



Valley View Water Systems Consolidation Project Phase IIIA-2 Segment

Supplemental Biological Resources Technical Study

prepared for

Woodard & Curran

Jennifer Ziv
Senior Project Manager
24422 Avenida de la Carlota, Suite 180
Laguna Hills, California 92653

Coachella Valley Water District

William Patterson
Environmental Supervisor
75-519 Hovley Lane East
Palm Desert, California 92211

prepared by

Rincon Consultants, Inc.
1980 Orange Tree Lane, Suite 105
Redlands, California 92374

October 2021



RINCON CONSULTANTS, INC.

Environmental Scientists | Planners | Engineers

rinconconsultants.com

Table of Contents

1	Introduction	1
1.1	Project Location	1
1.2	Project Description.....	1
1.3	Areas of Potential Effects.....	2
2	Methodology	5
2.1	Regulatory Overview.....	5
2.2	Database and Literature Review	7
2.3	Focused Biological Field Survey	7
3	Existing Conditions.....	9
3.1	Topography, Watershed, and Soils	9
3.2	Vegetation and Other Land Cover	11
3.3	General Wildlife	13
4	Sensitive Biological Resources	14
4.1	Special-Status Species.....	14
4.2	Sensitive Plant Communities	16
4.3	Jurisdictional Waters and Wetlands	16
4.4	Wildlife Movement	17
4.5	Resources Protected By Local Policies and Ordinances.....	17
4.6	Habitat Conservation Plans.....	18
4.7	Critical Habitat, Coastal Zone, Wild and Scenic Rivers, Essential Fish Habitat, and Coastal Barrier Resources	20
5	Impact Analysis and Mitigation Measures.....	21
5.1	Special-Status Species.....	21
5.2	Sensitive Plant Communities	23
5.3	Jurisdictional Waters and Wetlands	23
5.4	Wildlife Movement	24
5.5	Local Policies and Ordinances.....	24
5.6	Adopted or Approved Plans.....	25
5.7	Critical Habitat, Coastal Zone, Wild and Scenic Rivers, Essential Fish Habitat, and Coastal Barrier Resources	25
6	References	26
7	List of Preparers.....	28

Figures

Figure 1	Regional Location Map	3
Figure 2	Area of Potential Effects	4
Figure 3	Soils Map	10
Figure 4	Vegetation Communities and Land Cover Types	12
Figure 5	CVMSHCP Conservation Areas	19

Appendices

Appendix A	Site Photographs
Appendix B	Floral and Faunal Compendium
Appendix C	Special Status Species Evaluation Tables
Appendix D	Resumes
Appendix E	Official IPaC Species List

1 Introduction

Rincon Consultants, Inc. (Rincon) prepared this Supplemental Biological Resources Technical Study (SBRTS) to document the existing conditions and evaluate the potential for project-related impacts to biological resources associated with the Valley View Water Systems Consolidation Project, Phase IIIA-2 Segment (project). This SBRTS supplements the Saint Anthony's and Valley View Water Systems Consolidation Project BRTS (Rincon 2019) and has been prepared in support of a Subsequent Initial Study-Mitigated Negative Declaration (IS-MND) pursuant to the requirements of the California Environmental Quality Act (CEQA). Section 15162 of the State CEQA Guidelines states that a lead or responsible agency may prepare a subsequent Environmental Impact Report or IS-MND if "substantial changes are proposed in the project which would require major revisions of the previous...negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects." As such, changes in the proposed project which require major revisions of the IS-MND include the addition of supplemental mitigation measures, as necessary, to reduce project impacts to a less than significant level, as well as the removal of mitigation measures where such measures are no longer applicable. Coachella Valley Water District (CVWD) is the project's lead agency. The project is located in the community of Thermal, within unincorporated Riverside County, California.

1.1 Project Location

The project is generally located in the eastern portion of the Coachella Valley in Riverside County, California (Figure 1). More specifically, the project is located north of Airport Boulevard and east of Route 86 in the unincorporated community of Thermal. The project site is within the boundaries of the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) but outside of the CVMSHCP Mecca Hills/Orocopia Mountains Conservation Area.

The project site is depicted on Township 6S, Range 8E, Section 15 of the United States (U.S.) Geological Survey *Indio*, CA 7.5-minute topographic quadrangles, San Bernardino Baseline and Meridian. The surrounding area consists of light industrial, commercial, residential, open space, and transportation land uses.

1.2 Project Description

The Phase III A-2 Transmission Main pipeline is an up to 3,500 linear-foot (0.67 mile) pipe that would cross under the Whitewater River/Coachella Valley Stormwater Channel (CVSC) and Highway 111 using trenchless installation and connect to the existing CVWD water mains on Palm Street and Airport Boulevard. The project area is shown in Figure 2. The pipeline is a connecting segment between two existing water mains that is needed to deliver potable water to the nine independent Valley View Mobile Home Park (MHP) small water systems (SWS) being consolidated onto the CVWD potable water system. The proposed alignment for this segment of pipeline is preliminary and may be altered as easements are finalized. Therefore, the project area shown in Figure 2 encompasses a buffer area around the northern and southernmost options for the proposed pipeline alignment.

The potential Phase III A-2 pipeline segments are described as follows:

- A 30-inch diameter segment of the pipeline would connect to the existing CVWD water main on Palm Street and continue northeast to Highway 111 via open trenching. This segment would be up to 400 linear feet.
- A 30-inch diameter segment of the pipeline would cross under Highway 111 and the Union Pacific railroad tracks via jack-and-bore methods. This segment would be up to 450 linear feet.
- A 30-inch diameter segment of the pipeline would be constructed via open trenching between the segment that crosses under Highway 111 and the Union Pacific railroad tracks, and the segment that crosses the Whitewater River/Coachella Valley Stormwater Channel. This segment would be up to 1,050 linear feet.
- A 32-inch diameter segment of the pipeline would cross under the Whitewater River/Coachella Valley Stormwater Channel via horizontal directional drilling (HDD). This segment would be up to 950 linear feet.
- On the east side of the Whitewater River/Coachella Valley Stormwater Channel, a 30-inch diameter pipeline would connect the Phase III A-2 Transmission Main pipeline from the end of the pipeline placed under the channel to the existing CVWD water main on Airport Boulevard via open trenching. This segment would be up to 610 linear feet.

1.3 Areas of Potential Effects

The project Area of Potential Effects (APE) generally depicts all areas expected to be affected by the proposed project, including construction staging areas. For this study, the APE includes the project disturbance footprint associated with the construction of the Phase III A-2 Transmission Main pipeline. Areas that will be avoided during project activities include Highway 111, Union Pacific Railroad Tracks, and Whitewater River/Coachella Valley Stormwater Channel. The APE also includes a 100-foot buffer around the project site, which includes staging areas, to address potential indirect project effects such as noise and dust. The APE is 56.50 acres.

Figure 1 Regional Location Map



Basemap provided by Esri and its licensors © 2021.

★ Project Location

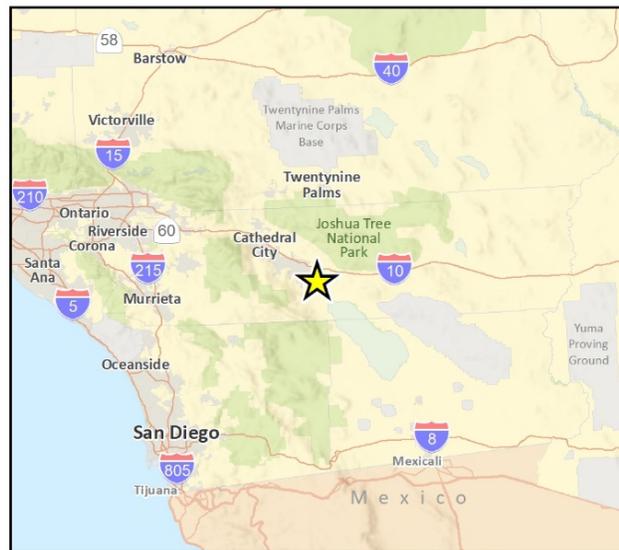
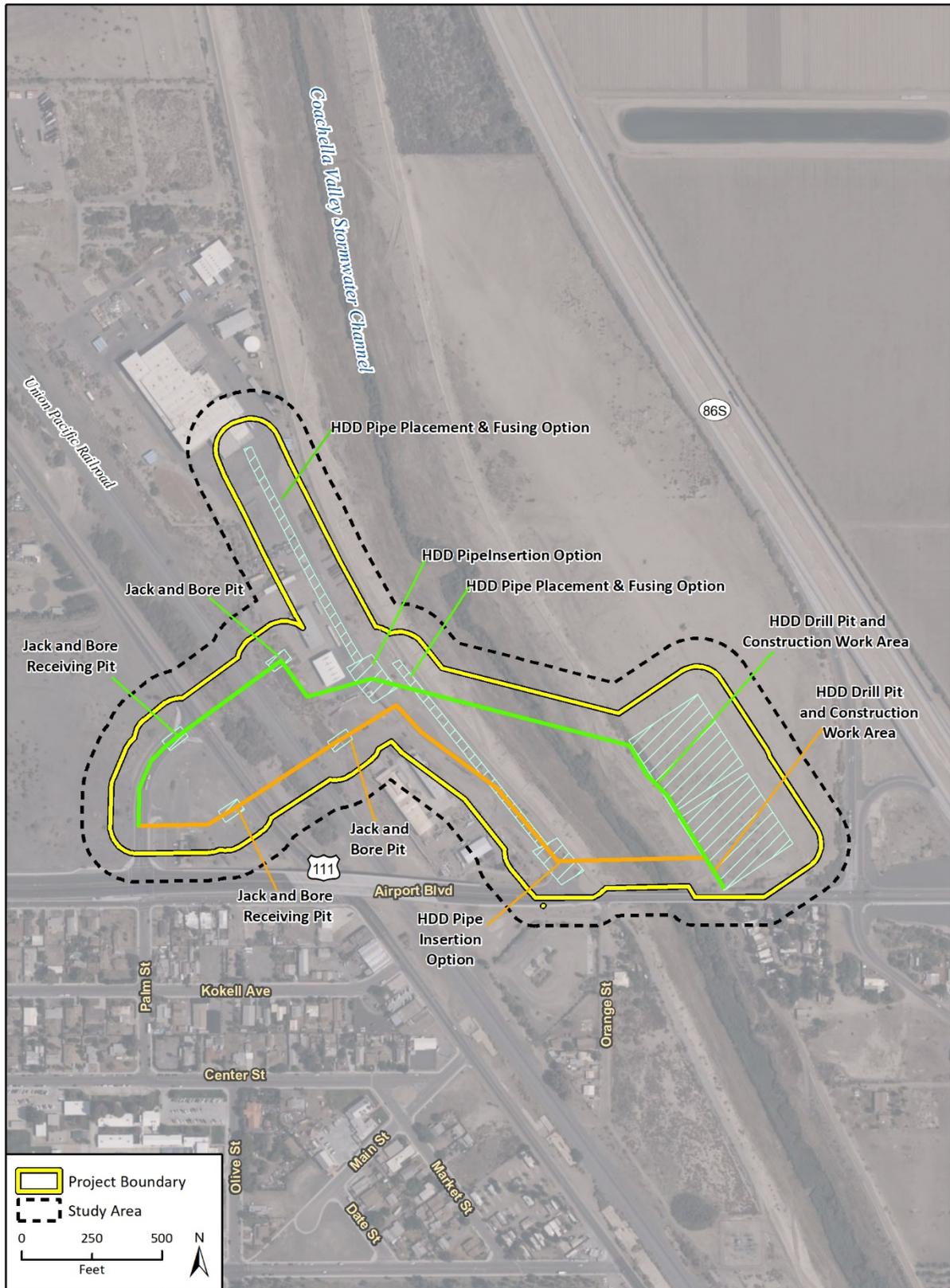


Figure 2 Area of Potential Effects



2 Methodology

2.1 Regulatory Overview

This section provides a general summary of the applicable federal and state regulations related to biological resources that could occur within the APE and immediate vicinity. Regulated or sensitive biological resources considered and evaluated in this SBRTS include special-status plant and wildlife species, nesting birds and raptors, sensitive plant communities, jurisdictional waters and wetlands, wildlife movement, and locally protected resources, such as protected trees.

CVWD is the lead agency for this project under the California Environmental Quality Act (CEQA).

2.1.1 Environmental Statutes

For the purpose of this report, potential impacts to biological resources were analyzed based on the following regulatory statutes and guiding documents:

Federal

- National Environmental Policy Act (NEPA)
- Federal Endangered Species Act (ESA)
- Federal Clean Water Act (CWA)
- Migratory Bird Treaty Act (MBTA)
- The Bald and Golden Eagle Protection Act
- Coastal Zone Management Act
- Protection of Wetlands- Executive Order 11990
- Wild and Scenic Rivers Act
- Magnuson-Stevens Fishery Conservation and Management Act
- Fish and Wildlife Coordination Act
- Coastal Barriers Resources Act

With respect to the requirements of the federal Fish and Wildlife Coordination Act, it is anticipated that the State Water Resources Control Board would perform either formal or informal consultation with the U.S. Fish and Wildlife Service (USFWS) as part of its review of the project's eligibility for Drinking Water State Revolving Fund program assistance. Furthermore, coordination with the California Department of Fish and Wildlife (CDFW) would occur, as appropriate, pending a determination of CDFW as a trustee agency for the purposes of CEQA.

