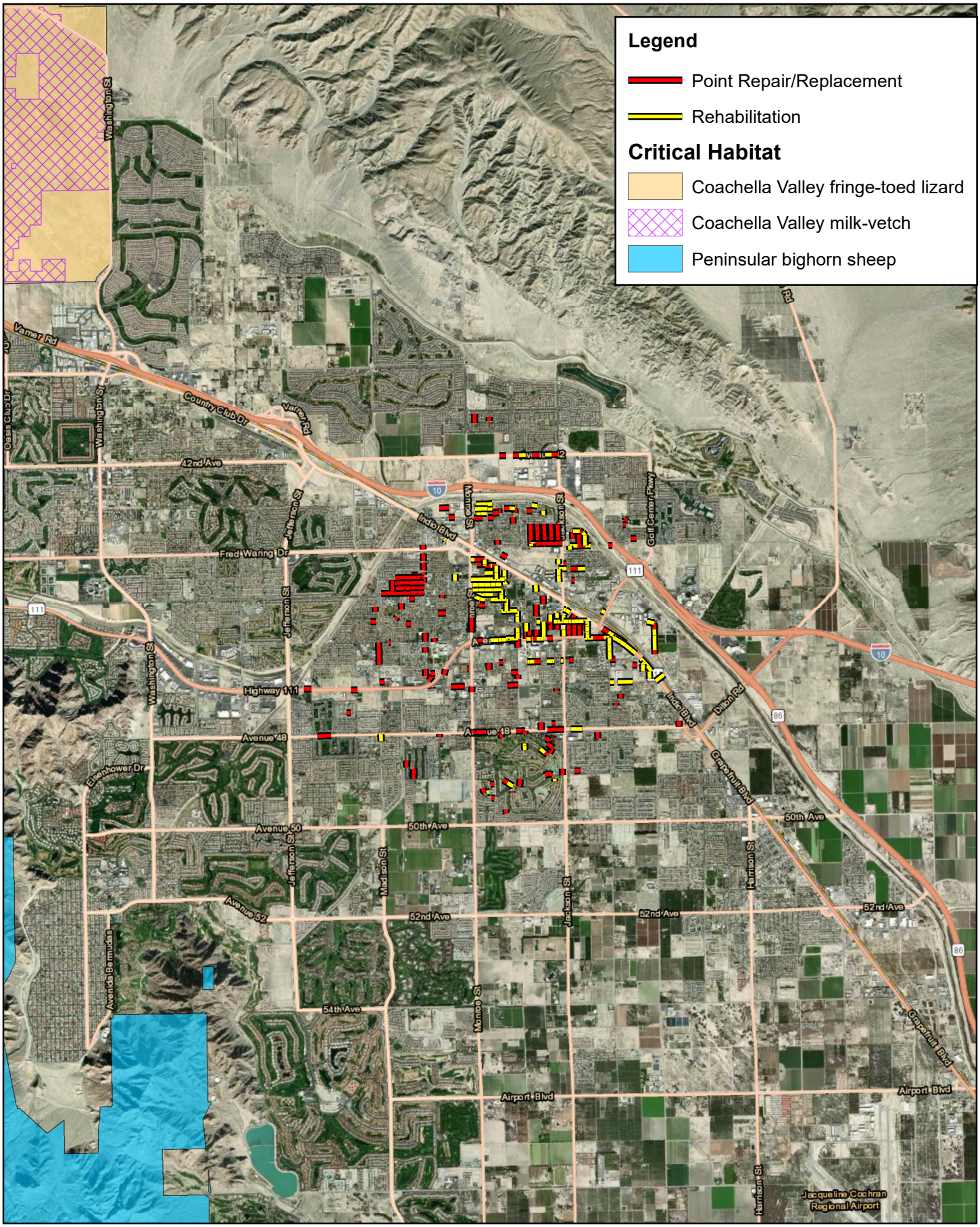
Thirty-four (34) special-status wildlife species have been reported in the Indio and La Quinta quadrangles (refer to Appendix B). No special-status animal species were observed on-site. Based on habitat requirements for the identified special-status wildlife species, and known distributions, it was determined that the project site does not have potential to support any of the special-status species documented as occurring within the vicinity of the project site and all are presumed absent.

It should be noted that undeveloped areas within the Whitewater River, outside of the boundaries of the project site, have a low potential to support burrowing owl (*Athene cunicularia*). However, despite a systematic search of these areas, no burrowing owl or sign were observed. Further, the project will be confined to existing paved right-of-way. With implementation of a pre-construction burrowing owl and nesting bird clearance survey, no impacts to special-status species are expected to occur.

4.8 CRITICAL HABITAT

Under the federal Endangered Species Act, "Critical Habitat" is designated at the time of listing of a species or within one year of listing. Critical Habitat refers to specific areas within the geographical range of a species at the time it is listed that include the physical or biological features that are essential to the survival and eventual recovery of that species. Maintenance of these physical and biological features requires special management considerations or protection, regardless of whether individuals or the species are present or not. All federal agencies are required to consult with the United States Fish and Wildlife Service (USFWS) regarding activities they authorize, fund, or permit which may affect a federally listed species or its designated Critical Habitat. The purpose of the consultation is to ensure that projects will not jeopardize the continued existence of the listed species or adversely modify or destroy its designated Critical Habitat. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing is on federal lands, uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highways Administration or a CWA Permit from the Corps). If a there is a federal nexus, then the federal agency that is responsible for providing the funding or permit would consult with the USFWS.

The project site is not located within federally designated Critical Habitat (Exhibit 4, *Critical Habitat*). The closest federally designated Critical Habitat is located approximately 2.7 miles southwest of the site for Peninsular bighorn sheep (*Ovis canadensis nelsoni*) and 4.3 miles northeast of the site for Coachella Valley fringe-toed lizard (*Uma inornata*) and Coachella Valley milk-vetch (*Astragalus lentiginosus* var. *coachellae*). Therefore, implementation of the proposed project will not result in any impacts or adverse modification to designated Critical Habitat.



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HABITAT ASSESSMENT AND CVMSHCP CONSISTENCY ANALYSIS

ELMT CONSULTING

0 0.625 1.25 2.5
Miles

Source: USA Topographic Map, USFWS Critical Habitat, Riverside County

Critical Habitat

Exhibit 4

Section 5 Coachella Valley MSHCP Consistency Analyis

The project site is not located within any of the CVMSHCP designated conservation areas; the closest conservation area is the East Indio Conservation Area located approximately 0.5 mile northeast of the project site (Exhibit 5, *CVMSHCP Conservation Areas*).

