

Appendix B

Biological Resources Assessment



Palm Desert Groundwater Replenishment Project

Biological Resources Assessment

prepared for
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Executive Summary

Rincon Consultants, Inc. (Rincon) was retained by the Coachella Valley Water District (CVWD) to prepare a Biological Resources Assessment (BRA) for the proposed Palm Desert Groundwater Replenishment Project. The project site is located in the central portion of the Coachella Valley in the city of Palm Desert, in central Riverside County, California.

CVWD is a public agency that provides water service, wastewater management, water resources management, flood control and recycled water service to domestic, agricultural, and industrial users in the desert, Coachella Valley area. In 2003, CVWD certified the Program Environmental Impact Report (Program EIR) for the Coachella Valley Water Management Plan and State Water Project Entitlement Transfer (hereafter referred to as “the Plan”). The Plan evaluated in the Program EIR included a suite of water management elements to eliminate overdraft of the Coachella Valley groundwater basin. Plan elements included water conservation, additional water supplies, source substitution, and groundwater recharge. The proposed project is designed for consistency with CVWD’s goal to eliminate groundwater overdraft in line with the Plan; as such, objectives of the proposed project include the following:

- Provide an estimated 25,000 acre-feet per year (AFY) of direct groundwater replenishment using imported Colorado River water in the Palm Desert area;
- Enable CVWD to maximize use of its annual allocation of Colorado River water;
- Meet the goals of the Coachella Valley Water Management Plan (CVWD 2002 and 2012) to assure adequate quantities of safe, high-quality water at the lowest cost to CVWD water users;
- Improve local groundwater supply and quality conditions through replenishment activities;
- Upgrade capacity of the existing MVP Pump Station utilizing two empty bays to install 800-HP pumps;
- Implement a new 200-HP pump station at WRP10 to pump Colorado River water from the Backfeed Reservoir to the replenishment ponds;
- Expand existing Secondary Effluent Storage ponds at WRP10; and
- Optimize the availability of recycled water produced at WRP10.

The proposed project would be implemented in two phases:

- I. Phase I of the proposed project would occur at and adjacent to CVWD’s existing Water Reclamation Plant No. 10 (WRP10), located at 43-000 Cook Street in Palm Desert, California.
- II. Phase II of the proposed project would occur within the existing Whitewater River Stormwater Channel, located adjacent to the south-southwest of WRP10.

In addition, the proposed project includes extension of the existing Mid-Valley Pipeline (MVP) to convey Colorado River water to Phase II of the project. The MVP is located within the Whitewater River Stormwater Channel, between the existing MVP Pump Station located at the junction of the Coachella Canal and the Whitewater River Stormwater Channel, and the WRP10 site. The pipeline

extension included under the proposed project would occur within the Whitewater River Stormwater Channel, from the existing WRP10 site west to Cook Street.

The proposed project lies within the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) planning area, but does not lie within a specific CVMSHCP Conservation Area.

The project site was determined to have potential habitat for burrowing owl (*Athene cunicularia*), which is a covered species under the CVMSHCP. Burrowing owl has a moderate probability for occurrence within the project site, while all other the remaining listed animal species previously documented near the project site have a low probability for occurrence. A pre-construction survey for the burrowing owl and nesting birds is recommended to avoid potential project impacts to this species. Rincon recommends that any removal of vegetation be conducted between September 1 and January 31 (outside the general bird nesting season) to avoid impacts to nesting birds that are protected by the California Fish and Game Code (CFGC) and the Migratory Bird Treaty Act (MBTA). If vegetation removal must occur during the nesting season (February 1 through August 31), a pre-construction nesting bird survey by a qualified biologist is recommended prior to vegetation removal.

The project site supports jurisdictional waters of the U.S. and state within the Whitewater River Stormwater Channel (ICF International 2014), a flood control channel that is the man-made extension of the Whitewater River. The CVWD routinely maintains this flood control channel (e.g., vegetation management). Although the project design, construction and implementation would not impact wetlands or alter the flood control functions and capacity of the Whitewater River Stormwater Channel within the project site, the project could result activities within jurisdictional waters (in the form of unvegetated ephemeral wash and contoured unvegetated bed and bank (levees) that may require permits (e.g., Clean Water Act Section 401 Water Quality Certification, CWA Section 404 authorization, and California Fish and Game Code Section 1600 *et seq.* Lake and Streambed Alteration Agreement), and California Water Code Section 13000 *et seq.*).

1 Introduction

This report documents the findings of a Biological Resources Assessment (BRA) conducted by Rincon Consultants, Inc. (Rincon) for the Coachella Valley Water District (CVWD) Groundwater Replenishment Project (project). The project site is an approximate 191-acre property identified by Assessor's Parcel Numbers (APNs) 634-030-017, 040-003, -040-004, -040-006, -040-007, and -040-025. The purpose of this report is to document the existing conditions at the project site and to evaluate the potential for impacts to special-status biological resources in accordance with the California Environmental Quality Act (CEQA), for the CVWD environmental review process.

1.1 Project Location

The project site is situated in the central portion of the Coachella Valley in the city of Palm Desert, in central Riverside County (Figure 1). The approximate geographic centerpoint of the project site is located at 33.738059/-116.349976 N and is depicted within the *La Quinta, California* U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle (Sections 15 and 16, Township 5 South, Range 6 East) (Figure 2). The project site is bounded to the north by Hovley Lane East and includes the Whitewater River Stormwater Channel between Fred Waring Drive to the east and Cook Street to the west. The project site is located at 75525 Hovley Lane East.

1.2 Project Description

CVWD is a public agency that provides water service, wastewater management, water resources management, flood control and recycled water service to domestic, agricultural, and industrial users in the desert, Coachella Valley area. The Coachella Valley relies on a combination of local groundwater, Colorado River water, State Water Project (SWP) water, and recycled water to meet water demands. The Coachella Canal brings Colorado River water from the All-American Canal near the Mexico-U.S. border and traverses the southeastern margin of the Valley. Because CVWD does not have a direct connection to the SWP, SWP water is obtained via Colorado River water exchange with Metropolitan and delivered to the Coachella Valley via the Colorado River Aqueduct.

The proposed project would enable CVWD to maximize its allocation of Colorado River water via the Coachella Canal, by providing storage at the CVWD's existing Water Reclamation Plant No. 10 (WRP10) (located at 43-000 Cook Street in Palm Desert [catty-corner to 75525 Hovley Lane East]) and within the Whitewater River Stormwater Channel. Recycled water would continue to be produced at the WRP10 site, and blended with Colorado River water for service to non-potable water customers.

The proposed project would be implemented in two phases (Figure 3):

Phase I

Phase I of the proposed project would occur on and adjacent to the north of CVWD's Water Reclamation Plant No. 10 (WRP10), located at 43-000 Cook Street in Palm Desert, California. Primary components of Phase I of the project are summarized below.

- Re-purpose existing ponds located adjacent to the north of CVWD's WRP10 site, to function as groundwater replenishment basins. Colorado River water would be delivered to the revised ponds for groundwater replenishment.
- Extend existing water transmission pipeline within the WRP10 site to provide transmission of imported Colorado River water from the existing pipeline to the re-purposed ponds located adjacent to the north of CVWD's WRP10 site.
- Install a Colorado River water pump station adjacent to the Back Feed Reservoir, including a minimum of two pumps with a pumping horsepower (HP) in the range of 100 to 200 HP, and a sound wall surrounding the new pump station.
- Relocate the existing WRP10 operations parking area by repurposing the northeastern-most percolation basin currently located within the WRP10 site, in order to concentrate the parking and storage of operations and maintenance vehicles to one area. The parking area will ultimately be relocated north and adjacent to WRP10.
- Install two new 800-HP pumps and a hydropneumatic tank within the existing MVP Pump Station, which is an existing structure and entirely enclosed; the existing MVP Pump Station was designed to accommodate these additional pumps.

Phase II

Phase II of the proposed project would occur on the WRP10 site and within the existing Whitewater River Stormwater Channel, located adjacent to the south-southwest of CVWD's WRP10 site. Primary components of Phase II of the project are summarized below.

- Construct berms using native sediments within the Whitewater River Stormwater Channel for the purposes of creating detention basins to receive and infiltrate Colorado River water for replenishing the underlying groundwater basin.
- Extend the existing MVP within the Whitewater River Stormwater Channel beyond the WRP10 site to convey Colorado River water to the new detention basins included under Phase II of the project.
- Expand and reconfigure the existing secondary effluent storage ponds within the southern portion of the existing WRP10 site to store approximately 100 million gallons of secondary effluent.
- Construct a new Secondary Effluent Pump Station within the WRP10 site to improve the routing of secondary effluent within the existing WRP10 site to the new lower storage ponds and subsequently back to the headworks at the WRP10 site.

The Whitewater River Stormwater Channel is presently used for a variety of purposes in addition to flood control; portions of the channel to the north and the south of the project site are used for golfing purposes. CVWD has a standing Memorandum of Understanding (MOU) with the California Department of Fish and Wildlife (CDFW) for operation and maintenance of the channel. Presently, CVWD mows vegetation within the channel on a regular operations schedule in order to maintain function of the channel for the conveyance of flood waters, in compliance with the CDFW MOU (CDFW 1977). Implementation of the project would include continuation of these operational activities and not alter channel functions or flood control capacity, including within the proposed percolation ponds.

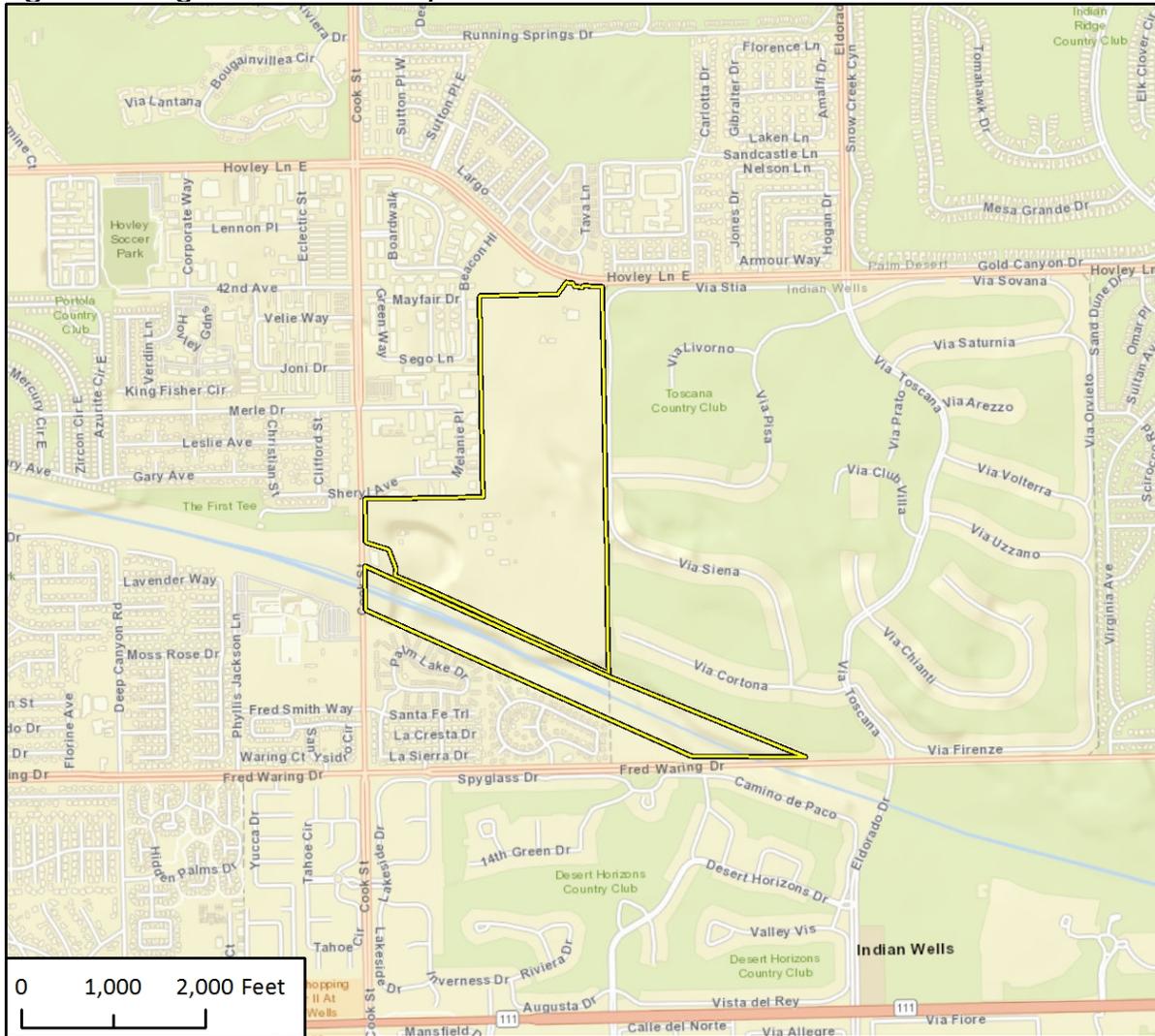
Operation and maintenance of the proposed project would include the following:

- Conveyance of Colorado River water within the Mid-Valley Pipeline (existing and extended) for groundwater infiltration at the project site;

- Maintenance of storage and percolation ponds at the WRP10 site, consistent with existing operations;
- Vegetation and sediment management within the Phase I and Phase II ponds/basins to maintain storage capacity and maximize infiltration capabilities, consistent with existing mowing and pond maintenance operations;
- Operation of pump stations consistent with existing procedures, wherein stations are controlled electronically from CVWD headquarters in Coachella and therefore require minimal site visits, approximately once per week.

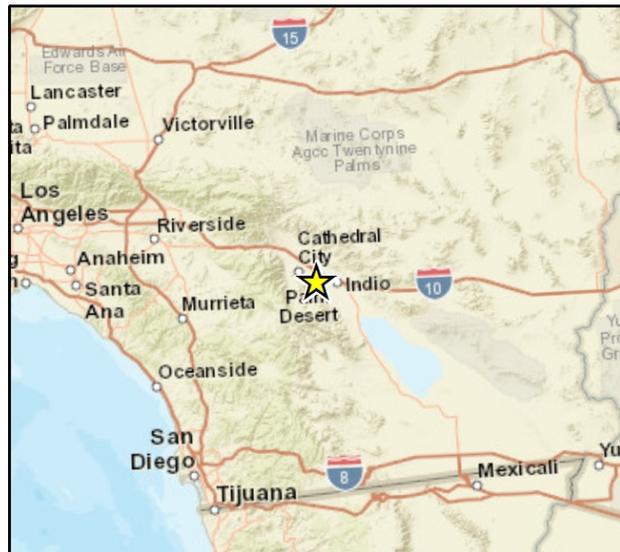
No manual intervention would be required for operation of the breakaway fencing or temporary berms. No new CVWD employees are anticipated to be needed to operate the proposed facilities.