State

- California Environmental Quality Act (CEQA)
- California Endangered Species Act (CESA)
- California Fish and Game Code (CFGC)
- Porter-Cologne Water Quality Control Act

Local

- Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP)
- Riverside County Ordinance No. 559 Regulating the Removal of Trees

2.1.2 Guidelines for Determining CEQA Significance

The following threshold criteria, as defined by the CEQA Guidelines Appendix G Initial Study Checklist, were used to evaluate potential environmental effects. Based on these criteria, the proposed project would have a significant effect on biological resources if it would:

- a) Have substantial adverse effects, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.*
- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service.*
- c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.*
- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.*
- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.*
- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan.*

2.1.3 National Environmental Policy Act Guidelines

Pursuant to the guidelines set forth by the U.S. Department of Agriculture (USDA) for preparing environmental assessments subject to Section 7 of the Federal ESA, a final determination of effect must be made for proposed or listed species and proposed or designated critical habitat that may be present in a project area according to the following determination categories (USDA 2018; USFWS 2019):

- “No effect” means there will be no impacts to listed or proposed resources. Concurrence from the USFWS is not required.
- “May affect, but not likely to adversely affect” means that all effects are beneficial, insignificant, or discountable. These determinations require written concurrence from the USFWS.
- “May affect, and is likely to adversely affect” means that listed resources are likely to be exposed to the action or its environmental consequences and will respond in a negative manner to the exposure.

2.2 Database and Literature Review

Prior to conducting the biological field survey for this SBRTS, Rincon reviewed a variety of literature sources to obtain baseline information about the biological resources with potential to occur within the APE and in the surrounding areas. The literature review included information from standard biological reference materials and regionally applicable regulatory guiding documents including (but not limited to) the following: *The Jepson Manual: Vascular Plants of California, Second Edition* (Baldwin et al. 2012) and *A Manual of California Vegetation, 2nd edition* (Sawyer et al. 2009). The CVSC Stormwater Channel Improvement Project Environmental Impact Report (EIR) was also reviewed (Terra Nova Planning & Research, Inc. 2019). Rincon also conducted queries of several relevant scientific databases that provide background information about the potential occurrences of sensitive biological resources: the CDFW California Natural Diversity Data Base (CNDDDB) (CDFW 2021a) and Biogeographic Information and Observation System (CDFW 2021b); the USFWS Critical Habitat Portal (USFWS 2021a) and Information, Planning, and Conservation (IPaC) System Query (USFWS 2021b; Appendix E); National Wetlands Inventory (NWI) (USFWS 2021c); the USDA Natural Resource Conservation Service (NRCS) Web Soil Survey (USDA NRCS 2021a); the California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants of California (CNPS 2021), and the CVMSHCP (Coachella Valley Association of Governments 2007). The CNDDDB query included a five-mile radius centered on the APE; the CNPS query included the *Indio*, California USGS 7.5-minute topographic quadrangle and the other eight USGS quadrangles that surround it (*Myoma*, *West Berdoo Canyon*, *Rockhouse Canyon*, *Thermal Canyon*, *Mecca*, *Valerie*, *Martinez Mountain*, and *La Quinta*).

Results of the special-status species queries were compiled and analyzed to determine which have potential to occur within the APE (Appendix C). The habitat requirements for each regionally occurring special-status species were assessed and compared to the type and quality of habitats observed in the APE during the biological field survey. Conclusions regarding which special-status species have the potential to occur were based not only on the background research and literature review previously mentioned, but also on the data collected in the field during the survey. Multiple regionally occurring special-status species were eliminated due to lack of suitable habitat within the APE, range in elevation, and/or geographic distribution. Special-status species determined to have the potential to occur within the APE are discussed in Section 4, Sensitive Biological Resources. Special-status species determined to have low or no potential to occur within the APE are not discussed further in this BRTS. Definitive surveys to confirm the presence or absence of special-status species were not performed and are not included in this analysis. The findings and opinions conveyed in this report are based exclusively on the methodology described above.

2.3 Focused Biological Field Survey

Rincon Biologist Sarah Toback conducted a biological field survey for this BRTS on July 30, 2021, from 0915 to 1135. Weather conditions during the survey included temperatures ranging from 93°F to 101°F, with winds of 10 miles per hour (mph) and 90% cloud cover. The survey area included the APE, as defined above. The pedestrian survey was supplemented with remote observation of inaccessible areas and/or private property using binoculars.

During the field survey an inventory of all plant and wildlife species observed was compiled, the existing vegetation communities classified, and the general site conditions were documented. Plant species nomenclature and taxonomy follows *The Jepson Manual: Vascular Plants of California*,

Second Edition (Baldwin et al. 2012). The vegetation classification used for this analysis is based on Sawyer et al. (2009) but it has been modified as needed to most accurately describe the existing land covers and/or vegetation communities in the APE. All species encountered were noted and identified to the lowest possible taxonomic level. Photographs were taken of representative areas of the APE as well as notable features (Appendix B).

The habitat requirements of each regionally occurring special-status species were assessed and compared to the type and quality of habitats observed within the APE during the survey. The survey was conducted to make an initial determination regarding the presence or absence of terrestrial biological resources including plants, birds, and other wildlife.

3 Existing Conditions

This section summarizes the results of the literature and database review as well as the biological field survey effort and provides further analysis of the data collected. Discussions regarding the general environmental setting, vegetation communities present, plant and wildlife species observed, special-status species potential, and other biological resource constraints in the APE are presented below. Representative photographs of the APE are provided in Appendix B and a complete list of all the plant and wildlife species observed in the APE during the field survey is presented in Appendix C.

3.1 Topography, Watershed, and Soils

The APE is located in the unincorporated community of Thermal in central Riverside County, within the Coachella Valley (Figure 1). The Coachella Valley is a desert valley that is bounded by the Little San Bernardino Mountains and Joshua Tree National Park in the north and east, the San Jacinto Mountains and Santa Rosa Mountains to the west and southwest, the Salton Sea to the southeast, and San Geronio Mountain to the north. The APE is located in the Whitewater River watershed and has an elevation ranging from 135 feet below mean sea level to 90 feet below mean sea level.

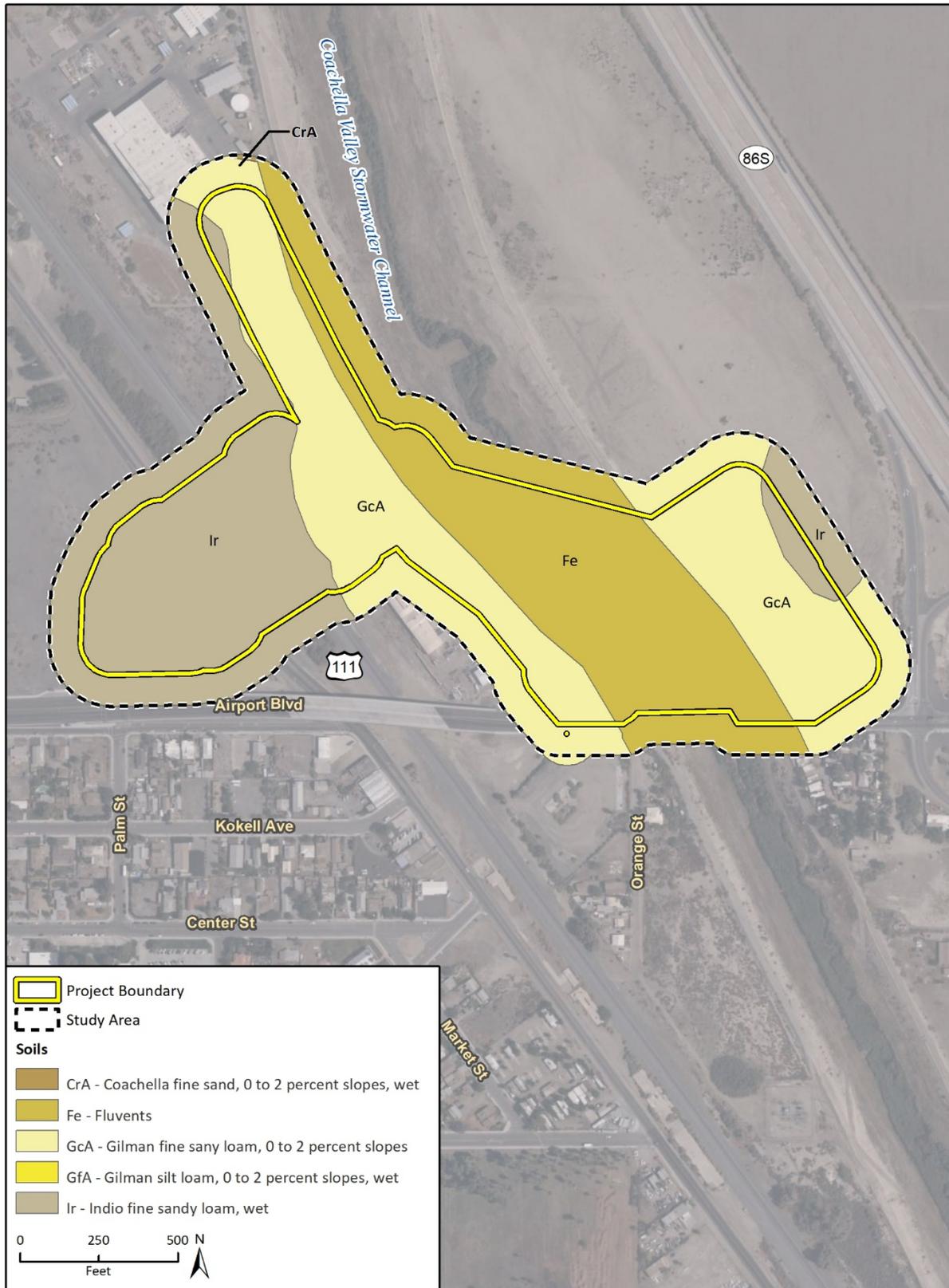
Based on the most recent soil survey for Riverside County (USDA NRCS 2021a) the APE contains five mapped soil types (Figure 3). These soil units are from the USDA NRCS Soil Survey of Riverside County, California, which was conducted on a broader scale than this study and did not necessarily include on-site observations. The physical characteristics of the soil units, as described below, are general and not necessarily indicative of characteristics currently present within the APE.

- Coachella fine sand, 0 to 2 percent slopes, wet
- Fluvents
- Gilman fine sandy loam, wet, 0 to 2 percent slopes
- Gilman silt loam, 0 to 2 percent slopes, wet
- Indio fine sandy loam, wet

The Coachella series consists of moderately drained soils formed in alluvium derived from igneous rock on alluvial fans. Coachella soils are used as prime farmland if irrigated and drained. This soil series is not considered hydric (USDA NRCS 2021a, 2021b). Coachella soils are located in the northwest section of the APE along Coachella Valley Stormwater Channel.

Fluvents soils are more or less freely drained and formed in recent water-deposited sediments on flood plains, fans, and deltas along rivers and small streams. Fluvents are frequently flooded, unless they are protected by dams or levees. Most Fluvents are used as rangeland, forest, pasture, or wildlife habitat. Some are used as cropland. Fluvents soils can be hydric (USDA NRCS 2021a, 2021b). Fluvents soils are located within the Coachella Valley Stormwater Channel.

Figure 3 Soils Map



Imagery provided by Microsoft Bing and its licensors © 2021.
 Additional data provided by NRCS SSURGO, 2021.

The Gilman series consists of very deep, well drained soils formed in stratified stream alluvium from mixed sources. The Gilman series is typically used for livestock grazing and irrigated cropland. In an undeveloped state, natural vegetation typically found on these soils include mesquite (*Prosopis* sp.), catclaw (*Senegalia greggii*), creosote bush (*Larrea tridentata*), arrow-weed (*Pluchea sericea*), and saltbush (*Atriplex* sp.). Cottonwoods (*Populus* sp.), willows (*Salix* sp.) and saltcedar (*Tamarix ramosissima*) grow in open areas. Gilman soils are not classified as hydric (USDA NRCS 2021a, 2021b). Gilman soils are located along either side of the Whitewater River/Coachella Valley Stormwater Channel within the APE.

The Indio series consists of very deep, well or moderately well drained soils formed in alluvium derived from mixed rock sources. The Indio series is typically used for irrigated cropland and livestock grazing. In other areas, natural vegetation typically present includes shadscale (*Atriplex confertifolia*), bursage (*Ambrosia* sp.), and arrow-weed. Indio soils are not classified as hydric (USDA NRCS 2021a, 2021b). Indio soils are located in the western and eastern portions of the APE.

3.2 Vegetation and Other Land Cover

The APE is within the lower Colorado desert which is a subdivision of the Sonoran Desert Region (DSon) geographic subdivision of California. The DSon subdivision is a component of the larger Desert Province (D) geographic region, which occurs within the larger California Floristic Province (Baldwin et al. 2012). Within the APE, three vegetation communities and two land cover types were observed (Figure 4) and are discussed in detail below. Appendix B includes a compendium of plant species observed within the APE during the reconnaissance survey.