5.1 COVERED ACTIVITIES OUTSIDE CONSERVATION AREAS

The proposed project was reviewed to determine consistency with the CVMSHCP. Geographic Information System (GIS) software was utilized to map the project site in relation to the CVMSHCP including conservation areas, corridors and linkages, and sand transport areas. The CVMSHCP requires that local permittees comply with various protective measures for covered species, communities, essential ecological processes, and biological corridors. In addition, certain projects may be subject to local development mitigation fees, a Joint Project Review Process, or other conservation or implementation measures.

The proposed project is not listed as a planned "Covered Activity" under the published CVMSHCP but is still considered to be a current Covered Activity pursuant to Section 7.1 of the CVMSHCP. According to Section 7.1 of the CVMSHCP, take authorization will be provided for certain activities that take place outside of Conservation Areas including "*Public facility construction, operations (not including groundwater withdrawal), and maintenance and safety activities by the Permittees for existing and future facilities, including both on and off site activities. Such facilities include, but are not limited to, publicly maintained roads and rights-of-way; materials pits; maintenance yards; flood control facilities; landfills, transfer stations, and other solid waste related facilities, including those for the processing of organic materials; public buildings; water development, production, storage, treatment, and transmission facilities; sewage treatment and transmission facilities; reclaimed water storage and transmission facilities; public parks; substations and electric transmission facilities; and other public utility facilities providing services essential to the health, safety, and welfare of the public.*"

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

5.2 CVMSHCP LAND USE ADJACENCY GUIDELINES

The purpose of Land Use Adjacency Guidelines is to avoid or minimize indirect effects from Development adjacent to or within the Conservation Areas. Adjacent means sharing a common boundary with any parcel in a Conservation Area. Such indirect effects are commonly referred to as

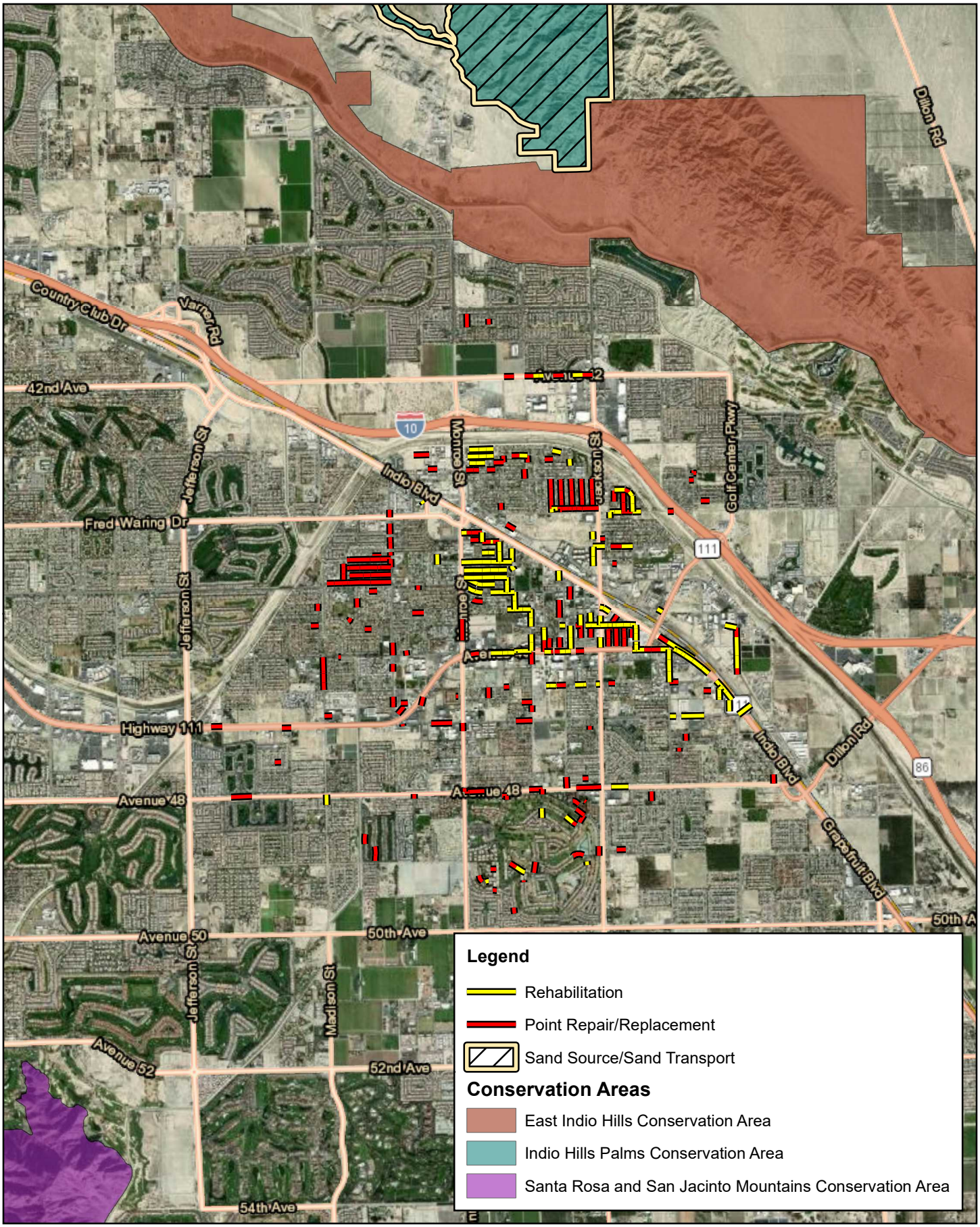
edge effects, and may include noise, lighting, drainage, intrusion of people, and the introduction of non-native plants and non-native predators such as dogs and cats.

The proposed project is not located within or adjacent to any CVMSHCP Conservation Areas. Therefore, the CVMSHCP Land Use Adjacency Guidelines do not apply to implementation of the proposed project.

5.3 CVMSHCP COVERED SPECIES

The CVMSHCP identifies modeled habitat for Coachella Valley fringe-toed lizard (*Uma inornata*), flat-tailed horned lizard (*Phrynosoma mcallii*), Coachella Valley round-tailed ground squirrel (*Spermophilus tereticaudus chlorus*), Palm Springs pocket mouse (*Perognathus longimembris bangsi*), Le Conte's thrasher (*Toxostoma lecontei*) and Coachella Valley giant sand-treader cricket (*Macrobaenetes valgum*) within portions of the proposed project site (refer to Appendix D, *CVMSHCP Covered Species*); therefore, extra time was taken to evaluate the habitat specifically for these species and determine its suitability. Of these species, the Coachella Valley fringe-toed lizard is a federally listed threatened species and the flat-tailed horned lizard is a state candidate for listing as endangered. The other species are not state or federally listed, but are considered sensitive species.

Based on the results of the field investigation, the project site consists of heavily disturbed and developed land that have been subject to a variety of anthropogenic disturbances. These disturbances have reduced, if not eliminated, the ability of the project site to provide suitable habitat for CVMSHCP Covered Species. As a result, the project site does not support suitable habitat for any of the CVMSHCP Covered Species, and no impacts to CVMSHCP Covered Species is expected to occur from project implementation.



