

**APPENDIX B.**  
**Biological Resources Assessment**  
**Pierce Street Sewer and Water Extension Project**  
**October, 2024**

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**BIOLOGICAL RESOURCES ASSESSMENT**  
**PIERCE STREET SEWER & WATER EXTENSION PROJECT**  
**RIVERSIDE COUNTY, CALIFORNIA**



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## 1.0 INTRODUCTION

At the request of Terra Nova Planning & Research, this biological resource assessment report (BRAR) was prepared by WSP USA Environment and Infrastructure, Inc. (WSP) for the Coachella Valley Water District (lead agency) for the proposed Pierce Street Sewer and Water Lines Extension Project (project), located in portions of the Torres-Martinez Indian Reservation and other lands in unincorporated Riverside County, California (Figure 1, Appendix A). Information contained herein is intended to be used, in part, for compliance with the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP), California Environmental Quality Act (CEQA) as well as federal and California Endangered Species Acts.

## 2.0 PROJECT LOCATION / DESCRIPTION

The Coachella Valley Water District (CVWD) proposes the installation of approximately 5.96 miles (31,469 linear feet) of new sewer lines, 3.92 miles (20,683 linear feet) of new water lines in the unincorporated community of Oasis, Riverside County, California. The alignment primarily located along a portion of the existing Pierce Street but also along portions of Avenue 66, Avenue 69, Avenue 70, Dennington Court and an unnamed road located between Avenue 69 and Avenue 70 (Figure 2, Appendix A). Specifically, the project site is located within portions of Sections 23 & 26; Township 7 South; Range 9 East as shown on the United States Geological Survey (USGS) Mecca, California, 7.5-minute topographic quadrangle (Figure 2, Appendix A). Portions of the alignment are also within and/or immediately adjacent to Sections 12, 13, 24 and 26. Portions of the alignment are also immediately adjacent to portions of Sections 14 and 25. The geographic coordinates near the approximate center of the project area, the intersection of Pierce Street and Avenue 68 are 33°33'13.70" north latitude and 116° 06'45.86" west longitude. The elevation of the alignment ranges from approximately -177 to -195 feet below mean sea level. The proposed project also includes the decommissioning of 33 existing septic tanks located along the alignment (Figure 3, Appendix A).

Project engineering drawings show that the sewer lines are proposed installed 23 feet east of the existing centerline (C/L) of Pierce Street and 23 feet north of the existing C/L of Avenue 66 within existing Right of Ways (ROW). The project proposes installation of a 12-inch gravity sewer line 15 feet east of existing CL and a 6-inch (in some areas) and 8-inch (in other areas) sewer force main out to 23 feet east of existing CL of Pierce Street. The proposed right-of-way (ROW) along Pierce Street and Avenue 66 is 30 feet from both sides of existing CL. An 8-inch sewer gravity line is also proposed within the existing pavement of Avenue 69 (approximately 5 feet north of CL), along the north side of Avenue 70 and along the north side of an unnamed road. The ROW along Avenue 69 is a total of 30 feet wide, approximately 15 feet from both sides of the CL. The ROW along Avenue 70 is 80 feet wide. A total of 19 new manholes are proposed to be installed at various locations along the alignment. A new gated/fenced sewer lift station is proposed for a 22,500-square foot area on the west side of Pierce Street at the southernmost terminus of the proposed new sewer line alignment. Channel Crossing Details in the sewer line engineering drawings propose the installation of three support structures where the alignment along Avenue 66 crosses the existing Coachella Valley Stormwater Channel (CVSC). These permanent structures are proposed to be installed adjacent to or within the existing riparian habitat present within and/or adjacent to the CVSC and located adjacent to the Coachella Valley Stormwater Channel and Delta Conservation Area.

Implementation of the proposed project would provide clean potable water and sewer services to the existing mobile home parks and rural residential housing in the immediate area. The existing mobile homes, housing and most of the roadways are located within Torres Martinez Tribal jurisdiction.

The public right-of-way (ROW) along existing roads, easements dedicated by tract map, or specific easements or fee title land granted to CVWD are proposed to be used for pipeline placement and installation. Design would be adjusted in consideration of utility conflicts, soils and/or any other conflicting factors.

### **3.0 REGULATORY FRAMEWORK**

#### **3.1 Federal**

*Endangered Species Act (ESA)* – The United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service are the designated federal agencies accountable for administering the ESA. The ESA defines species as “endangered” or “threatened” and provides regulatory protection at the federal level.

- Section 9 of the ESA prohibits the “take” of listed (i.e., endangered or threatened) species. The ESA’s definition of take is “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct.” Recognizing that take cannot always be avoided, Section 10(a) includes provisions for take that is incidental to, but not the purpose of, otherwise lawful activities. Specifically, Section 10(a) (1) (A) permits (authorized take permits) are issued for scientific purposes. Section 10(a) (1) (B) permits (incidental take permits) are issued for the incidental take of listed species that does not jeopardize the species.
- Section 7 (a) (2) requires federal agencies to evaluate the proposed project with respect to listed or proposed listed, species and their respective critical habitat (if applicable). Federal agencies must employ programs for the conservation of listed species and are prohibited from authorizing, funding, or carrying out any action that would jeopardize a listed species or destroy or modify its “critical habitat.”

As defined by the ESA, “individuals, organizations, states, local governments, and other non-federal entities are affected by the designation of critical habitat only if their actions occur on federal lands, require a federal permit, license, or other authorization, or involve federal funding.”

Section 10(a) of the ESA authorizes the issuance of incidental take permits and establishes standards for the content of habitat conservation plans (see Section 3.3 below).

*Migratory Bird Treaty Act (MBTA)* – Treaties signed by the U.S., Great Britain on behalf of Canada, Mexico, Japan, and the countries of the former Soviet Union make it unlawful to pursue, capture, kill, and/or possess, or attempt to engage in any such conduct to any migratory bird, nest, egg or parts thereof listed in the document. As with the ESA, the MBTA also allows the Secretary of the Interior to grant permits for the incidental take of these protected migratory bird species.

*National Environmental Policy Act (NEPA)* – If portions of a proposed project could fall under the jurisdiction of a federal agency (i.e., U.S. Bureau of Reclamation, U.S. Army Corps of Engineers) they are subject to environmental review pursuant to NEPA. NEPA establishes certain criteria that must be adhered to for any project that is “financed, assisted, conducted or approved” by a federal agency. The federal lead agency is required to “determine whether the proposed action will significantly affect the quality of the human environment.”

*Section 404 of the Clean Water Act* – This section of the Clean Water Act, administered by the U.S. Army Corps of Engineers (USACE), regulates the discharge of dredged and fill material into “waters of the United States.” The USACE has created a series of nationwide permits that authorize certain activities within waters of the U.S. Nationwide Permit 58 would apply to the proposed project:

*Nationwide Permit 58 Utility Line Activities for Water and Other Substances* – Activities required for the construction, maintenance, repair, and removal of utility lines for water and other substances, excluding oil, natural gas, products derived from oil or natural gas, and electricity. Oil or natural gas pipeline activities or electric utility line and telecommunications activities may be authorized by NWP 12 or 57, respectively. This NWP also authorizes associated utility line facilities in waters of the United States, provided the activity does not result in the loss of greater than 1/2-acre of waters of the United States for each single and complete project.

Utility lines: This NWP authorizes discharges of dredged or fill material into waters of the United States and structures or work in navigable waters for crossings of those waters associated with the construction, maintenance, or repair of utility lines for water and other substances, including outfall and intake structures. There must be no change in pre-construction contours of waters of the United States. A “utility line” is defined as any pipe or pipeline for the transportation of any gaseous, liquid, liquescent, or slurry substance, for any purpose that is not oil, natural gas, or petrochemicals. Examples of activities authorized by this NWP include utility lines that convey water, sewage, stormwater, wastewater, brine, irrigation water, and industrial products that are not petrochemicals. The term “utility line” does not include activities that drain a water of the United States, such as drainage tile or French drains, but it does apply to pipes conveying drainage from another area. Material resulting from trench excavation may be temporarily sidecast into waters of the United States for no more than three months, provided the material is not placed in such a manner that it is dispersed by currents or other forces. The district engineer may extend the period of temporary side casting for no more than a total of 180 days, where appropriate. In wetlands, the top 6 to 12 inches of the trench should normally be backfilled with topsoil from the trench. The trench cannot be constructed or backfilled in such a manner as to drain waters of the United States (e.g., backfilling with extensive gravel layers, creating a French drain effect). Any exposed slopes and stream banks must be stabilized immediately upon completion of the utility line crossing of each waterbody. (USACE Nationwide 58 Decision Document)

. For projects that exceed the threshold for nationwide permits, individual permits under Section 404 can be issued. An inspection of the project site to determine presence or absence of potential jurisdictional wetlands and waters was not conducted during the assessment for this project.

### **3.2 State**

*California Endangered Species Act (CESA)* – This legislation is similar to the federal ESA, but it is administered by the California Department of Fish and Wildlife (CDFW – formerly Department of Fish and Game). The CDFW is authorized to enter into “memoranda of understanding” with individuals, public agencies, and other institutions to import, export, take, or possess state-listed species for scientific, educational, or management purposes. CESA prohibits the take of state-listed species except as otherwise provided in state law. Unlike the federal ESA, the CESA applies the take prohibitions to species currently petitioned for state-listing status (candidate species). State lead agencies are required to consult with CDFW to ensure that actions are not likely to jeopardize the continued existence of any state-listed species or result in the destruction or degradation of occupied habitat.

*California Environmental Quality Act (CEQA)* – The basic goal of CEQA is to maintain a high-quality environment now and in the future. The specific goals are for California’s public agencies to:

1. identify the significant environmental effects of their actions; and, either
2. avoid those significant environmental effects, where feasible; or
3. mitigate those significant environmental effects, where feasible.

CEQA applies to "projects" proposed to be undertaken or requiring approval by state and local government agencies. Projects are activities that have the potential to have a physical impact on the environment and may include the enactment of zoning ordinances, the issuance of conditional use permits and the approval of tentative subdivision maps. Where a project requires approvals from more than one public agency, CEQA requires one of these public agencies to serve as the "lead agency."

A "lead agency" must complete the environmental review process required by CEQA. The most basic steps of the environmental review process are to:

4. Determine if the activity is a "project" subject to CEQA;
5. Determine if the "project" is exempt from CEQA;
6. Perform an Initial Study to identify the environmental impacts of the project and determine whether the identified impacts are "significant". Based on its findings of "significance", the lead agency prepares one of the following environmental review documents:
  - a) Negative Declaration if it finds no "significant" impacts;
  - b) Mitigated Negative Declaration if it finds "significant" impacts but revises the project to avoid or mitigate those significant impacts;
  - c) Environmental Impact Report (EIR) if it finds "significant" impacts.

While there is no ironclad definition of "significance", Article 5 of the State CEQA Guidelines (California Natural Resources Agency 2014) provides criteria to lead agencies in determining whether a project may have significant effects.

*The Native Plant Protection Act (NPPA)* – The NPPA includes measures to preserve, protect, and enhance rare and endangered native plant species. Definitions for "rare and endangered" are different from those contained in CESA. However, the list of species afforded protection in accordance with the NPPA includes those listed as rare and endangered under CESA. NPPA provides limitations on take as follows: "no person will import into this state, or take, possess, or sell within this state" any rare or endangered native plants, except in accordance with the provisions outlined in the act. If a landowner is notified by CDFW, pursuant to section 1903.5 that a rare or endangered plant is growing on their property, the landowner shall notify CDFW at least 10 days prior to the changing of land uses to allow CDFW to salvage the plants.

*Natural Community Conservation Planning (NCCP) Program* – A NCCP, which is managed by the CDFW, is intended to conserve multiple species and their associated habitats, while also providing for compatible use of private lands. Through local planning, the NCCP planning process is designed to provide protection for wildlife and natural habitats before the environment becomes so fragmented or degraded by development that species listing are required under CESA. Instead of conserving small, often isolated "islands" of habitat for just one listed species, agencies, local jurisdictions, and/or other interested parties have an opportunity through the NCCP to work cooperatively to develop plans that consider broad areas of land for conservation that would provide habitat for many species. Partners enroll in the programs and, by mutual consent, areas considered to have high conservation priorities or values are set aside and protected from development. Partners may also agree to study, monitor, and develop management plans for these high value "reserve" areas. The NCCP provides an avenue for fostering economic growth by allowing approved development in areas with lower conservation value. The project site is not within an individual NCCP.

*Sections 1600-1603 of the State Fish and Game Code* – The California Fish and Game (Wildlife) Code, pursuant to Sections 1600 through 1603, regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife resources. Under state code, CDFW jurisdiction is assessed in the field based on one, or a combination, of the following criteria:

7. At minimum, intermittent and seasonal flow through a bed or channel with banks and that also supports fish or other aquatic life.
8. A watercourse having a surface or subsurface flow regime that supports or that has supported riparian vegetation.
9. Hydro-geomorphically distinct top-of-embankment to top-of-embankment limits.
10. Outer ground cover and canopy extents of, typically, riparian associated vegetation species that would be sustained by surface and/or subsurface waters of the watercourse.

The CDFW requires that public and private interests apply for a “Streambed Alteration Agreement” for any project that may impact a streambed or wetland. The CDFW has maintained a “no net loss” policy regarding impacts to streams and waterways and requires replacement of lost habitats on at least a 1:1 ratio.

*Section 2081 of the State Fish and Game Code* – Under Section 2081 of the California Fish and Game Code, the CDFW authorizes individuals or public agencies to import, export, take, or possess state endangered, threatened, or candidate species in California through permits or memoranda of understanding. These acts, which are otherwise prohibited, may be authorized through permits or “memoranda of understanding” if (1) the take is incidental to otherwise lawful activities, (2) impacts of the take are minimized and fully mitigated, (3) the permit is consistent with regulations adopted in accordance with any recovery plan for the species in question, and (4) the applicant ensures suitable funding to implement the measures required by the CDFW. The CDFW shall make this determination based on the best scientific information reasonably available and shall include consideration of the species’ capability to survive and reproduce.

*Section 3505.5 of the State Fish and Game Code* – This section makes it unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds-of-prey, e.g.: owls, hawks, eagles, etc.) or to take, possess, or destroy the nest or eggs of any bird-of-prey.

*Clean Water Act* – The Regional Water Quality Control Board (RWQCB) regulates activities pursuant to Section 401(a)(1) of the Clean Water Act (CWA). Section 401 of the CWA specifies that certification from the State is required for any applicant requesting a federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities that may result in any discharge into navigable waters. Through the Porter Cologne Water Quality Control Act, the RWQCB asserts jurisdiction over Waters of the State of California (WSC) which is generally the same as WUS but may also include isolated waterbodies. The Porter Cologne Act defines WSC as “surface water or ground water, including saline waters, within the boundaries of the state”.

### **3.3 Regional**

Finalized in October 2008, the CVMSHCP is a comprehensive regional plan that addresses the conservation needs of 27 species of native flora and fauna and 24 natural vegetation communities occurring throughout the Coachella Valley region of western Riverside County, California. Permits for the CVMSHCP were issued by the CDFW on September 9, 2008 and the United States Fish and Wildlife Service (USFWS) on October 1, 2008 (TE104604-0). The CVMSHCP serves two primary purposes: Balancing environmental protection and economic development objectives in the CVMSHCP area and simplifying compliance with endangered species related laws. The CVMSHCP accomplishes this by conserving unfragmented habitat to permanently protect and secure viable populations of the covered species. The covered species include those plants and animals that are either currently listed as threatened or endangered, are proposed for listing, or are believed by an appointed Scientific Advisory Committee, USFWS and CDFW, to have a high probability of being proposed for listing in the future if not provided protection by the CVMSHCP.

The goal and purpose of the CVMSHCP is to meet the requirements of the state and federal endangered species acts, while at the same time allowing for the economic growth (land development) within the plan area without significant delay or hidden costs. Under the CVMSHCP, land development/mitigation fees are collected from all new development projects occurring in the plan area. The purpose of this fee is to support the assembly of a preserve system for the covered species and natural vegetation communities within areas identified as having high conservation value (Coachella Valley Conservation Commission [CVCC] 2023).

## 4.0 METHODS

### 4.1 Literature Review

In preparation for the field assessment, a literature search was conducted to identify special status biological resources known from the vicinity of the alignment. In the context of this report, and for the purpose of this assessment, vicinity is defined as areas within an approximate 5-mile radius of the proposed alignment.

The literature search included a review of the following documents:

- California Natural Diversity Data Base (CNDDDB) RareFind 5 (CDFW 2023a)
- Special Animals List (CDFW 2023b)
- California Native Plant Society's (CNPS) Inventory of Rare, Threatened, and Endangered Plants of California (CNPS 2023a)
- CVMSHCP (CVCC 2023)
- United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS). Web Soil Survey (USDA NRCS 2023a)
- USFWS IPaC Resource List (USFWS 2023)
- USGS 7.5' *Mecca, Oasis, Valerie & Rabbit Peak, Calif.* quadrangles (USGS 2015)

Scientific nomenclature for this document follows standard reference sources: For plant communities, CVMSHCP (CVCC 2023), Sawyer et. al (2009), and Holland (1986); or flora, Jepson eFlora (2023) and the USDA NRCS PLANTS Database (2021b); for amphibians, reptiles, and mammals, CDFW (2016); and for birds, California Bird Records Committee (2023).

### 4.2 Field Assessments

Portions of the project alignment were initially assessed on 5 November 2021 by WSP Senior Biologist Michael D. Wilcox. A follow-up assessment was conducted on 16 September 2022 by Wilcox, following minor changes to the project alignment. On-site suitable habitat was assessed based on the presence of constituent habitat elements (e.g., soils, vegetation and topography) characteristic of the potentially occurring special status biological resources determined by the literature review. The entire proposed alignment was driven, where it followed existing roads to assess habitats and record pertinent field data and document current site conditions. Where accessible, portions of the alignment were assessed on foot. Adjacent undeveloped areas within an approximate 150-meter (~500-foot) buffer zone that were unfenced and unsigned (i.e., not posted with "No Trespassing" and/or "Private Property") were also assessed for presence of potentially suitable burrowing owl (*Athene cunicularia*) habitat. Inaccessible areas were scanned for burrowing owl habitat and sign (i.e., burrows & perches with whitewash) with binoculars. All on-site flora and fauna observed or otherwise detected (e.g., vocalizations, presence of scat, tracks, and/or bones) during the assessment were recorded in field notes and are included in Appendix B. General weather and site conditions were also recorded at the beginning and end of the survey. Temperatures and wind speeds were recorded with a handheld Kestrel 3500 pocket weather meter. Percent cloud cover was visually estimated.