3.2.1 Quailbush Scrub (*Atriplex lentiformis* Shrubland Alliance)

The quailbush scrub in the APE corresponds to natural shrubland stands described by Sawyer et al. (2009). Quailbush scrub is dominated by quailbush (*Atriplex lentiformis*) with a sparse understory of Russian thistle (*Salsola tragus*) and Arabian schismus (*Schismus arabicus*). Within the APE, this vegetation community has varying levels of disturbance. It occupies approximately 14.72 acres and is located throughout the APE.

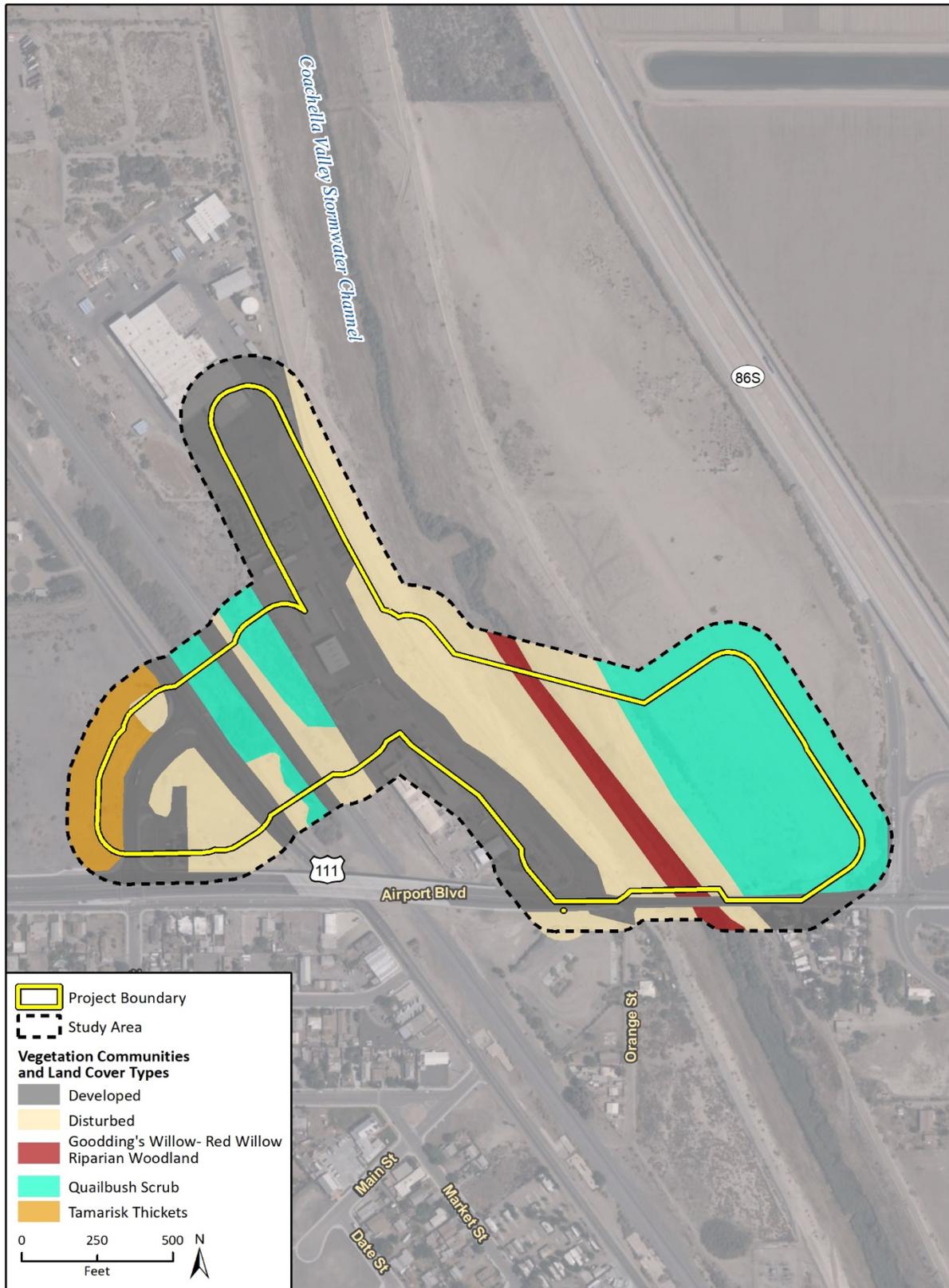
3.2.2 Goodding's Willow- Red Willow Riparian Woodland (*Salix gooddingii* – *Salix laevigata* Forest and Woodland Alliance)

Goodding's willow-red willow riparian woodland in the APE corresponds to natural woodlands described by Sawyer et al. (2009). Goodding's willow-red willow riparian woodland is dominated by Goodding's willow (*Salix gooddingii*) and cattail (*Typha* sp.) and contains other native species such as cocklebur (*Xanthium strumarium*) and common sunflower (*Helianthus annuus*). This plant community is limited to the CVSC in the eastern portion of the APE and occupies approximately 1.99 acres of the APE.

3.2.3 Tamarisk Thickets (*Tamarix* spp. Shrubland Semi-Natural Alliance)

The tamarisk thickets in the APE correspond to semi-natural stands described by Sawyer et al. (2009). Tamarisk thickets are dominated by tamarisk (*Tamarix* sp.), but also contain native species

Figure 4 Vegetation Communities and Land Cover Types



Imagery provided by Microsoft Bing and its licensors © 2021.

such as arrow-weed and quailbush. Tamarisk usually invades following disturbance. Within the APE, this vegetation community occupies approximately 2.54 acres and exists primarily in the western portion of the APE.

3.2.4 Disturbed

Disturbed habitats have been physically disturbed and are no longer recognizable as a native or naturalized vegetation association, but continue to retain a soil substrate. Typically, vegetation of disturbed areas, if present, is nearly exclusively composed of non-native plant species such as ruderal exotic species that take advantage of disturbance and limit the capability of the community to provide viable natural habitat for uses other than dispersal (Oberbauer et al. 2008). Disturbed areas are mostly devoid of vegetation and are generally located along road shoulders in the APE. Vegetative species present include Russian thistle and tumbleweed (*Amaranthus albus*). Approximately 16.44 acres of the disturbed areas occur within the APE.

3.2.5 Developed

Developed land includes areas that have been constructed upon or otherwise physically altered to an extent that native vegetation is no longer supported. It is characterized by permanent or semi-permanent structures, pavement or hardscape, and landscaped areas that often require irrigation (Oberbauer et al. 2008). Developed land comprises 20.81 acres of the APE and includes paved roads, railroad tracks, and buildings.

3.3 General Wildlife

The APE and surrounding areas provide habitat suitable for wildlife species that commonly occur in southern California rural and suburban areas. Wildlife observed on or adjacent to the site included bird species such as American crow (*Corvus brachyrhynchos*), mourning dove (*Zenaida macroura*), and rock pigeon (*Columba livia*). Coyote (*Canis latrans*) scat as well as lizard and small mammal burrows were observed within the APE. Refer to Appendix C for a complete list of wildlife species observed.

4 Sensitive Biological Resources

Local, state, and federal agencies regulate special-status species and other sensitive biological resources and require an assessment of their presence or potential presence to be conducted on-site prior to the approval of proposed development on a property. This section discusses sensitive biological resources observed within the APE and evaluates the potential for the APE to support additional sensitive biological resources.

4.1 Special-Status Species

Assessments for the potential occurrence of special-status species are based upon known ranges, habitat preferences for the species, species occurrence records from the CNDDDB, species occurrence records from other sites in the vicinity of the survey area, previous reports for the project site, and the results of surveys of the project site. The potential for each special-status species to occur in the study area was evaluated according to the following criteria:

- **Not Expected.** Habitat on and adjacent to the APE is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime), and species would have been identifiable on-site if present (e.g., oak trees).
- **Low Potential.** Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the APE is unsuitable or of very poor quality. The species is not likely to be found on the site.
- **Moderate Potential.** Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the APE is unsuitable. The species has a moderate probability of being found on the site.
- **High Potential.** All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the APE is highly suitable. The species has a high probability of being found on the site.
- **Present.** Species is observed in the APE or has been recorded (e.g., CNDDDB, other reports) on the site recently (within the last 5 years).

Plant or animal taxa may be considered “special-status” due to declining populations, vulnerability to habitat change, or because they have restricted ranges. Some are listed as threatened or endangered by the USFWS, the CDFW, or both and are protected by the federal and state ESAs. Others have been identified as special-status species by the USFWS, the CDFW, or by private conservation organizations, including the CNPS. Unlisted species of special concern do not have formal state or federal status, but are analyzed for potentially significant impacts under CEQA.

For the purpose of this report, special-status species are those plants and animals listed, proposed for listing, or candidates for listing as Threatened or Endangered by the USFWS under the ESA; those listed or candidates for listing as Rare, Threatened, or Endangered by the CDFW under the CESA or Native Plant Protection Act; those designated as Fully Protected (FP) by the CFGC; those recognized as Species of Special Concern (SSC) and Watch List (WL) species identified by the CDFW; and plants occurring on lists 1 and 2 of the CNPS California Rare Plant Rank (CRPR) system, per the following definitions:

- **Rank 1A** = Plants presumed extirpated in California and either rare or extinct elsewhere;
- **Rank 1B** = Rare, threatened or endangered in California and elsewhere;
- **Rank 2A** = Plants presumed extirpated in California but more common elsewhere.
- **Rank 2B** = Rare, threatened or endangered in California but more common elsewhere.

Additionally, the CNPS Threat Rank definitions are as follows:

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

In addition, special-status species are ranked globally (G) and subnationally (S) on a scale of 1 through 3 based on NatureServe's (2010) methodologies:

- **G1 or S1** - Critically Imperiled Globally or Statewide
- **G2 or S2** - Imperiled Globally or Statewide
- **G3 or S3** - Vulnerable to Extirpation or Extinction Globally or Statewide

4.1.1 Special-Status Plant Species

Rincon evaluated 43 special-status plant species documented by the CNDDDB and CNPS within a five-mile radius of the APE for their potential to occur within the APE (Appendix C). The assessment of the potential for these species to occur is based upon the presence of suitable habitat as identified during surveys and existing knowledge of species occurrences and distributions in the region. Of the 43 species evaluated, none have a moderate or high potential to occur based on the existing developed and disturbed nature of the APE, lack of suitable soils, inappropriate hydrologic conditions, and absence of appropriate vegetation communities in the APE. In addition, many of the species' CNDDDB occurrences are historical, dating from the early to mid-1920s. Therefore, special-status plant species either have a low potential or are not expected within the APE. Further, no special-status plant species were detected within the APE during the survey.

4.1.2 Special-Status Wildlife Species

Rincon evaluated 23 special-status wildlife species documented by the CNDDDB within five miles of the APE and identified in the USFWS IPaC resource list for their potential to occur within the APE (Appendix C). The assessment is based upon the presence of suitable habitat as identified during surveys and existing knowledge of species occurrences and distributions in the region. Of the 23 species evaluated, none have a moderate or high potential to occur within the APE based on low habitat quality in the developed and disturbed areas, lack of suitable vegetation that would support special-status wildlife species, and regular maintenance of the grounds or other disturbance from frequent human activity. While native vegetation does exist within the APE, the habitat quality is low relative to species requirements, and many CNDDDB occurrences are historical (dating from the early to mid-1900s). Therefore, special-status wildlife species either have a low potential or are not expected within the APE.

Southwestern Willow Flycatcher

Southwestern willow flycatcher (*Empidonax traillii extimus*) is a federally and state-listed endangered species that inhabits riparian woodlands in southern California. Riparian vegetation along the CVSC in the APE provides marginally suitable habitat for this species. However, this area is subject to regular maintenance for stormwater carrying capacity and there are high levels of disturbance from nearby transportation corridors. Therefore, this species has a low potential to occur in the APE.

Least Bell's Vireo

Least Bell's vireo (*Vireo bellii pusillus*; LBVI) is a federally and state-listed endangered species that inhabits low riparian areas in southern California in the vicinity of water or in dry river bottoms. They place their nests along margins of bushes or on twigs projecting into pathways. Riparian vegetation along the CVSC in the APE provides marginally suitable habitat for this species. However, as previously mentioned, this area is subject to disturbance from maintenance and nearby transportation corridors. Therefore, this species has a low potential to occur in the APE.

4.1.3 Nesting Birds

While not all birds are designated as special-status species, destruction of their eggs, nests, and nestlings is prohibited by federal and state law. Section 3503.5 of the CFGC specifically protects birds of prey, and their nests and eggs, against take, possession, or destruction. Section 3503 of the CFGC also incorporates restrictions imposed by the federal MBTA with respect to migratory birds (which consists of all native bird species). The APE provides suitable nesting habitat for numerous species of birds common in the area and nesting birds are likely to be present within the APE during the bird nesting season (January 1 through July 1 for raptors, February 1 through August 31 for burrowing owl (*Athene cunicularia*), and March 1 through September 15 for passerines). The burrowing owl may also occur during the winter in the APE.