VALLEY SANITARY DISTRICT - REPAIR/REPLACEMENT AND REHABILITATION PROJECT
HABITAT ASSESSMENT AND CVMSHCP CONSISTENCY ANALYSIS

ELMT CONSULTING

0 0.5 1 2 Miles

Source: USA Topographic Map, CVMSHCP, Riverside County

CVMSHCP Conservation Areas

Exhibit 5

Section 6 Conclusion and Recommendations

The project site consists of both developed and undeveloped land within the City of Indio and is confined to existing paved road right-of-ways. The site occurs throughout the City, surrounded by a mosaic of residential, recreational, commercial, and industrial developments with undeveloped parcels throughout. Undeveloped areas within the site have been significantly impacted by decades of human disturbance (i.e. agricultural activities, storage/staging activities, ongoing weed abatement activities, on-site development, and surrounding development). Due to these disturbances, no plant communities were observed on-site. The site supports two (2) land cover types that would be classified as developed and disturbed.

Special-Status Plant Species

No special-status plant species were observed during the field investigation. Based on habitat requirements for specific species and the availability and quality of habitats on-site, it was determined that the project site does not have potential to support any of the special-status plant species documented as occurring within the vicinity of the site and all are presumed absent. Therefore, no impacts to special-status plant species are expected to occur due to project implementation.

Special-Status Wildlife Species

No special-status wildlife species were observed during the field investigation. Based on habitat requirements for specific species and the availability and quality of habitats on-site, it was determined that the project site does not have potential to support any of the special-status wildlife species document as occurring within the vicinity of the site and all are presumed absent. It should be noted that an area within the Whitewater River has potential to support burrowing owl; however, no burrowing owl or sign were observed in this area during the field investigation. Further, this area lies outside of the boundaries for the project and will not be impacted. Therefore, no impacts to special-status wildlife species are expected to occur due to project implementation.

Riparian Habitat and Special-Status Natural Communities

No drainage features were observed within the boundaries of the project site. The Whitewater River flows along the northern and eastern boundaries of the site, but construction related to the project will be confined to existing paved road right-of-way and will not impact the Whitewater River. Therefore, development of the project site will not result in impacts to Corps, Regional Board, or CDFW jurisdiction and regulatory approvals will not be required.

No special-status natural communities were observed within the boundaries of the project site. Therefore, no special-status natural communities will be impacted by project implementation.

Wildlife Corridors and Linkages

Due to surrounding development, the project site is isolated from wildlife corridors or linkages with the exception of one area near the Whitewater River. Construction related to the project will be confined

to existing paved road right-of-way and will not impact this or any wildlife corridor or linkage. Therefore, no wildlife corridors or linkages will be impacted by project implementation.

Migratory Bird Treaty Act and CDFW Fish and Game Code Compliance

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

Additionally, although focused surveys for burrowing owl are not recommended, it is recommended that a pre-construction burrowing owl clearance survey be conducted prior to any ground disturbance or vegetation removal activities to ensure that burrowing owls remain absent and impacts do not occur to any occupied burrows that may be located on or within 500 feet of the project site.

CVMSHCP Compliance

As a Covered Activity located outside designated conservation areas, construction of the proposed project is expected to implement the applicable avoidance, minimization, and mitigation measures described in Section 4.4 of the CVMSHCP (refer to Appendix C). With implementation of applicable avoidance and minimization measures, the proposed project would be fully consistent with the biological goals and objectives of the CVMSHCP.

Section 7 References

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Appendix A Site Photographs

Photograph 1: Looking north along a vacant parcel located at the northeast corner of the intersection of Bataan Street and Avenue 48, adjacent to the proposed project footprint.

Photograph 2: Looking west across a vacant parcel located at the northeast corner of the intersection of Dr. Carreon Boulevard and Calhoun Street, adjacent to the project site.

Photograph 4: Looking northeast across a vacant parcel located at the northeast corner of the intersection of Calhoun Street and Date Avenue, adjacent to the project site.

Photograph 5: Looking east across a vacant parcel located north of the intersection of Daisy Street and John Nobles Avenue, adjacent to the project site.

Photograph 5: Looking southwest towards the southeast corner of the intersection of Requa Avenue and Monroe Street.

Photograph 6: Looking northwest across a vacant parcel located at the northwest corner of the intersection of Van Buren Street and Enterprise Way, adjacent to the project site.

Photograph 7: Looking northwest across a vacant parcel located immediately north of Cabazon Road between Commerce Street and Cabazon Center Drive, adjacent to the project site.

Photograph 8 Looking northwest at the Avenue 46 crossing over the Coachella Canal.

Photograph 9: Looking southwest across the vacant parcel located at the southwest corner of the Avenue 44 crossing over the Whitewater River, adjacent to the project site.

Photograph 10: Looking west across the wash of the Whitewater River immediately south of Avenue 44. This area has a low potential to support burrowing owl (*Athene cunicularia*), but occurs outside of the 500 foot buffer around the project footprint.