## 5.0 RESULTS

The proposed project alignment primarily occurs along a portion of the existing paved Pierce Street. Portions of the existing Avenue 66, Avenue 69, Avenue 70, Dennington Court, paved and unpaved roadways, access roads, entryways and their respective road shoulders and adjacent areas. The alignment and immediately adjacent areas are largely developed (i.e., existing and former residential dwellings, commercial and/or active and fallow agricultural areas) or disturbed (existing agricultural drains, compacted road shoulders, along the edges of active palm/date farms and/or vacant/fallow agricultural fields). Areas of natural vegetation, however, do intermittently occur at various locations throughout the alignment. Adjacent areas are of a similar nature, developed, agricultural, highly disturbed with intermittent undeveloped natural areas. One earthen-bottomed drainage (CVSC) and two existing agricultural drains (labeled “M Canal” on the project engineering drawings) are traversed by portions of the alignment. Representative site photos are included in Appendix C.

### 5.1 Coachella Valley Multiple Species Habitat Conservation Plan

The project alignment is within the CVMSHCP plan area, however outside of CVMSHCP-designated conservation areas. One portion, an approximate 850-foot section of the proposed sewer line at the northeastern-most terminus of the alignment along Avenue 66 is located immediately adjacent to a portion of the Coachella Valley Stormwater Channel and Delta Conservation Area (Figure 5, Appendix A). Much of the project alignment (generally west of Pierce Street) is also within Torres Martinez Tribal jurisdiction. The on-site portion of the alignment that is adjacent to the Coachella Valley Stormwater Channel and Delta Conservation Area is not within Torres Martinez Tribal jurisdiction, although other portions of the alignment (outside of the conservation area) are within the tribe’s jurisdiction.

Although the CVMSHCP states that “this area (i.e., the Coachella Valley Stormwater Channel and Delta Conservation Area) does not function as a biological corridor”, the riparian, emergent and aquatic habitats within the CVSC are almost certainly used as a movement/dispersal corridor for a variety of wildlife species. This conservation area contains core habitat for the desert pupfish (*Cyprinodon macularius*) and the crissal thrasher (*Toxostoma crissale*). It also contains conserved habitat and suitable habitat for covered species and known occurrences of burrowing owl as depicted on Figure 4-25b of the CVMSHCP. Additionally, this conservation area also protects one of the two known habitat areas in the plan area for Yuma Ridgway’s (formerly clapper) rail (*Rallus obsoletus yumanensis*) and California black rail (*Laterallus jamaicensis coturniculus*). It contains suitable migration and breeding habitat for special status riparian and tree-nesting species (i.e., southwestern willow flycatcher [*Empidonax traillii extimus*], yellow-breasted chat [*Icteria virens*] and least Bell’s vireo [*Vireo bellii pusillus*]) covered by the plan. Given the scarcity of riparian habitat in the desert, the CVMSHCP considers all riparian habitat to be important for these species and likely to contribute to the conservation of these species. The conservation area also provides other conserved habitat for LeConte’s thrasher (*Toxostoma lecontei*), Coachella Valley round-tailed ground squirrel (*Xerospermophilus tereticaudus chlorus*) and Palm Springs pocket mouse (*Perognathus longimembris bangsi*). CVMSHCP Table 4-103 illustrates the conserved vegetation communities within this conservation area as including mesquite hummocks, desert saltbush scrub, desert sink scrub, Sonoran cottonwood-willow riparian forest and coastal and valley freshwater marsh. CVMSHCP Figure 4-25c depicts these conserved communities (CVCC 2023).

### 5.2 Weather Conditions

Weather conditions during the field assessments were sunny and warm. Skies were clear with 0% cloud cover during both site visits. Temperatures ranged from 73 to 88 degrees Fahrenheit (°F) during the 2021 site assessment and 85 to 95 °F during the 2022 assessment. Winds were calm with wind speeds measured between 0 to 5 miles per hour during both site visits.

### 5.3 Topography, Soils, and Waters

The proposed project alignment is relatively flat. There are ten (10) distinct soil mapping units along the project alignment. These include: 1) Coachella fine sand, wet, 0 to 2 percent slopes (CrA); 2) Fluvents (Fe); 3) Gilman fine sandy loam, 0 to 2 percent slopes (GbA); 4) Gilman fine sandy loam, wet, 0 to 2 percent slopes (GcA:); 5) Gilman silt loam, wet, 0 to 2 percent slopes (GfA); 6) Indio fine sandy loam, wet (Ir); 7) Indio very fine sandy loam, wet (It); 8) Salton fine sandy loam (Sa) and; 9) Salton silty clay loam (Sb); and 10) Water (W) (Soil Survey Staff 2023a) (Figure 4, Appendix A).

Coachella series are well-drained, moderately rapidly permeable soils in lacustrine basins the sediments are from dominantly igneous rocks. Coachella series have been historically used for agricultural crops (USDA 2023a).

Fluvents are the stratified alluvial deposits found mainly on floodplains, alluvial fans and at deltas of river drainages. They are nearly level soils that are intermittently flooded (USDA 1980).

Gilman series consists of very deep, well drained soils that formed in stratified stream alluvium that typically occur on flood plains and alluvial fans. Gilman soils are on flood plains and alluvial fans. Gilman soils were historically, and still are used for irrigated cropland and livestock grazing (USDA 2023a).

Indio soil series consist of “very deep, well or moderately well drained soils formed in young calcareous, silty mixed alluvium derived from mixed rock sources. They are intermittently moist soils typically found on alluvial fans, lacustrine basins and flood plains that were historically, and still are used for irrigated cropland and livestock grazing (USDA 2023a).

Salton series are somewhat poorly drained, slowly permeable, soils that are formed in alluvium (USDA 1980).

The field assessment confirmed that on-site soils and substrates are typical of this area. Much of the areas along the alignment have been heavily altered for agricultural, commercial and/or residential development and road right-of-way maintenance. The site does not contain active sand dunes, drifts, rock outcrops, significant rocky areas, or clay lenses.

Except for the CVSC there are no natural drainages (i.e., rivers, creeks, streams) or any natural bodies of water (i.e., lakes, ponds, springs or seeps). Two existing agricultural drains, one containing flowing water and emergent vegetation and the other dry at the time of the assessments are traversed by the alignment. Also, three man-made irrigation ponds containing surface water, but lacking vegetation are also present, immediately adjacent to the alignment, at various locations.

### 5.4 Vegetation

Vegetation communities present on and/or along the alignment are best described as a mixture of existing agriculture (i.e., date/palm farms; turf farming; vacant, barren, fallow and active agricultural fields), landscaping (i.e., plantings around existing residential and/or commercial areas) and highly disturbed areas (i.e., graded, compacted, barren and weedy areas). These include areas of desert saltbush scrub, desert sink scrub, mesquite hummocks and tamarisk thickets (CVCC 2023, Sawyer et. al. 2009) which are intermittently present in and/or adjacent to portions of the alignment. Sonoran cottonwood-willow riparian woodland is also present adjacent to one location of the proposed alignment, where the alignment traverses the CVSC (Figure 6, Appendix A).

A total of 29 plant species were identified along the alignment during the assessment. These included of a mixture of native and non-native and/or weedy species. Representative examples included: big saltbush (*Atriplex lentiformis*), allscale (*Atriplex polycarpa*), four-wing saltbush

(*Atriplex canescens*), honey mesquite (*Prosopis glandulosa*), saltcedar (*Tamarisk ramosissima*), athel (*Tamarisk aphylla*), arrow weed (*Pluchea sericea*) and iodine bush (*Allenrolfea occidentalis*). A variety of landscaping and agricultural species were also observed but are not included on the species list (Appendix B). These generally consisted of orchard and landscaping plants common to the area including, but not limited to date palm (*Phoenix dactylifera*), California fan palm (*Washingtonia filifera*), oleander (*Nerium oleander*), bougainvillea (*Bougainvillea* sp.), agave (*Agave* spp.), yellow bells (*Tecoma stans*), citrus trees and various exotic cacti and succulent species.

## 5.5 Wildlife

Vertebrate wildlife directly observed and/or detected otherwise (e.g., scat, bones, tracks, feathers, burrows, etc.) during the assessment was not notably diverse or abundant, limited to 31 species, all of which are common to the region. This included one fish, one amphibian, two reptiles, 26 birds and one mammal species (Appendix B). Representative examples included species common to desert scrub and/or tolerant of agricultural practices, rural residential dwellings, commercial uses and areas of heavy disturbance. Representative examples observed included, but were not limited to, mosquitofish (*Gambusia affinis*), American bullfrog (*Lithobates catesbianus*), desert spiny lizard (*Sceloporus magister*), mourning dove (*Zenaida macroura*), great blue heron (*Ardea herodias*), American kestrel (*Falco sparverius*), common raven (*Corvus corax*) and verdin (*Auriparus flaviceps*). The species detected are representative of common species known from the region but does not represent the total number of species that may occur along the alignment. Brief assessments are limited by the seasonal timing and short duration of the survey period as well as the nocturnal, fossorial and/or migratory habits of many animals. The disturbed, agricultural and developed conditions of much of the alignment reduces the potential for use by some special status species, as many of these require higher quality and/or more extensive areas of natural habitats. Some are habitat specialists requiring aeolian deposits, which are not currently present along the alignment.

Although a few old, or inactive bird nests were observed in some of the trees adjacent to portions of the alignment, no actively nesting birds were detected on or adjacent to the site during the assessment. Both site assessments were conducted outside of the breeding season for most species in the region. During the 2021 site assessment, a few burrows most likely belonging to California ground squirrel (*Otospermophilus beecheyi*), were detected along the alignment, as was at least one broken drainage/irrigation pipe. California ground squirrel burrows and some man-made structures, like pipes of suitable size and orientation, provide potential roosting and nesting habitat for burrowing owls. No ground squirrel burrows or drainage pipes suitable for burrowing owl were detected along the alignment during the field assessment conducted in 2022 but have the potential to occur at any time in the future.

## 5.6 Special Status Biological Resources

Some plant and/or animal taxa are designated as having special status due to declining populations, limited geographic distributions and/or vulnerability to climate change, habitat loss and/or fragmentation. Some have been listed as threatened or endangered by the USFWS or by the CDFW and are protected by the federal and state ESAs and the CNPPA. Others have been identified, and are managed as sensitive by the USFWS, CDFW, United States Forest Service (USFS), Bureau of Land Management (BLM) or by private conservation organizations, including the CNPS, but have not been formally listed as threatened or endangered. Impacts to such species can still be considered significant under the CEQA, if not avoided, minimized and/or mitigated by specific project design and implementation.

The literature review, site visits, and IPaC resources list resulted in a total of 52 special biological resources occurring, or potentially occurring in the vicinity (within an approximate 5-mile radius)

of the project site. These include six plant species, one vegetation community, two invertebrates, two fishes, one amphibian, three reptiles, 27 birds and 10 mammals. Table 1 below provides a summary of these resources, their current conservation status, habitat associations and potential to occur along the project alignment.

Several special status species were observed on-site during the assessment (Appendix B). These included: great egret (*Ardea alba*), great blue heron, snowy egret (*Egretta thula*), loggerhead shrike (*Lanius ludovicianus*) and white-faced ibis (*Plegadis chihi*). None of these species are listed as threatened or endangered, however are either designated as a California Species of Special Concern (CSC) (i.e., loggerhead shrike) by the CDFW; managed as “sensitive” by the California Department of Forestry and Fire Protection (i.e., great egret, great blue heron) or are otherwise included on the California Special Animals List and/or IPaC Resources List (i.e., snowy egret, white-faced ibis). The CDFW watchlist species Cooper’s hawk (*Accipiter cooperii*) and merlin (*Falco columbarius*) were also seen on or in the project vicinity. The special status designations for these species generally applies while nesting and/or at their nesting/breeding habitats and locations.

**Table 1. Special Status Plants**

Species	Protective Status	Habitat	Flowering Period	Occurrence Probability
<i>Abronia villosa</i> var. <i>aurita</i> chaparral sand-verbena	F: ND C: ND CNPS: List 1B.1 State Rank: S2 CVMSHCP: No	Sandy areas in chaparral and coastal sage scrub habitats, 262-5249 feet (ft)	(Jan) Mar-Sept.	<b>Absent</b> (Habitat lacking, site below elevational range of species)
<i>Ambrosia monogyra</i> singlewhorl burrobush	F: ND C: ND CNPS: List 2B.2 State Rank: S2 CVMSHCP: No	Grows in sandy soils in chaparral and Sonoran desert scrub, 16 to 1,558 ft. elevation	August - November	<b>Absent</b> (Habitat lacking, site below elevational range of species)
<i>Astragalus lentiginosus</i> var. <i>cochellae</i> Coachella Valley milk-vetch	F: END C: ND CNPS List: 1B.2 State Rank: S1 CVMSHCP: Yes	Annual/Perennial herb found in sandy flats, washes, alluvial fans, sand field, dunes and dune edges, at 130 to 2,150 ft, a CA endemic.	February - May	<b>Absent</b> (Habitat lacking, site below known elevational range of species)
<i>Astragalus sabulorum</i> Gravel milk-vetch	F: ND C: ND CNPS List: 2B.2 State Rank: S2 CVMSHCP: No	Flats, usually sandy, sometimes gravelly, washes and roadside in desert dunes, Mojave Desert scrub and Sonoran Desert scrub at - 195 to 3050 ft. Known from approximately 4 mi. east of the alignment.	February - June	<b>Absent</b> (Habitat lacking; silty, disturbed, not sandy)
<i>Nemacaulis denudata</i> var. <i>gracilis</i> slender cottonheads	F: ND C: ND CNPS: List 2B.2 State Rank: S2 CVMSHCP: No	Sandy places in coastal dunes, desert dunes, & Sonoran Desert scrub. 164-1312 ft.	March – May	<b>Absent</b> (Habitat lacking, site below known elevational range of species)

Species	Protective Status	Habitat	Flowering Period	Occurrence Probability
<i>Petalonyx linearis</i> narrow-leaf sandpaper plant	F: ND C: ND CNPS: List 2B.3 State Rank: S3? CVMSHCP: No	Sometimes rocky, sometimes sandy areas of Mojave Desert scrub and Sonoran Desert scrub, 80-3660 ft.	(Jan-Feb) Mar-May (Jun-Dec)	<b>Absent</b> (Habitat lacking; silty, not sandy, not rocky; site below elevational range of species)

**Table 2. Special Status Vegetation Communities**

Community	Protective Status (F=Federal, C=California)	Occurrence Probability
Desert Fan Palm Oasis Woodland	F: ND C: ND State rank: S3.2 CVMSHCP: No	<b>Absent</b> (Date palms and fan palms planted as landscaping and as agricultural crops but no natural palm oases present)

**Table 3. Special Status Wildlife**

Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
<b>Invertebrates</b>			
<i>Danius plexippus, pop. 1</i> monarch butterfly, California overwintering population	F: C C: ND State Rank: S2S3 CVMSHCP: No	In California, generally known to overwinter in wind-protected tree groves ( <i>Eucalyptus</i> sp., Monterey pine [ <i>Pinus radiata</i> ], cypress) along the coast with nectar and water sources nearby. During breeding season, adults widespread but scarce in the desert. Larvae require milkweed ( <i>Asclepias</i> sp.). Larval hostplant and important nectar sources include milkweeds ( <u>Apocynaceae</u> )	<b>Overwintering:</b> <b>Absent</b> Monarchs generally move to the coast to overwinter.  <b>Foraging:</b> <b>High</b> (May temporarily occur and nectar anywhere on-site). If natural or planted milkweed is present, could breed.
<i>Oliarces clara</i> cheeseweed owlfly (moth lacewing)	F: ND C: ND State rank: S2 CVMSHCP: No	Known from lower Colorado River watershed, associated with creosote bush ( <i>Larrea tridentata</i> ) in desert scrub; creosote is suspected larval host. Found under rocks or in flight over streams. 1908 record from approximately 2 miles east of alignment (CNDDDB 2023).	<b>Absent</b> (Habitat lacking)
<b>Fish</b>			
<i>Cyprinodon macularius</i> desert pupfish	F: END C: END State rank: S1 CVMSHCP: Yes	Desert ponds, springs, marshes, and streams. Able to adapt to a variety of aquatic habitats, including those having high temperatures and salinities. Known from 3.5 mi. SE of the alignment (CNDDDB 2023).	<b>Very Low</b> (Inundated areas of agricultural drains and CVSC may provide suitable habitat)
<i>Xyrauchen texanus</i> razor-backed sucker	F: END C: END, FP State rank: S1 CVMSHCP: No	Medium and large streams and rivers with sand, mud, or gravel bottoms	<b>Absent-Very Low</b> (Although aquatic habitat present within CVSC may provide suitable habitat, not reported from vicinity since 1955)
<b>Amphibians</b>			

Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
<i>Scaphiopus couchii</i> Couch's spadefoot toad	F: BLM(s) C: CSC State rank: S2 CVMSHCP: No	In California generally found along Colorado River and desert regions of Imperial, eastern Riverside and eastern San Bernardino Counties. Rangelike, inhabits grassland, prairie, mesquite, creosote bush, thorn forest, sandy washes. Generally breeds in temporary rain pools. 1908 record from approximately 2 miles east of alignment (CNDDDB 2023).	<b>Low</b> (Habitat marginal and disturbed)
<b>Reptiles</b>			
<i>Gopherus agassizi</i> desert tortoise	F: THR C: THR, State rank: S2 CVMSHCP: Yes	Creosote bush scrub, Joshua tree woodland, saltbush scrub); washes, arroyos, bajadas, rocky hillsides, open flat desert.	<b>Absent</b> (Suitable habitat lacking, considered too alkaline. No records within vicinity of site)
<i>Phrynosoma mcallii</i> flat-tailed horned lizard	F: ND C: CSC State rank: S2 CVMSHCP: Yes	Fine sand in desert washes and flats with vegetative cover and ants, generally below 600 feet elevation in Riverside, San Diego, and Imperial Counties. 1908 record from approximately 2 miles east of alignment (CNDDDB 2023).	<b>Absent</b> (Habitat lacking, site isolated from sand sources)
<i>Uma inornata</i> Coachella Valley fringe-toed lizard	F: THR C: END State rank: S1 CVMSHCP: Yes	Sandy areas of the Coachella Valley (dunes and sand field habitats). 1959 record from approximately 1.5 miles northeast of the alignment (CNDDDB 2023).	<b>Absent</b> (Habitat lacking, site isolated from sand sources)
<b>Birds</b>			
<i>Accipiter cooperii</i> Cooper's hawk	F: MBTA C: WL State rank: S4 CVMSHCP: No	Woodland, chiefly of open, interrupted or marginal type, including residential areas. Nests in trees.	<b>Nesting: Low-Mod</b> (Nesting habitat present on-site and in adjacent trees)  <b>Foraging: High</b> (Observed in vicinity)