4.2 Sensitive Plant Communities

Plant communities are considered sensitive biological resources if they have limited distributions, have high wildlife value, include sensitive species, or are particularly susceptible to disturbance. CDFW ranks sensitive communities as "threatened" or "very threatened" and keeps records of their occurrences in CNDDDB. Similar to special-status plant and wildlife species, vegetation alliances are ranked 1 through 5 based on NatureServe's (2010) methodology, with those alliances ranked globally (G) or statewide (S) as 1 through 3 considered sensitive, though there are some exceptions.

According to the CNDDDB, no occurrences of sensitive plant communities are recorded within a five-mile radius of the APE. However, Goodding's willow – red willow riparian woodland, which has a G4S3 ranking, occurs within a small portion of the APE located in the CVSC.

4.3 Jurisdictional Waters and Wetlands

In accordance with Section 1602 of the CFGC, the CDFW has jurisdiction over lakes and streambeds (including adjacent riparian resources). CDFW regulates wetland areas only to the extent that those wetlands are part of a river, stream, or lake. Under Section 404 of the Clean Water Act (CWA), the United States Army Corps of Engineers (USACE) has authority to regulate activities that discharge

dredge or fill material into wetlands or other “waters of the United States” through issuance of a Section 404 Permit. Finally, the Regional Water Quality Control Board (RWQCB) has jurisdiction over “waters of the state” pursuant to the Porter-Cologne Water Quality Control Act and has the responsibility for review of the project water quality certification per Section 401 of the federal CWA.

Areas potentially subject to USACE, RWQCB, and CDFW jurisdiction were assessed during the literature review and field visit; however, a formal jurisdictional delineation was not performed. The APE contains a small portion of the CVSC. The CVSC is mapped as a Riverine Wetland by the NWI (USFWS 2021c).

Within the APE, the CVSC is comprised of Goodding’s willow – red willow riparian woodland with dense cattail as codominant. Review of aerial photography indicates that the channel contains a surface connection to the Salton Sea. Due to the presence of a defined bed and bank, riparian vegetation and downstream connectivity, the CVSC would likely be subject to the jurisdiction of the USACE, RWQCB, and CDFW.

4.4 Wildlife Movement

Wildlife corridors are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as between foraging and denning areas, or they may be regional in nature, allowing movement across the landscape. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Examples of barriers or impediments to movement include housing and other urban development, roads, fencing, unsuitable habitat, or open areas with little vegetative cover. Regional and local wildlife movement is expected to be concentrated near topographic features that allow convenient passage, including roads, drainages, and ridgelines.

The APE is not located within or adjacent to a natural landscape block or an essential habitat connectivity corridor (Spencer et al. 2010). The APE is within the boundaries of the CVMSHCP plan area but outside of a Conservation Area. The APE is mostly located within and along roadways and other transportation corridors which are existing deterrents to wildlife movement. The majority of the APE is subject to frequent human disturbance and does not provide linkage to wildlife habitat. The CVSC may provide a corridor for localized wildlife movement.

4.5 Resources Protected By Local Policies and Ordinances

Riverside County Ordinance No. 559 protects oak (*Quercus*) woodlands and requires a permit for removal of any native trees on parcels greater than one-half acre in size and above 5,000 feet in elevation. No trees in the APE meet these criteria and the APE is below 5,000 feet in elevation. No other local policies or ordinances would apply to the project.

The CVSC Improvement Project - Avenue 54 to Thermal Drop Structure Project has a mitigation site that is located approximately 550 feet upstream of the Airport Boulevard bridge and encompasses 45.7 acres of streambed and stream-associated habitat. This area is subject to preservation and long-term management in accordance with the requirements of a Streambed Alteration Agreement

(Notification No. 1600-2019-0235-R6) obtained by CDFW for the CVSC Improvement Project. Management actions include vegetation management and invasive species control.

4.6 Habitat Conservation Plans

The APE is within the CVMSHCP plan area. The CVMSHCP is a comprehensive, multi-jurisdictional habitat conservation plan focusing on the conservation of species and their associated habitats in the Coachella Valley region of Riverside County, and in which the CVWD is a participating entity. The overall goal of the CVMSHCP is to maintain and enhance biological diversity and ecosystem processes within the region while allowing for future economic growth (CVAG 2007).

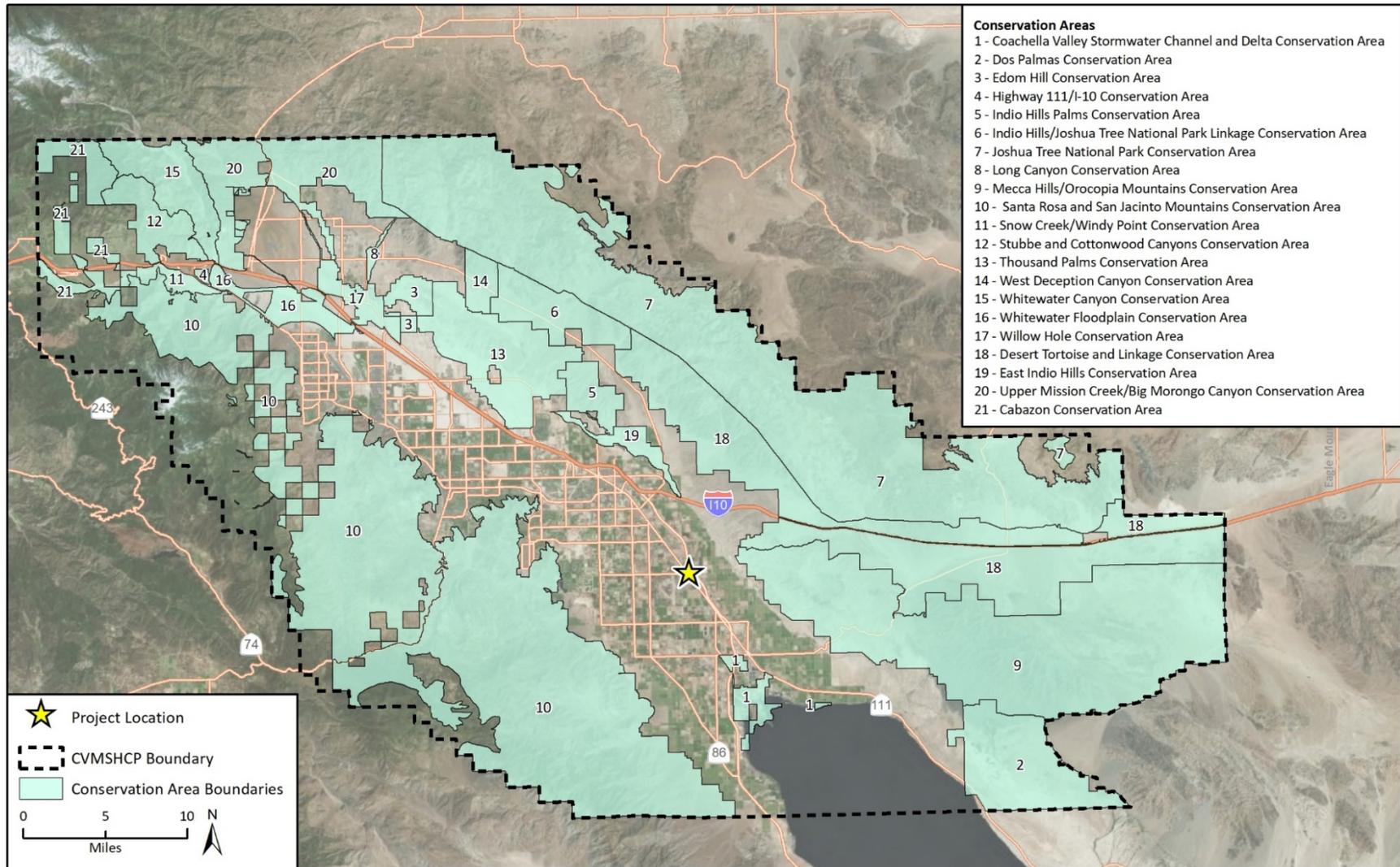
The CVMSHCP covers 27 special-status plant and wildlife species (CVMSHCP covered species) as well as 27 natural communities and includes 21 conservation areas. Covered species include both listed and non-listed species that are conserved by the CVMSHCP. The overall provisions for the Plan are subdivided according to specific resource conservation goals that have been organized according to geographic areas defined as Conservation Areas. These areas are identified as Core, Essential, or Other Conserved Habitat for special-status plant, invertebrate, amphibian, reptile, bird, and mammal species, Essential Ecological Process Areas, and Biological Corridors and Linkages.

Each Conservation Area has specific Conservation Objectives that must be satisfied. The CVMSHCP received final approval on October 1, 2008. The approval of the CVMSHCP and execution of the Implementing Agreement (IA) provides the signatories to the Plan coverage for take (with the exception of three species) during covered activities in concurrence with the appropriate wildlife agency. The three species not covered for take include peninsular bighorn sheep (*Ovis canadensis nelsoni*), Yuma clapper rail (*Rallus longirostris yumanensis*), and California black rail (*Laterallus jamaicensis coturniculus*). The CDFW acknowledges and agrees that if measures put forth in the CVMSHCP are fully complied with, the covered activities are not likely to result in the take of these species.

In addition, the purpose of CVMSHCP Section 4.5 Land Use Adjacency Guidelines is to avoid or minimize indirect effects from development adjacent to or within the Conservation Areas. In this context, “adjacent” means to share a common boundary with any parcel in a designated Conservation Area. Indirect effects include noise, lighting, drainage, intrusion of people, and the introduction of nonnative plants and nonnative predators such as dogs and cats.

The APE occurs within the planning boundary of the CVMSHCP but is not a part of any CVMSHCP Conservation Area (Figure 5). The closest Conservation Area is the Mecca Hills/Orocopia Mountains CVMSHCP Conservation Area, which is approximately five miles to the east of the APE. Per Section 4.3.18 of the CVMSHCP, this Conservation Area provides Core Habitat for the Mecca aster (*Xylorhiza cognata*), Orocopia sage (*Salvia greatae*), and desert tortoise (*Gopherus agassizii*), which is comprised of the Mecca Hills Wilderness and the Orocopia Mountains Wilderness (refer to Figure 4-23b in the CVMSHCP). In addition, the CVMSHCP Section 7.1 Covered Activities Outside Conservation Areas indicates that CVMSHCP permittee-proposed activities, and their associated potential impacts to covered species, outside of Conservation Areas would be covered by the CVMSHCP. Potential impacts to non-covered species would not be covered.

Figure 5 CVMSHCP Conservation Areas



4.7 Critical Habitat, Coastal Zone, Wild and Scenic Rivers, Essential Fish Habitat, and Coastal Barrier Resources

According to the USFWS Critical Habitat Portal (2021a), the APE is not within or adjacent to any critical habitat. The nearest critical habitat is for Peninsular bighorn sheep (*Ovis canadensis nelsoni*) and is located approximately 8.3 miles west of the APE. In addition, the APE is not within or adjacent to the Coastal Zone or any federally designated Wild and Scenic River. Furthermore, the APE is not within or adjacent to any Essential Fish Habitat or within lands covered by the Coastal Barrier Resources System.

5 Impact Analysis and Mitigation Measures

This section discusses the possible adverse impacts to sensitive biological resources that may occur from implementation of the proposed project and from operation/maintenance activities and suggests appropriate mitigation measures, including applicable mitigation measures from the original BRTS that would reduce those impacts to less than significant levels. Two mitigation measures from the original BRTS (BIO-1 and BIO-4) are not included in this SBRTS as they no longer relate to biological resources within the APE.

5.1 Special-Status Species

5.1.1 Special-Status Plant Species

As discussed in Section 4.1, the APE does not provide suitable habitat for most special-status plant species given the disturbance history of the APE, lack of suitable soils, inappropriate hydrologic conditions, or absence of appropriate vegetation communities. No special-status plant species have a moderate or high potential to occur within the APE. As a result, project impacts to special-status plant species are not expected and no mitigation measures are recommended. One special-status plant species (Coachella Valley milk-vetch; *Astragalus lentiginosus* var. *coachellae*) was identified in the IPaC report (Attachment E). The APE does not contain suitable habitat for this species; therefore, it is not expected to occur in the APE and the project would result in no effect to this species.

5.1.2 Special-Status Wildlife Species

As discussed in Section 4.1, the APE does not provide suitable habitat for most special-status wildlife species given their known distributions and habitat requirements relative to existing site conditions that include existing development, low quality habitat relative to species needs, and regular maintenance or other disturbance from frequent human activity. The riparian habitat along the CVSC provides marginally suitable habitat for two federally endangered species (southwestern willow flycatcher and least Bell's vireo), but these species have a low potential to occur due to the disturbed nature of the APE. Other special-status species identified in the IPaC report have been addressed in Attachment C, including Yuma Ridgways (clapper) rail (*Rallus obsoletus yumanensis*), Coachella Valley fringe-toed lizard (*Uma inornata*), and desert tortoise (*Gopherus agassizii*). The APE does not contain suitable habitat for these species; therefore, they are not expected to occur in the APE and the project would result in no effect to these species. No special-status wildlife species have a moderate or high potential to occur. As described in Section 1.2, the project would tunnel approximately 950 linear feet under the CVSC. As a result, no direct impacts to marginally suitable habitat for southwestern willow flycatcher or least Bell's vireo are expected. Elements of suitable nesting and wintering habitat for burrowing owl occur in scattered open areas in the APE, in particular the eastern portion. Impacts to special-status species from construction activities and resulting development would be addressed through implementation of Original BRTS Mitigation Measures (MM) BIO-2 and BIO-3. Additionally, no operational impacts to habitat that may be suitable for special-status species are expected. Original MM BIO-1 "Roosting Bats Impact Avoidance and Minimization" has not been included in this SBRTS because no special-status bat species are expected to roost within the APE. No additional mitigation measures are recommended.