Figure 1 Regional Location Map



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 Project Location



BRA Fig 1 Regional Loc

Figure 2 Project Vicinity Map

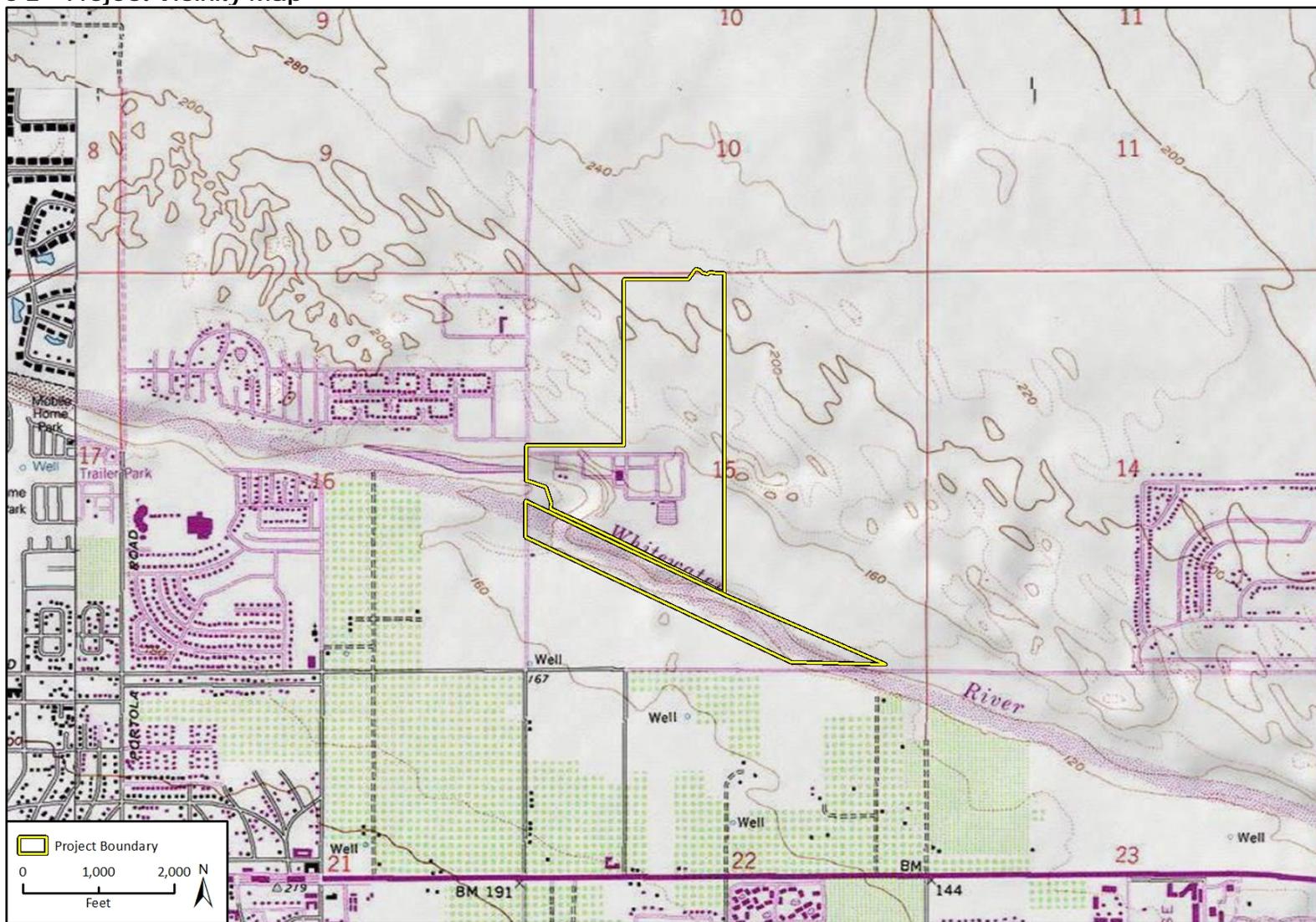
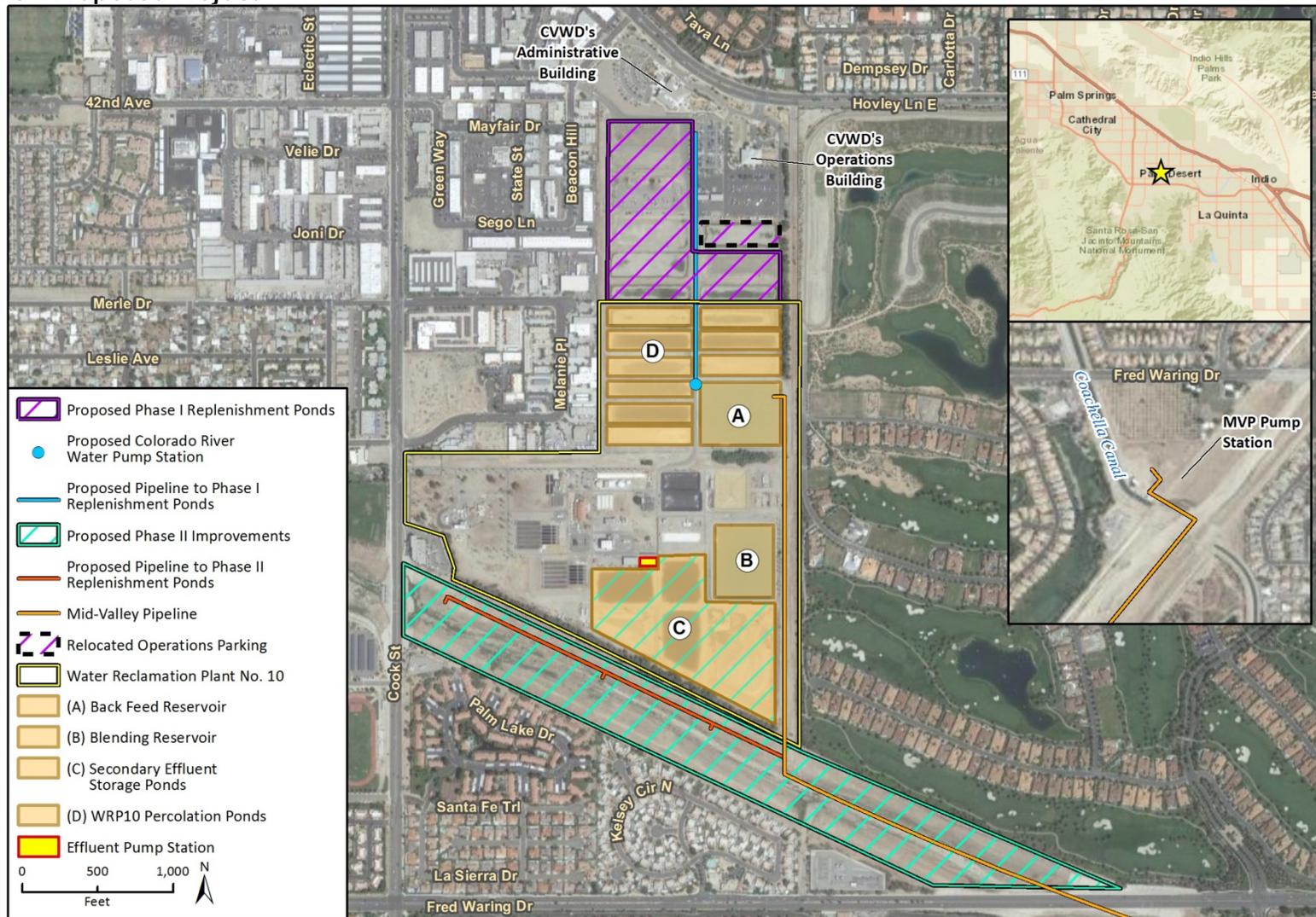


Figure 3 Proposed Project



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 Additional data provided by Coachella Valley Water District, 2017.

Fig 3 Project Site and Vicinity

2 Methodology

This BRA is a compilation of data collected during the site visit and literature review. The potential presence of special-status species is based on the literature review and field survey designed to assess habitat suitability only.

2.1 Regulatory Overview

Regulated or sensitive resources studied and analyzed herein include special status plant and wildlife species, nesting birds and raptors, sensitive plant communities, jurisdictional waters and wetlands, wildlife movement, and locally protected resources, such as protected trees. Relevant regulatory guidance is provided in Attachment A.

2.1.1 Environmental Statutes

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

- **California Environmental Quality Act (CEQA).** Requires environmental review prior to approval of discretionary projects, and requires significant impacts to be mitigated if feasible.
- **Federal Endangered Species Act (ESA) and California Endangered Species Act (CESA).** These laws prohibit the unauthorized take of federally and state-listed threatened and endangered species.
- **Federal Clean Water Act (CWA) and Porter-Cologne Water Quality Control Act.** These laws prohibit unauthorized discharges of pollutants, including fill material for construction, into jurisdictional waters of the United States and waters of the State.
- **California Fish and Game Code (CFG) Sections 1600 et seq.** These sections of the CFG set forth the Lake/ Streambed Alteration Agreement program, through which the California Department of Fish and Wildlife (CDFW) regulates activities that would divert, obstruct, or alter streambeds.
- **Migratory Bird Treaty Act (MBTA) and CFG Section 3503.** These laws prohibit the destruction of birds, including their eggs, nests, and nestlings.
- **Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP).** The project site lies within the boundary of CVMSHCP, which is an adopted, regional plan with the overall goal to enhance and maintain biological diversity and ecosystem processes while allowing future economic growth.
- **City of Palm Desert General Plan.** The City of Palm Desert General Plan (City of Palm Desert, 2016) guides the County's land use development.

2.1.2 Guidelines for Determining CEQA Significance

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

- a) Have substantial adverse effects, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS).
- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service.
- c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan.

2.2 Database and Literature Review

Prior to conducting the supplemental biological field survey, Rincon conducted a database and literature review to characterize the nature and extent of biological resources on and within the vicinity¹ of the project site (survey area) to the site. Relevant literature and data were reviewed to ascertain areas within and adjacent to the project site with topographical configurations and vegetative signatures that may present the potential for wetlands and/or streams and/or that may suggest the potential for sensitive habitats, plants and animals to occur, or have been previously documented and mapped, within the survey area. This information was evaluated by consulting the following additional available sources:

- *Jurisdictional Delineation Report Whitewater River and Coachella Valley Stormwater Channels Riverside County, California* (ICF International 2014)
- 7.5-minute La Quinta Quadrangle (USGS 1994)
- The web-based National Hydrography Dataset (USGS 2017)
- 2016 aerial maps of the survey area (U.S. Department of Agriculture [USDA] National Agriculture Imagery Program) (USDA 2016)
- Google Earth (Google 2017)
- The web-based National Wetlands Inventory Wetlands Mapper (USFWS 2017a)
- The web-based California Environmental Resources Evaluation System (CERES), California Wetlands Information System Wetland Databases and Inventories (CERES 2017)

¹ In the context of this report, and for the purpose of this assessment, vicinity is defined as areas within a 5-mile radius of the proposed project.

- The web-based Information Center for the Environment (U.C. Davis 2017a)
- The web-based USFWS Threatened and Endangered Species Active Critical Habitat Environmental Conservation Online System (ECOS) (USFWS 2017b)
- The web-based USFWS Information for Planning and Consulting Environmental Conservation System (USFWS 2017c)
- The web-based California Soil Resource Lab digital soil survey data (U.C. Davis 2017b)
- The web-based U.S Department of Agriculture (USDA)/Natural Resources Conservation Service (NRCS)/ Soil Survey (USDA/NRCS 2017)
- The web-based California Department of Fish and Wildlife (CDFW) California Natural Diversity Data Base (CNDDDB) RareFind5 (CDFW 2017a)
- CDFW Special Animals List (CDFW 2017b)
- California Natural Diversity Data Base (CNDDDB) Vegetation Classification and Mapping Program – List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database (CDFW 2017c)
- Special Vascular Plants, Bryophytes, and Lichens List (CDFW 2017d)
- California Native Plant Society’s (CNPS) Electronic Inventory of Rare and Endangered Plants of California (CNPS 2017)
- The web-based Information and observations on wild California plants for conservation (Calflora 2017)
- Coachella Valley Multiple Species Habitat Conservation Plan/Natural Community Conservation Plan (CVMSHCP) (CVAG 2008)
- The web-based Riverside County Geographic Information Services (County of Riverside 2017a)
- The web-based Riverside County Property Information Center (County of Riverside 2017b)
- The City of Palm Desert General Plan (City of Palm Desert, 2016)

2.3 Field Reconnaissance Survey

Rincon biologist Amber Bruno conducted a field reconnaissance survey on May 11, 2017, between the hours of 0900 and 1300. Average weather conditions recorded during the site reconnaissance survey included temperatures of approximately 75 to 83 degrees Fahrenheit, winds of 0 to 5 miles per hour, and clear skies (estimated at $\leq 25\%$ cloud cover) with good visibility.

The purpose of the survey was to document existing biological conditions within the project site, including plant and wildlife species, vegetation communities, and jurisdictional waters and wetlands, and to assess and determine the potential for presence or absence of special-status species and/or habitats determined by the literature review.

The biologist conducted the survey on foot, and general site photos capturing the onsite conditions are available in Attachment B.

The survey was reconnaissance-level only and did not include focused surveys for special status species. Focused surveys for sensitive plant and wildlife species generally require specific survey

protocols and extensive field survey time, and are usually conducted only at certain times of the year. The findings and opinions conveyed in this report are based on this methodology.

2.3.2 Flora

All plant species observed within the survey area were identified and documented. Floral nomenclature for native and non-native plants follows Baldwin et al. (Sawyer, et al. 2012) as updated by the *Jepson Flora Project* (Jepson Flora Project 2017) (Attachment C).

2.3.3 Fauna

Wildlife was examined and evaluated directly (as in the case of birds and evidence of raptor foraging) and indirectly through tracks, scat, and nests (as in the case of mammals) in the field. Methods consisted of walking slowly over the site while watching and listening for wildlife, pausing frequently to observe and listen. ‘Pishing’, a technique commonly used to attract the interest of passerines and draw them into view, was employed. Binoculars (8x42) were used to assist in the detection and identification of wildlife. As the survey was performed during the day, identification of nocturnal animals was limited to sign if present on-site.

Zoological nomenclature for birds is in accordance with the American Ornithologists’ Union Checklist (2017); for mammals, Wilson and Reeder (2005); and for amphibians and reptiles, Stebbins (2003). As the survey was performed during the day, identification of nocturnal animals was limited to sign if present on-site. Species presence was confirmed by visual observation and /or auditory detection, scats, bones, dens and burrows (Attachment C).

2.3.4 Jurisdictional Aquatic Resources

The results of the 2014 *Jurisdictional Delineation Report Whitewater River and Coachella Valley Stormwater Channels Riverside County, California* (ICF International 2014) were ground-truthed and confirmed during Rincon’s field reconnaissance survey.

3 Existing Conditions

3.1 Physical Characteristics

The project site occurs within the relatively flat-lying alluvial floor of the Coachella Valley and is situated on public property. The project is surrounded by commercial, recreational, and residential development and lies within the boundary of the CVMSHCP planning area, but is not within any specific CVMSHCP Conservation Area (Figure 4).