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Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
<i>Aechmophorus occidentalis</i> western grebe	F: BCC, MBTA C: ND State rank: ND CVMSHCP: No	Nests on large freshwater lakes and marshes edged with emergent vegetation, often reeds and rushes. Feeds mostly on aquatic wildlife (fish, amphibians, crustaceans and other invertebrates) but also occasionally on terrestrial invertebrates such as grasshoppers.	<b>Nesting: Absent</b> (Suitable nesting habitat lacking)  <b>Foraging: Moderate</b> (by forage in area, especially winter)
<i>Ardea alba</i> great egret	F: MBTA C: CDF(s) - Rookeries State rank: S4 CVMSHCP: No	Nests in large trees, occasionally on ground and/or on structures adjacent to freshwater, brackish and saltwater habitats. Known to nest in along north shore of Salton Sea (CNDDDB 2023).	<b>Nesting: Absent</b> (Suitable habitat lacking)  <b>Foraging: Occurs</b> (Observed)
<i>Ardea herodias</i> great blue heron	F: MBTA C: CDF(s) - Rookeries State rank: S4 CVMSHCP: No	Nest in large trees, on ground, in shrubs and on structures near freshwater and saltwater habitats and forage in wetlands, grasslands and agricultural fields. Known to nest in vicinity (CNDDDB 2023).	<b>Nesting: Absent</b> (Suitable nesting habitat lacking)  <b>Foraging: Occurs</b> (Observed)
<i>Athene cunicularia</i> burrowing owl	F: MBTA, BCC C: CSC State: S3 CVMSHCP: Yes	Occupies open, dry grasslands, scrub habitats, agricultural, railroad rights-of-way, and margins of highways, golf courses, and airports. Utilizes ground squirrel burrows and man-made structures, such as earthen berms, cement culverts, cement, asphalt, and debris piles for nesting and shelter. Known from approximately 2 miles northeast of alignment (CNDDDB 2023).	<b>Nesting: Low</b> (Suitable habitat present but very few potentially suitable burrows detected)  <b>Foraging: Low-Moderate</b> (Same as above. May nest adjacent and forage on-site)
<i>Calypte costae</i> Costa's hummingbird	F: MBTA, BCC C: ND State Rank: S4 MSHCP: No	Desert and semi-desert, arid brushy foothills and chaparral, in migration and winter also in adjacent mountains and in open meadows and gardens	<b>Nesting: High</b> (Suitable habitat present)  <b>Foraging: High</b> (Suitable habitat present)

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Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
<i>Egretta thula</i> snowy egret	F: MBTA C: ND State rank: S4 CVMSHCP: No	Nests in dense trees and shrubs adjacent to freshwater, brackish and saltwater habitats. Known from approximately 3 miles southeast of the alignment (CNDDDB 2023).	<b>Nesting: Absent</b> (Suitable habitat lacking)  <b>Foraging: Occurs</b> (Observed)
<i>Empidonax traillii extimus</i> southwestern willow flycatcher	F: END C: END State: S1 CVMSHCP: Yes	Nests in large areas of riparian forests and woodlands	<b>Low</b> (Riparian vegetation along CVSC on-site marginal)  <b>Foraging: Low-Moderate</b> (Same as above, especially during migration)
<i>Falco columbarius</i> merlin	F: MBTA C: WL State: S3S4 CVMSHCP: No	Seacoast, tidal estuaries, open woodlands, savannahs, edges of grasslands and deserts, farms and ranches. Clumps of trees or windbreaks are required for roosting in open country.	<b>Nesting: Absent</b> Does not nest in project region  <b>Foraging: Occurs</b> (Observed). Winter and migration only.
<i>Falco mexicanus</i> prairie falcon	F: MBTA, BCC C: WL State: S4 CVMSHCP: No	Inhabits dry, open terrain, either level or hilly. Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.	<b>Nesting: Absent</b> (Suitable nesting habitat lacking)  <b>Foraging: Moderate</b> (If nesting in region & during winter/migration )
<i>Gelochelidon nilotica</i> gull-billed tern	F: MBTA, BCC C: CSC State: S1 CVMSHCP: No	Seacoast salt marshes, fields, coastal bays. Also known from inland Salton Sea in California. Nests on bare ground, in small colonies (relative to other terns) Forages inland over marshes, pastures, farmland and other open country adjacent to coast. Nests mostly on beaches and islands. Known from approximately 3.5 miles southeast of the alignment.	<b>Nesting: Absent</b> (Suitable nesting habitat lacking)  <b>Foraging: Low-Moderate</b> (If nesting in region & during migration)

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Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
<i>Haliaeetus leucocephalus</i> bald eagle	F: MBTA, BCC C: END, FP State: S3 CVMSHCP: No	Margins of lakes, rivers and other bodies of water. In Southern California, nests at Big Bear Lake and Lake Silverwood in the San Bernardino Mountains and Lake Hemet in the San Jacinto Mountains.	<b>Nesting: Absent</b> (Suitable nesting habitat lacking)  <b>Foraging: Very Low</b> (Rarely occurs in this area in winter/migration)
<i>Icteria virens</i> yellow-breasted chat	F: MBTA C: CSC State rank: S3 CVMSHCP: No	Riparian vegetation communities. The species nests in early successional riparian habitats with a well-developed shrub layer and an open canopy. Nesting habitat usually restricted to the narrow border of streams, creeks, sloughs and rivers (Shuford & Gardali 2008). Known from approximately 2 miles east of alignment.	<b>Nesting: Absent</b> (Riparian habitat limited to narrow strip along the CVSC that is not likely extensive enough for this species)  <b>Foraging: Low-Moderate</b> (If nesting nearby)
<i>Lanius ludovicianus</i> loggerhead shrike	F: MBTA, BCC C: CSC State rank: S4 CVMSHCP: No	Prefers open fields with scattered trees or shrubs, open country with short vegetation, pastures, old orchards, cemeteries, golf courses, riparian areas, and open woodlands.	<b>Nesting: Moderate-High</b> (Suitable nesting habitat present, species detected)  <b>Foraging: Occurs</b> (Observed)
<i>Laterallus jamaicensis coturniculus</i> California black rail	F: MBTA, BCC C: THR, FP State rank: S1 CVMSHCP: Yes	Dense coastal and inland marsh habitat with shallow water (<2.5 cm) dominated by bullrushes. Do not prefer areas dominated by cattails.	<b>Nesting: Very Low</b> (Potentially suitable habitat may be present within CVSC and agricultural drains when densely vegetated but may be impacted by pollutants and flood control activities)  <b>Foraging:</b> (Same as above)

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Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
<i>Limosa fedoa</i> marbled godwit	F: MBTA, BCC C: ND State rank: ND CVMSHCP: No	Nests on ground in shortgrass prairies near wetlands.	<b>Nesting: Absent</b> (Suitable habitat lacking)  <b>Foraging: Absent</b> (Same as above)
<i>Nycticorax nycticorax</i> black-crowned night heron	F: ND C: ND State rank: S4 CVMSHCP: No	Nests in trees and cattails in wetland areas.	<b>Nesting: Very Low</b> (Potentially suitable habitat limited to CVSC and agricultural drains when densely vegetated but may be impacted by pollutants and flood control activities)  <b>Foraging: Moderate</b> (Suitable habitat limited but suitable)
<i>Pelecanus occidentalis californicus</i> American brown pelican	F: MBTA C: ND State rank: S3 CVMSHCP: No	Nests on ground and in trees.	<b>Nesting: Absent</b> (Suitable habitat lacking)  <b>Foraging: Very Low</b> (Aquatic habitat on-site limited, not likely suitable for this species)
<i>Plegadis chihi</i> white-faced ibis	F: MBTA C: ND State rank: S3S4 CVMSHCP: No	Nests in dense tule thickets adjacent to areas of shallow water.	<b>Nesting: Very Low</b> (Potentially suitable habitat limited to CVSC and agricultural drains when densely vegetated but may be impacted by pollutants and flood control activities)  <b>Foraging: Occurs</b> (Observed)

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Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
<i>Polioptila melanura</i> black-tailed gnatcatcher	F: MBTA C: ND State rank: S3S4 CVMSHCP: No	Nests in wooded desert wash habitat containing mesquite, palo verde, ironwood, and acacia. May also occur in areas with salt cedar, especially when adjacent to native wooded desert wash habitat. Also occurs in desert scrub habitat in winter.	<b>Nesting: Moderate</b> (Suitable habitat intermittently present)  <b>Foraging: Moderate-High</b> (Offsite nesting potential higher in vicinity, species known from region)
<i>Rallus obsoletus yumanensis</i> Yuma Ridgway's rail	F: END C: THR, FP State rank: S1 CVMSHCP: Yes	Well-developed marsh habitats of cattails and California bulrush. Also requires water depths varying from 6.5 cm to 20 cm. 1978 record from approximately 3.75 miles southeast of alignment (CBDDN 2023).	<b>Nesting: Very Low</b> (Potentially suitable habitat may be present within CVSC and agricultural drains when densely vegetated but may be impacted by pollutants and flood control activities)  <b>Foraging: Low</b> (same as above)
<i>Rynchops niger</i> black skimmer	F: BCC, MBTA C: CSC State rank: S2 CVMSHCP: No	Coastal areas, usually around sandy beaches and islands, colonies in California also known inland at large lakes (i.e., Salton Sea). Nests in open sandy areas, gravel or shell bars with sparse vegetation and/or broad mats of wrack (dead vegetation) in saltmarsh communities. Known from approximately 3.5 miles southeast of alignment (CNDDDB 2023).	<b>Nesting: Absent</b> (Suitable habitat lacking)  <b>Foraging: Absent</b> (Same as above. May forage over nearby CVSC)
<i>Setophaga petechia brewsteri</i> yellow warbler	F: BCC, MBTA C: CSC State rank: S2 CVMSHCP: Yes	Although prefers wetlands and mature riparian woodlands dominated by cottonwoods, alders, and willows, will also use wellwatered, second growth woodlands and even gardens.	<b>Nesting: Low-Moderate</b> (Habitat present but limited)  <b>Foraging: Moderate</b> (Same as above, species known from region)

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Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
<i>Toxostoma crissale</i> crissal thrasher	F: MBTA C: CSC State rank: S3 CVMSHCP: Yes	Dense thickets of shrubs or low trees in desert riparian and desert wash habitats. Southeastern California to Texas and northern Mexico. 1908 record from approximately 2 miles east of alignment (CNDDDB 2023).	<b>Nesting: Low-Moderate</b> (Habitat present but limited)  <b>Foraging: Moderate</b> (Same as above, species known from region)
<i>Toxostoma lecontei</i> Le Conte's thrasher	F: BCC, MBTA C: CSC (San Joaquin population only) State rank: S3 CVMSHCP: Yes	Resident of open desert wash, scrub, alkali scrub, succulent scrub habitats, nests in dense spiny shrubs and cacti in washes, usually within 2-8 feet of the ground. 1908 record from approximately 2 miles east of alignment (CNDDDB 2023).	<b>Nesting: Low-Moderate</b> (Habitat present but limited, species in region not CSC San Joaquin pop.)  <b>Foraging: Moderate</b> (Same as above)
<i>Tringa semipalmata</i> willet	F: BCC, MBTA C: ND State rank: ND CVMSHCP: No	In the west, nests on ground near marshes, ponds and other, often seasonal. wetlands. Forages on fish, beetles, spiders and other, usually aquatic or marine invertebrates.	<b>Nesting: Absent</b> (Suitable habitat lacking)  <b>Foraging: Absent</b> (Same as above)
<i>Vireo bellii pusillus</i> least Bell's vireo	F: END C: END State rank: S2 CVMSHCP: Yes	Riparian woodland habitats along the riverine systems of Southern California, primarily in San Diego, Santa Barbara, and Riverside Counties. Needs dense shrub cover within 1 to 2 meters (3 to 6 feet) off the ground for nesting, and stratified canopy for foraging	<b>Nesting: Low</b> (Potentially suitable nesting habitat limited to narrow strip of riparian vegetation along the CVSC)  <b>Foraging: Low</b> (Same as above)

<b>Mammals</b>			
<p><i>Chaetodipus fallax pallidus</i>  pallid San Diego pocket mouse</p>	<p>F: ND C: CSC State rank: S3S4 CVMSHCP: No</p>	<p>Desert border areas in desert wash, desert scrub, desert succulent scrub, pinon-juniper, etc. Associated with sandy herbaceous areas usually in association with rocks or coarse gravel from sea level to 1350 m (4500 ft). Known from approximately 6 miles east of the alignment (CNDDDB 2023).</p>	<p><b>Absent</b> (Site below known elevational range and lacking rocky and/or coarse gravelly substrates)</p>
<p><i>Corynorhinus townsendii</i>  Townsend's big-eared bat</p>	<p>F: ND C: CSC State rank: S2 CVMSHCP: No WBWG: H</p>	<p>Occurs throughout the state in a variety of habitats, most common in mesic areas though. Roosting sites (walls and ceilings of enclosed areas) are limited and this species is extremely sensitive to human disturbance. Known from approximately 2 miles east of alignment (CNDDDB 2023).</p>	<p><b>Absent: Roosting</b> (Habitat lacking, human presence and activity along the alignment likely too much for this extremely sensitive species. <b>Moderate: Foraging</b> higher potential for foraging, especially over inundated agricultural drains and CVSC)</p>
<p><i>Euderma maculata</i>  spotted bat</p>	<p>F: ND C: CSC State rank: S3 CVMSHCP: No WBWG: H</p>	<p>Roosts on vertical cliffs in canyons of arid areas, desert scrub and open forests. Known from approximately 2 miles northeast of the alignment (CNDDDB 2023).</p>	<p><b>Absent: Roosting</b> (Habitat lacking) <b>Moderate: Foraging</b> potential moderate, especially over CVSC, agricultural drains and at lights that attract insects)</p>
<p><i>Eumops perotis californicus</i>  western mastiff bat</p>	<p>F: ND C: CSC State rank: S3S4 CVMSHCP: No WBWG: H</p>	<p>Many open, semi-arid to arid areas including conifer and deciduous forests, grasslands, chaparral, and coastal scrubs. Roosts in crevices in cliff faces, buildings, trees and tunnels. Known from approximately 2 miles northeast of the alignment (CNDDDB 2023).</p>	<p><b>Low: Roosting</b> <b>Moderate: Foraging</b> (Tree roosting habitat intermittent, may forage over site, especially over CVSC and agricultural drains and at lights that attract nocturnal insect prey)</p>

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<p><i>Lasiurus ega</i> or <i>xanthinus</i>  southern or western yellow bat</p>	<p>F: ND C: CSC (<i>L. xanthinus</i>), ND (<i>L. ega</i>) State rank: S3 (<i>L. xanthinus</i>) CVMSHCP: Yes WBWG: H (<i>L. xanthinus</i>)</p>	<p>Found in valley foothill riparian, desert riparian, desert wash, and palm oasis. Roosts in trees, particularly palms. Forages over water and among trees. Known from approximately 5 miles south of alignment (CNDDDB 2023).</p>	<p><b>Moderate: Roosting &amp; Foraging</b> (Palm trees exhibiting mature aprons and other mature trees that provide suitable roosting habitat observed along and adjacent to the alignment; species may also forage over site, especially over CVSC and agricultural drains)</p>
<p><i>Neotoma albigula venusta</i>  Colorado Valley woodrat</p>	<p>F: ND C: ND State rank: S1S2 CVMSHCP: No</p>	<p>Low-lying desert areas from sea level to 2800 m (9200 ft) in SE California, closely associated with beaver-tail cactus and mesquite. Eats mainly succulent plants, distribution influenced by availability of nesting material. 1908 record from approximately 2 miles east of alignment (CNDDDB 2023).</p>	<p><b>Absent</b> (Site below known elevational range. Cacti and succulent plants largely absent with the exception of iodine bush and planted ornamental/landscaping species)</p>
<p><i>Ovis canadensis nelsoni</i> (Pop. 2)  Peninsular bighorn sheep DPS</p>	<p>F: END C: THR State Rank: S1 CVMSHCP: Yes</p>	<p>Eastern slopes of the Peninsular Ranges below 4,600 feet. Optimal habitat includes steep-walled canyons/ridges bisected by rocky or sandy washes w/ available water</p>	<p><b>Absent</b> (Suitable habitat lacking)</p>
<p><i>Perognathus longimembris bangsi</i>  Palm Springs pocket mouse</p>	<p>F: BLM(s) C: CSC State Rank: S2 CVMSHCP: Yes</p>	<p>Sonoran Desert habitats with level to gently sloping topography, sparse to moderate vegetative cover, and loosely packed or sandy soils.</p>	<p><b>Low</b> (Potentially suitable habitat intermittently present but limited and disturbed)</p>

<p><i>Taxidea taxus</i>  American badger</p>	<p>F: ND C: CSC State Rank: S3 CVMSHCP: No</p>	<p>Widespread, occurring in a wide variety of usually open habitats. 2001 record from approximately 4.75 miles northeast of alignment (CNDDDB 2023).</p>	<p><b>Low</b> (Potentially suitable habitat present)</p>
<p><i>Xerospermophilus tereticaudus chlorus</i>  Coachella Valley (Palm Springs) round-tailed ground squirrel</p>	<p>F: ND C: CSC State Rank: S2 CVMSHCP: Yes</p>	<p>Prefers open, flat, grassy areas in fine-textured, sandy soil in desert succulent scrub, desert wash, desert scrub, alkali scrub, &amp; levees. 1938 record from approximately 2 miles northeast of alignment (CNDDDB 2023).</p>	<p><b>Low</b> (Suitable alkali scrub habitat intermittently present but soils marginally suitable)</p>

**Definitions of status designations and occurrence probabilities.**

**Federal designations:** (federal Endangered Species Act, US Fish and Wildlife Service):

- END: Federally listed, Endangered.
- THR: Federally listed, Threatened.
- BCC: Birds of Conservation Concern
- BLM(s): Bureau of Land Management Sensitive.
- C: Candidate for Federal listing.
- ND: Not designated.
- BCC: Bird of Conservation Concern.

**State designations:** (California Endangered Species Act, California Dept. of Fish and Game)

- END: State listed, Endangered.
- THR: State listed, Threatened.
- RARE: State listed as Rare (Listed "Rare" animals have been re-designated as Threatened, but Rare plants have retained the Rare designation.)
- CSC: California Special Concern Species.
- WL: Watch List Species.
- CDF(s): California Department of Forestry and Fire Protection Sensitive
- ND: Not designated.