BIO-2 Burrowing Owl Impact Avoidance and Minimization (Original BRTS Measure)

To avoid potential impacts to burrowing owl (BUOW), a pre-construction clearance survey for BUOW shall be conducted no more than fourteen (14) days prior to initiation of construction activities. The BUOW pre-construction survey shall be conducted on-foot within the proposed disturbance area including a 500-foot buffer. The survey methods will be consistent with the Staff Report on Burrowing Owl Mitigation (CDFW 2012) and shall consist of walking parallel transects spaced adequately to obtain 100% visual coverage of the site. The survey shall be conducted by a biologist familiar with the identification of BUOW and their habitat.

If burrowing owls are found within the APE during the pre-construction surveys, active burrows will be avoided. If possible, timing and location of construction activities will be adjusted to avoid all potential impacts to occupied burrows during the breeding season. Buffer zones for occupied burrows will be established at 500 feet during the breeding season (February 1 to August 31) and at 100 feet for the non-breeding season. These buffers may be adjusted in consultation with CDFW and monitored at the discretion of a qualified biologist. The buffer zone will be clearly marked with flagging and/or construction fencing.

5.1.3 Nesting Birds

Nesting bird habitat is present within and adjacent to the APE, particularly within landscaped trees, quailbush scrub, tamarisk thickets and riparian habitat associated with the CVSC. Nesting bird species are protected by the CFGC 3503, CFGC 3503.5, and MBTA. If initial ground disturbance and vegetation/tree trimming or removal is required during the nesting bird season, the project may impact nesting birds through injury, mortality, or disruption of normal adult behaviors resulting in the abandonment or harm to eggs and nestlings. Construction occurring within the vicinity of nesting birds may also indirectly impact individuals through construction noise, dust, and vibration from equipment. Measures necessary for compliance with CFGC 3503, CFGC 3503.5, and the MBTA are provided below. Similar to the impact described in the original Saint Anthony's and Valley View Water Systems BRTS (Rincon 2019), the potential impact to nesting birds would remain less than significant with mitigation incorporated. Mitigation Measure BIO-3 in the original BRTS would apply, and requires the following:

BIO-3 Nesting Birds (Original BRTS Measure)

Project-related activities should occur outside of the bird breeding season (typically January 1 to September 15 to account for both passerines and raptors) to the extent practicable. If construction must occur within the bird breeding season, then no more than three days prior to initiation of ground disturbance and/or vegetation removal, a nesting bird and raptor pre-construction survey shall be conducted by a qualified biologist within the disturbance footprint plus a 100-foot buffer (500-foot for raptors), where feasible.

Pre-construction nesting bird and raptor surveys shall be conducted during the time of day when birds are active and shall factor in sufficient time to perform this survey adequately and completely. A report of the nesting bird and raptor survey results, if applicable, shall be submitted to the lead agency for review and approval prior to ground and/or vegetation disturbance activities.

If nests are found, their locations shall be flagged. An appropriate avoidance buffer ranging in size from 25 to 50 feet for passerines, and up to 500 feet for raptors depending upon the species and the proposed work activity, shall be determined and demarcated by a qualified biologist with bright orange construction fencing or other suitable flagging. Active nests shall be monitored at a

minimum of once per week until it has been determined that the nest is no longer being used by either the young or adults. No ground disturbance shall occur within this buffer until the qualified biologist confirms that the breeding/nesting is completed, and all the young have fledged. If no nesting birds are observed during pre-construction surveys, no further actions would be necessary.

5.2 Sensitive Plant Communities

Goodding's willow-red willow riparian woodland occurs in the CVSC within the APE. No other sensitive plant communities were documented within the APE. The proposed project would tunnel underneath the CVSC, thereby avoiding direct impacts to this vegetation community. Other indirect impacts from construction activities and resulting development would be addressed through erosion control measures recommended in Section 5.3, below. Operational impacts to sensitive vegetation communities are also not expected. Any impacts to this community would therefore not be significant. No additional mitigation measures are recommended.

5.3 Jurisdictional Waters and Wetlands

The APE contains the CVSC, which is potentially subject to USACE, RWQCB, and CDFW jurisdiction. The CVSC connects directly to the Salton Sea, which is considered a Traditionally Navigable Water by the USACE. Impacts to jurisdictional waters are anticipated to be avoided through the project design process. The project would avoid direct impacts to jurisdictional waters via horizontal directional drilling (HDD) or jack and bore pipeline installation.

As part of the project design and in compliance with the National Pollutant Discharge Elimination System (NPDES) Construction General Permit requirements, control measures would be implemented to prevent potential erosion, stormwater, and/or hazardous materials impacts to adjacent, potentially jurisdictional features. These requirements include preparation of a project-specific Stormwater Pollution Prevention Plan (SWPPP). As part of a SWPPP, best management practices would be developed and implemented to ensure avoidance of indirect impacts to potential jurisdictional resources. Erosion control measures that may be used include silt fences, sandbags, certified weed-free straw wattles and straw bales, and other control measures as needed. Adherence to MM BIO-5, which includes preparation of a Frac-Out Prevention and Contingency Plan, would also ensure potential indirect impacts to jurisdictional waters are minimized. MM BIO-5 is provided below. Based on the project design avoidance of the CVSC, implementation of best management practices for pollution prevention, and implementation of Supplemental MM BIO-5; potential impacts to jurisdictional waters and wetlands would be less than significant.

BIO-5 Frac-Out Prevention and Contingency Plan (Supplemental Measure)

If the HDD method of trenchless crossing of the CVSC is determined to be required, CVWD will require its construction contractor to prepare a Frac-Out Prevention and Contingency Plan prior to construction. At a minimum, the Plan will prescribe the following measures to ensure protection of jurisdictional resources:

- Verify recommended depth of the pipeline under the channel based on soil properties and risk for potential frac-out during HDD operation
- Procedures to minimize the potential for frac-out associated with HDD
- Procedures for timely detection of frac-outs
- Procedures for timely response and remediation in the event of a frac-out, and

- Monitoring of drilling and frac-out response activities in jurisdictional areas by a qualified biologist.

5.4 Wildlife Movement

Wildlife movement and habitat fragmentation are important issues in assessing impacts to wildlife. Habitat fragmentation occurs when a proposed action results in a single, unified habitat area being divided into two or more areas in such a way that the division isolates the two new areas from each other. Isolation of habitat occurs when wildlife cannot move freely from one portion of the habitat to another or from one habitat type to another, as in the fragmentation of habitats within and around “checkerboard” residential development. Habitat fragmentation also can occur when a portion of one or more habitats is converted into another habitat, as when annual burning converts scrub habitats to grassland habitats.

While the project APE crosses the CVSC, a potential local habitat connectivity corridor, project design includes trenchless construction methods (HDD) under the channel and therefore would avoid disturbing the channel and the riparian habitat within it. As a result, the project would not inhibit wildlife movement.

The proposed project footprint is mostly located within previously developed and disturbed areas that offer little to no value to wildlife movement. The project components that would be installed in these areas would be installed underground and would also not inhibit wildlife movement. The proposed project is not anticipated to have an incremental effect on localized and urban adapted wildlife movement or create habitat fragmentation in the region, nor is it anticipated to have significant impact on regional wildlife movement. Direct impacts to wildlife movement as a result of project implementation would be less than significant. A limited amount of overnight work involving the use of floodlighting may be required for the trenchless construction methods to prevent bore hole collapse. As such, Supplemental MM BIO-6 is recommended to reduce indirect wildlife movement impacts from floodlighting such that they would be less than significant with mitigation incorporated. Additionally, any operational activities are not expected to impact wildlife movement.

BIO-6 Light Abatement (Supplemental Measure)

To prevent indirect impacts to sensitive habitat areas (Goodding’s willow-red willow riparian woodland) that facilitate wildlife movement, all safety and security lighting at construction work areas and staging areas will be directed downward and shielded to avoid light spilling into sensitive habitat areas.

5.5 Local Policies and Ordinances

As described in Section 4.5, *Resources Protected By Local Policies and Ordinances*, no trees in the APE meet the criteria for protected trees pursuant to Riverside County Ordinance No. 559. As such, the project would not impact protected trees.

The northern portion of the APE intersects an approximately 45.7-acre mitigation area associated with the CVSC Improvement Project – Avenue 54 to Thermal Drop Structure Project. The mitigation area is located approximately 550 feet upstream of the Airport Boulevard bridge and consists of streambed and stream-associated habitat. Because the mitigation area is limited to the CVSC streambed and the project would avoid impacts to the CVSC, impacts to the mitigation area are not anticipated. Nevertheless, implementation of MM BIO-7 would ensure that the project avoids the

mitigation area and mitigation obligations are adhered to in the event of unforeseen impacts to the CVSC (i.e., frac out) and this impact would be less than significant with mitigation incorporated.

BIO-7 CVSC Mitigation Site Avoidance (Supplemental Measure)

Prior to project construction, the boundaries of the CVSC Improvement Project – Avenue 54 to Thermal Drop Structure Project mitigation site within 100 feet of project work areas shall be flagged for avoidance by qualified personnel in coordination with CVWD. All work shall avoid the mitigation site. In the event of unforeseen impacts to the mitigation site (i.e., frac out), the site shall be restored in accordance with the Habitat Mitigation and Monitoring Plan for On-site Mitigation (Streambed Alteration Agreement No. 1600-2019-0235-R6) to ensure existing mitigation obligations at the site are fulfilled.

5.6 Adopted or Approved Plans

As discussed in Section 4.8, the CVWD participates in the CVMSHCP and the proposed project is within the CVMSHCP plan area. The APE is entirely outside of the nearest Conservation Area. As a result, proposed activities at the project site would avoid direct impacts to CVMSHCP Conservation Areas and would not conflict with the CVMSHCP Conservation Objectives. Additionally, no CVMSHCP covered or otherwise special-status species have a moderate or high potential to occur within the APE. The project therefore would avoid impacts to any such species and would not conflict with the CVMSHCP. Original MM BIO-4 “CVMSHCP Surveys” has not been included in this SBRTS because the APE does not occur within a Conservation Area.

5.7 Critical Habitat, Coastal Zone, Wild and Scenic Rivers, Essential Fish Habitat, and Coastal Barrier Resources

Since the APE is not within any Essential Fish Habitat or within or adjacent to the Coastal Zone, Coastal Barrier Resources System, critical habitat, or any federally designated Wild and Scenic Rivers, no impacts would occur and, therefore, no mitigation measures are recommended. The nearest critical habitat is for Peninsular bighorn sheep (*Ovis canadensis nelsoni*) and is located approximately 8.3 miles west of the APE. The APE does not contain the required steep walled canyons and ridges with sandy washes to support Peninsular bighorn sheep. As such, this species is not expected to occur within the APE and the project would result in no effect to the species. As a result, direct or indirect effects to federally designated critical habitat are not expected. No additional mitigation measures are recommended.

6 References

- Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken, editors. 2012. The Jepson Manual: vascular plants of California, second edition. University of California Press, Berkeley.
- Calflora. 2021. Information on wild California plants for conservation, education, and appreciation. Berkeley, CA. Updated online and accessed via: www.calflora.org.
- California Department of Fish and Wildlife (CDFW). 2021a. California Natural Diversity Database, Rarefind V.. Accessed July 2021.
- _____. 2021b. Biogeographic Information and Observation System (BIOS). Retrieved July 2021 from www.wildlife.ca.gov/data/BIO
- _____. 2012. Staff Report on Burrowing Owl Mitigation. March 7, 2012.
- California Invasive Plant Council Inventory. 2021. Available at: <https://www.cal-ipc.org/plants/inventory/>.
- California Native Plant Society. 2021. Inventory of Rare and Endangered Plants. V.7-08c-Interim 8-22-02. Updated online and accessed via: www.rareplants.cnps.org.
- Coachella Valley Association of Governments (CVAG). 2007. Coachella Valley Multiple Species Habitat Conservation Plan. Online at: <http://www.cvmshcp.org/>. Accessed August 2021
- NatureServe. 2010. Ecosystem Classification. Online at: <http://www.natureserve.org/>
- Oberbauer et al. 2008. Draft Vegetation Communities of San Diego County. Available at: http://www.sandiegocounty.gov/content/dam/sdc/pds/ceqa/Soitec-Documents/Final-EIR-Files/references/rtcref/ch9.0/rtcrefaletters/O14%202014-12-19_OberbauerTM2008.pdf March.
- Rincon Consultants, Inc. 2019. Saint Anthony's and Valley View Water Systems Consolidation Project. July 2019.
- Sawyer, J. O., T. Keeler-Wolf, and J.M. Evens. 2009. A Manual of California Vegetation, Second Edition. California Native Plant Society, Sacramento, California.
- Spencer, W.D., P. Beier, K. Penrod, K. Winters, C. Paulman, H. Rustigian-Romsos, J. Strittholt, M. Parisi, and A. Pettler. 2010. California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California. Prepared for California Department of Transportation, California Department of Fish and Wildlife, and Federal Highways Administration.
- Terra Nova Planning & Research, Inc. 2019. Coachella Valley Stormwater Channel Improvement Project (Avenue 54 to Thermal Drop Structure) Final Environmental Impact Report. SCH No. 2015111067. October 30, 2019.
- United States Department of Agricultural, Natural Resources Conservation Service. 2018. USDA Guide for Preparing Environmental Assessments Under §1907-C for Projects with a CEQA Document. Accessed via: <http://cward.org/ArchiveCenter/ViewFile/Item/887>. May 15, 2018.