The project site contains a reach of the Whitewater River storm channel and the CVWD Palm Desert Operations for Wastewater Treatment and Water Reclamation Facility. The CVWD Palm Desert Operations Facility is a developed industrial facility consisting of multiple percolation basins and infrastructure for wastewater treatment and reuse for the Coachella Valley Region. The portion of the project within the facility is relatively flat, with exception to the multiple detention basins, with single-story buildings, maintenance roads, and large-scale underground utilities (water conveyance pipes). Elevation of CVWD Palm Desert Operations Facility ranges from approximately 210 feet (ft) Above Mean Sea Level (amsl) in the northern extent descending to approximately 160 ft amsl in the southern extent. The Whitewater River storm channel descended from approximately 160 ft amsl in the western extent to approximately 140 ft amsl in the eastern extent.

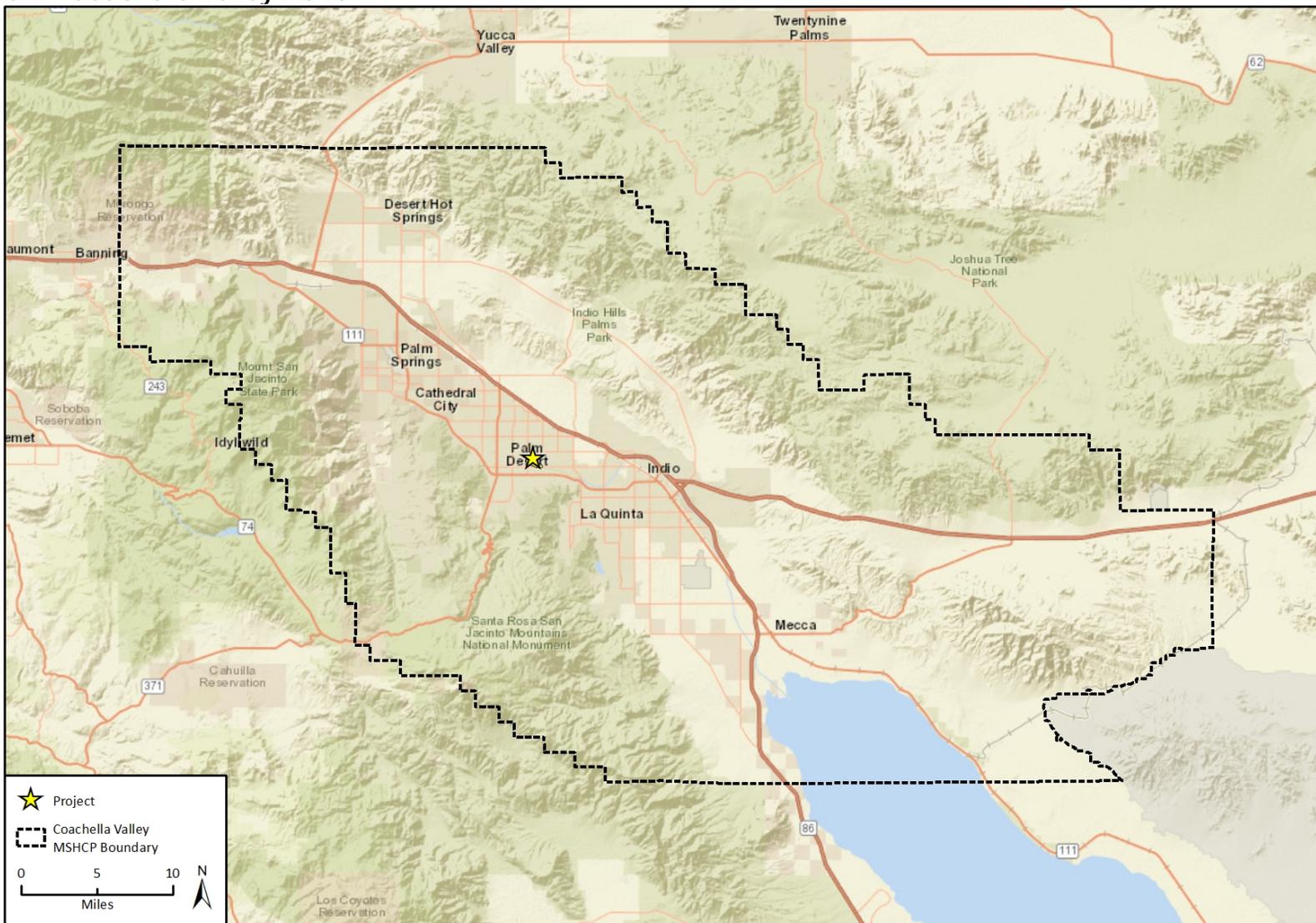
3.1.1 Watershed and Drainages

The project site is located within the central-eastern portion of the approximately 1,501 square-mile Whitewater River Watershed (Hydrologic Unit Code [HUC]: 18100201). Contained within the Whitewater River Watershed is the approximately 1,854-square-mile Whitewater Hydrologic Unit (HU: 719). Within the Whitewater HU is the approximate 1,445-square-mile Coachella Hydrologic Area (HA: 719.4), and within the HA is the approximate 115-square-mile Indio Hydrologic Subarea (HSA: 719.47). All watersheds are located within the RWQCB Colorado River Basin Region (RWQCB Region 7) (Caltrans 2017; USGS 2017).

The primary drainage feature within the project site is the Whitewater River Stormwater Channel. The CVWD Palm Desert Operations Facility does support stormwater conveyances that empty into the Whitewater River. The Whitewater River Stormwater Channel is tributary to the Salton Sea and is not listed as an Impaired Waterbody within the Whitewater River Region (watersheds). Due to the small percentage of the Whitewater River Watershed and the Whitewater River Region in urban land uses, urban runoff constitutes a minor percentage of the total flow in the Whitewater River under storm conditions. (SWRCB 2006; RWQCB 1994).

Within the project site the Whitewater River storm channel is considered and maintained as a flood control channel. The project site does not occur within and/or immediately adjacent to the CVMSHCP Whitewater Floodplain Conservation Area (CVAG 2007; CDFW 1977).

Figure 4 Coachella Valley MSHCP



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Additional data provided by Coachella Valley Association of Governments, 2017.

BRAG 4 Coachella Valley MSHCP

3.1.2 Soils

The four soils mapped by NRCS which underlie the project site are alluvial in origin and are classified as entisols (i.e., geologically young soils) primarily originating from eolian (wind-borne) sediments and alluvium that show little alteration of the parent material from which they were derived, and that exhibit little pedogenesis (soil formation) because of the dynamic and repeated movement from wind and flooding events (Brady 1990; USDA NRCS 2017a). These four soil types are described below (Figure 5).

Coachella

The Coachella series consists of moderately deep, gently sloping, well-drained soils that formed from dominantly igneous rocks in lacustrine basins. This series is found at elevations of 230 feet below sea level to 800 feet above sea level, with slopes ranging from gently sloping to nearly level. The typical soil texture is fine to very fine sand (with moderate to rapid permeability). Coachella soils are moderately extensive and found in lacustrine basins in the deserts of southern California (primarily the Coachella Valley).

Gilman

The Gilman series consists of very deep, well-drained soils that formed in stratified stream alluvium. Gilman soils are found on floodplains and alluvial fans at elevations of 75 to 2,500 feet, with slopes of 0% to 3%. Soil texture is typically coarse loam to fine sand (with slow runoff and moderate permeability). Gilman soils are extensive and found within southern California and southern Arizona.

Myoma

The Myoma series consists of somewhat excessively drained soils that formed in recent sand-blown alluvium. Myoma soils are generally level to rolling and found at elevations of 200 feet below sea level to 1,800 feet above sea level. Texture for the Myoma series ranges from fine sand to sand (with very slow runoff and rapid permeability). The Myoma series is extensive and found across southern California.

Fluvents

Fluvents are young alluvial soils consist primarily of recent water-deposited sediments on floodplains, fans, and deltas, where soil development is prevented by repeated deposition of sediment in periodic flooding events.

Figure 5 Soils



BRAFig 5 Soils

3.2 Vegetation

Four vegetation communities or land cover types were mapped within the project site, including tamarisk scrub, non-vegetated channel, urban/developed lands, and open water in detention basins. Figure 6 provides locations of each vegetation community/cover type mapped in the project site. As previously mentioned, names and definitions of plant communities discussed below are based on a combination of the Holland (1986), Oberbauer et al. (2008)², and Sawyer et al. (2009) classification systems. A list of the plant species observed during the field survey is included in Attachment C.

The project site supports primarily non-native plant species with some native species intermixed within the four vegetation communities observed. Plant species observed within the survey area are noted below within the vegetation that they occur. Table 1 lists the vegetation communities/land cover types and their acreages. No sensitive habitats were observed onsite.

Table 1 Vegetation Community/Land Cover Type

Vegetation Community/Land Cover Type by Holland (Holland Code)	Vegetation Community/Land Cover Type by Sawyer et al.	Acreage Within Project Site
Tamarisk Scrub (63810)	Tamarix spp. Semi-natural Shrubland Stands	5.67
Non-Vegetated Floodplain or Channel (64200)	--	45.92 ^a
Urban/Developed (12000)	--	125.96
Fresh Water (open water) (64140)	--	13.80

^a Composed of both unvegetated active channel (e.g., thalweg [waters of the U.S. and state]) and graded and contoured unvegetated flood control channel (waters of the state, exclusively).

Tamarisk Scrub (63810)

The tamarisk scrub habitat type on the project site corresponds to the Tamarix spp. semi-natural shrubland stands more recently described by Sawyer et al. (2009). Tamarisk scrub is dominated by the non-native and highly-invasive tamarisk (Tamarix spp.). This weedy plant community is usually a monoculture of tamarisk that has supplanted native wetland plant species. Tamarisk usually invades following disturbance. This plant community typically occurs in sandy or gravelly braided washes or intermittent streams, often in areas where high evaporation creates high salinity in the stream (Holland 1986).

Within the project site there are approximately 5.67 acres of tamarisk scrub. Tamarisk stands have been installed on the project site as windbreaks and are limited to the three rows. Ravens have been known to occupy and nest in the tamarisk scrub within the project site (Rincon 2017).

Non-Vegetated Floodplain or Channel (64200)

Non-vegetated floodplain or channel includes aquatic features composed of the sandy, gravelly, or rocky fringe of waterways or developed/constructed and managed flood channels. These aquatic

² Oberbauer et al. (2008) is used when no description for the cover types observed within the project site are provided by Holland (1986) and Sawyer et al. (2009).

features are unvegetated on a relatively permanent basis. Variable water lines inhibit the growth of vegetation, although some weedy species of grasses may grow along the outer edges of the wash. Vegetation may exist here but is usually less than 10% total cover.

Within the project site there are approximately 52.30 acres of channel, represented by the Whitewater River Stormwater Channel (Figure 6). This feature is a graded and managed flood control facility which also contains the smaller active channel. The Whitewater River Stormwater Channel within the project site supports small, sparse stands of willow (*Salix lasiolepis* and *Salix laevigata*), cattail (*Typha latifolia*) and both native and nonnative herbaceous vegetation such as curly dock (*Rumex crispus*), sandmatt (*Euphorbia serpens*), rabbitsfoot grass (*Polypogon monspeliensis*), beach burr (*Ambrosia chamissonis*), cocklebur (*Xanthium strumarium*) and Russian thistle (*Salsola tragus*). The channel within the project site is periodically maintained by CVWD.

Urban/Developed (12000)

Urban/developed areas are land cover types that have been constructed upon or otherwise physically altered to an extent that native vegetation is no longer supported and cannot persist. Developed land is characterized by permanent or semi-permanent structures, pavement or hardscape, and landscaped areas that often require irrigation. Areas where no natural land is evident due to a large amount of debris or other materials being placed upon it may also be considered Urban/Developed (e.g., car recycling plant, quarry) (Oberbauer et al 2008).

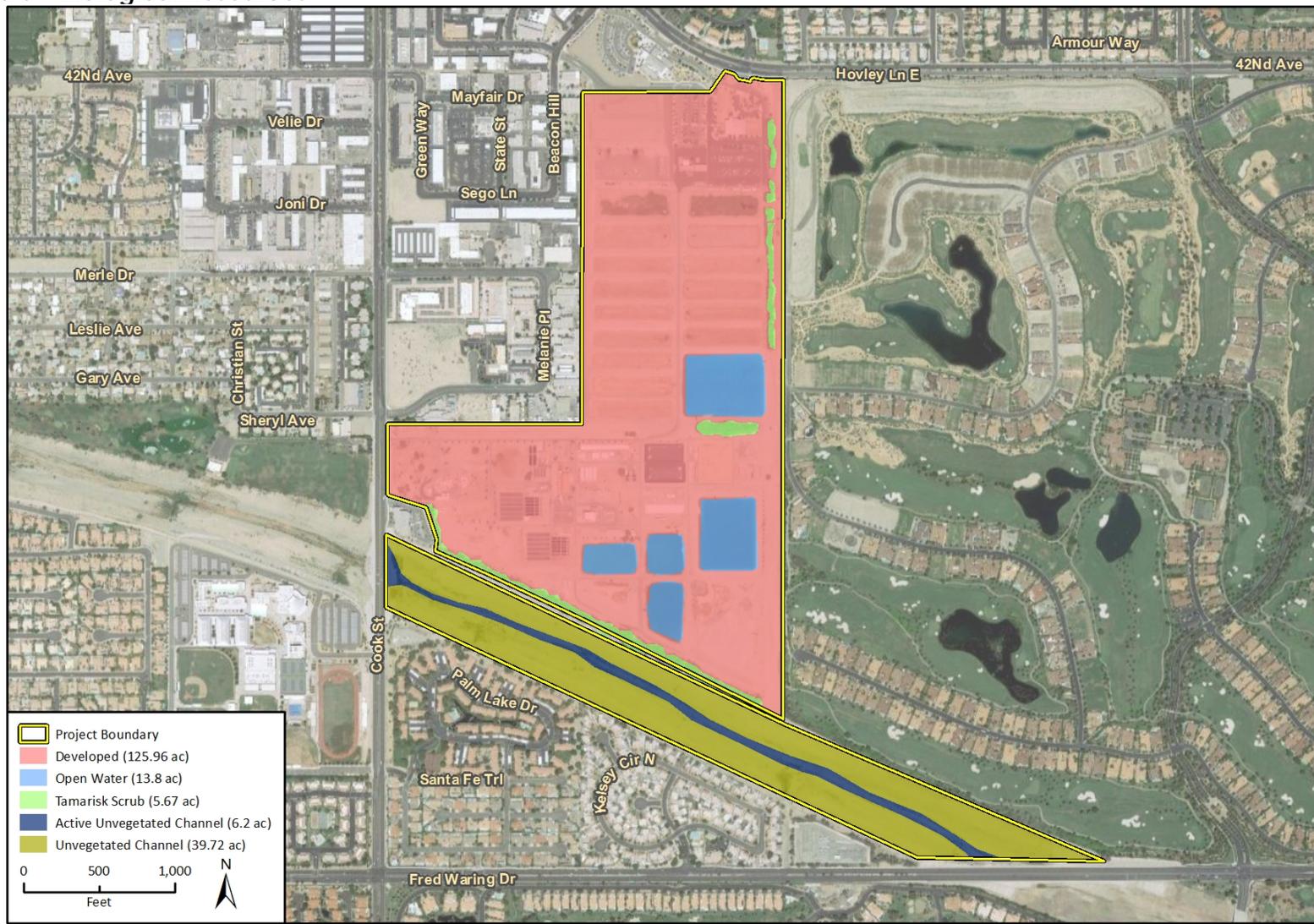
Within the project site there are approximately 125.96 acres of urban development (as the Water Reclamation Plant is an industrial facility). Plant species observed in this land cover type include typical ornamental landscape species such as Mexican fan palm (*Washingtonia robusta*), Peruvian pepper (*Shinus molle*), and ironbark eucalyptus (*Eucalyptus sideroxylon*). Herbaceous weedy species such as knotweed (*Polygonum lapathifolium*), cheeseweed (*Malva parvifolia*), and mustards (*Hirschfeldia incana* and *Sisymbrium irio*) were also observed within the developed area of the project site.