Appendix B Potentially Occurring Special-Status Biological Resources

Table B-1: Potentially Occurring Sensitive Biological Resources

Scientific Name Common Name	**Status**		**Habitat**	**Observed On-site**	**Potential to Occur**
SPECIAL – STATUS WILDLIFE SPECIES					
Anodonta californiensis California floater	USFWS: CDFW: CVMSHCP:	None None Not Covered	Found in lakes and lake-like stream environments at low altitudes.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Antrozous pallidus pallid bat	USFWS: CDFW: CVMSHCP:	None SSC Not Covered	Locally common species of low elevation in California. Occurs in grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests. Most common in open, dry habitats with rocky areas for roosting.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Aquila chrysaetos golden eagle	USFWS: CDFW: CVMSHCP:	None FP; WL Not Covered	Occupies nearly all terrestrial habitats of the western states except densely forested areas. Favors secluded cliffs with overhanging ledges and large trees for nesting and cover. Hilly or mountainous country where takeoff and soaring are supported by updrafts is generally preferred to flat habitats. Deeply cut canyons rising to open mountain slopes and crags are ideal habitat.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Athene cunicularia burrowing owl	USFWS: CDFW: CVMSHCP:	None SSC Covered	Primarily a grassland species, but it persists and even thrives in some landscapes highly altered by human activity. Occurs in open, annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. The overriding characteristics of suitable habitat appear to be burrows for roosting and nesting and relatively short vegetation with only sparse shrubs and taller vegetation.	No	**Presumed Absent** There is no suitable habitat within the project site. Portions of the Whitewater River adjacent to portions of the project site have the potential to support burrowing owls; however, the project will be confined to existing road right-of-way.
Buteo regalis ferruginous hawk	USFWS: CDFW: CVMSHCP:	None WL Not Covered	Common winter resident of grasslands and agricultural areas in southwestern California. Frequents open grasslands, sagebrush flats, desert scrub, low foothills surrounding valleys, and fringes of pinyon-juniper habitats. Does not breed in California.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Chaetodipus fallax pallidus pallid San Diego pocket mouse	USFWS: CDFW: CVMSHCP:	None SSC Not Covered	Common resident of sandy herbaceous areas, usually in association with rocks or course gravel in southwestern California. Occurs mainly in arid coastal and desert border areas. Habitats include coastal scrub, chamise-redshank chaparral, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon-juniper, and annual grassland.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Coleonyx variegatus abbotti San Diego banded gecko	USFWS: CDFW: CVMSHCP:	None SSC Not Covered	Prefers rocky areas in coastal sage and chaparral within granite or rocky outcrops. Occurs in coastal and cismontane southern California from interior Ventura Co. south.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed On-site**	**Potential to Occur**
Crotalus ruber red-diamond rattlesnake	USFWS: None CDFW: SSC CVMSHCP: Not Covered	It can be found from the desert, through dense chaparral in the foothills (it avoids the mountains above around 4,000 feet), to warm inland mesas and valleys, all the way to the cool ocean shore. It is most commonly associated with heavy brush with large rocks or boulders. Dense chaparral in the foothills, cactus or boulder associated coastal sage scrub, oak and pine woodlands, and desert slope scrub associations are known to carry populations of the northern red-diamond rattlesnake; however, chamise and red shank associations may offer better structural habitat for refuges and food resources for this species than other habitats.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Cyprinodon macularius desert pupfish	USFWS: **END** CDFW: **END** CVMSHCP: Covered	Inhabits desert ponds, springs, marshes, and streams.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Dinacoma caseyi Casey's June beetle	USFWS: **END** CDFW: None CVMSHCP: Not Covered	All *Dinacoma* populations are associated with alluvial sediments occurring in or contiguous with bases of desert alluvial fans, and the broad, gently sloping, depositional surfaces at the base of the Santa Rosa mountain ranges in the dry Coachella valley region. Most commonly associated with the Carsitas series soil.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Eumops perotis californicus western mastiff bat	USFWS: **END** CDFW: SSC CVMSHCP: Not Covered	Occurs in open, semi-arid to arid habitats including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Euparagia unidentata Algodones euparagia	USFWS: None CDFW: None CVMSHCP: Not Covered	Scavenges dead insects in sandy areas to feed larvae. Adults nectar primarily on *Croton* sp, on which it is closely reliant upon.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Falco mexicanus prairie falcon	USFWS: None CDFW: WL CVMSHCP: Not Covered	Commonly occur in arid and semiarid shrubland and grassland community types. Also occasionally found in open parklands within coniferous forests. During the breeding season, they are found commonly in foothills and mountains which provide cliffs and escarpments suitable for nest sites.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Gopherus agassizii desert tortoise	USFWS: **THR** CDFW: **THR** CVMSHCP: Covered	Widely distributed in the Mojave, Sonoran, and Colorado deserts from below sea level to 7,220 feet. Most common in desert scrub, desert wash, and Joshua tree habitats, but occurs in almost every desert habitat except those on the most precipitous slopes.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Hesperopsis gracielae MacNeill's sootywing	USFWS: None CDFW: None CVMSHCP: Not Covered	Found along riparian or otherwise moist areas within arid regions. Larvae are dependent upon *Atriplex lentiformes*.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Lasiurus xanthinus western yellow bat	USFWS: None CDFW: SSC CVMSHCP: Covered	Occurs in valley/foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts under palm trees and feeds in, and near, palm oases and riparian habitats.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.

Scientific Name Common Name	**Status**		**Habitat**	**Observed On-site**	**Potential to Occur**
Lithobates yavapaiensis Lowland leopard frog	USFWS: CDFW: CVMSHCP:	Delisted SSC Not Covered	Occurs in temperate forests, rivers, intermittent rivers, freshwater lakes, and freshwater marshes.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Macrobaenetes valgum Coachella giant sand treader cricket	USFWS: CDFW: CVMSHCP:	None None Covered	Nocturnal and moisture sensitive insects. Emergence occurs with winter rains and appear at maximum densities in January-February. Can be detected via their characteristic delta-shaped burrow excavations.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Nyctinomops femorosaccus Pocketed free-tailed bat	USFWS: CDFW: CVMSHCP:	None SSC Not Covered	Occurs in pine-juniper woodlands, desert scrub, palm oases, desert washes, desert riparian, and other arid areas in Southern California. Roosts in rocky areas with high cliffs.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Oliarces clara cheeseweed owlfly (cheeseweed moth lacewing)	USFWS: CDFW: CVMSHCP:	None None Not Covered	Inhabits the lower Colorado River drainage. Found beneath rocks or in flight over streams. Reliant upon *Larrea tridentata*.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
***Ovis canadensis nelsoni* pop. 2** Peninsular bighorn sheep DPS	USFWS: CDFW: CVMSHCP:	**END** **THR**; FP Covered	Preferred habitat is near mountainous terrain above the desert floor that is visually open, as well as steep and rocky. Most Mojave Desert mountain ranges satisfy these requirements well. Surface water is another element that is considered important to population health. Found mainly in the Peninsular Ranges.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Perognathus longimembris bangsi Palm Springs pocket mouse	USFWS: CDFW: CVMSHCP:	None SSC Covered	Inhabits areas having flat to gently sloping topography, sparse to moderate vegetative cover, and loosely packed or sandy soils on slopes ranging from 0% to approximately 15%. Remaining habitat in the Coachella Valley and environs is about 142,000 acres.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Phrynosoma mcallii flat-tailed horned lizard	USFWS: CDFW: CVMSHCP:	None SSC Covered	Typical habitat is sandy desert hardpan or gravel flats with scattered sparse vegetation of low species diversity. Most common in areas with high density of harvester ants and fine windblown sand, but rarely occurs on dunes.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Piranga rubra summer tanager	USFWS: CDFW: CVMSHCP:	None SSC Covered	Breed in gaps and edges of open deciduous or pine-oak forests across the southern and mid-Atlantic U.S. Uncommon (formerly common) summer resident and breeder in desert riparian habitat along lower Colorado River. Breeds in mature, desert riparian habitat dominated by cottonwoods and willows.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Polioptila melanura black-tailed gnatcatcher	USFWS: CDFW: CVMSHCP:	None WL Not Covered	In Mojave, Great Basin, Colorado and Sonoran desert communities, prefers nesting and foraging in densely lined arroyos and washes dominated by creosote bush and salt bush with scattered bursage, burrowed, ocotillo, saguaro, barrel cactus, nipple cactus, and prickly pear and cholla.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Pyrocephalus rubinus vermilion flycatcher	USFWS: CDFW: CVMSHCP:	None SSC Not Covered	Occupies desert riparian habitat, particularly cottonwoods, willows, mesquite, and other large desert riparian trees, in habitat adjacent to irrigated fields, irrigation ditches, pastures, and other open, mesic areas where it can forage.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.