- _____. 2021a. Web Soil Survey. Accessed July 2021. Available at:
<https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>.
- _____. 2021b. Lists of Hydric Soils. National Cooperative Soil Survey, U.S. Department of Agriculture. Accessed via: <https://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/use/hydric/>.
- United States Fish and Wildlife Service (USFWS). 2019. Section 7 Consultation Guidance for Preparing a Biological Assessment. Available at:
https://www.fws.gov/midwest/endangered/section7/ba_guide.html. Updated May 20, 2019.
- _____. 2021a. Critical Habitat Portal. Available at: <https://ecos.fws.gov/ecp/report/table/critical-habitat.html>
- _____. 2021b. Information for Planning and Consultation online project planning tool. Available at:
<https://ecos.fws.gov/ipac/>
- _____. 2021c. National Wetlands Inventory. Available at: <https://www.fws.gov/wetlands/>
- Woodard & Curran. 2019. Public Review Draft Initial Study and Mitigated Negative Declaration Saint Anthony Mobile Home Park Water Consolidation Project. Available at:
<https://www.cvwd.org/ArchiveCenter/ViewFile/Item/745>. July 2019.

7 List of Preparers

Rincon Consultants, Inc.

Field Survey/ Primary Author

- Sarah Toback, Associate Biologist

Technical Review

- Brenna Vredevelde, Supervising Biologist/Program Manager
- Steven J. Hongola, Vice President/Principal Biologist

Graphics

- Isabelle Radis, GIS Analyst

Appendix A

Site Photographs



Photograph 1. Southeast facing view of tamarisk thickets in western portion of APE.



Photograph 2. West facing view of disturbed land cover along paved roads in APE.

Coachella Valley Water District and Woodard & Curran
Valley View Water Systems Consolidation Project Phase IIIA-2 Segment



Photograph 3. South facing photo of quailbush scrub habitat along the railroad tracks within the APE.



Photograph 4. South facing view of paved roads and development within the APE.



Photograph 5. East facing view of Goodding's willow- red willow riparian habitat within the CVSC.



Photograph 6. Southeast facing view of disturbed dirt access road along CVSC.



Photograph 7. South facing view of quailbush scrub within the eastern portion of the APE.



Photograph 8. North facing view of quailbush scrub within the eastern portion of the APE.

Appendix B

Floral and Faunal Compendium

Plant Species Observed Within the APE on July 30, 2021

Scientific Name	Common Name	Status	Native or Non-Native
<i>Allenrolfea occidentalis</i>	iodine bush	–	Native
<i>Amaranthus albus</i>	tumbleweed	–	Non-native
<i>Arundo donax</i>	giant reed	Cal-IPC High	Non-native
<i>Atriplex lentiformis</i>	quailbush	–	Native
<i>Distichlis spicata</i>	salt grass	–	Native
<i>Helianthus annuus</i>	common sunflower	–	Native
<i>Pluchea sericea</i>	arrow-weed	–	Native
<i>Salsola tragus</i>	Russian thistle	Cal-IPC Limited	Non-native
<i>Schismus arabicus</i>	Arabian schismus	Cal-IPC Limited	Non-native
<i>Suaeda nigra</i>	bush seepweed	–	Native
<i>Tamarix</i> sp.	tamarisk	Cal-IPC Limited or High (depending on species)	Non-native
<i>Washingtonia</i> sp.	fan palm	–	Non-native
<i>Xanthium strumarium</i>	cocklebur	–	Native

List Info Sources: Calflora 2021, Cal-IPC 2021

Wildlife Species Observed Within the APE on July 30, 2021

Scientific Name	Common Name	Status	Native or Non-Native
Birds			
<i>Columbia livia</i>	rock pigeon	–	Non-native
<i>Corvus brachyrhynchos</i>	American crow	–	Native
<i>Corvus corax</i>	common raven	–	Native
<i>Haemorhous mexicanus</i>	house finch	–	Native
<i>Zenaida macroura</i>	mourning dove	–	Native
Mammals			
<i>Canis latrans</i>	coyote (scat)	–	Native
Reptiles			
<i>Uta stansburiana</i>	common side-blotched lizard	–	Native

This page intentionally left blank.

Appendix C

Special Status Species Evaluation Tables

Special Status Plant and Wildlife Species in the Regional Vicinity of the Project Site

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/ Observations
Plants and Lichens				
<i>Abronia villosa</i> var. <i>aurita</i> chaparral sand- verbena	None/None G5T2?/S2 1B.1	Annual herb. Blooms Jan-Sept. Occurs in chaparral, coastal scrub. Sandy areas of the South Coast and Sonoran Desert Floristic Provinces. 80-1600m (260-5250ft).	Not Expected	The APE is outside the known elevation range of this species.
<i>Ambrosia monogyra</i> singlewhorl burrobrush	None/None G5/S2 2B.2	Chaparral, Sonoran desert scrub. Sandy soils. 10-500m. Blooms Aug-Nov.	Not Expected	The APE is outside the known elevation range of this species.
<i>Astragalus bernardinus</i> San Bernardino milk-vetch	None/None G3/S3 1B.2	Joshua tree "woodland", Pinyon and juniper woodland. Granitic or carbonate substrates. 900-2000m. Blooms Apr-Jun.	Not Expected	The APE is outside the known elevation range of this species.
<i>Astragalus lentiginosus</i> var. <i>borreganus</i> Borrego milk-vetch	None/None G5T5?/S4 4.3	Mojavean desert scrub, Sonoran desert scrub. Sandy flats and semi-stabilized dunes, locally abundant after rains. 30-895m. Blooms Feb-May.	Not Expected	The APE is outside the known elevation range of this species.
<i>Astragalus lentiginosus</i> var. <i>coachellae</i> Coachella Valley milk-vetch	FE/None G5T1/S1 1B.2	Desert dunes, Sonoran desert scrub. Sandy flats, washes, outwash fans, sometimes on dunes. 40-655m. Blooms Feb- May.	Not Expected	The APE is outside the known elevation range of this species.
<i>Astragalus preussii</i> var. <i>laxiflorus</i> Lancaster milk- vetch	None/None G4T2/S1 1B.1	Chenopod scrub. Alkaline clay flats or gravelly or sandy washes and along draws in gullied badlands. 700-735 m in California. 700-700m. Blooms Mar-May.	Not Expected	The APE is outside the known elevation range of this species.
<i>Astragalus sabulonum</i> gravel milk-vetch	None/None G4G5/S2 2B.2	Desert dunes, Mojavean desert scrub, Sonoran desert scrub. Sandy or gravelly flats, washes, and roadsides. - -60-930m. Blooms Feb-Jun.	Low Potential	Marginally suitable habitat (Sonoran desert scrub [quailbush scrub]) and roadsides are present within the APE but are heavily disturbed.
<i>Astragalus tricarinatus</i> triple-ribbed milk- vetch	FE/None G2/S2 1B.2	Joshua tree "woodland", Sonoran desert scrub. Hot, rocky slopes in canyons and along edge of boulder-strewn desert washes, with Larrea and Encelia. 450-1190m. Blooms Feb-May.	Not Expected	The APE is outside the known elevation range of this species.

Coachella Valley Water District and Woodard & Curran
Valley View Water Systems Consolidation Project Phase IIIA-2 Segment

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/ Observations
<i>Ayenia compacta</i> California ayenia	None/None G4/S3 2B.3	Mojavean desert scrub, Sonoran desert scrub. Sandy and gravelly washes in the desert; dry desert canyons. 150-1095m. Blooms Mar-Apr.	Not Expected	The APE is outside the known elevation range of this species.
<i>Bursera microphylla</i> little-leaf elephant tree	None/None G4/S2 2B.3	Sonoran desert scrub. Hillsides and washes and on canyon sides in California; rocky sites. 200-700m. Blooms Jun-Jul.	Not Expected	The APE is outside the known elevation range of this species.
<i>Chorizanthe leptotheca</i> Peninsular spineflower	None/None G3/S3 4.2	Chaparral, Coastal scrub, Lower montane coniferous forest. On granitic soils, in alluvial fans. 300-1900m. Blooms May-Aug.	Not Expected	The APE is outside the known elevation range of this species.
<i>Ditaxis clyariana</i> glandular ditaxis	None/None G3G4/S2 2B.2	Mojavean desert scrub, Sonoran desert scrub. In dry washes and on rocky hillsides. Sandy soils. 0-465m. Blooms Oct-Mar.	Not Expected	The APE is outside the known elevation range of this species.
<i>Ditaxis serrata</i> var. <i>californica</i> California ditaxis	None/None G5T3T4/S2? 3.2	Sonoran desert scrub. On sandy washes and alluvial fans of the foothills and lower desert slopes. 30-1000m. Blooms Mar-Dec.	Not Expected	The APE is outside the known elevation range of this species.
<i>Eremothera boothii</i> ssp. <i>boothii</i> Booth's evening-primrose	None/None G5T4/S3 2B.3	Joshua tree "woodland", Pinyon and juniper woodland. 815-2400m. Blooms Apr-Sep.	Not Expected	The APE is outside the known elevation range of this species.
<i>Eriastrum harwoodii</i> Harwood's eriastrum	None/None G2/S2 1B.2	Desert dunes. Sandy soils. 15-1100m. 125-915m. Blooms Mar-Jun.	Not Expected	The APE is outside the known elevation range of this species.
<i>Eschscholzia androuxii</i> Joshua Tree poppy	None/None G3/S3 4.3	Joshua tree "woodland", Mojavean desert scrub. Desert washes, flats, and slopes. Sandy, gravelly, and/or rocky soils. 585-1685m. Blooms Feb-May(Jun).	Not Expected	The APE is outside the known elevation range of this species.
<i>Euphorbia abramsiana</i> Abrams' spurge	None/None G4/S2 2B.2	Mojavean desert scrub, Sonoran desert scrub. Sandy sites. - -5-1310m. Blooms (Aug)Sep-Nov.	Low Potential	Marginally suitable Sonoran desert scrub (quailbush scrub) is present, however, the APE is outside the known elevation range of this species.
<i>Euphorbia arizonica</i> Arizona spurge	None/None G5/S3 2B.3	Sonoran desert scrub. Sandy soils. 50-300m. Blooms Mar-Apr.	Not Expected	The APE is outside the known elevation range of this species.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/ Observations
<i>Euphorbia platysperma</i> flat-seeded spurge	None/None G3/S1 1B.2	Desert dunes, Sonoran desert scrub. Sandy places or shifting dunes. Possibly a waif in California; more common in Arizona and Mexico. 65-100m. Blooms Feb-Sep.	Not Expected	The APE is outside the known elevation range of this species.
<i>Funastrum crispum</i> wavyleaf twinvine	None/None G4/S1 2B.2	Chaparral, Pinyon and juniper woodland. 1165-1840m. Blooms May-Aug.	Not Expected	The APE is outside the known elevation range of this species.
<i>Horsfordia alata</i> pink velvet-mallow	None/None G5/S4 4.3	Sonoran desert scrub. Rocky sites. 100-500m. Blooms Feb-Dec.	Not Expected	The APE is outside the known elevation range of this species.
<i>Horsfordia newberryi</i> Newberry's velvet-mallow	None/None G5/S4 4.3	Sonoran desert scrub. Rocky sites. 3-800m. Blooms Feb-Dec.	Not Expected	The APE is outside the known elevation range of this species.
<i>Jaffuelobryum raui</i> Rau's jaffuelobryum moss	None/None G4/S2 2B.3	Alpine dwarf scrub, Chaparral, Mojavean desert scrub, Sonoran desert scrub. Dry openings, rock crevices. On dry sandstone or limestone. 490-2100m.	Not Expected	The APE is outside the known elevation range of this species.
<i>Johnstonella costata</i> ribbed cryptantha	None/None G4G5/S4 4.3	Desert dunes, Mojavean desert scrub, Sonoran desert scrub. Sandy and gravelly places. - - 60-500m. Blooms Feb-May.	Not Expected	Suitable desert dunes, Mojavean desert scrub, and Sonoran desert scrub habitats do not occur within the APE. In addition, suitable sandy or gravelly substrates are not present.
<i>Johnstonella holoptera</i> winged cryptantha	None/None G4G5/S4 4.3	Mojavean desert scrub, Sonoran desert scrub. Gravelly to rocky soils in washes, on slopes and ridges. 100-1690m. Blooms Mar-Apr.	Not Expected	The APE is outside the known elevation range of this species.
<i>Juncus acutus</i> ssp. <i>leopoldii</i> southwestern spiny rush	None/None G5T5/S4 4.2	Coastal dunes, Marshes and swamps, Meadows and seeps. Moist saline places. 3-900m. Blooms (Mar)May-Jun.	Not Expected	The APE is outside the known elevation range of this species.
<i>Juncus cooperi</i> Cooper's rush	None/None G4/S3 4.3	Meadows and seeps. Mesic sites; alkaline or saline soils. - - 260-1770m. Blooms Apr-May(Aug).	Not Expected	Suitable meadow and seep habitats do not occur within the APE.
<i>Leptosiphon floribundus</i> ssp. <i>hallii</i> Santa Rosa Mountains leptosiphon	None/None G4T1T2/S1S2 1B.3	Pinyon and juniper woodland, Sonoran desert scrub. Desert canyons. 1000-2000m. Blooms May-Jul(Nov).	Not Expected	The APE is outside the known elevation range of this species.