Fresh Water (Open Water) (64140)

This land cover type is comprised of year-round bodies of fresh water (extremely low salinity) in the form of lakes, streams, ponds or rivers. This includes those portions of water bodies that are usually covered by water and contain less than 10% vegetative cover (Oberbauer et al 2008).

Within the project site, at the time of the survey, there are approximately 13.80 acres of detention open water basins filled with reclaimed water (Figure 6). It is noted that status of the impounded water in the detention basins can change and acreage of open water can thus fluctuate.

Figure 6 Biological Resources



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 Additional data provided by Coachella Valley Water District, 2017.

BRFig 6 Bio Resources

3.3 General Wildlife

The project site and surrounding areas provide habitat suitable for common wildlife species that occur in vegetation communities and land cover types as described above. Common avian species observed/detected on or adjacent to the project site include mallard duck (*Anas platyrhynchos*), common teal (*Anas crecca*), bufflehead (*Bucephala albeola*), common raven (*Corvus corax*), mourning dove (*Zenaida macroura*), Costa's hummingbird (*Calypte costae*), cliff swallow (*Petrochelidon pyrrhonota*), and Say's phoebe (*Sayornis saya*). Other wildlife previously observed in the survey area include the coyote (*Canis latrans*), bobcat (*Lynx rufus*), California ground squirrel (*Otospermophilus beecheyi*), raccoon (*Procyon lotor*), and roof rat (*Rattus rattus*) (Rincon 2017).

Additionally, the western fence lizard (*Sceloporus occidentalis*), a common reptile, was observed. Fish species such as bass (*Micropterus* sp.), grass carp (*Ctenopharyngodon idella*), common perch (*Perca* sp), and common molly (*Poecilia* sp.) are also known to occupy the ponds (Rincon 2017). No amphibian species were observed during the site visit.

A list of the animal species observed during the field survey is included in Attachment C.

4 Special-Status Biological Resources

This section discusses special-status biological resources observed within the project site during the field survey, and evaluates the potential for the project site to support other special-status resources based on existing conditions. Local, state, and federal agencies regulate special-status species and require an assessment of their presence or potential presence to be conducted prior to the approval of any proposed development on a property. Assessments for the potential occurrence of special-status species are based upon known ranges, habitat preferences for the species, species occurrence records from the CNDDDB, species occurrence records from other sites in the vicinity of the survey area, and previous reports for the project site. The potential for each special status species to occur in the survey area was evaluated according to the following criteria:

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

Plant or animal taxa may be considered "sensitive" or as having "special-status" due to declining populations, vulnerability to habitat change, or because they have restricted ranges. Some are listed as threatened or endangered by the USFWS or by the CDFW and are protected by the federal and state ESAs. Others have been identified as sensitive or as special status species by the USFWS, the CDFW, or by private conservation organizations, including the CNPS. Unlisted special-status species do not have formal state or federal status.

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

- **List 1A** = Plants presumed extinct in California;
- **List 1B.1** = Rare or endangered in California and elsewhere; seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat);
- **List 1B.2** = Rare or endangered in California and elsewhere; fairly endangered in California (20-80% occurrences threatened);

- **List 1B.3** = Rare or endangered in California and elsewhere, not very endangered in California (<20% of occurrences threatened or no current threats known);
- **List 2** = Rare, threatened or endangered in California, but more common elsewhere.

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

- **G1 or S1** - Critically Imperiled Globally or State-wide
- **G2 or S2** - Imperiled Globally or State-wide
- **G3 or S3** - Vulnerable to extirpation or extinction Globally or State-wide

Plant communities are also considered special-status biological resources if they have limited distributions, have high value for sensitive wildlife, contain special-status species, or are particularly susceptible to disturbance. The CDFW ranks special-status communities as “threatened” or “very threatened” and keeps records of their occurrences in CNDDB.

Attachment D provides the species name, status, and habitat requirements for all special-status species that were detected during the field visits, have been reported within the vicinity (5-mile radius), or are considered to have some potential to occur onsite based on geographic distribution and presence of potentially suitable habitat. These tables provide the names, legal or conservation status, general habitat associations, and the probability of occurrence for each of these species which is based on the database queries performed for the project. A determination of their potential to occur within the project site is also summarized.

4.1 Special Status Plant Species

Attachment D lists the fifty-six (56) special-status plant species reported from the vicinity of the greater project area. Of these, all are considered to be absent or not expected to occur due to a lack of potentially suitable habitat and/or the project site occurring outside or at the edge of the species' geographic range or elevational range.

4.2 Sensitive Plant Communities

The CNDDB documents no special-status vegetation or habitat communities within a five-mile radius of the project site. No special-status vegetation communities were observed on or adjacent to the site during the field reconnaissance survey.

4.3 Special Status Wildlife Species

Attachment D lists the thirty six (36) special-status animal species reported from the vicinity of the project site. Of these, thirty two (32) are considered to be absent or not expected to occur due to a lack of potentially suitable habitat.

Attachment D summarizes the four (4) special-status bird species reported from the vicinity of the project site. These include:

- Golden eagle (*Aquila chrysaetos*)
- Prairie falcon (*Falco mexicanus*)
- Burrowing owl (*Athene cunicularia*)

- Loggerhead shrike (*Lanius ludovicianus*)

All of these bird species have been reported in the vicinity (5 miles) of the project site and therefore potential for these species to occur (at least during migration or while foraging) is present. Golden eagle, prairie falcon, and loggerhead shrike have a low potential for occurrence within Phase II of the project site (the Whitewater River Stormwater Channel). Burrowing owl has a moderate potential for occurrence within Phase II of the project site. Burrowing owl and loggerhead shrike are covered species under the CVMSHCP.

The project site does not present suitable nesting habitat for golden eagle, prairie falcon, or loggerhead shrike. However, the Whitewater River Stormwater Channel may present potential foraging opportunities for these three bird species.

4.3.1 Burrowing Owl, Nesting and Migratory Birds

Burrowing owl and other nesting and migratory bird species are protected by California Fish and Game Code Sections 3503, 3503.5, and 3800, and by the international MBTA (16 United States Code [USC] 703-711). Under the provisions of the MBTA, it is unlawful “by any means or manner to pursue, hunt, take, capture (or) kill” any migratory birds except as permitted by regulations issued by the USFWS.

The term “take” is defined by the USFWS regulation to mean to “pursue, hunt, shoot, wound, kill, trap, capture or collect” any migratory bird or any part, nest, or egg of any migratory bird covered by the conventions, or to attempt those activities. In addition, the CFCG extends protection to non-migratory birds identified as resident game birds (CFCG Section 3500) and any birds in the orders Falconiformes or Strigiformes (birds-of-prey) (CFCG Section 3503.5). Habitat is present within the project site that has the potential to support protected nesting birds. These laws make it unlawful to take, possess, or needlessly destroy the nest or eggs of any migratory bird or bird of prey.

No nesting birds or owl burrows with burrowing owl sign (whitewash, pellets and feathers) were observed during the May 11, 2017, field reconnaissance survey at the project site.

4.4 Jurisdictional Waters and Wetlands

No potential jurisdictional waters of the U.S. and/or state (including wetlands) were observed within the WRP10, where all work in Phase I of the proposed project would occur.

A formal jurisdictional delineation report has been prepared for the CVWD which contains the segment of the Whitewater River Storm Channel within Phase II of the project (ICF International, revised 2014). This delineation mapped 5.82 acres of unvegetated ephemeral channel as waters of the U.S. and state and 46.47 acres of jurisdictional waters of the state. Within the project site the Whitewater River storm channel is maintained as a flood control channel. The project site does not occur within and/or adjacent to the CVMSHCP Whitewater Floodplain Conservation Area.

4.5 Wildlife Movement

Wildlife movement and habitat fragmentation are important issues in assessing impacts to wildlife. Habitat fragmentation occurs when a proposed action results in a single, unified habitat area being divided into two or more areas in such a way that the division isolates the two new areas from each other. Isolation of habitat occurs when wildlife cannot move freely from one portion of the habitat

to another or from one habitat type to another, as in the fragmentation of habitats within and around “checkerboard” residential development. Habitat fragmentation also can occur when a portion of one or more habitats is converted into another habitat, as when annual burning converts scrub habitats to grassland habitats.

The project site occurs within the planning boundary of the CVMSHCP area but is not a part of any specific CVMSHCP Conservation Area. The project site lies adjacent to a CVMSHCP Conservation Area (Santa Rosa and San Jacinto Mountains Conservation Area). The conservation area provides biological corridor and linkage between the San Jacinto/Santa Rosa Mountains, the San Bernardino Mountains, and Joshua Tree National Park. The proposed project would not affect any Conservation Areas. The proposed project is to occur within a previously developed and routinely managed area and is not anticipated to have an incremental effect on localized and urban adapted wildlife movement or create habitat fragmentation in the region, nor is it anticipated to have significant impact on regional wildlife movement.

.6 Resources Protected by Local Policies and Ordinances

.6.1 Coachella Valley Multiple Species Habitat Conservation Plan

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

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

Each Conservation Area has specific Conservation Objectives that must be satisfied. The CVMSHCP received final approval on October 1, 2008. The approval of the CVMSHCP and execution of the Implementing Agreement (IA) allows signatories of the IA to issue take authorizations for all species covered by the CVMSHCP, including State and federally listed species as well as other identified covered species and/or their habitats.

The CVWD is a signatory to the IA. Each participating city or local jurisdiction within the Coachella Valley will impose a development mitigation fee for new development projects within its jurisdiction. With payment of the mitigation fee and compliance with the requirements of the CVMSHCP, full mitigation in compliance with CEQA, the National Environmental Policy Act (NEPA), CESA, and FESA will be granted.

As stated above, the project site occurs within the planning boundary of the CVMSHCP, but is not a part of any specific CVMSHCP Conservation Area. However, the project site is adjacent to the Santa Rosa and San Jacinto Mountains CVMSHCP conservation area, which occurs approximately 2-miles to the south (CVAG 2007).

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

The proposed project is within the CVMSHCP plan area, but not within any specific CVMSHCP Conservation Area. It does, however, lie in close proximity to a CVMSHP Conservation Area. The proposed project would avoid direct impacts to this CVMSHCP Conservation Areas and will not conflict with the CVMSHCP Conservation Objectives. The project would comply with CVMSHCP Section 4.5 Land Use Adjacency Guidelines to avoid and minimize indirect effects to adjacent CVMSHCP conserved habitats (CVAG 2007).

Standards developed in Section 4.5 of the CVMSHCP are for the avoidance or minimization of indirect effects or impacts of development that is proposed for land uses adjacent to (or within) the Conservation Areas. These indirect ‘edge effects’ may include noise, lighting, drainage, human intrusion, introduction of invasive non-native plants, and non-native predators (e.g., dogs and cats).

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5 Impact Analysis and Mitigation Measures

Potential impacts to special-status biological resources were evaluated pursuant to the threshold criteria from the CEQA Environmental Checklist Form (see Section 2.1.2), presented here for the study area (project site). Implementation of the proposed project has the potential to affect special-status species and jurisdictional waters. The following sections provide an analysis of potential project effects to these resources and recommended mitigation measures to avoid and/or minimize potential project effects. With implementation of the measures, potential effects to special-status biological resources would be less than significant under CEQA. It is noted that the final determination of effects of significance and required mitigation measures for the project will be made by CVWD.

5.1 Special-Status Species

The proposed project would have a significant effect on biological resources if it would:

- a) *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.*

The project site contains natural vegetation that provides suitable nesting habitat for burrowing owl and common native birds. The proposed project could adversely affect raptors and nesting birds if construction occurs while they are present on or adjacent to the site through direct mortality or abandonment of nests. The loss of a nest due to construction activities would be a violation of CFGC Section 3503, 3503.5, 3513 and 3800, and the MBTA. The project design, construction, and implementation would not impact special-status species that may potentially occur downstream, because the project will not alter the flood control function and capacity of the Whitewater River Stormwater Channel.

- To avoid impacts to nesting birds, project-related activities should occur outside of the bird breeding season (typically February 1 to August 31) to the extent practicable. If construction must occur within the bird breeding season (February 1 through August 31), then no more than one week prior to initiation of ground disturbance and/or vegetation removal, a nesting bird and raptor pre-construction survey should be conducted by a qualified biologist within the disturbance footprint plus a 300-foot buffer (500-foot for raptors), where feasible. If the proposed project is phased, a subsequent pre-construction nesting bird and raptor survey may be required prior to each phase of construction within the project site.
- Pre-construction nesting bird and raptor surveys should be conducted during the time of day when birds are active and should be of sufficient duration to reliably conclude presence/absence of nesting birds and raptors onsite and within the designated vicinity. A report of the nesting bird and raptor survey results, if applicable, should be submitted to the lead agency for review and approval prior to ground and/or vegetation disturbance activities.
- If nests are found, their locations should be flagged. An appropriate avoidance buffer ranging in size from 25 to 50 feet for songbirds, and up to 250 feet for raptors depending upon the species and the proposed work activity, should be determined and demarcated by a qualified biologist

with bright orange construction fencing or other suitable flagging. Active nests should be monitored at a minimum of once per week until it has been determined that the nest is no longer being used by either the young or adults. No ground disturbance should occur within this buffer until the qualified biologist confirms that the breeding/nesting is completed and all the young have fledged. If project activities must occur within the buffer, they should be conducted at the discretion of the qualified biologist. If no nesting birds are observed during pre-construction surveys, no further actions would be necessary.