Scientific Name Common Name	**Status**		**Habitat**	**Observed On-site**	**Potential to Occur**
Rallus obsoletus yumanensis Yuma Ridgeway's rail	USFWS: CDFW: CVMSHCP:	**END** **THR**; FP Not Covered	Nests in freshwater marches along the Colorado River and Salton Sea. Prefers stands of cattails and tules dissected by narrow channels of flowing water.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Taxidea taxus American badger	USFWS: CDFW: CVMSHCP:	None SSC Not Covered	Primarily occupy grasslands, parklands, farms, tallgrass and shortgrass prairies, meadows, shrub-steppe communities and other treeless areas with sandy loam soils where it can dig more easily for its prey. Occasionally found in open chaparral (with less than 50% plant cover) and riparian zones.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Toxostoma crissale Crissal thrasher	USFWS: CDFW: CVMSHCP:	None SSC Covered	Year round resident in California. Occupies a relatively large variety of desert riparian and scrub habitats from below sea level to over 6,000 feet. Occurs in areas dominated by mesquite hummocks and thickets with acacias, arrowweed, and desert saltbush scrub.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Toxostoma lecontei Le Conte's thrasher	USFWS: CDFW: CVMSHCP:	None SSC Covered	An uncommon to rare, local resident in southern California deserts from southern Mono Co. south to the Mexican border, and in western and southern San Joaquin Valley. Occurs primarily in open desert wash, desert scrub, alkali desert scrub, and desert succulent shrub habitats; also occurs in Joshua tree habitat with scattered shrubs.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Uma inornata Coachella Valley fringe-toed lizard	USFWS: CDFW: CVMSHCP:	**THR** **END** Covered	Sparsely-vegetated arid areas with fine wind-blown sand, including dunes, washes, and flats with sandy hummocks formed around the bases of vegetation. Needs fine, loose sand for burrowing.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Vireo bellii pusillus least Bell's vireo	USFWS: CDFW: CVMSHCP:	**END** **END** Covered	Primarily occupy Riverine riparian habitat that typically feature dense cover within 1 -2 meters of the ground and a dense, stratified canopy. Typically it is associated with southern willow scrub, cottonwood-willow forest, mule fat scrub, sycamore alluvial woodlands, coast live oak riparian forest, arroyo willow riparian forest, or mesquite in desert localities. It uses habitat which is limited to the immediate vicinity of water courses, 2,000 feet elevation in the interior.	Yes	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Xanthocephalus xanthocephalus yellow-headed blackbird	USFWS: CDFW: CVMSHCP:	None SSC Not Covered	Occurs in freshwater emergent wetlands, and moist, open areas along croplands and mud flats of lacustrine habitats. Prefers to nest in dense wetland vegetation characterized by tules, cattails, or other similar plant species along the border of lakes and ponds.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Xerospermophilus tereticaudus chlorus Palm Springs round-tailed ground squirrel	USFWS: CDFW: CVMSHCP:	None SSC Covered	Inhabits sandy arid regions of Lower Sonoran Life Zone. Its scrub and wash habitats include mesquite and creosote dominated sand dunes, creosote bush scrub, creosote palo verde and saltbush/alkali scrub.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
SPECIAL – STATUS PLANT SPECIES					
Abronia villosa* var. *aurita chaparral sand-verbena	Fed: CA: CNPS: CVMSHCP:	None None 1B.1 Not Covered	Found on the coastal side of the southern California mountains in chaparral and coastal sage scrub plant communities in areas of full sun and sandy soils. Found at elevations ranging from 262 to 5,249 feet. Blooming period is from January to September.	No	**Presumed Absent** The project site is out of the elevation range for this species.

Scientific Name Common Name	**Status**		**Habitat**	**Observed On-site**	**Potential to Occur**
Astragalus lentiginosus* var. *borreganus Borrego milk-vetch	Fed: CA: CNPS: CVMSHCP:	None None 4.3 Not Covered	Occurs in sandy soils in Mojavean and Sonoran desert scrub. Found at elevations ranging from 98 to 2,936 feet. Blooming period is from February to May.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Astragalus lentiginosus* var. *coachellae Coachella Valley milk-vetch	Fed: CA: CNPS: CVMSHCP:	**END** None 1B.2 Covered	Preferred habitat includes desert dunes and sandy Sonoran desert scrub. Found at elevations ranging from 131 to 2,149 feet in elevation. Blooming period is from February to May.	No	**Presumed Absent** The project site is out of the elevation range for this species.
Astragalus preussii* var. *laxiflorus Lancaster milk-vetch	Fed: CA: CNPS: CVMSHCP:	None None 1B.1 Not Covered	Occurs on alkaline clay flats, gravelly or sandy washes, and along draws in gullied badlands. Found at elevations up to 2,379 feet. Blooming period is from March to May.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Astragalus sabulonum gravel milk-vetch	Fed: CA: CNPS: CVMSHCP:	None None 2B.2 Not Covered	Occurs in sandy and gravelly soils in flats, washes, and roadsides in desert dunes and Mojavean and Sonoran desert scrub. Found at elevations ranging from 98 to 2,936 feet. Blooming period is from February to May.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Chorizanthe leptotheca Peninsular spineflower	Fed: CA: CNPS: CVMSHCP:	None None 4.2 Not Covered	Found in granitic soils within chaparral, coast scrub, and lower montane coniferous forest habitats. Found at elevations ranging from 984 to 6,234 feet. Blooming period is from May to August.	No	**Presumed Absent** The project site is out of the elevation range for this species.
Ditaxis claryana glandular ditaxis	Fed: CA: CNPS: CVMSHCP:	None None 2B.2 Not Covered	Found in sandy soils in dry washes and rocky hillsides within Mojavean and Sonoran desert scrub. Occurs at elevations ranging from 0 to 1,525 feet. Blooming period is October and December through March.	No	**Presumed Absent** The project site is out of the elevation range for this species.
Ditaxis serrata* var. *californica California ditaxis	Fed: CA: CNPS: CVMSHCP:	None None 3.2 Not Covered	Found in Sonoran desert scrub. Occurs at elevations ranging from 98 to 3,281 feet. Blooming period is from March to December.	No	**Presumed Absent** The project site is out of the elevation range for this species.
Eschscholzia androuxii Joshua Tree poppy	Fed: CA: CNPS: CVMSHCP:	None None 4.3 Not Covered	Occurs on sandy, gravelly, and/or rocky desert washes, flats, and slopes in Joshua tree woodland and Mojavean desert scrub. Found at elevations ranging from 1,900 to 5,530 feet above msl. Blooming period is February to June.	No	**Presumed Absent** The project site is out of the elevation range for this species.
Horsfordia alata pink velvet-mallow	Fed: CA: CNPS: CVMSHCP:	None None 4.3 Not Covered	Occurs in rocky Sonoran desert scrub. Found at elevations ranging from 328 to 1,640 feet. Blooming period is from February to December.	No	**Presumed Absent** The project site is out of the elevation range for this species.
Horsfordia newberryi Newberry's velvet-mallow	Fed: CA: CNPS: CVMSHCP:	None None 4.3 Not Covered	Occurs in rocky Sonoran desert scrub. Found at elevations ranging from 10 to 2,624 feet. Blooming period includes February, April, November, and December.	No	**Presumed Absent** The project site is out of the elevation range for this species.