Coachella Valley Water District and Woodard & Curran
Valley View Water Systems Consolidation Project Phase IIIA-2 Segment

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/ Observations
<i>Lycium torreyi</i> Torrey's box-thorn	None/None G4G5/S3 4.2	Mojavean desert scrub, Sonoran desert scrub. Sandy, rocky, washes, streambanks, desert valleys. - -50-1220m. Blooms (Jan-Feb)Mar-Jun(Sep-Nov).	Low Potential	Marginally suitable Sonoran desert scrub (quailbush scrub) and streambanks (along CVSC) are present within the APE but are heavily disturbed.
<i>Marina orcuttii</i> var. <i>orcuttii</i> California marina	None/None G2G3T1T2/S2? 1B.3	Chaparral, Pinyon and juniper woodland, Sonoran desert scrub. Gravelly hillsides, rocky soil. 1050-1160m. Blooms May-Oct.	Not Expected	The APE is outside the known elevation range of this species.
<i>Matelea parvifolia</i> spear-leaf matelea	None/None G5/S3 2B.3	Mojavean desert scrub, Sonoran desert scrub. Dry rocky ledges and slopes. 440-1095m. Blooms Mar-May(Jul).	Not Expected	The APE is outside the known elevation range of this species.
<i>Mirabilis tenuiloba</i> slender-lobed four o'clock	None/None G5/S4 4.3	Sonoran desert scrub. 230-1095m. Blooms (Feb)Mar-May.	Not Expected	The APE is outside the known elevation range of this species.
<i>Nemacaulis denudata</i> var. <i>gracilis</i> slender cottonheads	None/None G3G4T3?/S2 2B.2	Coastal dunes, Desert dunes, Sonoran desert scrub. In dunes or sand. - -50-400m. Blooms (Mar)Apr-May.	Low Potential	Marginally suitable Sonoran desert scrub (quailbush scrub) is present within the APE but heavily disturbed.
<i>Petalonyx linearis</i> narrow-leaf sandpaper-plant	None/None G4/S3? 2B.3	Mojavean desert scrub, Sonoran desert scrub. Sandy or rocky canyons. - -25-1115m. Blooms (Jan-Feb)Mar-May(Jun-Dec).	Not Expected	The APE is outside the known elevation range of this species and suitable sandy or rocky canyons are not present.
<i>Phaseolus filiformis</i> slender-stem bean	None/None G5/S1 2B.1	Sonoran desert scrub. Gravelly washes bordered by creosote bush-dominated rocky slopes. 120 m -125m. Blooms Apr.	Not Expected	The APE is outside the known elevation range of this species.
<i>Pseudorontium cyathiferum</i> Deep Canyon snapdragon	None/None G4G5/S1 2B.3	Sonoran desert scrub. Rocky sites. 0-800m. Blooms Feb-Apr.	Not Expected	The APE is outside the known elevation range of this species.
<i>Saltugilia latimeri</i> Latimer's woodland-gilia	None/None G3/S3 1B.2	Chaparral, Mojavean desert scrub, Pinyon and juniper woodland. Rocky or sandy substrate; sometimes in washes, sometimes limestone. 400-1900m. Blooms Mar-Jun.	Not Expected	The APE is outside the known elevation range of this species.
<i>Selaginella eremophila</i> desert spike-moss	None/None G4/S2S3 2B.2	Chaparral, Sonoran desert scrub. Shaded sites, gravelly soils; crevices or among rocks. 200-1295m. Blooms (May)Jun(Jul).	Not Expected	The APE is outside the known elevation range of this species.
<i>Senna covesii</i> Cove's cassia	None/None G5/S3 2B.2	Sonoran desert scrub. Dry, sandy desert washes, slopes. 225-1295m. Blooms Mar-Jun(Aug).	Not Expected	The APE is outside the known elevation range of this species.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/ Observations
<i>Stemodia durantifolia</i> purple stemodia	None/None G5/S2 2B.1	Sonoran desert scrub. Sandy soils; mesic sites. 180-300m. Blooms (Jan)Apr-Dec.	Not Expected	The APE is outside the known elevation range of this species.
<i>Tetracoccus hallii</i> Hall's tetracoccus	None/None G4/S4 4.3	Mojavean desert scrub, Sonoran desert scrub. 30- 1200m. Blooms Jan-May.	Not Expected	The APE is outside the known elevation range of this species.
<i>Wislizenia refracta</i> ssp. <i>refracta</i> jackass-clover	None/None G5T5?/S1 2B.2	Desert dunes, Mojavean desert scrub, Playas, Sonoran desert scrub. Sandy washes, roadsides, alkaline flats. 600- 800m. Blooms Apr-Nov.	Not Expected	The APE is outside the known elevation range of this species.
<i>Xylorhiza cognata</i> Mecca-aster	None/None G2/S2 1B.2	Sonoran desert scrub. Steep canyon slopes, in sandstone and clay. 20-400m. Blooms Jan- Jun.	Not Expected	The APE is outside the known elevation range of this species.
Invertebrates				
<i>Euparagia unidentata</i> Algodones euparagia	None/None G1G2/S1S2	Endemic to the Imperial Sand Dunes Recreational Area.	Not Expected	The APE is outside the known distribution of this species.
<i>Oliarces clara</i> cheeseweed owlfly (cheeseweed moth lacewing)	None/None G1G3/S2	Inhabits the lower Colorado River drainage. Found under rocks or in flight over streams. <i>Larrea tridentata</i> is the suspected larval host.	Not Expected	The only CNDDDB observation within 5 miles of the APE was recorded in 1908. Additionally, the suspected larval host plant was not observed within the APE.
Fish				
<i>Xyrauchen texanus</i> razorback sucker	FE/SE G1/S1S2 FP	Found in the Colorado River bordering California. Adapted for swimming in swift currents but also need quiet waters. Spawn in areas of sand/gravel/rocks in shallow water.	Not Expected	The only CNDDDB observation within 5 miles of the APE was recorded in 1955, north of the Salton Sea. Additionally, suitable aquatic habitat was limited within the APE.
Reptiles				
<i>Gopherus agassizii</i> desert tortoise	FT/ST G3/S2S3	Most common in desert scrub, desert wash, and Joshua tree habitats; occurs in almost every desert habitat. Require friable soil for burrow and nest construction. Creosote bush habitat with large annual wildflower blooms preferred.	Not Expected	Due to the overall disturbed nature of the APE, it is not expected that this species would inhabit the area. Additionally, suitable burrows were not observed within the APE.

Coachella Valley Water District and Woodard & Curran
Valley View Water Systems Consolidation Project Phase IIIA-2 Segment

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/ Observations
<i>Phrynosoma mcallii</i> flat-tailed horned lizard	None/None G3/S2 SSC	Restricted to desert washes and desert flats in central Riverside, eastern San Diego, and Imperial counties. Critical habitat element is fine sand, into which lizards burrow to avoid temperature extremes; requires vegetative cover and ants.	Not Expected	Suitable desert wash and desert flat habitats do not occur within the APE. Additionally, suitable sandy soils were not present within the APE.
<i>Uma inornata</i> Coachella Valley fringe-toed lizard	FT/SE G1Q/S1	Limited to sandy areas in the Coachella Valley, Riverside County. Requires fine, loose, windblown sand (for burrowing), interspersed with hardpan and widely-spaced desert shrubs.	Not Expected	Multiple CNDDDB observations have been recorded within 5 miles of the APE; however, these observations were all recorded in 1975 and earlier. Additionally, the APE does not contain fine, loose sand required by the species.
Birds				
<i>Athene cucularia</i> burrowing owl	None/None G4/S3 SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Low Potential	Elements of suitable habitat required for nesting, including low-growing vegetation in disturbed areas, are limited in the APE. No potentially suitable burrows were observed.
<i>Empidonax traillii extimus</i> southwestern willow flycatcher	FE/SE G5T2/S1	Riparian woodlands in Southern California.	Low Potential	Riparian vegetation along the CVSC in the APE provides marginally suitable habitat for this species. However, this area is subject to regular maintenance for stormwater carrying capacity and there are high levels of disturbance from nearby transportation corridors.
<i>Falco mexicanus</i> prairie falcon	None/None G5/S4 WL	Inhabits dry, open terrain, either level or hilly. Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.	Low Potential (foraging)	Suitable cliff habitats for breeding do not occur within the APE. However, this species may forage in the APE.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/ Observations
<i>Icteria virens</i> yellow-breasted chat	None/None G5/S3 SSC	Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 ft of ground.	Low Potential	Riparian vegetation along the CVSC in the APE provides marginally suitable habitat for this species. However, this area is subject to regular maintenance for stormwater carrying capacity and there are high levels of disturbance from nearby transportation corridors.
<i>Polioptila melanura</i> black-tailed gnatcatcher	None/None G5/S3S4 WL	Primarily inhabits wooded desert wash habitats; also occurs in desert scrub habitat, especially in winter. Nests in desert washes containing mesquite, palo verde, ironwood, acacia.	Low Potential	Suitable wooded desert wash habitats do not occur within the APE. However, the salt cedar present within the APE may provide marginally suitable nesting habitat for this species.
<i>Pyrocephalus rubinus</i> vermillion flycatcher	None/None G5/S2S3 SSC	During nesting, inhabits desert riparian adjacent to irrigated fields, irrigation ditches, pastures, and other open, mesic areas. Nest in cottonwood, willow, mesquite, and other large desert riparian trees.	Low Potential	Riparian vegetation along the CVSC in the APE provides marginally suitable habitat for this species. However, this area is subject to regular maintenance for stormwater carrying capacity and there are high levels of disturbance from nearby transportation corridors.
<i>Rallus obsoletus yumanensis</i> Yuma clapper rail	FE/ST G5T3/S1S2 FP	Inhabits freshwater marsh along the lower Colorado River and nearby areas.	Not Expected	Suitable freshwater marsh habitat does not occur within the APE.
<i>Toxostoma crissale</i> Crissal thrasher	None/None G5/S3 SSC	Resident of southeastern deserts in desert riparian and desert wash habitats. Nests in dense vegetation along streams/washes; mesquite, screwbean mesquite, ironwood, catclaw, acacia, arrowweed, willow.	Low Potential	Riparian vegetation along the CVSC in the APE provides marginally suitable habitat for this species. However, this area is subject to regular maintenance for stormwater carrying capacity and there are high levels of disturbance from nearby transportation corridors.