- The portion of the Whitewater River Stormwater Channel where Phase II of the project would occur has potentially suitable habitat for burrowing owl, although none were observed during the field survey. Although the burrowing owl is a covered species under the CVMSHCP, additional survey and conservation requirements apply. A pre-construction survey for the burrowing owl is recommended on the project site prior to any ground-disturbing activities since suitable habitat exists on site. The direct take of a burrowing owl, or any raptor, must be avoided. If the burrowing owl is found to be present, avoidance measures would be required, as described further below. In addition, if a burrowing owl is found to be present during the breeding season (February 1 to August 31), no ground disturbance can begin within the occupied area until after the breeding season (i.e., after August 31) and/or until the burrowing owls have completed their nesting activities.
- The pre-construction survey for the burrowing owl should occur 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) prior to ground breaking activities. Additionally, a final survey must be conducted within 24 hours of the initiation of ground disturbance activities 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 on-site, no ground-disturbing activities, such as vegetation clearance or grading, shall be permitted within a buffer of no fewer than 100 meters (330 feet) from an occupied burrow during the breeding season (February 1 to August 31), unless otherwise authorized by CDFW. During the non-breeding (winter) season (September 1 to January 31), ground-disturbing work can proceed as long as the work occurs no closer than 50 meters (165 feet) from the burrow. Depending on the level of disturbance, a smaller buffer may be established in consultation with CDFW.
- Compensatory mitigation may be required for permanent impacts to nesting, occupied and satellite burrows and/or burrowing owl habitat such that the habitat acreage, number of burrows and burrowing owls impacted are replaced based on the guidance provided in Appendix A of the CDFW Burrowing Owl Staff Report (CDFW 2012).
- Where habitat will be temporarily disturbed, restore the disturbed area to pre-project condition including decomposing soil and re-vegetating. Permanent habitat protection may be warranted if there is the potential that the temporary impacts may render a nesting site (nesting burrow and satellite burrows) unsustainable or unavailable depending on the time frame, resulting in reduced survival or abandonment.

- If burrow avoidance is infeasible during the non-breeding season or during the breeding season (February 1 through August 31), where resident owls have not yet begun egg laying or incubation, or where the juveniles are foraging independently and capable of independent survival, a qualified biologist shall implement a passive relocation program in accordance with the 2012 CDFW Staff Report on Burrowing Owl Mitigation.

5.2 Sensitive Plant Communities

The proposed project would have a significant effect on biological resources if it would:

- b) *Have a substantial adverse impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service.*

As discussed in Section 4.2, the CNDDDB documents no special-status vegetation or habitat communities within a five-mile radius of the project site. No sensitive plant communities were observed on the project site during the field reconnaissance survey and potential impacts are not expected.

5.3 Jurisdictional Waters and Wetlands

The proposed project would have a significant effect on biological resources if it would:

- c) *Adversely impact federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) either individually or in combination with the known or probable impacts of other activities through direct removal, filling, hydrological interruption, or other means.*

The project site does not support wetlands therefore no impacts to wetlands would occur. Phase II includes the construction of temporary berms using native sediments within the Whitewater River Stormwater Channel for the purposes of creating detention basins to receive and infiltrate Colorado River water for replenishing the underlying groundwater basin. In addition, a subsurface extension of the Mid-Valley Pipeline to provide water to the recharge ponds is proposed.

The berms may become a permanent feature of the channel as they will be replaced whenever they are washed out by high flow events. Construction of the berms and the pipeline extension could result in the discharge of sediments into the low flow channel, but given downstream uses (including a golf course in the channel), such discharge would not have a significant adverse effect to protected biological habitats or species. Because of the lack of biological resources associated with this maintained channel, no direct biological impact would be anticipated. In addition, construction and maintenance of the berms would be similar to the current regular maintenance activities and result in no change in existing conditions. The berms would also not substantially alter the hydraulic characteristics of the channel, especially as compared to peak flow events, therefore impacts would be less than significant.

Phase II of the project also has the potential to enhance the biological function and value of the Whitewater River Stormwater Channel within the project area by retaining water for longer periods of time and thereby creating potential habitat for plant and wildlife species. The level of habitat enhancement is unknown and subject to seasonal conditions, the timing, frequency and quantity of water entering the project area and infiltration rates.

Though mitigation to reduce potential impacts in accordance with CEQA guidelines is not recommended as impacts are expected to be less than significant, the proposed Phase II activity is subject to regulation by the CDFW, CRRWQCB, and USACE and proceeding without the appropriate authorizations and permits would conflict with adopted regulatory policies intended to reduce environmental effects.

CVWD should consult with CDFW, the USACE, and the CRRWQCB. This consultation may result in CVWD being required to apply for permits authorizing the construction of the berms and the installation of the pipeline extension within the unvegetated Whitewater River Stormwater Channel. CVWD will be required to comply with all permit conditions when implementing the proposed activities, including any seasonal timing restrictions, impact avoidance measures, limitations on construction means and methods, site restoration, compensatory mitigation, and reporting requirements.

5.4 Wildlife Movement

The proposed project would have a significant effect on biological resources if it would:

- d) *Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites.*

The project site does not occur within a CVMSHCP Conservation Area. The proposed project would occur within a previously developed and managed area and is not anticipated to cause any habitat fragmentation in the region, nor is the proposed project anticipated to have significant impact on regional wildlife movement. The temporary recharge basins within the Whitewater River Stormwater Channel would be protected from human egress by “break-away” fencing that is anticipated to be chain link or similar. Such fencing would be relatively permeable to local, urban adapted wildlife and avian species and would not be expected to limit localized wildlife movement through this urban area. It is noted that the increase in open water availability associated with the recharge ponds could potentially increase the number of water-related birds, such as ducks, and other wildlife at the site.

5.5 Local Policies and Ordinances

The proposed project would have a significant effect on biological resources if it would:

- e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance*

The proposed project will not conflict with any local policies or ordinances, due to the CVWD’s participation in the CVMSHCP.

5.6 Adopted or Approved Plans

The proposed project would have a significant effect on biological resources if it would:

- f) *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan.*

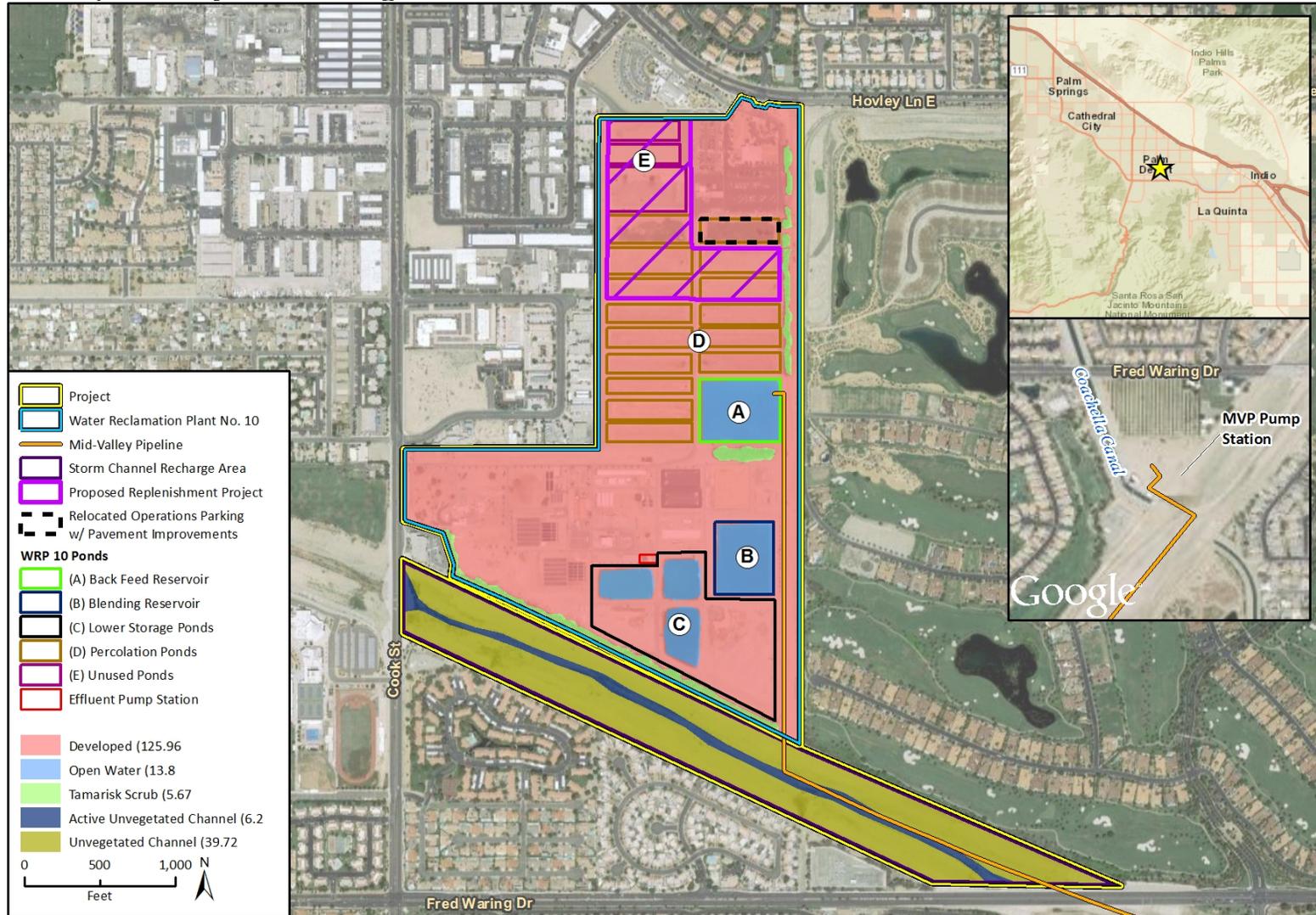
As discussed in Section 4.6 the proposed project will not conflict with any local policies or ordinances, due to participation with the CVMSHCP. The proposed project is within the CVMSHCP plan area, but not within any specific CVMSHCP Conservation Area. It does, however, lie in close proximity to a CVMSHP Conservation Area. The proposed project would avoid direct impacts to this CVMSHCP Conservation Areas and will not conflict with the CVMSHCP Conservation Objectives. The project will comply with CVMSHCP Section 4.5 Land Use Adjacency Guidelines to avoid and minimize indirect effects (CVAG 2007).

5.7 Cumulative Impact Analysis

According to Section 15130 of the *CEQA Guidelines*, cumulative impacts refer to incremental effects of an individual project when viewed in connection with the effects of past projects, current projects, and probable future projects. The project occurs within a previously developed and actively managed area. The CVMSHCP has analyzed cumulative effects within the region of the proposed project under CEQA, NEPA, CESA, and FESA. Through compliance with the CVMSHCP, project effects to will be offset, and as a result, the cumulative impacts to sensitive biological resources would be less than significant.

Any potential cumulative impacts to jurisdictional waters will be offset through the regulatory permitting process (e.g., CWA Section 404 and 401, CFGC Section 1600 *et seq.* and CWC Section 13000 *et seq.*) with requisite compensatory mitigation pursued at the watershed level. As a result, the cumulative impacts to aquatic resources would be less than significant with mitigation incorporated into the project. Figure 7 displays elements of the proposed project in light of the biological resources occurring at the project site.

Figure 7 Proposed Project and Biological Resources



Imagery provided by Google and its licensors © 2017.
 Additional data provided by Coachella Valley Water District, 2017.

BRA Fig 7 Bio Resources With Proposed Project

6 Limitations, Assumptions, and Use Reliance

This Biological Resources Assessment has been performed in accordance with professionally accepted biological investigation practices conducted at this time and in this geographic area. The biological investigation is limited by the scope of work performed. Biological surveys for the presence or absence of certain taxa have been conducted as part of this assessment but were not performed during a particular blooming period, nesting period, or particular portion of the season when positive identification would be expected if present, and therefore, cannot be considered definitive. The biological surveys are limited also by the environmental conditions present at the time of the surveys. In addition, general biological (or protocol) surveys do not guarantee that the organisms are not present and will not be discovered in the future within the site. In particular, mobile wildlife species could occupy the site on a transient basis, or re-establish populations in the future. Our field studies were based on current industry practices, which change over time and may not be applicable in the future. No other guarantees or warranties, expressed or implied, are provided. The findings and opinions conveyed in this report are based on findings derived from site reconnaissance, jurisdictional areas, review of CNDDDB RareFind5, and specified historical and literature sources. Standard data sources relied upon during the completion of this report, such as the CNDDDB, may vary with regard to accuracy and completeness. In particular, the CNDDDB is compiled from research and observations reported to CDFW that may or may not have been the result of comprehensive or site-specific field surveys. Although Rincon believes the data sources are reasonably reliable, Rincon cannot and does not guarantee the authenticity or reliability of the data sources it has used. Additionally, pursuant to our contract, the data sources reviewed included only those that are practically reviewable without the need for extraordinary research and analysis.

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7 References

- AOU (American Ornithologists' Union) and Cooper Ornithological Society, 2017. *Check-list of North American Birds*. Available at: <http://www.aou.org/checklist/north>. Accessed May.
- Brady, N.C., 1990. *The Nature and Property of Soils*, 10th ed. New York: Macmillan Publishing Company.
- CERES (California Environmental Resources Evaluation System), 2017. Available at <http://www.ceres.ca.gov/>. Accessed May.
- Caltrans (California Department of Transportation), 2017. Water Quality Planning Tool. Available at: <http://svctenvims.dot.ca.gov/wqpt/wqpt.aspx>. Accessed May.
- CDFG (California Department of Fish and Game), 1977. Memorandum of Understanding Between the State Department of Fish and Game and the Coachella Valley County Water District. June.
- _____, 2012. Staff Report on Burrowing Owl Mitigation. State of California, Natural Resources Agency, March 7, 2012.
- California Department of Fish and Wildlife (CDFW). 2017a. RareFind 5 Report *Cathedral City, Indio, La Quinta, Rancho Mirage, Martinez Mtn., Myoma, Toro Peak, Valerie and West Berdoo Canyon Calif.* quadrangles. California Natural Diversity Database (CNDDDB) California Department of Fish and Game, State of California Resources Agency. Sacramento, California. <https://www.wildlife.ca.gov/Data/CNDDDB/Maps-and-Data>. Accessed May.
- _____, 2017b. Special Animals List. Published List by the Biogeographic Data Branch of the CNDDDB accessed online at: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline=1>. Accessed May
- _____, 2017c. The Vegetation Classification and Mapping Program – List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database. Wildlife Habitat Data Analysis Branch. Available at <https://www.wildlife.ca.gov/Data/VegCAMP>. Accessed May.
- _____, 2017d. Special Vascular Plants, Bryophytes, and Lichens List. Biogeographic Data Branch, California Natural Diversity Database. Updated April 2017. Available at: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109383&inline>. Accessed: May.
- CNPS (California Native Plant Society), 2017. Rare Plant Program. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. Available at: <http://www.rareplants.cnps.org/advanced.html>. Accessed May.
- Calflora, 2017. Information on wild California plants for conservation, education, and appreciation. Berkeley, CA. Updated online and accessed via: <http://www.calflora.org/>. Accessed May.

County of Riverside, 2017a. Riverside County Geographic Information Services. Available at: <http://gis.rivcoit.org/>. Accessed May

_____, 2017b. Property Information Center. Available at: <http://pic.asrclrec.com/>. Accessed May

City of Palm Desert, 2016. City of Palm Desert General Plan. Available at: <http://www.cityofpalmdesert.org/home/showdocument?id=16858>

CVAG (Coachella Valley Association of Governments), 2007. Coachella Valley Multiple Species Habitat Conservation Plan. Online at: <http://www.cvmshcp.org/>. Accessed May 2017.