**CVMSHCP designations**

**Yes: Conserved by the CVMSHCP**

No: Not Specifically Conserved by the CVMSHCP

C: Considered, but not included in the CVMSHCP

**California Native Plant Society (CNPS) designations:** (Non-regulatory, compilation by a non-profit organization which tracks rare plants)

**CNPS California Rare Plant Ranks (CRPR)** Note: According to the CNPS

([http://www.cnps.org/programs/Rare\\_Plant/inventory/names.htm](http://www.cnps.org/programs/Rare_Plant/inventory/names.htm)), ALL plants on Lists 1A, 1B, 2A, and 2B meet definitions for state listing as threatened or endangered under Secs. 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code. Certain plants on Lists 3 and 4 do as well.

The CDFW ([http://www.dfg.ca.gov/hcpb/species/t\\_e\\_spp/nat\\_plnt\\_consv.shtml](http://www.dfg.ca.gov/hcpb/species/t_e_spp/nat_plnt_consv.shtml)) states that plants on Lists 1A, 1B, 2A, and 2B of the CNPS Inventory consist of plants that may qualify for listing, and recommends they be addressed in CEQA projects (CEQA Guidelines Section 15380). However, a plant need not be in the Inventory to be considered a rare, threatened, or endangered species under CEQA. In addition, CDFW recommends, and local governments may require, protection of plants which are regionally significant, such as locally rare species, disjunct populations of more common plants, or plants on the CNPS Lists 3 and 4.

**List 1A:** Plants presumed extinct in California.

**List 1B:** Plants rare and endangered in California and throughout their range.

**List 2A:** Plants presumed extirpated in California, but more common elsewhere.

**List 2B:** Plants rare, threatened, or endangered in California, but more common elsewhere.

**List 3:** Plants for which more information is needed.

**List 4:** Plants of limited distribution; a "watch list."

**CA Endemic:** Taxa that occur only in California

CNPS Threat Code:

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

.2 – Fairly endangered in California (20-80% occurrences threatened)

.3 – Not very endangered in California (<20% of occurrences threatened or no current threats known)

**Note:** All List 1A (presumed extinct in California) and some List 3 (need more information- a review list) plants lacking any threat information receive no threat code extension. Also, these Threat Code guidelines represent a starting point in the assessment of threat level. Other factors, such as habitat vulnerability and specificity, distribution, and condition of occurrences, are also considered in setting the Threat Code.

#### **Definitions of occurrence probability:**

*Occurs:* Observed on the site by AMEC personnel, or recorded on-site by other qualified biologists.

*High:* Observed in similar habitat in region by qualified biologists, or habitat on the site is a type often utilized by the species and the site is within the known range of the species.

*Moderate:* Reported sightings in surrounding region, or site is within the known range of the species and habitat on the site is a type occasionally used by the species.

*Low:* Site is within the known range of the species but habitat on the site is rarely used by the species.

*Absent:* A focused study failed to detect the species, or, no suitable habitat is present.

#### **CDFW CNDDDB rankings: Animals**

**S1** = Extremely endangered: <6 viable occurrences or <1,000 individuals, or < 2,000 acres of occupied habitat

**S2** = Endangered: about 6-20 viable occurrences or 1,000 - 3,000 individuals, or 2,000 to 10,000 acres of occupied habitat

**S3** = Restricted range, rare: about 21-100 viable occurrences, or 3,000 – 10,000 individuals, or 10,000 – 50,000 acres of occupied habitat

**S4** = Apparently secure; some factors exist to cause some concern such as narrow habitat or continuing threats

**S5** = Demonstrably secure; commonly found throughout its historic range

**SH** = all sites are historical, this species may be extinct, further field work is needed

#### **CDFW CNDDDB rankings: Plants and Vegetation Communities**

**S1** = Less than 6 viable occurrences OR less than 1,000 individuals OR less than 2,000 acres

S1.1 = very threatened

S1.2 = threatened

S1.3 = no current threats known

**S2** = 6-20 viable occurrences OR 1,000-3,000 individuals OR 2,000-10,000 acres

S2.1 = very threatened

S2.2 = threatened

S2.3 = no current threats known

**S3** = 21-80 viable occurrences or 3,000-10,000 individuals OR 10,000-50,000 acres

S3.1 = very threatened

S3.2 = threatened

S3.3 = no current threats known

**S4** = Apparently secure within California; this rank is clearly lower than S3 but factors exist to cause some concern; i.e. there is some threat, or somewhat narrow habitat.

**S5** = Demonstrably secure to ineradicable in California.

#### **Western Bat Working Group (WBWG) designations:**

The Western Bat Working Group is comprised of agencies, organizations and individuals interested in bat research, management and conservation from the 13 western states and provinces. Its goals are (1) to facilitate communication among interested parties and reduce risks of species decline or extinction; (2) to provide a mechanism by which current information on bat ecology, distribution and research techniques can be readily accessed; and (3) to develop a forum to discuss conservation strategies, provide technical assistance and encourage education programs.

**H:** High: Species which are imperiled or are at high risk of imperilment based on available information on distribution, status, ecology and known threats.

**M:** Medium: Species which warrant a medium level of concern and need closer evaluation, more research, and conservation actions of both the species and possible threats. A lack of meaningful information is a major obstacle in adequately assessing these species' status and should be considered a threat.

**L:** Low: Species for which most of the existing data support stable populations, and for which the potential for major changes in status in the near future is considered unlikely. There may be localized concerns, but the overall status of the species is believed to be secure. Conservation actions would still apply for these bats, but limited resources are best used on High and Medium status species.

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**P:** Periphery: This designation indicates a species on the edge of its range, for which no other designation has been determined.

## 6.0 DISCUSSION

Implementation of the proposed project would result in temporary impacts to existing developed roadways and roadside habitats during the installation and construction of the proposed sewer and water pipelines and activities associated with the decommissioning of the existing septic tanks. Biological resources, sensitive and otherwise, occurring, or potentially occurring on- and/or adjacent to the alignment have the potential to be directly or indirectly impacted. Much of the alignment is located within and/or immediately adjacent to existing developed areas (i.e., roadways, mobile home parks, rural residential single-family dwellings, agricultural areas and/or highly disturbed areas). Undeveloped and less-disturbed areas are, however, also intermittently present along the alignment. Although much of the alignment is located within Torres Martinez Tribal jurisdiction, which is technically not a part of the CVMSHCP, the project proponent is CVWD, who is a signatory to the plan. For these reasons, it is WSP's understanding that the entire project alignment is subject to the provisions of the plan.

Habitat suitable for some of the federally and/or state listed species reported by the literature review of occurring in the vicinity is not present anywhere along the alignment. These species include: Coachella Valley milk-vetch (*Astragalus lentiginosus var. coachellae*), desert tortoise (*Gopherus agassizi*), Coachella Valley fringe-toed lizard (*Uma inornata*), and Peninsular bighorn sheep (*Ovis canadensis nelsoni*). Site conditions are either too alkaline, too disturbed, not sandy enough or otherwise do not have the key habitat components for these species.

An approximate 850 ft. of the northeastern terminus of the proposed alignment along Avenue 66 is immediately north of the a portion of the Coachella Valley Stormwater Channel and Delta Conservation Area. The aquatic habitats and/or emergent or riparian vegetation communities present at and adjacent to this location provide potentially suitable habitat for desert pupfish, razorback sucker (*Xyrauchen texanus*), Cooper's hawk, southwestern willow flycatcher, yellow-breasted chat, California black rail, Yuma Ridgway's rail, yellow warbler (*Setophaga petechia brewsteri*) and least Bell's vireo. The shrubby and open, sparsely vegetated habitats within and adjacent to the alignment within the conservation area also provide potentially suitable habitat for burrowing owl, loggerhead shrike, black-tailed gnatcatcher (*Polioptila melanura*), crissal thrasher, LeConte's thrasher and Coachella Valley (Palm Springs) round-tailed ground squirrel. At least one California fan palm and/or some of the mature trees in this area provide potential roosting habitat for western yellow bat (*Lasiurus xanthinus*) in the conservation area.

Two other locations, outside of the conservation area, where the alignment traverses two agricultural drains, both labeled "M Canal" on the project engineering drawings, that may provide potentially suitable habitat for desert pupfish, California black rail and Yuma Ridgway's rail when they are inundated and/or heavily vegetated with emergent vegetation (i.e., bullrush, cattails, sedges, etc). Only one of the agricultural drains exhibited surface water at the time of the assessment. Neither agricultural drain contained vegetative cover suitable for either of the rails at the time of the assessment but remnant emergent vegetation (i.e., dormant cattails, sedges, etc.) was evident and if allowed to develop, potentially suitable habitat for the rails could be present in the future. Since the agricultural drains at this location are located within the CVMSHCP plan area, potential impacts to the desert pupfish is expected to be covered with project participation in the CVMSHCP. Although, the California black rail and Yuma Ridgway's rail are covered under the CVMSHCP they are also fully protected species, no take of either of these species is permitted. If suitable habitat (i.e., surface water and dense emergent vegetative cover of cattails, rushes and/or sedges) is present within either of the agricultural drains prior to initiation of work at this location, surveys for the rails may be required at these locations prior to project implementation to ensure no impacts to these species result from project implementation. In addition, construction monitoring will be required if any dense emergent vegetation is removed as a component of the project to ensure that no rails are impacted. If dense emergent cover is not

present prior to initiation of project activities at this location, surveys for these species would not be required and no further action is recommended. It should be noted that CVWD routinely cleans out these agricultural drains which reduces the likelihood of these species occurring.

Other areas of the alignment, outside of and not immediately adjacent to the conservation area, are located within and/or immediately adjacent to areas that provide suitable habitat for burrowing owl, loggerhead shrike, black-tailed gnatcatcher, crissal thrasher, LeConte's thrasher, western yellow bat and Coachella Valley (Palm Springs) round-tailed ground squirrel. As seen on Tables 1-3, the occurrence potential of for most special status species is generally considered to be very low to low. A few species, however, have a moderate to high potential of occurrence.

The CVMSHCP was designed to streamline the permitting process and to mitigate potential impacts to covered species and habitats resulting from covered projects and the lawful activities of permittees through payment of the requisite development fees and participation in other requirements of the plan. Not all potentially occurring special status species are covered under the CVMSHCP, however. Significant impacts (if any) to special status species that are not covered under the CVMSHCP must be avoided or mitigated through other actions to reduce significant impacts to these species to a level below the threshold of significance. Likewise, impacts to nesting birds are not covered, nor are impacts to jurisdictional waters. Lastly, impacts adjacent to Conservation Areas may require additional species measures covered by the plan (CVMSHCP Section 4.4 Required Avoidance, Minimization, and Mitigation Measures).

Three bird species always require extra measures where habitat is present and proposed project activities could result in impacts. Yuma Ridgway's rail and the California black rail are fully protected species in California. As such, take of these species is not authorized in the NCCP Permit and is prohibited by the California Fish and Game Code. Focused surveys are required in potentially suitable habitat (i.e., agricultural drains, CVSC) before any activity that would impact the habitat or potentially affect nesting of these species, where present. If habitat is allowed to become reestablished in the agricultural drains and/or rails are found, the habitat must be avoided or measures approved by the Wildlife Agencies implemented to ensure that no potential take of an individual occurs. This includes project activities that may not impact habitat directly but adjacent project activities (i.e., increased noise, vibrations, dust, human presence, etc.) could impact offsite nesting nearby. For burrowing owls, at a minimum, a pre-construction survey is required anywhere in the CVMSHCP plan area where potential habitat is present. Where potential habitat is within conservation areas, full focused surveys are required for burrowing owl.

Permittees must comply with all applicable avoidance, minimization, and mitigation measures described in Section 4.4 of the CVMSHCP and the Land Use Adjacency Guidelines as described in Section 4.5 of the CVMSHCP. These measures are detailed in Section 7.1 below.

The CVSC and two agricultural drains are present along portions of the alignment. Riparian vegetation, emergent vegetation and surface water was flowing in the river while surface water and emergent vegetation was present in one of the agricultural drains. Although dry at the time of the assessment, evidence of recent surface water and emergent vegetation was present in the other agricultural drains. These water features may fall under the jurisdiction of the USACE, RWQCB, and/or CDFW. If the project proposes to disturb or impact these features, and/or vegetation associated with them, a jurisdictional delineation is recommended and may be required.

## **6.1 Discussion of the Special-status Species Tables**

A review of the CNDDDB, CNPS and the collective knowledge of WSP senior biologists resulted in a total of 52 special status biological resources that are known from the vicinity of the project site (Tables 1-3). These include: six plants, one vegetation community, two invertebrates, two fishes, one amphibian, three reptiles, 27 birds and 10 mammals. Of these, 28 are considered to be absent

from the site due to a lack of suitable habitat and/or the location of the site outside of known elevational or geographic range requirements. These include: chaparral sand-verbena (*Abronia villosa* var. *aurita*), singlewhorl burrobush (*Ambrosia monogyra*), Coachella Valley milk-vetch, gravel milk-vetch (*Astragalus sabulonum*), Slender cottonheads (*Nemacaulis denudata* var. *gracilis*), narrow-leaf sandpaper plant (*Petalonyx linearis*), desert fan palm oasis woodland, cheeseweed owlfly (*Oliarces clara*), desert tortoise, flat-tailed horned lizard (*Phrynosoma mcallii*), Coachella Valley fringe-toed lizard, nesting western grebe (*Aechmophorus occidentalis*), nesting great egret, nesting great blue heron, nesting snowy egret, nesting merlin, nesting prairie falcon (*Falco mexicanus*), nesting gull-billed tern (*Gelochelidon nilotica*), nesting bald eagle (*Haliaeetus leucocephalus*), nesting yellow-breasted chat, nesting marbled godwit (*Limosa fedoa*), nesting American brown pelican (*Pelecanus occidentalis californicus*), nesting black skimmer (*Rynchops niger*), nesting willet (*Tringa semipalmata*), pallid San Diego pocket mouse (*Chaetodipus fallax pallidus*), roosting Townsend's big-eared bat (*Corynorhinus townsendii*), roosting spotted bat (*Euderma maculatum*), Colorado Valley woodrat (*Neotoma albigula venusta*) and Peninsular bighorn sheep (Pop. 2). These special status biological resources will not be discussed further.

13 of the remaining 26 species are fully covered and conserved under the CVMSHCP. Participation in the CVMSHCP and payment of the requisite CVMSHCP development fees and participation in the plan, as appropriate, is expected to fully mitigate project related impacts (if any) to these species. Participation in the plan, however, may require additional surveys for some of these species, particularly areas that are adjacent to, within an approximate 152-meters (500 feet) of the CVMSHCP Conservation Area. Fully conserved species include desert pupfish, burrowing owl, California black rail, Yuma Ridgway's rail, yellow warbler, southwestern willow flycatcher, crissal thrasher, LeConte's thrasher, least Bell's vireo, western yellow bat, Palm Springs pocket mouse and Coachella Valley (Palm Springs) round-tailed ground squirrel. Regardless of whether these species occur on the project site, participation in the CVMSHCP including payment of requisite fees, permittee obligations, surveys for some species (i.e., burrowing owl, California black rail and Yuma's Ridgway's rail) and implementation of avoidance and/or mitigation measures may also be required.

Suitable habitat for burrowing owl was observed at various locations along the alignment. Mammal (likely California ground squirrel) burrows and one drainpipe suitable for burrowing owl use, were also observed within these areas. For these reasons, suitable habitat for burrowing owl to occur along the alignment is present. This species nests and roosts underground and is particularly sensitive to ground disturbing activities, loud noise created by operation of heavy equipment up to 500 meters away (CDFW 2012) and may abandon nests or burrows if/when such activities occur. Therefore, in addition to on-site impacts, potential direct and indirect impacts to burrowing owls potentially occurring nearby off-site must also be considered. The burrowing owl is not listed as threatened or endangered by the USFWS or CDFW. It is, however, managed as a Bird of Conservation Concern (BCC) by the USFWS and designated as a CSC by the CDFW. It is also protected from take by the MBTA and California Fish and Game Code. The burrowing owl is a covered species under the CVMSHCP, however, the federal permit for the CVMSHCP does not allow take of this species under the MBTA. For these reasons, full focused presence/absence surveys for the areas of the project alignment containing suitable habitat that are located adjacent (within 152 meters [500 feet]) to the conservation area will likely be required in accordance with the CVMSHCP and to ensure that no direct or indirect impacts to burrowing owl occur in the conservation area as result from project implementation. For the areas that are not within or adjacent (i.e., more than 152 meters [500 feet]) to the conservation area, two pre-construction take avoidance surveys (the first within 14-30 days prior to ground disturbance and the second within 24 hours of ground disturbance) would be required to ensure that no direct take

of burrowing owls occur. If burrowing owl is determined to be present at and/or adjacent to the site, the CDFW should be contacted to determine the appropriate course of action.

All work will be conducted outside of nesting season when feasible. If construction must take place within nesting season, nesting bird surveys will be required for species protected under ESA, CESA, MBTA, California Fish and Game Code and species of special concern. Focused surveys for southwestern willow flycatcher, California black rail, Yuma Ridgway's rail, Crissal thrasher, LeConte's thrasher and least Bell's vireo will be required in the portion of the project alignment containing potentially suitable habitat and located adjacent (withing 152 meters [500 feet]) to the conservation area to ensure that implementation of project activities do not directly or indirectly impact these species within the conservation area. Additionally, although lacking at the time of the assessment, if habitat for the California black rail and/or Yuma Ridgeway's rail is present in the two agricultural drains outside of the conservation area, focused surveys may be required at these locations as well.

The remaining species, which are considered to have some potential to occur and are not covered, or not fully covered, under the CVMSHCP are discussed below.

### **6.1.1 Potentially Occurring Species Not Covered, or Not Fully Covered Under the CVMSHCP**

Three special status bird species that are not covered by the CVMSHCP are considered to have at least some potential to nest on the project site. These include Cooper's hawk, loggerhead shrike and black-tailed gnatcatcher. These species are discussed individually below.

Cooper's hawk was observed in the vicinity by WSP senior biologists. This species is not listed as threatened or endangered by any of the resource agencies. It is, however, designated as a watch list species by the CDFW and is protected by the California Fish and Game Code and the MBTA. Some of the existing trees along and/or immediately adjacent to the alignment may provide suitable nesting habitat for this species. WSP considers there to be a low to moderate potential of Cooper's hawk nesting along the alignment. Should any project construction or disturbance be conducted during the nesting season (generally 1 February through 31 August), nesting bird clearance surveys conducted by a qualified biologist are recommended to ensure that active bird nests, including Cooper's hawk, are avoided. The CVMSHCP provides no coverage for Cooper's hawk and/or nesting birds of any kind. For these reasons, all potential project related impacts to Cooper's hawk and other nesting bird species must be entirely avoided. Any impacts to nesting bird species would be considered significant.