Coachella Valley Water District and Woodard & Curran
Valley View Water Systems Consolidation Project Phase IIIA-2 Segment

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/ Observations
<i>Toxostoma lecontei</i> Le Conte's thrasher	None/None G4/S3 SSC	Desert resident; primarily of open desert wash, desert scrub, alkali desert scrub, and desert succulent scrub habitats. Commonly nests in a dense, spiny shrub or densely branched cactus in desert wash habitat, usually 2-8 feet above ground.	Low Potential	Elements of suitable habitat required for nesting, including desert scrub, are limited in the APE. Additionally, the APE does not contain suitable nesting substrates (spiny shrubs and densely branched cactus).
<i>Vireo bellii pusillus</i> least Bell's vireo	FE/SE G5T2/S2	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on trigs projecting into pathways, usually willow, Baccharis, and mesquite.	Low Potential	Riparian vegetation along the CVSC in the APE provides marginally suitable habitat for this species. However, this area is subject to regular maintenance for stormwater carrying capacity and there are high levels of disturbance from nearby transportation corridors.
Mammals				
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	None/None G4/S2 SSC	Occurs throughout California in a wide variety of habitats. Most common in mesic sites, typically coniferous or deciduous forests. Roosts in the open, hanging from walls & ceilings in caves, lava tubes, bridges, and buildings. This species is extremely sensitive to human disturbance.	Not Expected	Due to the overall disturbed nature of the APE, it is not expected that this species would inhabit the area. Additionally, suitable caves, lava tubes, and bridges are absent from the APE.
<i>Euderma maculatum</i> spotted bat	None/None G4/S3 SSC	Occupies a wide variety of habitats from arid deserts and grasslands through mixed conifer forests. Typically forages in open terrain; over water and along washes. Feeds almost entirely on moths. Roosts in rock crevices in cliffs or caves. Occasionally roosts in buildings.	Low Potential (foraging)	Suitable roosting habitat does not occur within the APE. However, the species may forage along the CVSC within the APE.
<i>Eumops perotis californicus</i> western mastiff bat	None/None G4G5T4/S3S4 SSC	Occurs in open, semi-arid to arid habitats, including coniferous and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces and caves, and buildings. Roosts typically occur high above ground.	Low Potential	Suitable roosting habitat (palm trees and buildings) are limited within the APE. Due to the disturbed nature of the APE, the species has a low potential to occur.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/ Observations
<i>Lasiurus xanthinus</i> western yellow bat	None/None G4G5/S3 SSC	Occurs in arid regions of the southwestern United States. Typically found in riparian woodlands, oak or pinyon-juniper woodland, desert wash, palm oasis habitats, and urban or suburban areas. Roosts in trees, often between palm fronds.	Low Potential	Scattered palm trees are present throughout the APE, but only offer minimal roosting habitat as the trees appear to be maintained and trimmed regularly.
<i>Neotoma albigula venusta</i> Colorado Valley woodrat	None/None G5T3T4/S1S2	Low-lying desert areas in southeastern California. Closely associated with beaver-tail cactus & mesquite. Intolerant of cold temps. Eats mainly succulent plants. Distribution influenced by abundance of nest building material.	Not Expected	Beaver-tail cactus and mesquite do not occur within the APE.
<i>Perognathus longimembris bangsi</i> Palm Springs pocket mouse	None/None G5T2/S2 SSC	Desert riparian, desert scrub, desert wash and sagebrush habitats. Most common in creosote-dominated desert scrub. Rarely found on rocky sites. Occurs in all canopy coverage classes.	Low Potential	Marginally suitable desert riparian habitat is present along the CVSC within the APE. However, creosote-dominated desert scrub is absent from the APE.
<i>Xerospermophilus tereticaudus chlorus</i> Palm Springs round-tailed ground squirrel	None/None G5T2Q/S2 SSC	Restricted to the Coachella Valley. Prefers desert succulent scrub, desert wash, desert scrub, alkali scrub, and levees. Prefers open, flat, grassy areas in fine-textured, sandy soil. Density correlated with winter rainfall.	Not Expected	Suitable desert succulent scrub, desert wash, alkali scrub, and levees do not occur within the APE. Additionally, open, flat, grassy areas with sandy soils are absent from the APE.

Regional Vicinity refers to within a 5-mile (CNDDb) and 9-quad (CNPS) search radius of site.

Status (Federal/State)

- FE = Federal Endangered
- FT = Federal Threatened
- SE = State Endangered
- ST = State Threatened
- SSC = CDFW Species of Special Concern
- FP = CDFW Fully Protected
- WL = CDFW Watch List

Other Statuses

- G1 or S1 Critically Imperiled Globally or threatened/Subnationally (state)
- G1 or S1 Critically Imperiled Globally or Subnationally (state)
- G2 or S2 Imperiled Globally or Subnationally (state)
- G3 or S3 Vulnerable to extirpation or extinction Globally or Subnationally (state)
- G4/5 or S4/5 Apparently secure, common and abundant

Additional notations may be provided as follows

- T – Intraspecific Taxon (subspecies, varieties, and other designations below the level of species)
- Q – Questionable taxonomy that may reduce conservation priority
- ? – Inexact numeric rank

CRPR (CNPS California Rare Plant Rank)

- 1B = Rare, Threatened, or Endangered in California and elsewhere
- 2B = Rare, Threatened, or Endangered in California, but more common elsewhere
- 3 = Need more information (Review List)
- 4 = Limited Distribution (Watch List)

CRPR Threat Code Extension

- .1 = Seriously endangered in California (>80% of occurrences threatened/ high degree and immediacy of threat)
- .2 = Moderately threatened in California (20-80% of occurrences moderate degree and immediacy of threat)
- .3 = Not very endangered in California (<20% of occurrences threatened/ low degree and immediacy of threat)

This page intentionally left blank.

Appendix D

Resumes

EDUCATION

MS, Conservation Biology,
Macquarie University

BS, Environmental Science,
University of California, Los
Angeles

CERTIFICATIONS

HAZWOPER 40-Hour Certified,
OSHA, 2019

First Aid/CPR/AED Certified,
American Red Cross, 2019

Level II Blunt-Nosed Leopard
Lizard Surveyor, CDFW, 2019

EXPERIENCE

Rincon Consultants, Inc.
(11/2020 – present)

Stantec Consulting, Inc.
(03/2019 – 10/2020)

Macquarie University (03/2018
– 08/2018)

Southern California Coastal
Water Research Project
(08/2016 – 01/2017)

Sarah Toback, MSc

ASSOCIATE BIOLOGIST

Ms. Toback has over three years of experience in wildlife biology, habitat assessments, and ecosystem monitoring and reporting. Her work experience includes protocol- and reconnaissance-level botanical and wildlife surveys, wetland delineations, construction monitoring, Federal and State permit preparation, and laboratory research. Her responsibilities at Rincon include conducting biological surveys, assisting on client deliverables, and acting as an assistant project manager on various projects.

PROJECT DETAILS

Staff Biologist, Various Clients, Blunt-Nosed Leopard Lizard Surveys, Kern County

Ms. Toback has conducted over 60 protocol-level surveys for blunt-nosed leopard lizards throughout Kern County during both the adult and juvenile survey seasons. She began as a Level I surveyor where she accompanied more senior biologists on surveys. After 50 surveys and over 10 confirmed sightings, she completed the requirements of a Level II Surveyor and began leading her own surveys.

Construction Monitor, Southern California Gas Company– L4002 Exposure Repair, Cajon

Ms. Toback performed the duties of a biological monitor on an exposure repair project within an unnamed waterway in San Bernardino County. She was responsible for ensuring the contractor remained in compliance with the project's Fish and Game Code section 1602 Lake and Streambed Alteration Agreement by advising appropriate measures to protect water resources.

Construction Monitor, San Bernardino County Department of Public Works – Sheep Creek Culvert Replacement Project, Wrightwood

Ms. Toback performed the duties of a biological monitor on a large culvert replacement project within Sheep Creek in San Bernardino County. She was responsible for ensuring the contractor remained in compliance with the project's Fish and Game Code section 1602 Lake and Streambed Alteration Agreement by advising appropriate measures to protect water resources and surveying for sensitive species.

Staff Biologist, San Bernardino County Department of Public Works – San Bernardino Kangaroo Rat PAO Project, San Bernardino

Ms. Toback conducted the pre-trapping site assessments and assisted throughout the entire trapping event alongside a CDFW Permitted Biologist in order to complete the 2020 San Bernardino Kangaroo Rat Proportion of Area Occupied Survey. Her work involved assessing habitat for kangaroo rat suitability, setting up trapping grids throughout the project area, conducting small mammal trapping and assessment, data collection, and report preparation.

Staff Biologist, Riverside County Department of Parks, Hidden Valley Park Jurisdictional Delineation, Riverside County

Ms. Toback assisted on a large-scale wetland delineation within Hidden Valley Park in order to determine agency jurisdiction prior to the implementation of a re-watering project within the park. She conducted the initial biological survey throughout the project area as well as the wetland delineations at multiple locations within the park. She then prepared the biological technical report and the jurisdictional delineation report.



PROJECT LIST

BIOLOGICAL RESOURCES ASSESSMENTS

- Southern California Edison – Del Valle Substation Project Protocol-Level Coastal Least Bell’s Vireo Surveys, Los Angeles and Ventura Counties, California
- Amor Ranch LLC – Fortuna Sur Guest Ranch Jurisdictional Delineation and Biological Constraints Analysis, Los Angeles County, California
- City of Victorville – Victorville Retail Project Biological Resource Assessment, San Bernardino County, California
- Southern California Gas Company – L8105/8106 Span Assessment and ROW Maintenance Habitat Assessment, Kern County, California
- Southern California Gas Company – L7000 MP 14.77 Exposure Repair Jurisdictional Delineation, Kern County, California
- Metropolitan Water District – Perris Bypass Relining Project Construction Monitoring, Riverside County, California
- Metropolitan Water District – Lakeview Pipeline Repairs Improvement Project Construction Monitoring, Riverside County, California
- Metropolitan Water District – Lakeview Pipeline Dewatering Project Pre- and Post- Construction Habitat Assessment, Riverside County, California
- LA County Sheriff’s Department – Solar Project Jurisdictional Delineation, Los Angeles County, California
- Southern California Edison – Del Valle Substation Project Habitat Assessment, Los Angeles and Ventura Counties, California
- Southern California Edison – Del Valle Substation Project Protocol-Level Coastal California Gnatcatcher Surveys, Los Angeles and Ventura Counties, California
- California Resources Corporation – Kern Mallow Focused Surveys, Kern County, California
- California Resources Corporation – Blunt-Nosed Leopard Lizard Protocol Surveys, Kern County, California
- Berry Petroleum – Blunt-Nosed Leopard Lizard Protocol Surveys, Kern County, California
- California Rail Builders – Blunt-Nosed Leopard Lizard Protocol Surveys, Kern County, California
- Friant Kern Canal – San Joaquin Kit Fox Monitoring Surveys, Kern County, California
- City of La Puente – Urban Nesting Bird Surveys, Los Angeles County, California
- City of Santa Barbara– Laguna Pump Station Biological Resource Assessment, Santa Barbara County, California
- Private Client – Rare Plant Surveys, Mono County, California
- San Bernardino County – Sheep Creek Culvert Replacement, San Bernardino County, California
- Southern California Gas Company – L4002 Exposure Repair, San Bernardino County, California

ENVIRONMENTAL RESTORATION

- Plains All American Pipeline – Refugio Oil Spill Habitat Restoration, Santa Barbara County, California
- Plains All American Pipeline – Santa Clara River Habitat Restoration, Los Angeles County, California
- Long Beach Department of Parks, Recreation, and Marine – El Dorado Park Invasive Species Management Plan, Los Angeles County, California

ENVIRONMENTAL SITE ASSESSMENTS

- KB Homes – Phase I Environmental Site Assessments, San Bernardino, Los Angeles, and Orange Counties, California
- Private Client – Phase I Environmental Site Assessments, San Bernardino and Los Angeles Counties, California
- sPower – Phase I Environmental Site Assessment, Kern County, California
- Private Client – Phase I Environmental Site Assessments, Blythe, Riverside County, California

EMERGENCY RESPONSE



- FEMA – Golden Ray Cargo Ship, Post-Capsize Surface Water Sampling, St. Simons, Georgia



Appendix E

Official IPaC Species List



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
Phone: (760) 431-9440 Fax: (760) 431-5901
<http://www.fws.gov/carlsbad/>

In Reply Refer To:

July 26, 2021

Consultation Code: 08ECAR00-2021-SLI-1280

Event Code: 08ECAR00-2021-E-02894

Project Name: Airport Boulevard Water Transmission Pipeline Project

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, and proposed species, designated critical habitat, and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at:

<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>;

<http://www.towerkill.com>; and

<http://>

www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Carlsbad Fish And Wildlife Office

2177 Salk Avenue - Suite 250

Carlsbad, CA 92008-7385

(760) 431-9440

Project Summary

Consultation Code: 08ECAR00-2021-SLI-1280

Event Code: 08ECAR00-2021-E-02894

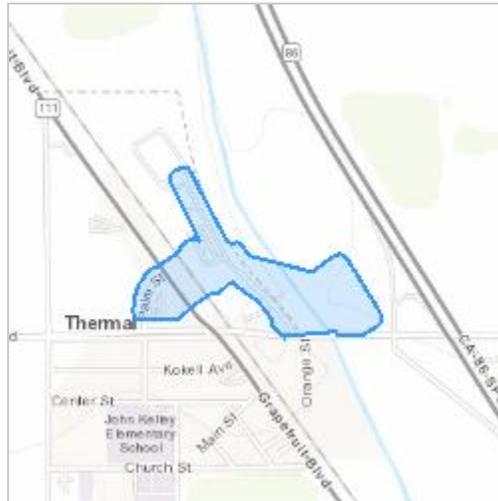
Project Name: Airport Boulevard Water Transmission Pipeline Project

Project Type: WATER SUPPLY / DELIVERY

Project Description: New water transmission pipeline

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@33.64440835,-116.14102873204561,14z>



Counties: Riverside County, California

Endangered Species Act Species

There is a total of 6 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
Least Bell's Vireo <i>Vireo bellii pusillus</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered
Yuma Ridgways (clapper) Rail <i>Rallus obsoletus [=longirostris] yumanensis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3505	Endangered

Reptiles

NAME	STATUS
Coachella Valley Fringe-toed Lizard <i>Uma inornata</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/2069	Threatened
Desert Tortoise <i>Gopherus agassizii</i> Population: Wherever found, except AZ south and east of Colorado R., and Mexico There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/4481	Threatened

Flowering Plants

NAME	STATUS
Coachella Valley Milk-vetch <i>Astragalus lentiginosus var. coachellae</i>	Endangered
There is final critical habitat for this species. The location of the critical habitat is not available.	
Species profile: https://ecos.fws.gov/ecp/species/7426	

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.