_____, 2015. Coachella Valley Multiple Species Habitat Conservation Plan/ Natural Community Conservation Plan 2015 Annual Report. Available at: http://www.cvmshcp.org/pdf%20files/Annual%20Report_2015/2015%20Annual%20Report%20FinalA.pdf. Accessed May 2017.

Google, 2017. Google Earth. Available at: <https://www.google.com/earth>. Accessed May.

Holland, Robert F., 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. California Department of Fish and Wildlife, Nongame Heritage Program. 156 pgs.

ICF International, 2014. *Jurisdictional Delineation Report Whitewater River and Coachella Valley Stormwater Channels Riverside County, California*. May.

Jepson Flora Project (eds.), 2017. Jepson eFlora. <http://ucjeps.berkeley.edu/IJM.html>. Accessed

Oberbauer, Thomas, Meghan Kelly, and Jeremy Buegge, March 2008. *Draft Vegetation Communities of San Diego County*. Based on "Preliminary Descriptions of the Terrestrial Natural Communities of California", Robert F. Holland, Ph.D., October 1986.

RWQCB (Regional Water Quality Control Board), 1993. Water Quality Control Plan Colorado River Basin Region 7 (as amended). March. Available at: http://www.waterboards.ca.gov/coloradoriver/water_issues/programs/basin_planning/. Accessed May 2017.

Rincon, 2017. Personal communication between Josh Zinn, Biologist at Rincon Consultants, and Brett Daniels, Biologist at the Palm Desert Operations. May 11.

Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens, 2009. *A Manual of California Vegetation*, Second Edition. California Native Plant Society, Sacramento. 1300 pp. Web Link: A Manual of California Vegetation, Second Edition. Available at: <http://www.cnps.org/cnps/vegetation/manual.php>. Accessed May.

SWRCB (State Water Resources Control Board), 2006. *Whitewater River Region Stormwater Management Plan*. Accessed May 2017. Available at: http://www.swrcb.ca.gov/coloradoriver/board_decisions/adopted_orders/orders/2008/08_0001swmp_final.pdf.

Stebbins, Robert C, 2003. *Western Reptiles and Amphibians, Third Edition*. Peterson Field Guides. Houghton Mifflin Company, 514 pages.

- U.C. Davis (University of California at Davis), 2017a. The Information Center for the Environment. Available at <http://ice.ucdavis.edu/>. Accessed May.
- _____, 2017b. California Soil Resource Lab digital soil survey data. Available at <http://casoilresource.lawr.ucdavis.edu/drupal/>. Accessed May.
- USDA (U.S. Department of Agriculture), 2016. National Agriculture Imagery Program. Available at <https://www.fsa.usda.gov/programs-and-services/aerial-photography/imagery-programs/naip-imagery/>. Accessed May 2017.
- USDA/NRCS (Natural Resources Conservation Service), 2017. Web Soil Survey. Available at: <http://websoilsurvey.nrcs.usda.gov/app/>. Accessed
- USFWS (United States Fish and Wildlife Service), 2017a. National Wetlands Inventory Interactive Wetlands Mapper. Available at: <http://www.nwi.fws.gov>. Accessed May.
- _____, 2017b. Threatened and Endangered Species Active Critical Habitat Environmental Conservation Online System mapping tool. Search of project site. Available at: <https://ecos.fws.gov/ecp/report/table/critical-habitat.html>. Accessed: 25 April.
- _____, 2017c. Information for Planning and Consultation (IPAC) Environmental Conservation System. Search of project site. Available at: <https://ecos.fws.gov/ipac/location/T732ZJSRFFAJFMC2HQBWT5GXVE/resources>. Accessed: 25 April.
- USGS (U.S. Geological Survey), 1994. La Quinta 7.5-Minute Quadrangle
- _____, 2017. National Hydrography Dataset. Available at <http://nhd.usgs.gov/>. Accessed May.
- Wilson, D.E. and Reeder, D.M. 2005. *Mammal Species of the World. A Taxonomic and Geographic Reference* (3rd edition), Johns Hopkins University Press, 2,142 pp. Available at: <http://www.departments.bucknell.edu/biology/resources/msw3/browse.asp>.

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Attachment A

Regulatory Guidance

Special-status habitats are vegetation types, associations, or sub-associations that support concentrations of special-status plant or wildlife species, are of relatively limited distribution, or are of particular value to wildlife.

Listed species are those taxa that are formally listed as endangered or threatened by the federal government (e.g. U.S. Fish and Wildlife Service [USFWS]), pursuant to the Federal Endangered Species Act (FESA) or as endangered, threatened, or rare (for plants only) by the State of California (i.e. California Fish and Game Commission), pursuant to the California Endangered Species Act or the California Native Plant Protection Act. Some species are considered rare (but not formally listed) by resource agencies, organizations with biological interests/expertise (e.g. Audubon Society, CNPS, The Wildlife Society), and the scientific community.

The following is a brief summary of the regulatory context under which biological resources are managed at the federal, state, and local levels. A number of federal and state statutes provide a regulatory structure that guides the protection of biological resources. Agencies with the responsibility for protection of biological resources within the project site include:

- U.S. Army Corps of Engineers (wetlands and other waters of the United States)
- Regional Water Quality Control Board (waters of the State)
- U.S. Fish and Wildlife Service (federally listed species and migratory birds)
- California Department Fish and Wildlife (riparian areas and other waters of the State, state-listed species);

U.S. Army Corps of Engineers

Under Section 404 of the Clean Water Act, the U.S. Army Corps of Engineers (USACE) has authority to regulate activities that could discharge fill of material or otherwise adversely modify wetlands or other “waters of the United States.” Perennial and intermittent creeks are considered waters of the United States if they are hydrologically connected to other jurisdictional waters. The USACE also implements the federal policy embodied in Executive Order 11990, which is intended to result in no net loss of wetland value or acres. In achieving the goals of the Clean Water Act, the USACE seeks to avoid adverse impacts and offset unavoidable adverse impacts on existing aquatic resources. Any fill or adverse modification of wetlands that are hydrologically connected to jurisdictional waters would require a permit from the USACE prior to the start of work. Typically, when a project involves impacts to waters of the United States, the goal of no net loss of wetland acres or values is met through compensatory mitigation involving creation or enhancement of similar habitats.

Regional Water Quality Control Board

The State Water Resources Control Board (SWRCB) and the local Central Coast Regional Water Quality Control Board (RWQCB) have jurisdiction over “waters of the State,” pursuant to the Porter-Cologne Water Quality Control Act, which are defined as any surface water or groundwater, including saline waters, within the boundaries of the State. The SWRCB has issued general Waste Discharge Requirements (WDRs) regarding discharges to “isolated” waters of the State (Water Quality Order No. 2004-0004-DWQ, Statewide General Waste Discharge Requirements for Dredged or Fill Discharges to Waters Deemed by the U.S. Army Corps of Engineers to be Outside of Federal Jurisdiction). The Central Coast RWQCB enforces actions under this general order for isolated waters not subject to federal jurisdiction, and is also responsible for the issuance of water quality certifications pursuant to Section 401 of the Clean Water Act for waters subject to federal jurisdiction.

United States Fish and Wildlife Service

The USFWS implements the Migratory Bird Treaty Act (16 United States Code [USC] Section 703-711) and the Bald and Golden Eagle Protection Act (16 USC Section 668). The USFWS and National Marine Fisheries Service (NMFS) share responsibility for implementing the Federal Endangered Species Act (FESA) (16 USC § 153 et seq.). The USFWS generally implements the FESA for terrestrial and freshwater species, while the NMFS implements the FESA for marine and anadromous species. Projects that would result in “take” of any federally listed threatened or endangered species are required to obtain permits from the USFWS or NMFS through either Section 7 (interagency consultation with a federal nexus) or Section 10 (Habitat Conservation Plan) of FESA, depending on the involvement by the federal government in permitting and/or funding of the project. The permitting process is used to determine if a project would jeopardize the continued existence of a listed species and what measures would be required to avoid jeopardizing the species. “Take” under federal definition means to harass, harm (which includes habitat modification), pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Proposed or candidate species do not have the full protection of FESA; however, the USFWS and NMFS advise project applicants that they could be elevated to listed status at any time.

California Department of Fish and Wildlife

CDFW derives its authority from the Fish and Game Code of California. Fish and Game Code Section 2050 *et. seq.* (e.g., CESA) prohibits take of state listed threatened, endangered or fully protected species. Take under CESA is restricted to direct mortality of a listed species and does not prohibit indirect harm by way of habitat modification. The CDFW also prohibits take for species designated as Fully Protected under the Code.

California Fish and Game Code sections 3503, 3503.5, and 3511 describe unlawful take, possession, or destruction of birds, nests, and eggs. Fully protected birds (Section 3511) may not be taken or possessed except under specific permit. Section 3503.5 of the Code protects all birds-of-prey and their eggs and nests against take, possession, or destruction of nests or eggs.

Species of Special Concern (SSC) is a category used by the CDFW for those species which are considered to be indicators of regional habitat changes or are considered to be potential future protected species. Species of Special Concern do not have any special legal status except that which may be afforded by the Fish and Game Code as noted above. The SSC category is intended by the CDFW for use as a management tool to include these species into special consideration when decisions are made concerning the development of natural lands. The CDFW also has authority to administer the Native Plant Protection Act (NPPA) (Fish and Game Code Section 1900 et seq.). The NPPA requires the CDFW to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rare. Under Section 1913(c) of the NPPA, the owner of land where a rare or endangered native plant is growing is required to notify the department at least 10 days in advance of changing the land use to allow for salvage of plant.

Perennial and intermittent streams and associated riparian vegetation, when present, also fall under the jurisdiction of the CDFW. Section 1600 et seq. of the Fish and Game Code (Lake and Streambed Alteration Agreements) gives the CDFW regulatory authority over work within the stream zone (which could extend to the 100-year flood plain) consisting of, but not limited to, the diversion or obstruction of the natural flow or changes in the channel, bed, or bank of any river, stream or lake.

Coachella Valley Multiple Species Habitat Conservation Plan

The CVMSHCP is a comprehensive, regional plan that addresses the conservation needs of 27 species of native flora and fauna (5 plants, 2 insects, 1 amphibian, 3 reptiles, 11 birds, and 5 mammals) and 27 natural communities occurring throughout the Coachella Valley region of western Riverside County, California. These include federal and state-listed species, federal and California Species of Concern (CSCs), and species on the CNPS sensitive species lists. Also included are species that are designated as sensitive by the Bureau of Land Management (BLM) regardless of their other federal, state, or regional conservation status.

Permits for the CVMSHCP were issued by the California Department of Fish and Wildlife (CDFW) on September 9, 2008 and by the United States Fish and Wildlife Service (USFWS) on October 1, 2008 (TE104604-0). The CVMSHCP balances environmental protection and economic development objectives in the CVMSHCP area, simplifying compliance with endangered species 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 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, local 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 communities within areas identified as having high conservation value.

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Attachment B

Site Photographs



Photo 1: Looking southeast at empty basin populated with nonnative plant species.



Photo 2: Looking southwest at empty basin..



Photo 3: Looking southwest at water filled basin.



Photo 4: Looking northwest at water filled basin.



Photo 5: Looking northeast at water filled basin.



Photo 6: Ground squirrel burrow.



Photo 7: Looking northwest at Arundo stack in floodcontrol portion of the Whitewater channel.



Photo 8: Ground squirrel burrow.



Photo 9: Looking SW at willow stack at outfall.



Photo 10: Looking southeast at Whitewater Channel and Fred Waring Drive Bridge.

Attachment C

Floral and Faunal Compendium

Vascular Plants and Animal Species Observed Within the Study Area on May 11, 2017

Scientific Name	Common Name
Dicots	
Anacardiaceae-Cashew Family	
<i>Shinus molle</i> •	Peruvian pepper
ASTERACEAE-Sunflower Family	
<i>Ambrosia chamissonis</i>	Beach burr
<i>Conyza bonariensis</i> •	Flax-leaf fleabane
<i>Helminthotheca echinoides</i> •	Bristly ox-tongue
<i>Lactuca serriola</i> •	Wild Lettuce
<i>Sonchus oleraceus</i> •	Sow-Thistle
<i>Verbesina encelioides</i>	Cowpen Daisy
<i>Xanthium strumarium</i>	Cocklebur
BRASSICACEAE-Mustard	
<i>Brassica nigra</i> •	Black mustard
<i>Hirschfeldia incana</i> •	Shortpod mustard
<i>Sisymbrium irio</i> •	London rocket
CHENOPODIACEAE-Goosefoot Family	
<i>Salsola tragus</i> •	Russian Thistle
EUPHORBIACEAE-Spurge Family	
<i>Croton setiger</i>	Doveweed
<i>Euphorbia serpens</i> •	Matted Sandmat
FABACEAE- Legume Family	
<i>Medicago polymorpha</i> •	Burr-clover
<i>Melilotus albus</i> •	Sweetclover
<i>Parkinsonia aculeata</i> •	Palo Verde
GERANIACEAE-Geranium Family	
<i>Erodium cicutarium</i> •	Redstem Filaree
MALVACEAE-Mallow Family	
<i>Malva parvifolia</i> •	Cheeseweed Mallow
MYRTACEAE-Myrtle Family	
<i>Eucalyptus sideroxylon</i> •	Ironbark
POLYGONACEAE-Buckwheat Family	
<i>Polygonum lapathifolium</i> •	Curlytop knotweed
<i>Rumex crispus</i> •	Curly dock
SALICACEAE-Willow Family	
<i>Salix lasiolepis</i>	Arroyo willow
<i>Salix laevigata</i>	Red willow
SOLANACEAE-Nightshade Family	
<i>Datura wrightii</i>	Western jimson weed

TAMARICACEAE-Tamarisk Family

Tamarix ramosissima• Saltcedar

Monocots**ARECACEAE-Palm Family**

Washingtonia robusta Mexican Fan Palm

POACEAE - Grass Family

Arundo donax• Giant reed
Avena Barbata• Slender Wild Oat
Bromus diandrus• Rippgut Brome
Polypogon monspeliensis• Rabbitsfoot grass
Schismus barbatus• Mediterranean Grass
Rumex crispus• Curly dock

TYPHACEAE-Cattail Family

Typha latifolia Broadleaf cattail

•Denotes non-native plant taxa

Birds**ANATIDAE-Ducks, Geese & Swans**

Anas crecca Common teal
Anas platyrhynchos Mallard duck
Anas sp. Wigeon
Bucephala albeola Bufflehead

ARDEIDAE-Heron Family

Nycticorax sp.•• Night heron

COLUMBIDAE-Dove Family

Streptopelia decaocto Collard dove
Zenaida macroura Mourning dove

CHARADRIIDAE-Plover Family

Charadrius vociferous Killdeer

CORVIDAE-Crows and Jays

Corvus corax Common raven

HIRUNDINIDAE-Swallow Family

Petrochelidon pyrrhonota Cliff swallow

STRIGIDAE-Owl Family

Bubo virginianus•• Great horned owl

TROCHILIDAE-Hummingbird Family

Calypte costae Costa's hummingbird

TYRANNIDAE-Flycatcher Family

Sayornis saya Say's phoebe

Mammals

CANIDAE-Canine Family

<i>Canis latrans</i> **	Coyote
<i>Canis lupus familiaris</i> **	Feral dog

FELIDAE-Feline Family

<i>Lynx rufus</i> **	Bobcat
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MEPHITIDAE-Skunk Family

<i>Mephitis mephitis</i> **	Striped skunk
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MURINAE-Rat and Mice Family

<i>Rattus rattus</i> **	Roof rat
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PROCYONIDAE-Raccoon Family

<i>Procyon lotor</i> **	Raccoon
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SCIURIDAE-Squirrel Family

<i>Otospermophilus beecheyi</i>	California ground squirrel
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Fish

CENTRACHIDAE-Sunfish Family

<i>Micropterus sp.</i> **	Bass
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CYPRINDAE-Carp Family

<i>Ctenopharyngodon idella</i> **	Grass carp
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PERCIDAE-Perch Family

<i>Perca sp.</i> **	Common perch
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POECILIIDAE-Tooth-carp Family

<i>Poecilla sp.</i> **	Common molly
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Reptiles

IGUANIDAE-Lizard Family

<i>Sceloporus occidentalis</i>	Western fence lizard
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**Denotes animals observed by the CVWD Palm Desert Operations Biologist (Rincon 2017).