Loggerhead shrike was observed along the proposed alignment during the assessment. This species is also widespread and known to occur throughout the region in a variety of desert habitats, including saltbush scrub and disturbed areas. Loggerhead shrike nests in spiny trees and shrubs, which are intermittently present along the project alignment. It is not listed as threatened or endangered by any of the regulatory agencies, however, is designated as a CSC by the CDFW, managed as a BCC by the USFWS and afforded protection by the California Fish and Game Code and MBTA. Due to the presence of suitable habitat intermittently present along and immediately adjacent to the project alignment, WSP considers there to be a high potential for loggerhead shrike to nest on and/or adjacent to the site. Should project-related disturbance be conducted during the nesting season (1 February through 31 August), a nesting bird clearance survey is recommended to ensure that implementation of the proposed project does not impact nesting loggerhead shrike.

Black-tailed gnatcatcher was not detected on-site during the assessment. This species is known to occur throughout the Coachella Valley and occurs in desert wash and scrub habitats, including

saltbush scrub. Black-tailed gnatcatcher is not listed as threatened or endangered by the USFWS or CDFW. It is, however, is managed as a watch list species by the CDFW, designated as a BCC by the USFWS and afforded protection by the MBTA and California Fish and Game Code. Due to the presence of suitable habitat intermittently present along and immediately adjacent to the project alignment, WSP considers there to be a low to moderate potential for black-tailed gnatcatcher to nest on and/or adjacent to the site. Should project-related disturbance be conducted during the nesting season (1 February through 31 August), a nesting bird clearance survey is recommended to ensure that implementation of the proposed project does not impact nesting black-tailed gnatcatcher.

### **6.1.2 Additional Bird Species Protected by the Migratory Bird Treaty Act and State Code**

Excluded from coverage under the CVMSHCP are a variety of common bird species that are protected by the MBTA and the state Fish and Game Code. This includes virtually all native migratory and resident bird species, including birds known to occur in the vicinity. Avoidance of impacts to these nesting migratory and resident birds is a requirement of the federal permit issued for the CVMSHCP. To avoid impacting nesting birds, either avoidance of project-related disturbance during the nesting season (1 February through 31 August) or nesting bird surveys conducted by a qualified ornithologist or biologist immediately prior to on-site disturbance during the nesting season would be required.

If nesting birds are found, no work would be permitted near the nest until young have fledged. There is no established protocol for nest avoidance, however, when consulted the CDFW generally recommends avoidance buffers of about 500 feet for birds-of-prey and species listed as threatened or endangered, and 100–300 feet for unlisted songbirds. This avoidance buffer can be changed at the discretion of the biological monitor based on nesting bird behavior.

### **6.1.3 Additional Considerations**

A portion of the alignment crosses the CVSC and two agricultural drains. Surface hydrology (i.e., flowing water) was observed within the CVSC and within one of the two agricultural drains. Although dry at the time, evidence of hydrology was also observed within the dry canal. The CVSC qualifies as jurisdictional under the USACE, CDFW and the RWQCB. The two agricultural drains do not fall under the jurisdictions of these regulatory agencies. If project proposes to disturb or impact these jurisdictional, or potentially jurisdictional areas in any way, regulatory agency permits may be necessary, and a wetland delineation may be required.

## **7.0 Conclusions**

Implementation of the proposed project would result in temporary impacts to existing developed roadways and roadside habitats during the installation of the proposed sewer and water pipelines and activities associated with the decommissioning of the existing septic tanks. Biological resources, sensitive and otherwise, occurring, or potentially occurring on- and/or adjacent to the alignment have the potential to be directly or indirectly impacted. Much of the alignment is located within and/or immediately adjacent to existing developed areas (i.e., roadways, mobile home parks, rural residential single-family dwellings, agricultural areas and/or highly disturbed areas). Undeveloped and less-disturbed areas are, however, also intermittently present along the alignment. Although much of the alignment is located within Torres Martinez Tribal jurisdiction, which is technically not a part of the CVMSHCP, the project proponent is the CVWD, which is subject to the plan. For these reasons, it is WSP's understanding that the entire project alignment would be subject to the provisions of the plan.

Approximately 850 feet of the northeastern terminus of the alignment is not within but is located immediately adjacent to the northern-most portions of Coachella Valley Stormwater Channel and Delta Conservation Area. The aquatic habitats and/or emergent or riparian vegetation

communities present at and adjacent to this location provide potentially suitable habitat for desert pupfish, razorback sucker, Cooper's hawk, southwestern willow flycatcher, yellow-breasted chat, California black rail, Yuma Ridgway's rail, yellow warbler and least Bell's vireo. The open, shrubby and sparsely vegetated habitats within and adjacent to the alignment that are adjacent to (within 152 meters [500 feet]) the conservation area also provide potentially suitable habitat for burrowing owl, loggerhead shrike, black-tailed gnatcatcher, crissal thrasher, LeConte's thrasher and Coachella Valley (Palm Springs) round-tailed ground squirrel. Lastly, at least one California fan palm was observed within this area, along with mature willow, salt cedar and other trees. Western and southern yellow bats, and other bat species roost in trees with suitable habitat. Palm trees are generally the preferred roost tree but may also utilize any tree species with suitable canopy or cavities for roosting. For these reasons, potential for western and southern yellow bats to occur and roost is also present at this location within and/or adjacent to the conservation area.

Significant direct and indirect impacts to sensitive species potentially occurring within the portion of the alignment that is adjacent to the Coachella Valley Stormwater Channel and Drain Conservation Area must be avoided, minimized and/or mitigated in accordance with the provision of the CVMSHCP, as appropriate, as those impacts are not covered under the plan. Although construction activities are expected to be largely confined to existing roadways, road shoulders and/or other developed and/or disturbed areas adjacent to the conservation area, potential indirect impacts could occur. Indirect impacts could include, increased noise levels, dust, runoff, and the presence of project personnel within and/or adjacent to suitable habitats. Significant impacts within the conservation area are not likely as the proposed alignment and impacts area are within the existing roadway and bridge.

### **7.1 Measures Required within and/or Immediately Adjacent to the Conservation Area**

Because 850 feet of the northeastern terminus of the alignment is adjacent to the conservation area and potentially suitable habitat for various special status species is present within the conservation area, focused surveys for some of these species may be required. Surveys may be required for southwestern willow flycatcher, California black rail, Yuma Ridgway's rail, least Bell's vireo, burrowing owl, western and southern yellow bat in the areas of the project alignment that are adjacent to potentially suitable habitat within the conservation area. If any of these species are found to be present and potential direct and/or indirect impacts cannot be avoided, additional conservation measures may be required to ensure that direct and/or indirect impacts to these species are avoided within the conservation area.

The CVMSHCP states that because the "Yuma clapper rail and the California black rail are fully protected species, surveys will be required in potential habitat for the rails before any activity that might impact the habitat". If rails are found, their habitat must be avoided or measures approved by the wildlife regulatory agencies implemented to ensure that no take occurs, other than for projects where Fish and Game Code Section 2081.7 is applicable. If found and potential direct or indirect impacts cannot be avoided, additional conservation measures developed through coordination with the involved regulatory agencies (i.e., CVAG, USFWS, CDFW and/or USACE) will be required prior to, during and following project implementation. Examples of additional conservation measures that may be required included, but are not limited to, avoidance of project activities that have the potential to directly or indirectly impact these species during their respective nesting seasons, use of noise attenuating barriers adjacent to occupied areas of habitat, use of visual barriers adjacent to occupied habitat and/or methods to control project-related fugitive dust.

The CVMSHCP requires burrowing owl surveys in conservation areas in accordance with accepted protocol for the plan. Prior to disturbance or development, the construction footprint and suitable adjacent areas within 152 meters (500 feet) of the construction footprint, or to the edge of the property if less than 500 feet, will be surveyed by a qualified biologist for burrows that could be used by burrowing owl. If a burrow is located, the biologist will determine if an owl is present in the burrow. If the burrow is determined to be occupied, the burrow will be flagged and a 49-meter (160-foot) buffer during the non-breeding season and a 76-meter (250-foot) buffer during the breeding season, or a buffer to the edge of the property boundary if less than 152 meters (500 feet), will be established around the occupied burrow. The buffer will be staked and flagged. No disturbance or development will be allowed within the buffer until the young are no longer dependent on the burrow.

If suitable but unoccupied burrows are detected within the portion of the conservation area that is adjacent to the project alignment, the burrow will be made inaccessible to burrowing owl, and project activities may proceed. If a nesting or an escape burrow is determined to be occupied and cannot be avoided by project activities, burrowing owls may need to be relocated in accordance with currently accepted wildlife regulatory agency protocol(s). A burrow is generally assumed occupied if records indicate that, based on protocol surveys, at least one burrowing owl has been observed occupying a burrow on-site during the past three years (CDFW 2012). If there are no records for the site, surveys must be conducted to determine the status of burrowing owl, prior to construction. Burrowing owl surveys can be conducted concurrent with other nesting bird surveys. Determination of the appropriate method of relocation, such as eviction/passive relocation or active relocation, shall be based on the specific site conditions (e.g., distance to nearest suitable habitat and presence of burrows within that habitat) in coordination with the wildlife regulatory agencies. Active relocation and eviction/passive relocation require the preservation and maintenance of suitable burrowing owl habitat determined through coordination with the wildlife regulatory agencies.

Project activities that have the potential to cause direct or indirect disturbance to protected nesting birds within the riparian habitat (i.e., southern willow cottonwood riparian scrub) present along the CVSC within the conservation area, will be conducted to the maximum extent feasible outside of the 15 March – 15 September nesting season for least Bell's vireo, and the 1 May – 15 September nesting season for southwestern willow flycatcher, summer tanager, yellow warbler and yellow-breasted chat. If project activities must occur during the nesting season (15 March-15 September), surveys shall be conducted to determine if any active nests are present within 152-meters (500-feet) of the portions of the project alignment that are adjacent to the potentially suitable habitat areas within the conservation area. If active nests are detected, project activities shall not be conducted within 61 meters (200 feet) of an active nest. If surveys conducted during the nesting season document that these covered nesting riparian bird species are not present, the project activities may proceed in that portion of the conservation area.

Although areas of the site are considered potentially suitable for crissal thrasher, modeled habitat for this species is not present within this portion of the conservation area. As a result, focused surveys specifically for this species are not anticipated to be required. If crissal thrasher nests are detected during surveys conducted for other species (i.e., burrowing owl, least Bell's vireo, etc.), no project activities will be conducted within a 61-meter (200-foot) radius of the active nest site until young have fledged the nest.

Similar to the crissal thrasher discussed above, although areas of the site are considered to be potentially suitable for LeConte's thrasher, modeled habitat for this species is not present within this portion of the conservation area. For this reason, focused surveys for this species are not

anticipated to be required. If LeConte's thrasher nests are detected during surveys required for other species, no project activities will be permitted within a 152-meter (500-foot radius) of the active nest site during the nesting season (i.e., 15 January – 15 June) or until the young have fledged the nest.

Because the site is considered to be too alkaline for desert tortoise occurrence and/or otherwise unsuitable, surveys for the desert tortoise are considered to be unwarranted, are not recommended and not anticipated to be required for this project. Installation of desert tortoise fencing is also considered unwarranted, not recommended, and not anticipated to be required for this project.

Disturbance to mesquite hummocks within the conservation area must be avoided to the greatest extent feasible. It does not appear that any mesquite hummocks will be affected by project activities, however. If mesquite hummocks are disturbed, mitigation may be required. Such mitigation may include removal of salt cedar thickets within the conservation area.

To avoid or minimize potential effects adjacent to or within the conservation area, project-related activities conducted within and/or adjacent to the conservation area shall implement CVMSHCP Land Use Adjacency Guidelines. The guidelines are as follows:

#### **Drainage**

Project-related activities adjacent to or within the conservation area shall incorporate plans to ensure that the quantity and quality of runoff discharged to the conservation area is not altered in an adverse way when compared with existing conditions. Stormwater systems shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological resources or ecosystem processes within the conservation area.

#### **Toxics**

Land uses proposed adjacent to or within a conservation area that use chemicals or generate bioproducts such as manure that are potentially toxic or may adversely affect wildlife and plant species, Habitat, or water quality shall incorporate measures to ensure that application of such chemicals does not result in any discharge to the conservation area.

#### **Lighting**

Any proposed lighting shall be shielded and directed toward developed areas, away from natural areas. Landscape shielding or other appropriate methods shall be incorporated in project design to minimize the effects of lighting adjacent to or within the conservation area.

#### **Noise**

Proposed development adjacent to or within a Conservation Area that generates noise in excess of 75 dBA Leq hourly shall incorporate setbacks, berms, or walls, as appropriate, to minimize the effects of noise on the adjacent conservation area in accordance with the guidelines to be included in the Implementation Manual.

#### **Invasives**

Invasive, non-native plant species shall not be incorporated in the landscape for land uses adjacent to or within a conservation area. Landscape treatments within

or adjacent to a conservation Area shall incorporate native plant materials to the maximum extent feasible; recommended native species are listed in CVMSHCP Table 4-112 (Appendix D). Plant species listed in CVMSHCP Table 4-113 shall not be used within or adjacent to a conservation area (Appendix E).

### **Barriers**

Land uses within and/or adjacent to the conservation area shall incorporate barriers into project design to minimize unauthorized public access, domestic animal predation, illegal trespass and/or dumping within the conservation area. Barriers may include native landscaping, rocks/boulders, fencing, walls, signage or a combination of any of the above.

### **Grading/Land Development**

Manufactured slopes associated with the project shall not extend into adjacent land in the conservation area.

## **7.2 Measures Required Outside of the Conservation Area**

Although the alignment is located outside of the conservation area, certain conservation measures are also required for areas of the alignment that contain potentially suitable habitat for some special status biological resources.

In addition to the aquatic and emergent habitat present within the adjacent conservation area, potentially suitable habitat for the Yuma clapper rail and California black rail may be present within two agricultural drains (labeled "M Canal" on engineering drawings) that are traversed by the project alignment along Pierce Street. One of these canals contained water and sparse emergent vegetation (i.e., cattails, sedges, rushes, etc.) while the other canal was dry at the time of the assessments but had evidence of hydrology (i.e., dried mud, dormant emergent vegetation, etc.). Suitable habitat for these species (i.e., dense emergent vegetation) was not present at the time of the assessment, however, if not maintained by CDWD, could develop between the time of the assessment and commencement of project activities. If water and dense emergent vegetation are present within either of these canals prior to commencement of project activities, surveys would be required prior to commencement of project activities as both rails are fully protected species. If rails are detected, their habitat must be avoided or measures approved by the wildlife regulatory agencies implemented to ensure that no take occurs, other than for projects where Fish and Game Code Section 2081.7 is applicable. If no water and/or dense emergent vegetation is present within the on-site and/or adjacent portions of the canals immediately prior to the commencement of project activities, surveys for the rails would be considered unwarranted and are not anticipated to be required.

Outside of the conservation area, two "take avoidance" surveys for burrowing owl, the first no less than 14 days (in accordance with the Staff Report on Burrowing Owl Mitigation [CDFW 2012]) and no more than 30 days (in accordance with CVWD's Operations and Maintenance Manual) and the second within 24 hours of the initiation of ground disturbance, may be required in areas containing potentially suitable habitat, in accordance with the CDFW 2012 protocol. If no burrowing owls are detected during those surveys, implementation of ground disturbance activities could proceed without further consideration of this species assuming there is no lapse between the surveys and construction as the protocol states "time lapses between Project activities trigger subsequent take avoidance surveys including but not limited to a final survey conducted within 24 hours prior to ground disturbance." If burrowing owls are detected during the take avoidance surveys, avoidance and minimization measures would then be required and the need for mitigation for otherwise unavoidable impacts triggered.

### **7.3 Additional Measures Required for Both Inside and Outside of the Conservation Area**

Bird species, including special status bird species, that are not covered under the CVMSHCP have potential to occur both within and outside of the conservation area and may be affected by project implementation. These include Cooper's hawk, yellow-breasted chat, loggerhead shrike and black-tailed gnatcatcher and all other bird species protected by the MBTA and California Fish and Game Code. Direct and indirect impacts to these species must be avoided both on-site and in adjacent areas. Scheduling project activities that have the potential to disturb nesting birds during the nesting season (Generally 1 January to 31 August but could occur year-round) is one way to avoid potential impacts. If it is not feasible to avoid project activities during the nesting season, nesting bird surveys conducted by a qualified biologist are recommended prior to any such activities. If active nests are found, they should be avoided, and adequate no disturbance buffer zones established and observed by project activities until after the young have fledged. Although there is no established protocol for nest avoidance, regulatory agencies generally recommend avoidance buffers of about 152 meters (500 feet) for birds-of-prey and species listed as threatened or endangered, and 30-91 meters (100–300 feet) for unlisted songbirds; however, these avoidance buffer zone areas are often determined on a case-by case, or a project-by-project basis.

Areas of the project alignment traverse the CVSC and two agricultural drains. Some, or all, of these areas may fall under the jurisdiction of the USACE, CDFW and/or RWQCB. If project activities cannot avoid potential impacts to these areas, a jurisdictional delineation of wetlands, waters of the United States and/or waters of the state of California may be required.

With the implementation of the recommendations above, in addition to any additional measures required by CVCC, impacts to special-special status biological resources are anticipated to be avoided, minimized and/or mitigated to acceptable levels, and in accordance with the CVMSHCP.