Scientific Name Common Name	**Status**		**Habitat**	**Observed On-site**	**Potential to Occur**
Johnstonella costata ribbed cryptantha	Fed: CA: CNPS: CVMSHCP:	None None 4.3 Not Covered	Occurs in sandy soils within desert dunes and Mojavean and Sonoran desert scrub. Found at elevations ranging from -197 to 1,640 feet. Blooming period is from February to May.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Johnstonella holoptera winged cryptantha	Fed: CA: CNPS: CVMSHCP:	None None 4.3 Not Covered	Occurs in Mojavean and Sonoran desert scrub. Found at elevations ranging from 328 to 5,544 feet. Blooming period is from March to April.	No	**Presumed Absent** The project site is out of the elevation range for this species.
Juncus acutus* ssp. *leopoldii southwestern spiny rush	Fed: CA: CNPS: CVMSHCP:	None None 4.2 Not Covered	Occurs in mesic coastal dunes, alkaline soils in meadows and seeps, and coastal salt marshes and swamps. Found at elevations ranging from 10 to 2,952 feet. Blooming period is typically from May to June and can begin as early as March.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Marina orcuttii* var. *orcuttii California marina	Fed: CA: CNPS: CVMSHCP:	None None 1B.3 Not Covered	Occurs in rocky soils in chaparral, pinyon-juniper woodland, and Sonoran desert scrub. Found at elevations ranging from 3,444 to 3,805 feet. Blooming period is from May to October.	No	**Presumed Absent** The project site is out of the elevation range for this species.
Matelea parvifolia spear-leaf matelea	Fed: CA: CNPS: CVMSHCP:	None None 2B.3 Not Covered	Occurs in rocky soils in Mojavean and Sonoran desert scrub. Found at elevations ranging from 1,443 to 3,593 feet. Blooming period is typically March to May and can last through July.	No	**Presumed Absent** The project site is out of the elevation range for this species.
Mentzelia tridentata creamy blazingstar	Fed: CA: CNPS: CVMSHCP:	None None 1B.3 Not Covered	Occurs in rocky, gravelly, and sandy soils in Mojavean desert scrub. Found at elevations ranging from 2,297 to 3,855 feet. Blooming period is from March to May.	No	**Presumed Absent** The project site is out of the elevation range for this species.
Nemacaulis denudata* var. *gracilis slender cottonheads	Fed: CA: CNPS: CVMSHCP:	None None 2B.2 Not Covered	Occurs in coastal dunes, desert dunes, and Sonoran desert scrub habitats. Found at elevations ranging from 164 to 1,312 feet. Blooming period is from March to May.	No	**Presumed Absent** The project site is out of the elevation range for this species.
Petalonyx linearis narrow-leaf sandpaper-plant	Fed: CA: CNPS: CVMSHCP:	None None 2B.3 Not Covered	Occurs in sandy or rocky canyons in Mojavean desert scrub or Sonoran Desert scrub. Found at elevations ranging from -82 to 3,658 feet. Blooming period ranges from January to December.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Pseudorontium cyathiferum Deep Canyon snapdragon	Fed: CA: CNPS: CVMSHCP:	None None 2B.3 Not Covered	Occurs in rocky Sonoran desert scrub. Found at elevations ranging from 0 to 2,624 feet. Blooming period is from February to April.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Selaginella eremophila desert spike-moss	Fed: CA: CNPS: CVMSHCP:	None None 2B.2 Not Covered	Occurs in chaparral and Sonoran desert scrub habitats within gravelly or rocky soil. Found at elevations ranging from 656 to 2,953 feet. Blooming period is from May to July.	No	**Presumed Absent** The project site is out of the elevation range for this species.

Scientific Name Common Name	**Status**	**Habitat**	**Observed On-site**	**Potential to Occur**
Stemodia durantifolia purple stemodia	Fed: None CA: None CNPS: 2B.1 CVMSHCP: Not Covered	Occurs in sandy, often mesic areas within Sonoran desert scrub. Found at elevations ranging from 591 to 984 feet. Blooming period ranges sporadically in April, June, August, September, October, December, and occasionally January.	No	**Presumed Absent** The project site is out of the elevation range for this species.
Xylorhiza cognata Mecca-aster	Fed: None CA: None CNPS: 1B.2 CVMSHCP: Covered	Occurs in Sonoran desert scrub. Found at elevations ranging from 66 to 1,312 feet. Blooming period is from January to June.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
SPECIAL – STATUS PLANT COMMUNITIES				
Desert Fan Palm Oasis Woodland	CDFW Sensitive Habitat	Rare plant community that is one of the most unusual biological resources located within the Coachella Valley. Found within canyons and along the San Andreas Fault Zone, where water occurs naturally. Generally characterized by open to dense groves of native desert fan palms, which are the most massive native palm in North America, growing more than 66 feet.	No	**Absent**.

U.S. Fish and Wildlife Service (USFWS) - Federal
END - Federal Endangered
THR - Federal Threatened

California Department of Fish and Wildlife (CDFW) - California
END - California Endangered
THR - California Threatened
SSC - California Species of Concern
WL - Watch List
FP - California Fully Protected

California Native Plant Society (CNPS)
California Rare Plant Rank
1A - Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere
1B - Plants Rare, Threatened, or Endangered in California and Elsewhere
2B - Plants Rare, Threatened, or Endangered in California, but More Common Elsewhere
4 - Plants of Limited Distribution – A Watch List

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

Appendix C CVMSHCP Avoidance, Minimization, and Mitigation Measures

4.4 Required Avoidance, Minimization, and Mitigation Measures

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

plans for the project. The representative of the appropriate RMUC will review alignment, pole spacing, clearing limits, burrow locations, and other specific project plans which have the potential to affect the desert tortoise. He or she may recommend modifications to the contact person to further avoid or minimize potential impacts to desert tortoise.