## 8.0 LITERATURE CITED AND REFERENCES

- The Altum Group. 2021. Pierce Street Sewer Extension, Oasis, California, Preliminary Engineering Report dated June 2021.
- California Bird Records Committee. 2021. Official California Checklist. Accessed online at: [http://californiabirds.org/ca\\_list.asp](http://californiabirds.org/ca_list.asp).
- California Department of Fish and Game (CDFG). 2012. Staff report on Burrowing Owl Mitigation. CDFG, Sacramento, CA.
- California Department of Fish and Wildlife (CDFW). 2023a. California Natural Diversity Data Base, Rarefind 5. Report for the *Oasis, Mecca, Valerie & Rabbit Peak, Calif.* quadrangles. Accessed at: [dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp](http://dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp)
- CDFW. 2023b. Special Animals List. April. Periodic publication. Sacramento, CA. Accessed online at: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline=1>
- CDFW. 2016. Complete List of Amphibian, Reptile, Bird and Mammal Species in California. Accessed online at: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=87155&inline>
- California Legislative Information. 2021. Fish and Game Code of California. <https://leginfo.legislature.ca.gov/faces/codesTOCSelected.xhtml?tocCode=FGC&tocTitle=+Fish+and+Game+Code+-+FGC>
- CDFW. 2015b. California Wildlife Habitat Relationships, Life History Accounts and Range Maps. Accessed online at: <http://www.dfg.ca.gov/biogeodata/cwhr/cawildlife.aspx>
- CDFW. 2015c. Threatened and Endangered Species, Species Lists and Accounts, Species Accounts-Fish. Accessed online at: [https://www.dfg.ca.gov/wildlife/nongame/t\\_e\\_spp/](https://www.dfg.ca.gov/wildlife/nongame/t_e_spp/)
- CDFW. 2014. Complete List of Amphibian, Reptile, Bird and Mammal Species in California. Accessed online at: [nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=87155&inline=1](http://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=87155&inline=1)
- California Native Plant Society (CNPS). 2023a. Inventory of Rare, Threatened, and Endangered Plants of California. Report for the *Oasis, Mecca, Valerie & Rabbit Peak, Calif.* quadrangles. Accessed online at: <http://www.rareplants.cnps.org>
- CNPS. 2021b. The California Rare Plant Ranking System. Accessed online at: <https://www.cnps.org/cnps/rareplants/ranking.php>
- California Natural Resources Agency. 2014. CEQA Guidelines. Accessed online at: <http://resources.ca.gov/ceqa/guidelines/>
- Coachella Valley Conservation Commission (CVCC). 2023. Coachella Valley Multiple Species Habitat Conservation Plan, including 2016 major amendment. Accessed online at: [cvmshcp.org](http://cvmshcp.org)
- Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. Prepared for the California Department of Fish and Game.
- Jepson Flora Project (eds.) 2023. *Jepson eFlora*, <https://ucjeps.berkeley.edu/eflora/> [accessed on May 24, 2023]
- Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. A manual of California vegetation (2<sup>nd</sup> ed.). California Native Plant Society, Sacramento, CA.
- Shuford, W. D., and Gardali, T. (Ed.). 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. *Studies of Western Birds* 1. Western Field

Pierce Street Sewer & Water Extension Project  
Biological Resources Assessment  
Riverside County, CA  
October 2024

Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.

United States Department of Agriculture (USDA), Soil Conservation Service. 1980. A Soil Survey of Riverside County, California, Coachella Valley Area.  
[https://www.nrcs.usda.gov/Internet/FSE\\_MANUSCRIPTS/california/riversideCA1980/riversideCA1980.pdf](https://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/california/riversideCA1980/riversideCA1980.pdf)

USDA, Soil Survey Staff, NRCS. 2023a. Web Soil Survey. Accessed online at:  
<http://websoilsurvey.nrcs.usda.gov/app/> Accessed [May 24, 2023].

USDA, NRCS. 2023b. The PLANTS Database. National Plant Data Team. Accessed online at:  
[plants.usda.gov](http://plants.usda.gov)

USFWS. 2016. Bird Laws and Treaties. Accessed online at:  
<http://www.fws.gov/migratorybirds/RegulationsandPolicies.html>

USFWS. 2023. IPaC Resource List.

USGS. 2015. US Topo and Historical Topographic Map Collection (7.5-minute Oasis, *Mecca*, *Valerie & Rabbit Peak*, *Riverside*, *California* quadrangles). Accessed online at:  
<http://geonames.usgs.gov/apex/f?p=262:1:0::NO:RP:>

**APPENDIX A**  
**FIGURES**

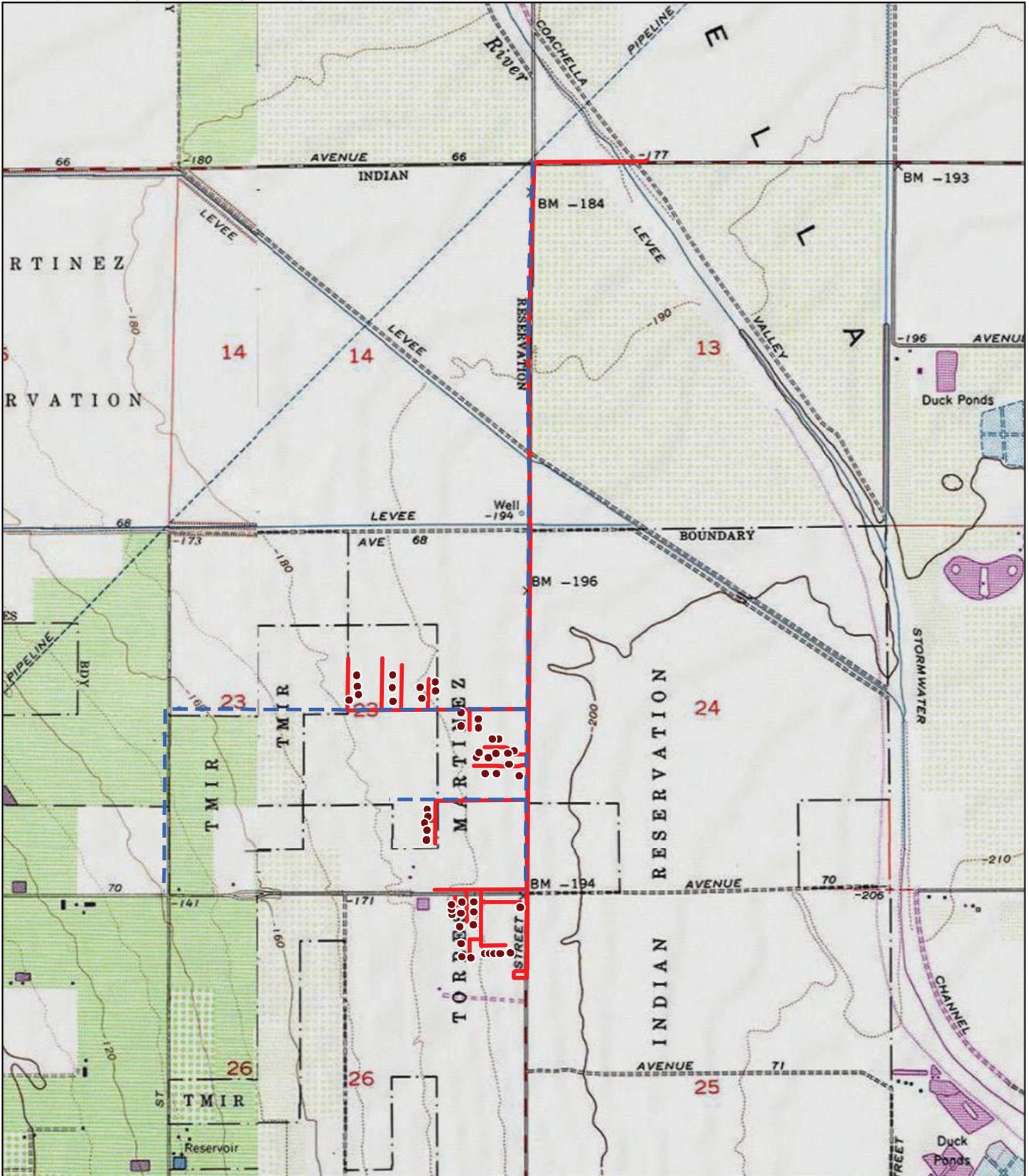


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- Sewer Line
- Water Line

**FIGURE 1**  
Regional Location  
Biological Resources Assessment Report  
Pierce Street Water and Sewer Extension  
Riverside County, CA

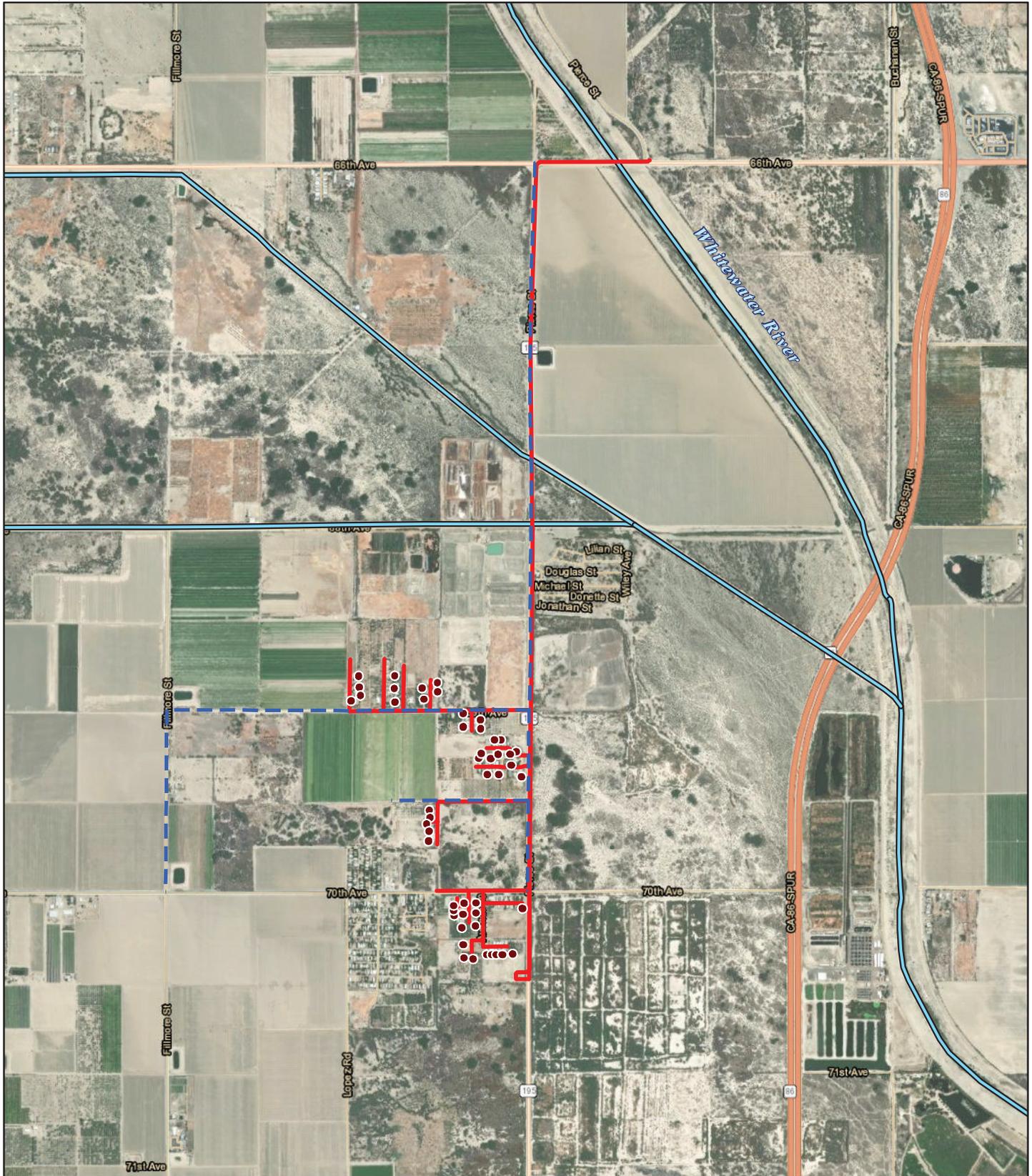


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- Sewer Line
- - - Water Line
- Septic Tanks

**FIGURE 2**  
USGS 7.5' Quad: Mecca  
Biological Resources Assessment Report  
Pierce Street Water and Sewer Extension  
Riverside County, CA



Path: \\sdg1-fs1\gis\3554\_NaturalResources\PierceSt\_SewerExtension\_322520110\MXD\ReportFigures\Fig3\_SiteVicinity.mxd, aaron.johnson 5/22/2023

1 inch = 2,000 feet



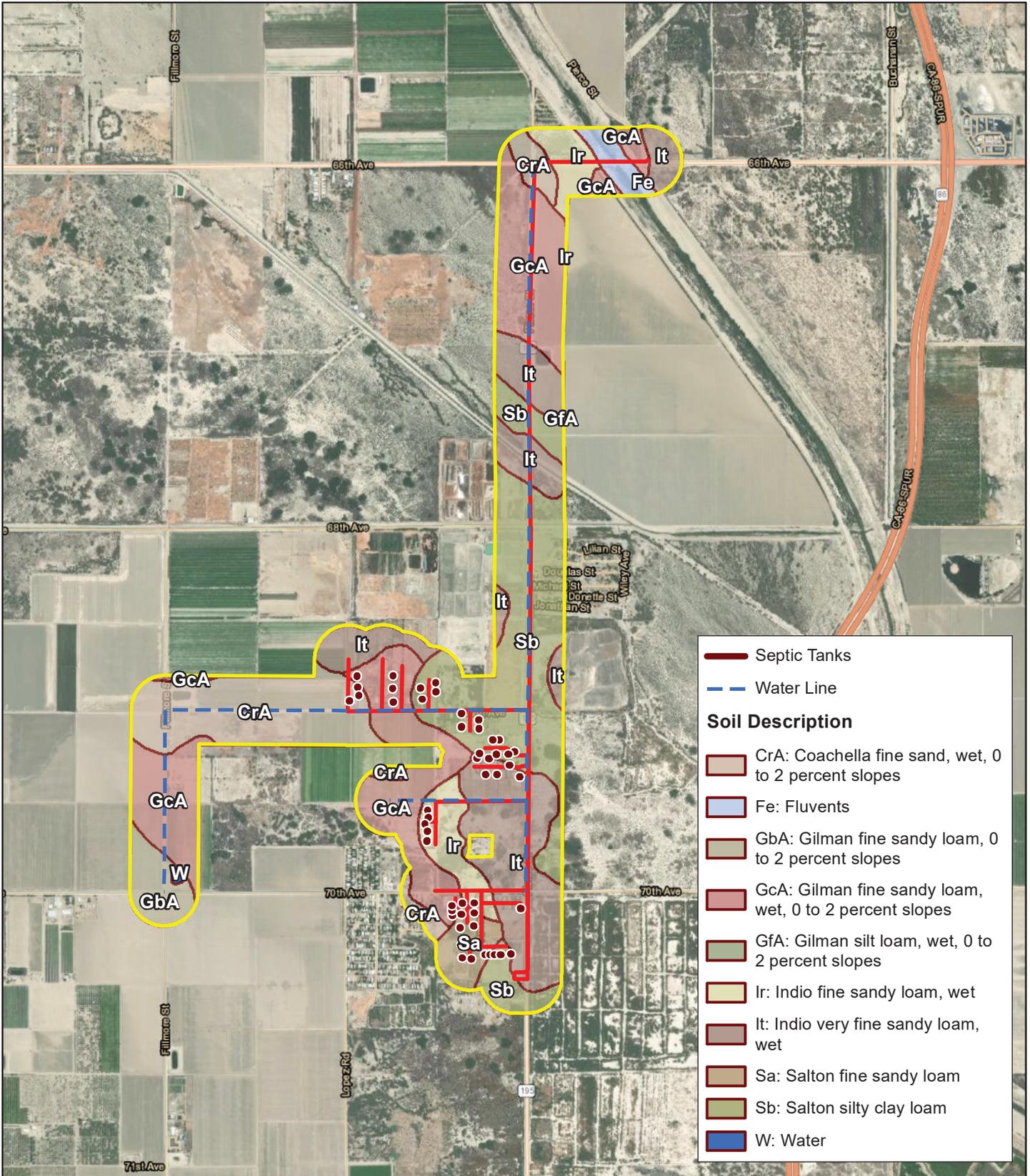
- Sewer Line
- - - Water Line
- Septic Tanks
- Canal/Ditch

### FIGURE 3

Site Vicinity

Biological Resources Assessment Report  
Pierce Street Water and Sewer Extension  
Riverside County, CA





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1 inch = 2,000 feet



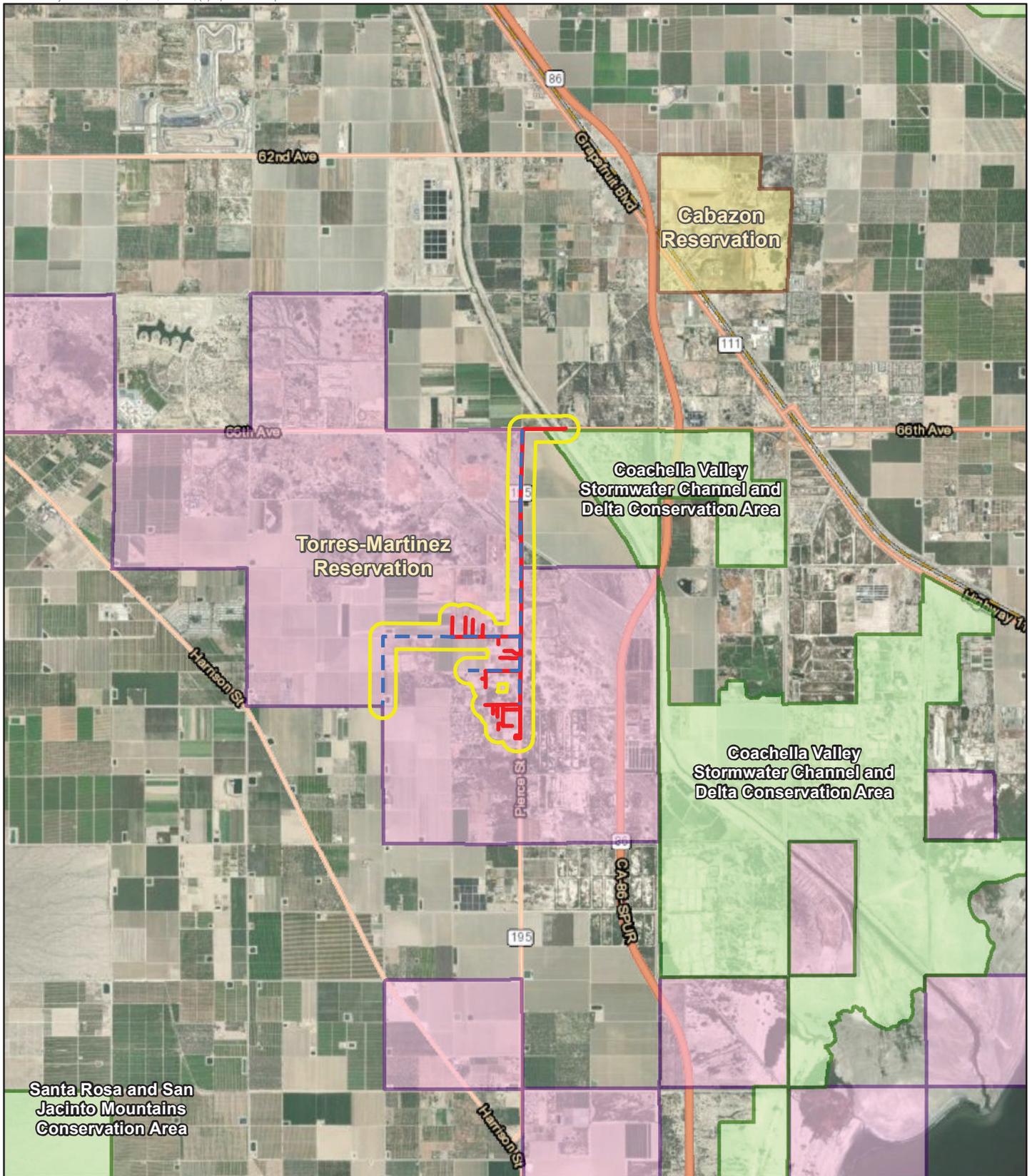
- Sewer Line
- Water Line
- Septic Tanks
- 500' Buffer of Alignment

## FIGURE 4

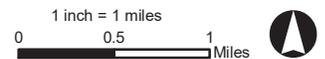
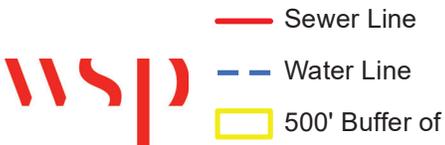
Project Soils

Biological Resources Assessment Report  
Pierce Street Water and Sewer Extension  
Riverside County, CA



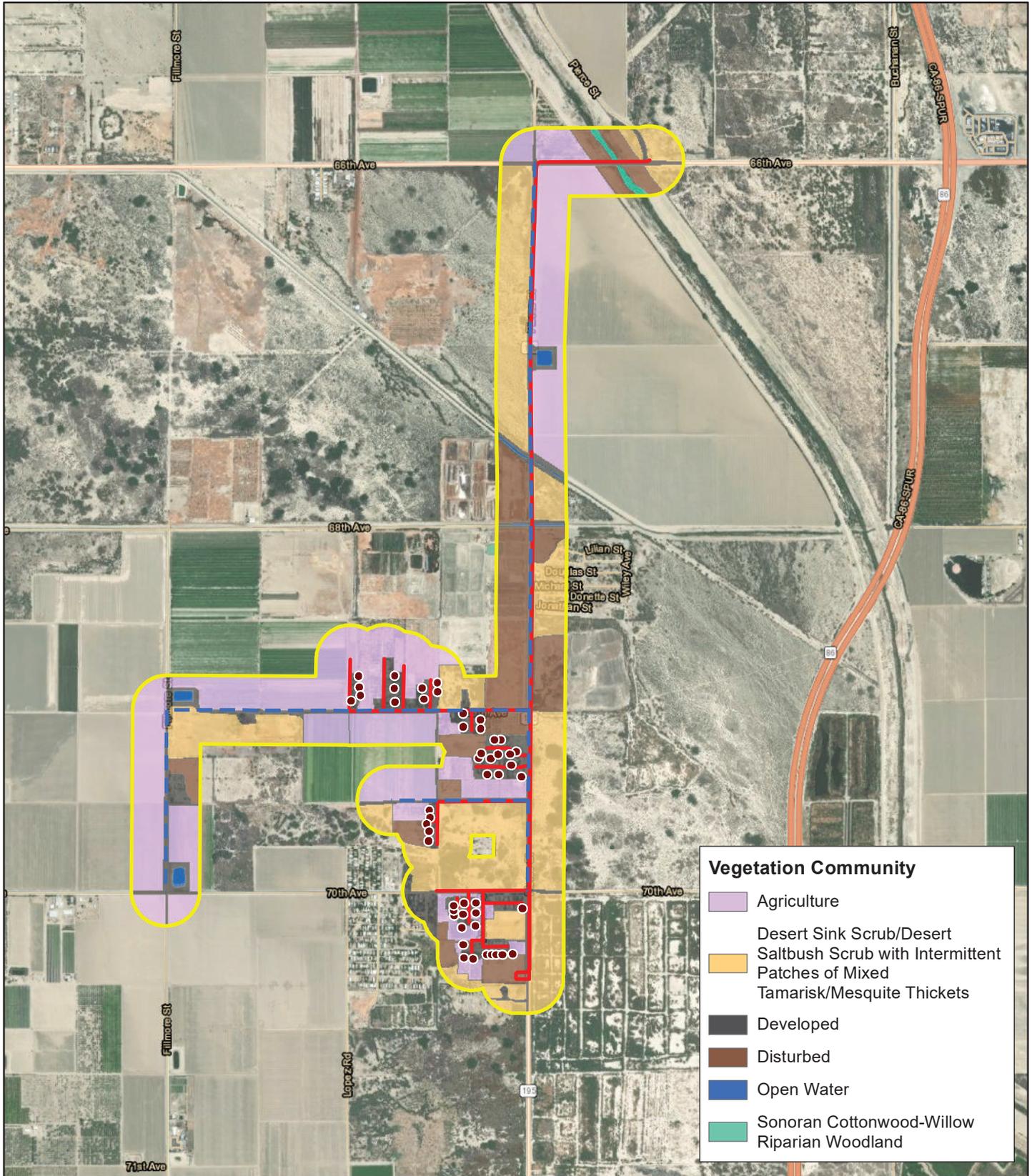


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**FIGURE 5**  
 MSHCP and Tribal Lands  
 Biological Resources Assessment Report  
 Pierce Street Water and Sewer Extension  
 Riverside County, CA





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1 inch = 2,000 feet



- Project Alignment
- - - Water Line
- Septic Tanks
- 500' Buffer of Alignment

**FIGURE 6**  
Vegetation Communities  
Biological Resources Assessment Report  
Pierce Street Water and Sewer Extension  
Riverside County, CA

**APPENDIX B**

**PLANTS AND VERTEBRATE WILDLIFE OBSERVED ON THE  
PIERCE STREET SEWER EXTENSION PROJECT**

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**Plants Observed or Detected**  
**Pierce Street Sewer Extension Project, Riverside County, California**

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**ANGIOSPERMAE**  
**DICOTYLEDONEAE**

**Amaranthaceae**

\* *Amaranthus albus*

**Asteraceae**

\* *Erigeron bonariensis*

\* *Erigeron canadensis*

*Helianthus annuus*

\* *Lactuca serriola*

*Pluchea sericea*

**Boraginaceae**

*Tiquilia plicata*

**Brassicaceae**

\* *Brassica tournefortii*

\* *Sisymbrium irio*

**Chenopodiaceae**

*Allenrolfea occidentalis*

*Atriplex canescens*

*Atriplex lentiformis*

*Atriplex polycarpa*

\* *Salsola tragus*

**Fabaceae**

\* *Parkinsonia aculeata*

*Parkinsonia florida*

*Prosopis glandulosa*

**Euphorbaceae**

*Ricinus communis*

**Saliaceae**

*Populus fremontii*

*Salix* spp.

**Solanaceae**

*Datura wrightii*

*Nicotiana glauca*

**Tamaricaceae**

\* *Tamarix ramosissima*

**DICOT FLOWERING PLANTS**

**Amaranth family**

tumbleweed

**Sunflower family**

flax-leaved horseweed

horseweed

annual sunflower

prickly lettuce

arrow weed

**Forget-Me-Not family**

fanleaf crinklemat

**Mustard family**

Saharan mustard

London rocket

**Goosefoot Family**

iodine bush

four-wing saltbush

big saltbush

allscale

Russian thistle

**Legume Family**

Jerusalem thorn

blue paloverde

honey mesquite

**Legume Family**

castor bean

**Willow Family**

Fremont cottonwood

undetermined willow trees

**Night Shade Family**

Jimsonweed

tree tobacco

**Tamarisk Family**

saltcedar

**Viscaceae**

*Phoradendron californicum*

**Mistletoe Family**

mesquite mistletoe

MONOCOT ANGIOSPERMS

**Aracaceae**

*Washingtonia filifera*

**Palm Family**

California fan palm

**Cyperaceae**

*Carex* sp.

**Sedge Family**

undetermined sedge species

**Poaceae**

\**Cynodon dactylon*

\**Schismus* sp.

**Grass Family**

Bermuda grass

**Poaceae**

*Typha* sp.

**Grass Family**

cattails

\* - denotes a non-native species

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**Vertebrate Wildlife Observed or Detected  
Pierce Street Sewer Extension Project, Riverside County, California**

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**CHORDATES**

**TOOTHED CARP**

**Live-Bearing Top Minnows**  
western mosquitofish\*

**AMPHIBIANS & REPTILES**

**True Frogs**  
American bullfrog\*

**Horned Lizards, Spiny Lizards**  
desert spiny lizard  
side-blotched lizard

**BIRDS**

**Pigeons and Doves**  
Eurasian collared dove\*  
mourning dove

**Lapwings and Plovers**  
killdeer

**Hérons, Bitterns, and Allies**  
great egret\*\*  
great blue heron\*\*  
snowy egret\*\*  
green heron

**Ibises & Spoonbills**  
white-faced ibis\*\*

**New World Vultures**  
turkey vulture

**Ospreys**  
osprey

**Caracaras and Falcons**  
American kestrel  
merlin\*\*

**CHORDATA**

**MICROCYPRIINI**

**Poeciliidae**  
*Gambusia affinis*

**HERPETOFAUNA**

**Ranidae**  
*Lithobates catesbianus*

**Phrynosomatidae**  
*Sceloporus magister*  
*Uta stansburiana*

**AVES**

**Columbidae**  
*Streptopelia decaocto*  
*Zenaida macroura*

**Charadriidae**  
*Charadrius vociferus*

**Ardeidae**  
*Ardea alba*  
*Ardea herodias*  
*Egretta thula*  
*Butorides virescens*

**Threskiornithidae**  
*Plegadis chihi*

**Cathartidae**  
*Cathartes aura*

**Pandionidae**  
*Pandion haliaetus*

**Falconidae**  
*Falco sparverius*  
*Falco columbarius*

**Tyrant Flycatchers**

black phoebe

**Shrikes**

loggerhead shrike\*\*

**Jays, Magpies, and Crows**

common raven

**Penduline Tits and Verdins**

verdin

**Larks**

horned lark

**Silky-flycatchers**

phainopepla

**Mockingbirds and Thrashers**

northern mockingbird

**Starlings**

European starling\*

**New World Sparrows**

song sparrow

white-crowned sparrow

**Old World Sparrows**

house sparrow\*

**Wagtails and Pipits**

American pipit

**Fringilline & Cardueline Finches & Allies**

house finch

**Wood Warblers**

common yellowthroat

**MAMMALS****Squirrels***cf.* California ground squirrel (burrows)**Tyrannidae***Sayornis nigricans***Laniidae***Lanius ludovicianus***Corvidae***Corvus corax***Remizidae***Auriparus flaviceps***Alaudidae***Eremophila alpestris***Ptiliogonatidae***Phainopepla nitens***Mimidae***Mimus polyglottos***Sturnidae***Sturnus vulgaris***Passerellidae***Melospiza melodia**Zonotrichia leucophrys***Passeridae***Passer domesticus***Motacillidae***Anthus rubescens***Fringillidae***Haemorhous mexicanus***Parulidae***Geothlypis trichas***MAMMALIA****Sciuridae***Otospermophilus beecheyi*

\* - non-native species

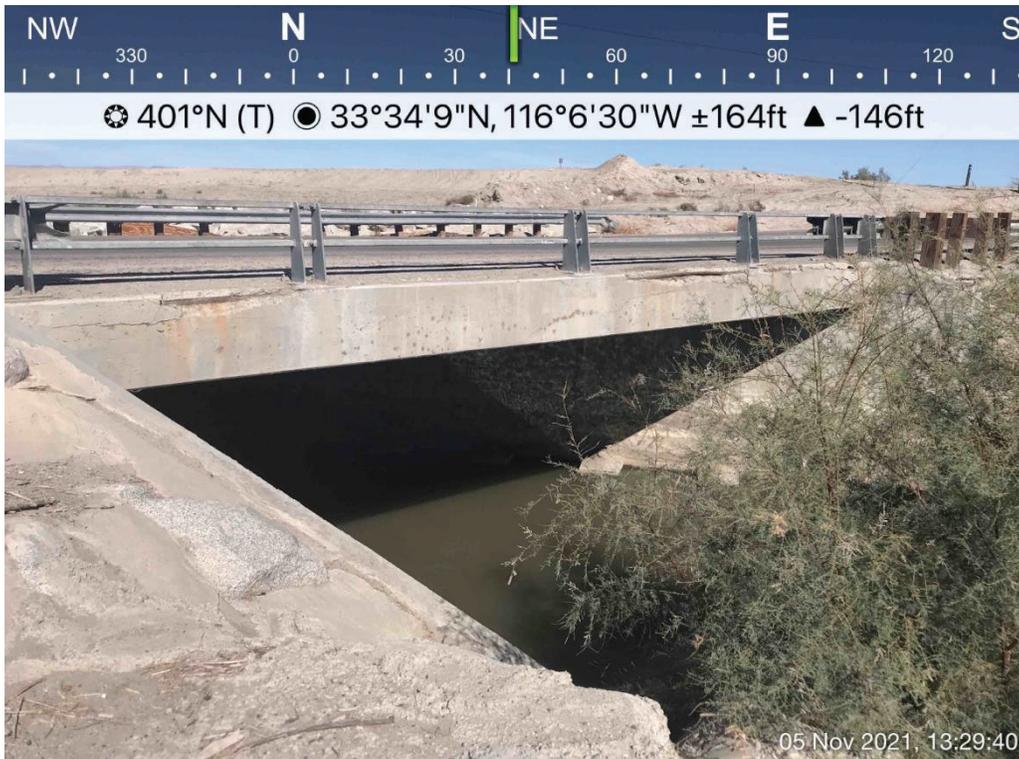
\*\* - special status species (Table 3)

*cf* – compares favorably with

**APPENDIX C**  
**SITE PHOTOS**



**Photo 1.** Northern-most portion of the alignment where it crosses the CVSC.



**Photo 2.** Avenue 66 bridge over CVSC.



**Photo 3.** Riparian vegetation present north of the Avenue 66 bridge over the CVSC.



**Photo 4.** Pierce Street culvert over one of the canals present along the alignment.



**Photo 5.** Desert saltbush and sink scrub present along the Pierce Street portion of the alignment.



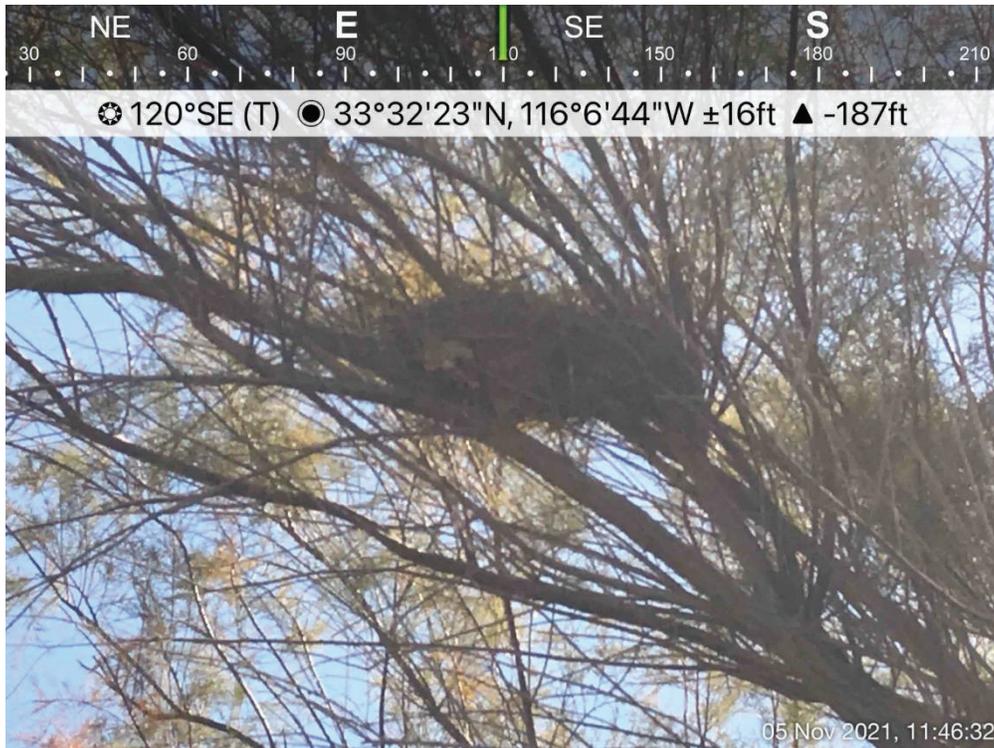
**Photo 6.** Agricultural field along the Pierce Street portion of the alignment.