3. The construction area shall be clearly fenced, marked, or flagged at the outer boundaries to define the limits of construction activities. The construction right-of-way shall normally not exceed 50 feet in width for standard pipeline corridors, access roads and transmission corridors, and shall be minimized to the maximum extent Feasible. Existing access roads shall be used when available, and rights-of-way for new and existing access roads shall not exceed 20 feet in width unless topographic obstacles require greater road width. Other construction areas including well sites, storage tank sites, substation sites, turnarounds, and laydown/staging sites which require larger areas will be determined in the pre-construction phase. All construction workers shall be instructed that their activities shall be confined to locations within the fenced, flagged, or marked areas.

4. An Acceptable Biologist shall conduct pre-construction clearance surveys of all areas potentially disturbed by the proposed project. Any winter burrows discovered in the Conservation Areas during the pre-construction survey shall be avoided or mitigated. The survey shall be submitted to the representative of the appropriate RMUC as part of plan review.

5. All site mitigation criteria shall be determined in the pre-construction phase, including but not limited to seeding, barrier fences, leveling, and laydown/staging areas, and will be reviewed by the representative of the appropriate RMUC prior to implementation.

6. A worker education program shall be implemented prior to the onset of each construction project. All construction employees shall be required to read an educational brochure prepared by the representative of the appropriate RMUC and/or the RMOC and attend a tortoise education class prior to the onset of construction or site entry. The class will describe the sensitive species which may be found in the area, the purpose of the MSHCP Reserve System, and the appropriate measures to take upon discovery of a sensitive species. It will also cover construction techniques to minimize potential adverse impacts.

7. All pre-construction activities which could Take tortoises in any manner (e.g., driving off an established road, clearing vegetation, etc.) shall occur under the supervision of an Acceptable Biologist.

8. If there are unresolvable conflicts between the representative of the appropriate RMUC and the contact person, then the matter will be arbitrated by the RMOC and, if necessary, by CVCC.

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

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

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

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

construction inactivity to prevent entry by desert tortoises.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Appendix D CVMSHCP Covered Species

3.2 Species and Natural Communities Considered

This section delineates the species and natural communities identified in the Planning Agreement and identifies those now included in the Plan. Species considered but not covered by the Plan, and natural communities not included in the Conservation Areas are also identified. Information on the Covered Species and conserved natural communities that are protected in the Conservation Areas is presented in Sections 9 and 10.

3.2.1 Review of Species Identified in the Planning Agreement

The Planning Agreement among the local, state, and federal agencies comprising the Plan Participants that initiated development of the Plan identified 52 species to be considered for inclusion in the Plan and targeted all the natural communities in the Plan Area. As information was gathered through the planning process, the planning team continuously reviewed the list. Other experts on individual species were also consulted. The Covered Species in the Plan are listed in Table 3-1. These are species for which sufficient information existed or was gathered during the planning process to enable the development of Conservation measures.

Table 3-2 lists the species from the Planning Agreement that are not proposed for coverage under the Plan. Generally, the reasons for not covering a species include lack of known locations in the Plan Area or insufficient data to facilitate Conservation planning. Section 3.8 of Appendix I provides additional information on reasons why these species are not proposed for coverage.

Table 3-1: Species Covered under the Plan

Plants
Mecca aster, *Xylorhiza cognata*[1]
Coachella Valley milkvetch, *Astragalus lentiginosus* var. *coachellae* (FE)
Triple-ribbed milkvetch, *Astragalus tricarinatus* (FE)
Orocopia sage, *Salvia greatae*[1]
Little San Bernardino Mountains linanthus, *Linanthus maculatus (*or *Gilia maculata)*[1]

Invertebrates - Insects
Coachella Valley giant sand-treader cricket, *Macrobaenetes valgum*
Coachella Valley Jerusalem cricket, *Stenopelmatus cahuilaensis*

Fish
Desert pupfish, *Cyprinodon macularius* (FE/SE)

Table 3-1: Species Covered under the Plan (cont.)

Amphibians
Arroyo toad, *Bufo californicus* (FE/CSC)

Reptiles
Desert tortoise, *Gopherus agassizii* (FT/ST)
Flat-tailed horned lizard, *Phrynosoma mcallii* (CSC)
Coachella Valley fringe-toed lizard, *Uma inornata* (FT/SE)

Birds
Yuma clapper rail, *Rallus longirostris yumanensis* (FE/ST/SFP)
California black rail, *Laterallus jamaicensis* (ST/SFP)
Burrowing owl, *Athene cunicularia* (CSC)
Southwestern willow flycatcher, *Empidonax traillii extimus* (SE/FE)
Crissal thrasher, *Toxostoma crissale* (CSC)
Le Conte's thrasher, *Toxostoma lecontei* (CSC)
Least Bell's vireo, *Vireo bellii pusillus* (FE/SE)
Gray vireo, *Vireo vicinior* (CSC)
Yellow warbler, *Dendroica petechia brewsteri* (CSC)
Yellow-breasted chat, *Icteria virens* (CSC)
Summer tanager, *Piranga rubra*[1]

Mammals
Southern yellow bat, *Lasiurus ega* or *xanthinus*[1]
Coachella Valley round-tailed ground squirrel, *Spermophilus tereticaudus chlorus* (C/CSC)
Palm Springs pocket mouse, *Perognathus longimembris bangsi* (CSC)
Peninsular bighorn sheep, *Ovis canadensis nelsoni* (FE/ST/SFP)

(Footnotes are explained below.)

The status codes used in the table are identified in the following key, as listed in the *California Natural Diversity Data Base Special Animals List and Special Plants List* from July 2000 (CNDDB 2000).

Key:	FE	=	Federal Endangered
	FT	=	Federal Threatened
	FC	=	Federal Candidate
	SE	=	State Endangered
	ST	=	State Threatened
	SC	=	State Candidate
	SFP	=	State Fully Protected
	CSC	=	Species of Special Concern (a state list of species that are at risk due to habitat modification or destruction, over-collecting, disease, or other threats)
	CNPS	=	Rare in California

[1] These species have no official status at this time; however, USFWS, CDFG, and the SAC have recommended inclusion of the species because of the likelihood of their being elevated to listing status in the coming years due to their rarity and decline. Note, also, that the Department of the Interior eliminated the category of FC2 subsequent to the adoption of the Planning Agreement.