**Photo 7.** Residential dwellings along a portion of the alignment.



**Photo 8.** Palm tree farm and agricultural area present along Avenue 66 at the junction of Pierce Street.



**Photo 9.** Inactive bird nest detected in a saltcedar present adjacent to the alignment.



**Photo 10.** Man-made drainage pipe suitable for burrowing owl present along the alignment.

**APPENDIX D**

**CVMSHCP Table 4-112:  
Coachella Valley Native Plants Recommended for Landscaping**

## Coachella Valley Native Plants Recommended for Landscaping

### BOTANICAL NAME

### COMMON NAME

#### **Trees**

<i>Washingtonia filifera</i>	California fan palm
<i>Cercidium floridum</i>	blue palo verde
<i>Chilopsis linearis</i>	desert willow
<i>Olneya tesota</i>	ironwood tree
<i>Prosopis glandulosa</i> var. <i>torreyana</i>	honey mesquite

#### **Shrubs**

<i>Acacia greggii</i>	cat's claw acacia
<i>Ambrosia dumosa</i>	burro bush
<i>Atriplex canescens</i>	four wing saltbush
<i>Atriplex lentiformis</i>	quailbush
<i>Atriplex polycarpa</i>	cattle spinach
<i>Baccharis sergiloides</i>	squaw water-weed
<i>Bebia juncea</i>	sweet bush
<i>Cassia (Senna) covesii</i>	desert senna
<i>Condalia parryi</i>	crucillo
<i>Crossosoma bigelovii</i>	crossosoma
<i>Dalea emoryi</i>	dye weed
<i>Dalea (Psorothamnus) schottii</i>	indigo bush
<i>Datura meteloides</i>	jimson weed
<i>Encelia farinosa</i>	brittle bush
<i>Ephedra aspera</i>	Mormon tea
<i>Eriogonum fasciculatum</i>	California buckwheat
<i>Eriogonum wrightii membranaceum</i>	Wright's buckwheat
<i>Fagonia laevis</i>	no common name
<i>Gutierrezia sarothrae</i>	matchweed
<i>Haplopappus acradenius</i>	goldenbush
<i>Hibiscus denudatus</i>	desert hibiscus
<i>Hoffmannseggia microphylla</i>	rush pea
<i>Hymenoclea salsola</i>	cheesebush
<i>Hyptis emoryi</i>	desert lavender
<i>Isomeris arborea</i>	bladder pod
<i>Juniperus californica</i>	California juniper
<i>Krameria grayi</i>	ratany
<i>Krameria parvifolia</i>	little-leaved ratany
<i>Larrea tridentata</i>	creosote bush
<i>Lotus rigidus</i>	desert rock pea
<i>Lycium andersonii</i>	box thorn
<i>Petalonyx linearis</i>	long-leaved sandpaper plant
<i>Petalonyx thurberi</i>	sandpaper plant
<i>Peucephyllum schottii</i>	pygmy cedar
<i>Prunus fremontii</i>	desert apricot
<i>Rhus ovata</i>	sugar-bush
<i>Salazaria mexicana</i>	paper-bag bush
<i>Salvia apiana</i>	white sage
<i>Salvia eremostachya</i>	Santa Rosa sage

<i>Salvia vaseyi</i>	wand sage
<i>Simmondsia chinensis</i>	jojoba
<i>Sphaeralcea ambigua</i>	globemallow (desert mallow)
<i>Sphaeralcea ambigua rosacea</i>	apricot mallow
<i>Trixis californica</i>	trixis
<i>Zauschneria californica</i>	California fuchsia

### **Groundcovers**

<i>Mirabilis bigelovii</i>	wishbone bush (four o'clock)
<i>Mirabilis tenuiloba</i>	white four o'clock (thin-lobed)

### **Vines**

<i>Vitis girdiana</i>	desert grape
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### **Accent**

<i>Muhlenbergia rigens</i>	deer grass
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### **Herbaceous Perennials**

<i>Adiantum capillus-veneris</i>	maiden-hair fern
<i>Carex alma</i>	sedge
<i>Dalea parryi</i>	Parry dalea
<i>Eleocharis montevidensis</i>	spike rush
<i>Equisetum laevigatum</i>	horsetail
<i>Juncus bufonis</i>	toad rush
<i>Juncus effuses</i>	juncus
<i>Juncus macrophyllus</i>	juncus
<i>Juncus mexicanus</i>	Mexican rush
<i>Juncus xiphioides</i>	juncus
<i>Notholaena parryi</i>	Parry cloak fern
<i>Pallaea mucronata</i>	bird-foot fern

### **Cacti and Succulents**

<i>Agave deserti</i>	desert agave
<i>Asclepias albicans</i>	desert milkweed (buggy-whip)
<i>Asclepias subulata</i>	ajamete
<i>Dudleya arizonica</i>	live-forever
<i>Dudleya saxosa</i>	rock dudleya
<i>Echinocereus engelmannii</i>	calico hedgehog cactus
<i>Ferocactus acanthodes</i>	barrel cactus
<i>Fouquieria splendens</i>	ocotillo
<i>Mamillaria dioica</i>	nipple cactus
<i>Mamillaria tetrancistra</i>	corkseed cactus
<i>Nolina parryi</i>	Parry nolina
<i>Opuntia acanthocarpa</i>	stag-horn or deer-horn cholla
<i>Opuntia bigelovii</i>	teddy bear or jumping cholla
<i>Opuntia basilaris</i>	beavertail cactus
<i>Opuntia echinocarpa</i>	silver or golden cholla
<i>Opuntia ramosissima</i>	pencil cholla, darning needle cholla
<i>Yucca schidigera</i>	Mojave yucca, Spanish dagger
<i>Yucca whipplei</i>	Our Lord's candle

## **APPENDIX E**

### **Prohibited Invasive Ornamental Plants**

## Prohibited Invasive Ornamental Plants

<u>BOTANICAL NAME</u>	<u>COMMON NAME</u>
<i>Acacia</i> spp. (all species except <i>A. greggii</i> )	(all species except native catclaw acacia)
<i>Arundo donax</i>	giant reed or arundo grass
<i>Atriplex semibaccata</i>	Australian saltbush
<i>Avena barbata</i>	slender wild oat
<i>Avena fatua</i>	wild oat
<i>Brassica tournefortii</i>	African or Saharan mustard
<i>Bromus madritensis</i> ssp. <i>rubens</i>	red brome
<i>Bromus tectorum</i>	cheat grass or downy brome
<i>Cortaderia jubata</i> [syn. <i>C. atacamensis</i> ]	jubata grass or Andean pampas grass
<i>Cortaderia dioica</i> [syn. <i>C. selloana</i> ]	pampas grass
<i>Descurainia sophia</i>	tansy mustard
<i>Eichhornia crassipes</i>	water hyacinth
<i>Elaeagnus angustifolia</i>	Russian olive
<i>Foeniculum vulgare</i>	sweet fennel
<i>Hirschfeldia incana</i>	Mediterranean or short-pod mustard
<i>Lepidium latifolium</i>	perennial pepperweed
<i>Lolium multiflorum</i>	Italian ryegrass
<i>Nerium oleander</i>	oleander
<i>Nicotiana glauca</i>	tree tobacco
<i>Oenothera berlandieri</i>	Mexican evening primrose
<i>Olea europea</i>	European olive tree
<i>Parkinsonia aculeata</i>	Mexican palo verde
<i>Pennisetum clandestinum</i>	Kikuyu grass
<i>Pennisetum setaceum</i>	fountain grass
<i>Phoenix canariensis</i>	Canary Island date palm
<i>Phoenix dactylifera</i>	date palm
<i>Ricinus communis</i>	castorbean
<i>Salsola tragus</i>	Russian thistle
<i>Schinus mole</i>	Peruvian pepper tree
<i>Schinus terebinthifolius</i>	Brazilian pepper tree
<i>Schismus arabicus</i>	Mediterranean grass
<i>Schismus barbatus</i>	Saharan grass, Abu Mashi
<i>Stipa capensis</i>	no common name
<i>Tamarix</i> spp. (all species)	tamarisk or salt cedar
<i>Taeniatherum caput-medusae</i>	Medusa-head
<i>Tribulus terrestris</i>	puncturevine
<i>Vinca major</i>	periwinkle
<i>Washingtonia robusta</i>	Mexican fan palm
<i>Yucca gloriosa</i>	Spanish dagger

Sources: California Exotic Pest Plant Council, United States Department of Agriculture-Division of Plant Health and Pest Prevention Services, California Native Plant Society, Fremontia Vol. 26 No. 4, October 1998, The Jepson Manual; Higher Plants of California, and County of San Diego Department of Agriculture.

## **APPENDIX F**

### **IPaC Resources 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

In Reply Refer To:

06/10/2024 16:05:56 UTC

Project Code: 2024-0101698

Project Name: PIERCE STREET SEWER & WATER EXTENSION 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, proposed and candidate species, as well as proposed and final designated critical habitat, 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 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 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 at the Fish and Wildlife Service's Endangered Species Consultation website at:

<https://www.fws.gov/service/esa-section-7-consultation>

**Migratory Birds:** In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see <https://www.fws.gov/program/migratory-bird-permit/what-we-do>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

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 Code 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

Project Code: 2024-0101698

Project Name: PIERCE STREET SEWER & WATER EXTENSION PROJECT

Project Type: Wastewater Discharge

Project Description: The Coachella Valley Water District (CVWD) proposes the installation of approximately 4.7± miles (24,800± linear feet) of new sewer lines that will include gravity and force main and sewage lift station, and 5.68± miles (31,000± linear feet) of new potable water lines in the unincorporated community of Oasis, Riverside County, California. Implementation of the proposed project would provide clean potable water and sewer services to the existing mobile home parks and rural residential housing in the immediate area. The existing mobile homes, housing and most of the roadways are located within Torres Martinez Tribal jurisdiction.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@33.5535539,-116.1128040852388,14z>



Counties: Riverside County, California

## ENDANGERED SPECIES ACT SPECIES

There is a total of 8 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 Fisheries<sup>1</sup>, 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.

## MAMMALS

NAME	STATUS
Peninsular Bighorn Sheep <i>Ovis canadensis nelsoni</i> Population: Peninsular CA pop. There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/4970">https://ecos.fws.gov/ecp/species/4970</a>	Endangered

## BIRDS

NAME	STATUS
Least Bell's Vireo <i>Vireo bellii pusillus</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5945">https://ecos.fws.gov/ecp/species/5945</a>	Endangered
Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/6749">https://ecos.fws.gov/ecp/species/6749</a>	Endangered
Yuma Ridgway's Rail <i>Rallus obsoletus yumanensis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/3505">https://ecos.fws.gov/ecp/species/3505</a>	Endangered

## REPTILES

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

## FISHES

NAME	STATUS
Desert Pupfish <i>Cyprinodon macularius</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/7003">https://ecos.fws.gov/ecp/species/7003</a>	Endangered

## INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate

## **CRITICAL HABITATS**

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

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

## **IPAC USER CONTACT INFORMATION**

Agency: WSP USA  
Name: Dale Hameister  
Address: WSP USA Environment & Infrastructure Inc  
Address Line 2: 862 E Hospitality Ln #350  
City: San Bernardino  
State: CA  
Zip: 92408  
Email: dale.hameister@wsp.com  
Phone: 8312380676

## **APPENDIX G**

### **CDFW CNDDDB Species Query**



**Summary Table Report**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



Query Criteria: Quad<span style="color:Red"> IS </span>(Mecca (3311651))

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Ambrosia monogyra</i> singlewhorl burbrobrush	G5 S2	None None	Rare Plant Rank - 2B.2 SB_CRES-San Diego Zoo CRES Native Gene Seed Bank		30 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Antrozous pallidus</i> pallid bat	G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive	800 800	424 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Ardea alba</i> great egret	G5 S4	None None	CDF_S-Sensitive IUCN_LC-Least Concern	-230 -230	43 S:2	0	0	2	0	0	0	2	0	2	0	0
<i>Ardea herodias</i> great blue heron	G5 S4	None None	CDF_S-Sensitive IUCN_LC-Least Concern	-230 -230	156 S:2	0	0	2	0	0	0	2	0	2	0	0
<i>Astragalus lentiginosus var. coachellae</i> Coachella Valley milk-vetch	G5T1 S1	Endangered None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture		69 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Astragalus sabulonum</i> gravel milk-vetch	G4G5 S2	None None	Rare Plant Rank - 2B.2	-50 -50	19 S:1	0	0	0	0	1	0	1	0	0	0	1
<i>Athene cunicularia</i> burrowing owl	G4 S2	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	-160 150	2057 S:6	0	1	0	1	0	4	1	5	6	0	0
<i>Chaetodipus fallax pallidus</i> pallid San Diego pocket mouse	G5T3T4 S3S4	None None		150 150	79 S:1	0	0	0	0	0	1	1	0	1	0	0



**Summary Table Report**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



Name (Scientific/Common)	CNDDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	G4 S2	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive	-170 -170	635 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Cyprinodon macularius</i> desert pupfish	G1 S1	Endangered Endangered	AFS_EN-Endangered IUCN_VU-Vulnerable	-230 -230	74 S:6	0	0	0	0	0	6	6	0	6	0	0
<i>Egretta thula</i> snowy egret	G5 S4	None None	IUCN_LC-Least Concern	-230 -230	20 S:2	0	0	2	0	0	0	2	0	2	0	0
<i>Euderma maculatum</i> spotted bat	G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	-170 -170	68 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Eumops perotis californicus</i> western mastiff bat	G4G5T4 S3S4	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern	240 240	296 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Falco mexicanus</i> prairie falcon	G5 S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	800 800	451 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Gelochelidon nilotica</i> gull-billed tern	G5 S1	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	-235 -235	6 S:1	0	1	0	0	0	0	1	0	1	0	0
<i>Icteria virens</i> yellow-breasted chat	G5 S4	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	-180 -180	101 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Nemacaulis denudata var. gracilis</i> slender cottonheads	G3G4T3? S2	None None	Rare Plant Rank - 2B.2	-160 -160	24 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Neotoma albigula venusta</i> Colorado Valley woodrat	G5T3T4 S1S2	None None		-180 -180	22 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Nycticorax nycticorax</i> black-crowned night heron	G5 S4	None None	IUCN_LC-Least Concern	-230 -230	37 S:2	0	0	2	0	0	0	2	0	2	0	0



**Summary Table Report**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Nyctinomops femorosaccus</i> pocketed free-tailed bat	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	800 800	90 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Oliarces clara</i> cheeseweed owlfly (cheeseweed moth lacewing)	G1G3 S2	None None		-180 -180	11 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Petalonyx linearis</i> narrow-leaf sandpaper-plant	G4 S3?	None None	Rare Plant Rank - 2B.3		26 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Phrynosoma mcallii</i> flat-tailed horned lizard	G3 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened	-180 -180	340 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Plegadis chihi</i> white-faced ibis	G5 S3S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	-220 -220	20 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Poliptila melanura</i> black-tailed gnatcatcher	G5 S3S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	-180 -180	34 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Rallus obsoletus yumanensis</i> Yuma Ridgway's rail	G3T3 S1	Endangered Threatened	CDFW_FP-Fully Protected	220 220	58 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Rynchops niger</i> black skimmer	G5 S2	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	-220 -220	7 S:1	0	1	0	0	0	0	1	0	1	0	0
<i>Scaphiopus couchii</i> Couch's spadefoot	G5 S2	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	-180 -180	6 S:1	0	1	0	0	0	0	0	1	1	0	0
<i>Stuckenia striata</i> broadleaf pondweed	G3G4Q S2S3	None None	Rare Plant Rank - 2B.3	-220 -145	21 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Taxidea taxus</i> American badger	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	50 50	647 S:1	0	1	0	0	0	0	1	0	1	0	0



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Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Toxostoma crissale</i> Crissal thrasher	G5 S2	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	-180 -180	67 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Toxostoma lecontei</i> Le Conte's thrasher	G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	-180 -180	239 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Trichinorhipis knulli</i> Knull's metallic wood-boring beetle	G1 S1	None None		1,000 1,000	4 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Uma inornata</i> Coachella Valley fringe-toed lizard	G1Q S1	Threatened Endangered	IUCN_EN-Endangered	-170 -170	162 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Xerospermophilus tereticaudus chlorus</i> Palm Springs round-tailed ground squirrel	G5T2 S2	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern	-170 10	11 S:2	0	1	0	0	0	1	2	0	2	0	0
<i>Xylorhiza cognata</i> Mecca-aster	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	140 500	36 S:4	0	1	1	0	0	2	1	3	4	0	0
<i>Xyrauchen texanus</i> razorback sucker	G1 S2	Endangered Endangered	AFS_EN-Endangered CDFW_FP-Fully Protected IUCN_CR-Critically Endangered	-190 -190	28 S:1	0	0	0	0	0	1	1	0	1	0	0



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Query Criteria: Quad<span style="color:Red"> IS </span>(Oasis (3311641))

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Ardea herodias</i> great blue heron	G5 S4	None None	CDF_S-Sensitive IUCN_LC-Least Concern	-230 -230	156 S:1	0	1	0	0	0	0	1	0	1	0	0
<i>Athene cunicularia</i> burrowing owl	G4 S2	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	0 0	2057 S:1	0	1	0	0	0	0	0	1	1	0	0
<i>Ayenia compacta</i> California ayenia	G4 S3	None None	Rare Plant Rank - 2B.3 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	200 200	74 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Charadrius nivosus nivosus</i> western snowy plover	G3T3 S3	Threatened None	CDFW_SSC-Species of Special Concern	-230 -230	140 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Chylismia arenaria</i> sand evening-primrose	G4? S2S3	None None	Rare Plant Rank - 2B.2		16 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Cyprinodon macularius</i> desert pupfish	G1 S1	Endangered Endangered	AFS_EN-Endangered IUCN_VU-Vulnerable	-230 -220	74 S:10	0	0	2	0	0	8	10	0	10	0	0
<i>Desert Fan Palm Oasis Woodland</i> Desert Fan Palm Oasis Woodland	G3 S3.2	None None		200 200	80 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Lasiurus xanthinus</i> western yellow bat	G4G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	-130 -130	58 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Pelecanus occidentalis californicus</i> California brown pelican	G4T3T4 S3	Delisted Delisted	BLM_S-Sensitive USFS_S-Sensitive	-230 -230	27 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Petalonyx linearis</i> narrow-leaf sandpaper-plant	G4 S3?	None None	Rare Plant Rank - 2B.3	-100 -100	26 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Plegadis chihi</i> white-faced ibis	G5 S3S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	-220 -220	20 S:1	0	0	0	0	0	1	1	0	1	0	0



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Name (Scientific/Common)	CNDDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Xyrauchen texanus</i> razorback sucker	G1 S2	Endangered Endangered	AFS_EN-Endangered CDFW_FP-Fully Protected IUCN_CR-Critically Endangered	-200 -200	28 S:1	0	0	0	0	0	1	1	0	1	0	0



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Query Criteria: Quad<span style="color:Red"> IS </span>(Rabbit Peak (3311642))

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Bursera microphylla</i> little-leaf elephant tree	G4 S2	None None	Rare Plant Rank - 2B.3 IUCN_LC-Least Concern SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	2,000 2,000	18 S:1	0	0	0	0	0	1	0	1	1	0	0
<i>Ovis canadensis nelsoni pop. 2</i> Peninsular bighorn sheep DPS	G4T3Q S2	Endangered Threatened	CDFW_FP-Fully Protected	3,400 3,400	7 S:1	0	0	0	0	0	1	1	0	1	0	0



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Query Criteria: Quad<span style="color:Red"> IS </span>(Valerie (3311652))

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Abronia villosa</i> var. <i>aurita</i> chaparral sand-verbena	G5T2? S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden USFS_S-Sensitive	-200 -200	98 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Bursera microphylla</i> little-leaf elephant tree	G4 S2	None None	Rare Plant Rank - 2B.3 IUCN_LC-Least Concern SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	1,800 1,800	18 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Leptosiphon floribundus</i> ssp. <i>hallii</i> Santa Rosa Mountains leptosiphon	G4T1T2 S1S2	None None	Rare Plant Rank - 1B.3 BLM_S-Sensitive USFS_S-Sensitive		6 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Phaseolus filiformis</i> slender-stem bean	G5 S1	None None	Rare Plant Rank - 2B.1 IUCN_LC-Least Concern	400 400	1 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Senna covesii</i> Cove's cassia	G5 S3	None None	Rare Plant Rank - 2B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	850 850	55 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Stuckenia striata</i> broadleaf pondweed	G3G4Q S2S3	None None	Rare Plant Rank - 2B.3	-145 -145	21 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Uma inornata</i> Coachella Valley fringe-toed lizard	G1Q S1	Threatened Endangered	IUCN_EN-Endangered	-130 40	162 S:16	0	0	0	0	0	16	16	0	16	0	0