Table 3-2: Species Considered but Not Proposed for Coverage under the Plan

Plants
California ditaxis, *Ditaxis californica*
Cliff spurge, *Euphorbia misera*
Flat-seeded spurge, *Chamaesyce platysperma*
Glandular ditaxis, *Ditaxis clariana*
Robison's monardella, *Monardella robisonii*

Invertebrates - Insects
Casey's June beetle, *Dinacoma caseyi*
Coachella Valley grasshopper, *Spaniacris deserticola*
Pratt's dark aurora blue butterfly *Euphilotes enoptes cryptorufes*

Invertebrates - Other
Morongo desert snail, *Eremarionta morongoana*
Thousand Palms desert snail, *Eremarionta millepalmarum*

Amphibians
California red-legged frog, *Rana aurora draytonii* (FT)
Desert slender salamander, *Batrachoseps aridus* (FE)
Lowland leopard frog, *Rana yavapiensis*
Mountain yellow-legged frog, *Rana muscosa* (FE)

Reptiles
California legless lizard, *Anniella pulchra pulchra*
San Diego horned lizard, *Phrynosoma coronatum blainvillei*

Mammals
California leaf-nosed bat, *Macrotus californicus*
California (Western) mastiff bat, *Eumops perotis californicus*
Fringed myotis, *Myotis thysanodes*
Long-eared myotis, *Myotis evotis*
Long-legged myotis, *Myotis volans*
Pallid bat, *Antrozous pallidus*
Pocketed free-tailed bat, *Nyctinomops femorosaccus*
Townsend's (Western) big-eared bat, *Corynorhinus townsendii pallescens*
Western small-footed myotis, *Myotis ciliolabrum*
Yuma myotis, *Myotis yumanensis*

3.2.2 Review of Natural Communities Identified in the Planning Agreement

The Planning Agreement listed 23 natural communities known to occur in the Plan Area. Through the planning process a total of 46 natural communities were identified in the Plan Area. Of these, 27 natural communities provide Habitat for the Covered Species and are the focal point for the establishment of Conservation Areas. The conserved natural communities included in the

Plan's Conservation Areas are listed in Table 3-3, as named and described in *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986), with the addition of five new natural community types developed by the SAC to distinguish better among the blowsand communities in the Plan Area. Figure 3-1 depicts the natural communities within the Plan Area, as well as developed areas.

Table 3-3: Natural Communities Included in the Plan

Active desert dunes
Stabilized and partially stabilized desert dunes
Active desert sand fields
Ephemeral desert sand fields
Stabilized and partially stabilized desert sand fields
Stabilized shielded desert sand fields
Mesquite hummocks
Sonoran creosote bush scrub
Sonoran mixed woody and succulent scrub
Mojave mixed woody scrub
Desert saltbush scrub
Desert sink scrub
Chamise chaparral
Red shank chaparral
Semi-desert chaparral
Interior live oak chaparral
Cismontane alkali marsh
Coastal and valley freshwater marsh
Southern arroyo willow riparian forest
Sonoran cottonwood-willow riparian forest
Mesquite bosque
Desert dry wash woodland
Desert fan palm oasis woodland
Southern sycamore-alder riparian woodland
Arrowweed scrub
Mojavean pinyon and juniper woodland
Peninsular juniper woodland and scrub

The other natural communities are already adequately protected in the Plan Area on public lands outside the Conservation Areas, except for tamarisk scrub, active shielded desert dunes, and Riversidean desert scrub. This existing protection adds to the overall Conservation value of the Plan in protecting watersheds, providing Habitat for large predators, protecting overall biological diversity in the Plan Area, providing buffers for Conservation Areas established under this Plan, and providing areas that could become important to Covered Species under conditions of potential future climatic change. With regard to tamarisk scrub, it is not a "natural" community in that it is dominated by an exotic plant species, i.e. tamarisk. In areas where some tamarisk scrub is included in the Conservation Areas, the intent is to restore it to the appropriate natural community to the maximum extent possible. The natural communities that are not included in the Plan are listed in Table 3-4. Additional information about these natural communities and why they were not included in the Plan is found in Section 3.9 of Appendix I.

Table 3-4: Natural Communities Considered but Not Included in the Plan

Tamarisk scrub
Active shielded desert dunes
Riversidean desert scrub
Mojave mixed steppe
Blackbush scrub
Upper Sonoran mixed chaparral
Upper Sonoran manzanita chaparral
Mixed montane chaparral
Northern mixed chaparral
Scrub oak chaparral
Canyon live oak forest
Black oak forest
Coulter pine forest
Bigcone spruce-canyon oak forest
Westside ponderosa pine forest
Sierran mixed coniferous forest
Jeffrey pine forest
Jeffrey pine-fir forest
Southern California subalpine forest

Appendix E Regulations

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

Federal Regulations

Endangered Species Act of 1973

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

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

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

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

Migratory Bird Treaty Act

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

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

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

State Regulations

California Environmental Quality Act (CEQA)

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

California Endangered Species Act (CESA)

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

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

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

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

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

Fish and Game Code

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

Native Plant Protection Act

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

California Native Plant Society Rare and Endangered Plant Species

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

California Rare Plant Rank

1A- Plants Presumed Extirpated in California and either Rare or Extinct Elsewhere

1B- Plants Rare, Threatened, or Endangered in California and Elsewhere

2A- Plants Presumed Extirpated in California, But More Common Elsewhere

2B- Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere

3- Plants about Which More Information is Needed - A Review List

4- Plants of Limited Distribution - A Watch List

Threat Ranks

.1- Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)

.2- Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

.3- Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known).

Local Policies

Coachella Valley MSHCP

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

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

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

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

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

Federal Regulations

Section 404 of the Clean Water Act

Since 1972, the Corps and EPA have jointly regulated the filling of waters of the United States, including wetlands, pursuant to Section 404 of the CWA. The Corps has regulatory authority over the discharge of dredged or fill material into the waters of the United States under Section 404 of the CWA. The Corps and EPA define "fill material" to include any "material placed in waters of the United States where the material has the effect of: (i) replacing any portion of a water of the United States with dry land; or (ii) changing the bottom elevation of any portion of the waters of the United States." Examples include, but are not limited to, the placement of sand, rock, clay, construction debris, wood chips, and "materials used to create any structure or infrastructure in the waters of the United States."

In April of 2020, the Corps and the EPA provided a new definition for *waters of the United States* [Federal Register, Vol. 85, No. 77 (April 21, 2020)] which encompass:

- 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.

Additionally, the new definition identifies 12 categories of those waters and features that are excluded from the definition of ''waters of the United State, such as features that only contain water in direct response to rainfall (e.g., ephemeral features), groundwater, many ditches, prior converted cropland, and waste treatment systems. The final rule excludes from the definition of ''waters of the United States'' all waters or features not mentioned above. In addition to this general exclusion, the final rule specifically clarifies that waters of the United States do not include the following:

- Groundwater, including groundwater drained through subsurface drainage systems;
- Ephemeral features that flow only indirect 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 runoff;
- Groundwater recharge, water reuse, and wastewater recycling structures constructed or excavated in upland or in non-jurisdictional waters; and
- Waste treatment systems.

Section 401 of the Clean Water Act

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

State Regulations

Fish and Game Code

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

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

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

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

that support fish or other aquatic life and watercourses having a surface or subsurface flow that support or have supported riparian vegetation. A Section 1602 Streambed Alteration Agreement would be required if impacts to identified CDFW jurisdictional areas occur.

Porter Cologne Act

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