Attachment D

Special Status Species Evaluation Tables

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

Scientific Name Common Name	Status	Habitat Requirements (Elevation in Feet)	Potential for Impact	Potential for Occurrence / Basis for Determination
	Fed/State ESA G-Rank/S-Rank CVMSHCP			
<i>Abronia villosa</i> var. <i>aurita</i> chaparral sand-verbena	None/None/1B.1 G5T2T3/S2	Annual herb; Blooms Jan – Sept; Chaparral, coastal scrub, desert dunes; Elevation range: 246–5249 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present
<i>Acmispon haydonii</i> pygmy lotus	None/None/1B.3 G3/S3	Perennial herb; Blooms Jan – June; Pinyon and juniper woodland, Sonoran desert scrub; rocky; Elevation range: 1706–3937 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present.
<i>Astragalus bicristatus</i> crested milk-vetch	None/None/4.3 G3/S3	Perennial herb; Blooms May – Aug; Lower montane coniferous forest, upper montane coniferous forest; sandy or rocky, mostly carbonate; Elevation range: 5577–9006 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat/vegetation present
<i>Astragalus lentiginosus</i> var. <i>borreganus</i> Borrego milk-vetch	None/None/4.3 G5T1/S1	Annual herb; Blooms Feb – May; Mojavean desert scrub, Sonoran desert scrub; sandy; Elevation range: 98–2936 asl	None	Not expected to occur. There is no suitable habitat/vegetation present
<i>Astragalus lentiginosus</i> var. <i>coachellae</i> Coachella Valley milk-vetch	FE/None/1B.2 G5T1/S1 CVMSHCP Covered	Perennial herb; Blooms Feb – May; Desert dunes, Sonoran desert scrub (sandy) ; Elevation range: 131–2149 asl	None	Not expected to occur. No suitable habitat/vegetation present
<i>Astragalus leucolobus</i> Big Bear Valley woollypod	None/None/1B.2 G2/S2	Perennial herb; Blooms May – July; Lower montane coniferous forest, pebble plain, pinyon and juniper woodland, upper montane coniferous forest; rocky; Elevation range: 3609–9465 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat/vegetation present
<i>Astragalus preussii</i> var. <i>laxiflorus</i> Lancaster milk-vetch	None/None/1B.1 G4T2/S1	Perennial herb; Blooms Mar – May; Chenopod scrub; Elevation range: 2297–2297 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat/vegetation present
<i>Astragalus sabulorum</i> gravel milk-vetch	None/None/2B.2 G5T4/S2	Perennial herb; Blooms Feb – June; Desert dunes, Mojavean desert scrub, Sonoran desert scrub; usually sandy, sometimes gravelly; flats, washes, and roadsides; Elevation range: 197–3051 asl	None	Not observed. Not expected to occur Site is disturbed. Flood control channel is managed and populated by invasive exotics. There is no suitable habitat/vegetation present

Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CVMSHCP	Habitat Requirements (Elevation in Feet)	Potential for Impact	Potential for Occurrence / Basis for Determination
<i>Astragalus tricarinatus</i> triple-ribbed milk-vetch	FE/None/1B.2 G2/S2 CVMSHCP Covered	Perennial herb; Blooms Feb – May; Joshua tree woodland, Sonoran desert scrub; sandy or gravelly; Elevation range: 1476–3904 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat/vegetation present
<i>Ayenia compacta</i> California ayenia	None/None/2B.3 G4/S3	Perennial herb; Blooms Mar – Apr; Mojavean desert scrub, Sonoran desert scrub; rocky; Elevation range: 492–3593 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat/vegetation present.
<i>Brodiaea filifolia</i> thread-leaved brodiaea	FT/CE/1B.1 G2/S3	Perennial bulbiferous herb; Blooms Mar–June; Chaparral (openings), cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools; often clay; Elevation range: 82–3675 asl	None	Not expected to occur. No suitable habitat/vegetation present.
<i>Bursera microphylla</i> little-leaf elephant tree	None/None/2B.3 G4/S2	Deciduous tree; Blooms June–July Sonoran desert scrub (rocky)/perennial; Elevation range: 656–2297 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat/vegetation present
<i>Calochortus palmeri</i> var. <i>munzii</i> San Jacinto mariposa lily	None/None/1B.2 G3T3/S3	Perennial bulbiferous herb; Blooms May–July; Chaparral, lower montane coniferous forest, meadows and seeps; Elevation range: 2805–7218 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present.
<i>Calochortus palmeri</i> var. <i>palmeri</i> Palmer's mariposa lily	None/None/1B.2 G3T3/S3	Perennial bulbiferous herb; Blooms Apr–July; Chaparral, lower montane coniferous forest, meadows and seeps; mesic; Elevation range: 2329–7841 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat/vegetation present
<i>Caulanthus simulans</i> Payson's jewelflower	None/None/4.2 G4/S4	Annual herb; Blooms Feb–May; Chaparral, coastal scrub; sandy, granitic; Elevation range: 295–7218 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat/vegetation present
<i>Chaenactis parishii</i> Parish's chaenactis	None/None/1B.3 G3G4/S3	Perennial herb; Blooms May–July; Chaparral (rocky); Elevation range: 4265–8202 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat/vegetation present

Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CVMSHCP	Habitat Requirements (Elevation in Feet)	Potential for Impact	Potential for Occurrence / Basis for Determination
<i>Chorizanthe leptotheca</i> Peninsular spineflower	None/None/4.2 G3/S3	Annual herb; Blooms May– Aug Chaparral, coastal scrub, lower montane coniferous forest; alluvial fan, granitic; Elevation range: 984–6234 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present
<i>Chorizanthe xanti</i> var. <i>leucotheca</i> white-bracted spineflower	None/None/1B.2 G4T3/S3	Annual herb; Blooms Apr– Jun; Chaparral, coastal scrub, lower montane coniferous forest; alluvial fan, granitic; Elevation range: 984–3937 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat/vegetation present
<i>Cuscuta californica</i> var. <i>apiculata</i> pointed dodder	None/None/3 G5T2T4/S3	Annual vine (parasitic); Blooms Feb-Aug; Mojavean desert scrub, Sonoran desert scrub; sandy; Elevation range: 0–1640 asl	None	Not expected to occur. Site is disturbed and there is no suitable habitat/vegetation present
<i>Delphinium parishii</i> ssp. <i>Subglobosum</i> Colorado Desert larkspur	None/None/4.3 G4T4/S4	Perennial herb;; Blooms Mar- Jun; Chaparral, cismontane woodland, pinyon and juniper woodland, Sonoran desert scrub; Elevation range: 1969– 5906	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat/vegetation present.
<i>Dieteria canescens</i> var. <i>ziegleri</i> Ziegler's aster	None/None/1B.2 G5T1/S1	Perennial herb; Blooms Oct– Mar; Mojavean desert scrub, Sonoran desert scrub; sandy; Elevation range: 4501–8199 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat/vegetation present
<i>Ditaxis claryana</i> glandular ditaxis	None/None/2B.2 G3G4/S2	Perennial herb; Blooms Oct– Mar; Mojavean desert scrub, Sonoran desert scrub; sandy; Elevation range: 0–1526 asl	None	Not expected to occur. Not observed. Site is disturbed/developed and there is no suitable habitat/vegetation present
<i>Ditaxis serrata</i> var. <i>californica</i> California ditaxis	None/None/3.2 G5T3T4/S2	Perennial herb; Blooms Mar– Dec; Sonoran desert scrub; Elevation range: 98–3281 asl	None	Not expected to occur. Not observed. Site is disturbed/developed and there is no suitable habitat/vegetation present
<i>Draba saxosa</i> Southern California rock draba	None/None/1B.3 G2/S2	Perennial herb; Blooms June– Sep; Alpine boulder and rock field, subalpine coniferous forest, upper montane coniferous forest; rocky; Elevation range: 8005–11811 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat/vegetation present.

Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CVM SHCP	Habitat Requirements (Elevation in Feet)	Potential for Impact	Potential for Occurrence / Basis for Determination
<i>Eremothera boothii</i> ssp. <i>Boothii</i> Booth's evening-primrose	None/None/2B.3 G5T4/S2	Annual herb; Blooms Apr– Sep; Joshua tree woodland, pinyon and juniper woodland; Elevation range: 2674–7874 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat/vegetation present.
<i>Eschscholzia androuxii</i> Joshua Tree poppy	None/None/4.3 G3/S3	Annual herb; Blooms Feb– June Joshua tree woodland, Mojavean desert scrub; desert washes, flats, and slopes; sandy, gravelly, and/or rocky; Elevation range: 1919–5528 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat/vegetation present.
<i>Euphorbia abramsiana</i> Abrams' spurge	None/None/2B.2 G4/S2	Annual herb; Blooms Aug– Nov Mojavean desert scrub, Sonoran desert scrub; sandy; Elevation range: 16–4298 asl	None	Not expected to occur. Not observed. Site is disturbed/developed and there is no suitable habitat/vegetation present
<i>Euphorbia arizonica</i> Arizona spurge	None/None/2B.3 G5/S3	Perennial herb; Blooms Mar– Apr; Sonoran desert scrub (sandy); Elevation range: 164–984 asl	None	Not expected to occur. Not observed. The site is disturbed/developed and managed and there is no suitable habitat/vegetation present
<i>Euphorbia platysperma</i> Flat-seeded spurge	None/None/1B.2 G3/S1	Annual herb; Blooms Feb– Sep; Desert dunes, Sonoran desert scrub (sandy); Elevation range: 213–328 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat/vegetation present
<i>Euphorbia revoluta</i> revolute spurge	None/None/4.3 G5/S4	Annual herb; Blooms Aug– Sep; Mojavean desert scrub (rocky); Elevation range: 3593–10171 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat/vegetation present
<i>Galium angustifolium</i> ssp. <i>Jacinticum</i> San Jacinto Mountains bedstraw	None/None/1B.3 G5T2/S2	Perennial herb; Blooms June– Aug; Lower montane coniferous forest; Elevation range: 4429–6890 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat/vegetation present
<i>Hecastocleis shockleyi</i> prickle-leaf	None/None/3 G3G4/S4S3	Perennial evergreen shrub; Blooms May–July; Chenopod scrub, Mojavean desert scrub; rocky slopes, washes; often carbonate or slate; Elevation range: 3937–7218 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat/vegetation present

Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CVMSHCP	Habitat Requirements (Elevation in Feet)	Potential for Impact	Potential for Occurrence / Basis for Determination
<i>Heuchera hirsutissima</i> shaggy-haired alumroot	None/None/1B.3 G3/S3	Perennial rhizomatous herb; Blooms (May) June–July; Subalpine coniferous forest, upper montane coniferous forest; rocky, granitic; Elevation range: 4987–11483	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat/vegetation present
<i>Hulsea vestita</i> ssp. <i>callicarpa</i> beautiful hulsea	None/None/4.2 G5T3/S3	Perennial herb; Blooms May– Oct; Chaparral, lower montane coniferous forest; rocky or gravelly, granitic; Elevation range: 3002–10007 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present
<i>Jaffuelobryum raii</i> Rau's jaffuelobryum moss	None/None/2B.3 G4/S2	Moss; Blooms: N/A; Alpine dwarf scrub, chaparral, Mojavean desert scrub, Sonoran desert scrub; dry openings, rock crevices, carbonate; Elevation range: 1608–6890 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat/vegetation present
<i>Juncus acutus</i> ssp. <i>leopardii</i> southwestern spiny rush	None/None/4.2 S4/G5T5	Perennial rhizomatous herb; Blooms May–June; Coastal dunes (mesic), meadows and seeps (alkaline seeps), marshes and swamps (coastal salt); Elevation range: 10– 2953 asl	None	Not expected to occur. The site is disturbed/developed and managed and there is no suitable habitat/vegetation present
<i>Leptosiphon floribundus</i> ssp. <i>hallii</i> Santa Rosa Mountains leptosiphon	None/None/1B.3 / G4T1/S1	Perennial herb; Blooms May– July; Pinyon and juniper woodland, Sonoran desert scrub; Elevation range: 3281– 6562 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat/vegetation present
<i>Lilium parryi</i> lemon lily	None/None/1B.2 G3/S3	Perennial bulbiferous herb; Blooms July–Aug; Lower montane coniferous forest, meadows and seeps, riparian forest, upper montane coniferous forest; mesic; Elevation range: 4003–9006 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat/vegetation present
<i>Linanthus maculatus</i> ssp. <i>maculatus</i> Little San Bernardino Mtns. linanthus	None/None/1B.2 G2T2/S2 CVMSHCP Covered	Annual herb; Blooms; Mar– May; Desert dunes, Joshua tree woodland, Mojavean desert scrub, Sonoran desert scrub, sandy; Elevation range: 459–4003 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat/vegetation present

Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CVMSHCP	Habitat Requirements (Elevation in Feet)	Potential for Impact	Potential for Occurrence / Basis for Determination
<i>Marina orcuttii</i> var. <i>orcuttii</i> California marina	None/None/1B.3 G2G3T1T2/S2	Perennial herb; Blooms May–Oct; Chaparral, pinyon and juniper woodland, Sonoran desert scrub; rocky; Elevation range: 3445–3806 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present
<i>Matelea parvifolia</i> spearleaf	None/None/2B.3 G5/S3	Perennial herb; Blooms Mar–May; Mojavean desert scrub, Sonoran desert scrub; rocky; Elevation range: 1444–3593 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat/vegetation present
<i>Mentzelia tridentata</i> creamy blazing star	None/None/1B.3 G3/S3	Annual herb; Blooms Mar–May; Mojavean desert scrub; rocky, gravelly, sandy; Elevation range: 2297–3855 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat/vegetation present
<i>Nemacaulis denudata</i> var. <i>gracilis</i> slender cottonheads	None/None/2B.2 G3G4T3/S2	Annual herb; Blooms Apr–May; Coastal dunes, desert dunes, Sonoran desert scrub; Elevation range: 164–1312 asl	None	There is no suitable habitat/vegetation present
<i>Penstemon californicus</i> California beardtongue	None/None/1B.2 G3/S2	Perennial herb; Blooms May–June (Aug); Chaparral, lower montane coniferous forest, pinyon and juniper woodland; sandy; Elevation range: 3839–7546 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat/vegetation present
<i>Phaseolus filiformis</i> slender-stem bean	None/None/2B.1 G5/S1	Annual herb; Blooms Feb–Apr; Sonoran desert scrub; Elevation range: 1000–1600 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present
<i>Pseudorontium cyathiferum</i> Deep Canyon snapdragon	None/None/2B.3 G4G5/S1	Annual herb; Blooms Feb–Apr; Sonoran desert scrub (rocky); Elevation range: 0–2625 asl	None	Not expected to occur. There is no suitable habitat/vegetation present
<i>Saltugilia latimeri</i> Latimer's woodland-gilia	None/None/1B.2 G3/S3	Annual herb; Blooms Mar–June; Chaparral, Mojavean desert scrub, pinyon and juniper woodland; rocky or sandy, often granitic, sometimes washes; Elevation range: 1312–6234 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat/vegetation present
<i>Sedum niveum</i> Davidson's stonecrop	None/None/4.2 G3/S3	Perennial rhizomatous herb; Blooms June–Aug; Lower montane coniferous forest, subalpine coniferous forest, upper montane coniferous forest; rocky; Elevation range: 6808–9843 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat/vegetation present

Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CVMSHCP	Habitat Requirements (Elevation in Feet)	Potential for Impact	Potential for Occurrence / Basis for Determination
	<i>Selaginella eremophila</i> desert spike-moss	None/None/2B.2 G4/S2S3	Perennial rhizomatous herb; Blooms May-July; Chaparral, Sonoran desert scrub (gravelly or rocky); Elevation range: 656–4249 asl	None
<i>Senna covesii</i> Coves' cassia	None/None/2B.2 G5/S2	Perennial herb; Blooms Mar–June; Sonoran desert scrub (sandy); Elevation range: 738–4249 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present
<i>Sidothea emarginata</i> white-margined oxytheca	None/None/1B.3 G3/S3	Annual herb; Blooms Apr–July; Chaparral, lower montane coniferous forest, pinyon and juniper woodland; Elevation range: 3937–8202 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat/vegetation present
<i>Stemodia durantifolia</i> purple stemodia	None/None/2B.1 G5/S2	Perennial herb; Blooms Jan–Dec; Sonoran desert scrub (often mesic, sandy); Elevation range: 591–984 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present
<i>Streptanthus campestris</i> southern jewelflower	None/None/1B.3 G3/S3	Perennial herb; Blooms May–July; Chaparral, lower montane coniferous forest, pinyon and juniper woodland; rocky; Elevation range: 2953–7546	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat/vegetation present
<i>Thelypteris puberula</i> var. <i>sonorensis</i> Sonoran maiden fern	None/None/2B.2 G5T3/S2	Perennial rhizomatous herb; Blooms Jan–Sep; Meadows and seeps (seeps and streams); Elevation range: 164–2001 asl	None	Not expected to occur. Flood control channel is managed and populated by invasive exotics. There is no suitable habitat/vegetation present
<i>Thysanocarpus rigidus</i> rigid fringedpod	None/None/1B.2 G1G2/S1	Annual herb; Blooms Feb–May; Pinyon and juniper woodland; Dry rocky slopes; Elevation range: 1969–7218 asl	None	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present
<i>Xylorhiza cognata</i> <i>Mecca aster</i>	None/None/1B.2 G2/S2 CVMSHCP Covered	Sonoran desert scrub/perennial herb/Jan–June/66–1312; Elevation range: 66–1312 asl	None	Not expected to occur. The site is disturbed/developed and managed and there is no suitable habitat/vegetation present

Scientific Name Common Name	Status		Potential for Impact	Potential for Occurrence / Basis for Determination
	Fed/State ESA G-Rank/S-Rank	Habitat Requirements (Elevation in Feet)		

Regional Vicinity refers to within a [5] mile radius of site.

FE = Federally Endangered FT = Federally Threatened

SE = State Endangered ST = State Threatened SR = State Rare

G-Rank/S-Rank = Global Rank and State Rank as per NatureServe and CDFW's CNDDDB RareFind3.

CRPR (CNPS California Rare Plant Rank)

- 1A=Presumed Extinct in California
- 1B=Rare, Threatened, or Endangered in California and elsewhere
- 2A=Plants presumed extirpated in California, but more common elsewhere
- 2B=Plants Rare, Threatened, or Endangered in California, but more common elsewhere
- 3=Need more information (a Review List)
- 4=Plants of Limited Distribution (a Watch List)

CRPR Threat Code Extension

- .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)

Global Ranking

The global rank (G-rank) is a reflection of the overall condition of an element throughout its global range.

Species or Community Level

- G1 = Less than 6 viable element occurrences (EOs) OR less than 1,000 individuals OR less than 2,000 acres.
- G2 = 6-20 EOs OR 1,000-3,000 individuals OR 2,000-10,000 acres.
- G3 = 21-80 EOs OR 3,000-10,000 individuals OR 10,000-50,000 acres.
- G4 = Apparently secure; this rank is clearly lower than G3 but factors exist to cause some concern; i.e., there is some threat, or somewhat narrow habitat.
- G5 = Population or stand demonstrably secure to ineradicable due to being commonly found in the world.

State Ranking

The state rank (S-rank) is assigned much the same way as the global rank, except state ranks in California often also contain a threat designation attached to the S rank.

- S1 = Less than 6 Element Occurrences (EOs) 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 EOs 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 EOs 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. NO THREAT RANK.
- S5 = Demonstrably secure to ineradicable in California. NO THREAT RANK.
- SH = all sites are historical, this species may be extinct, further field work is needed

Subspecies Level

Subspecies receive a T-rank attached to the G-rank. With the subspecies, the G-rank reflects the condition of the entire species, whereas the T-rank reflects the global situation of just the subspecies or variety. For example: *Chorizanthe robusta* var. *hartwegii*. This plant is ranked G2T1. The G-rank refers to the whole species range i.e., *Chorizanthe robusta*. The T-rank refers only to the global condition of var. *hartwegii*.

Special Status Animal Species in the Regional Vicinity of the Project Site

Scientific Name	Status Fed/State ESA G-Rank/S-Rank CDFW	Habitat Requirements	Potential for Impact	Potential for Occurrence / Basis for Determination
Amphibians				
<i>Batrachoseps major aridus</i> desert slender salamander	FE/SE G4T1/S1	Barren, palm oasis, desert wash, and desert scrub	None	Not expected to occur. The desert slender salamander is only known to occur in the seeps and talus slides from two remote canyons in Santa Rosa Mountains. Site is disturbed. Whitewater River stormwater channel is a routinely managed and populated by invasive exotics. There is marginal habitat/vegetation present
Birds				
<i>Aquila chrysaetos</i> golden eagle	None/None G5/S3 FP, WL	Nests and winters in hilly, open/semi-open areas, including shrublands, grasslands, pastures, riparian areas, mountainous canyon land, open desert rimrock terrain; nests in large trees and on cliffs in open areas and forages in open habitats	Low	Low potential to occur. Site is disturbed. Whitewater River stormwater channel is routinely managed and populated by invasive exotics. There is marginal habitat/vegetation present
<i>Athene cunicularia</i> burrowing owl	None/None G4/S3 SSC, WL CVMSHCP Covered	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows	Moderate	Moderate potential to occur. Site is disturbed. Whitewater River Stormwater Channel is managed and populated by invasive exotics. There are squirrel burrows present within Whitewater River Stormwater channel, marginal habitat/vegetation present. The burrowing owl population in the Coachella Valley occupies two very different habitats: they occupy a creosote dominated desert scrub, with concentrations along dry washes with steep banks, especially in the Desert Hot Springs region, but also in dune habitats, and they occupy

Scientific Name	Status Fed/State ESA G-Rank/S-Rank CDFW	Habitat Requirements	Potential for Impact	Potential for Occurrence / Basis for Determination
<i>Buteo regalis</i> Ferruginous hawk	None/None G3G4/S1S2 WL	Winters and forages in open, dry country, grasslands, open fields, agriculture	None	habitats that border agricultural lands, primarily in the Coachella-Thermal regions and especially along the Whitewater River Stormwater Channel and its tributaries (CVAGG 2015) Not expected to occur. No suitable habitat/vegetation present
<i>Empidonax traillii</i> <i>extimus</i> southwestern willow flycatcher	FE/SE G5T2/S1 CVMSHCP Covered	Nests in dense riparian habitats along streams, reservoirs, or wetlands; uses variety of riparian and shrubland habitats during migration	None	Not expected to occur. No suitable habitat/vegetation present
<i>Falco mexicanus</i> prairie falcon	None/None G5/S4 WL	Forages in grassland, savanna, rangeland, agriculture, desert scrub, alpine meadows; nest on cliffs or bluffs	Low	Low potential to occur. Site is disturbed. Whitewater River Stormwater channel is managed and populated by invasive exotics. There is marginal habitat/vegetation present
<i>Lanius</i> <i>ludovicianus</i> loggerhead shrike	None/None G4/S4 SSC	Nests and forages in open habitats with scattered shrubs, trees, or other perches	Low	Low potential to occur. Site is disturbed. Whitewater River Stormwater channel is managed and populated by invasive exotics. There is marginal habitat/vegetation present
<i>Polioptila</i> <i>californica</i> <i>californica</i> coastal California gnatcatcher	FT/None G4/S2 SSC	Nests and forages in wooded desert wash and desert scrub	None	Not expected to occur. No suitable habitat/vegetation present
<i>Polioptila melanura</i> black-tailed gnatcatcher	None/None G5/S3S4 WL	Nests and forages in wooded desert wash and desert scrub	None	Not expected to occur. No suitable habitat/vegetation present
<i>Pyrocephalus</i> <i>rubinus</i> vermilion flycatcher	None/None G5/S2S3 SSC	Nests in riparian woodlands, riparian scrub, and freshwater marshes; typical desert riparian with cottonwood, willow, mesquite adjacent to irrigated	None	Low potential to occur. Site is disturbed. Whitewater River Stormwater channel is managed and populated

Scientific Name	Status Fed/State ESA G-Rank/S-Rank CDFW	Habitat Requirements	Potential for Impact	Potential for Occurrence / Basis for Determination
Common Name	CVMSHCP	fields, ditches, or pastures		by invasive exotics. There is marginal habitat/vegetation present
<i>Toxostoma crissale</i> Crissal thrasher	None/None G5/S3 SSC CVMSHCP Covered	Nests and forages in desert riparian and desert wash; dense thickets of sagebrush and other shrubs such as mesquite, iron catclaw acacia, and arrowweed willow within juniper and pinyon-juniper woodlands	None	Not expected to occur. No suitable habitat/vegetation present
<i>Toxostoma lecontei</i> Le Conte's Thrasher	None/None G4/S3 SSC CVMSHCP Covered	Nests and forages in desert wash, desert scrub, alkali desert scrub, desert succulent, and Joshua tree habitats; nests in spiny shrubs or cactus	None	Not expected to occur. Site is disturbed/developed. Whitewater River Stormwater channel is routinely managed and populated by herbaceous invasive exotics.
Fishes				
<i>Cyprinodon macularius</i> desert pupfish	None/None FE/SE G1/S1 CVMSHCP Covered	Desert ponds, springs, marshes and streams in Southern California	None	Not expected to occur. Impoundment basins from treated water (these waters are not considered suitable for these species, and could not have been naturally colonized by them), predation from fish stocks, and regular basin management
Insects				
<i>Bombus crotchii</i> Crotch bumble bee	None/None G3/S1	Coastal California east to the Sierra-Cascade crest and south into Mexico	None	Not expected to occur. No suitable habitat/vegetation present
<i>Dinacoma caseyi</i> Casey's June beetle	FE/None G1/S1	Desert wash, Mojavean desert scrub	None	Not expected to occur. Site is disturbed/developed. Whitewater River Stormwater channel is routinely managed and populated by herbaceous invasive exotics.
<i>Macrobaenetes valgum</i> Coachella giant sand treader cricket	None/None G1/S1 CVMSHCP	Desert dunes. Known from the sand dune ridges in the vicinity of Coachella Valley	None	Not expected to occur. No suitable habitat/vegetation present

Scientific Name	Status Fed/State ESA G-Rank/S-Rank CDFW	Habitat Requirements	Potential for Impact	Potential for Occurrence / Basis for Determination
Common Name	CVMSHCP			
	Covered			
<i>Oliarces clara</i> cheeseweed owlfly (cheeseweed moth lacewing)	None/None G1/S2	Sonoran desert scrub. Found in the large, undulating dunes	None	Not expected to occur. No suitable habitat/vegetation present
<i>Stenopelmatus</i> <i>cahuillaensis</i> Coachella Valley jerusalem cricket	None/None G1G2/S1S2 CVMSHCP Covered	Desert dunes. Inhabits a small segment of the sand and dune areas of the Coachella Valley, in the vicinity of Palm Springs	None	Not expected to occur. No suitable habitat/vegetation present
Mammals				
<i>Chaetodipus fallax</i> <i>pallidus</i> pallid San Diego pocket mouse	None/None G5T34/S3S4 SSC	Desert wash, pinon & juniper woodlands, Sonoran desert scrub, sandy herbaceous areas, usually in association with rocks or coarse gravel	None	Not expected to occur. Site is disturbed. Whitewater River Stormwater channel is routinely managed and populated by invasive exotics.
<i>Dipodomys</i> <i>merriami collinus</i> Earthquake Merriam's kangaroo rat	None/None G5T1T2/S1S2	Riversidean sage scrub, coastal sage scrub, chaparral, & non- native grassland	None	Not expected to occur. No suitable habitat/vegetation present
<i>Eumops perotis</i> <i>californicus</i> western mastiff bat	None/None G5T4T2/S3S4 SSC WBWG: H-High Priority	Chaparral, cismontane woodland, coastal scrub, valley & foothill grassland; open, semi- arid to arid habitats, including conifer & deciduous woodlands. Roosts in crevices in cliff faces, high buildings, trees & tunnels	None	Not expected to occur. No suitable habitat/vegetation/roosting present
<i>Lasiurus xanthinus</i> western yellow bat	None/None G5/S3 SSC WBWG: H-High CVMSHCP Covered	Desert wash. Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats	None	Not expected to occur. Site is disturbed. Whitewater River Stormwater channel is managed and populated by invasive exotics. There is no suitable habitat/vegetation/roosting present
<i>Neotoma albigula</i> <i>venusta</i> Colorado Valley woodrat	None/None G5T3T4/S1S2	Sonoran desert scrub. Low-lying desert areas in southeastern California. Closely associated with beaver-tail cactus &	None	Not expected to occur. No suitable habitat/vegetation present

Scientific Name	Status Fed/State ESA G-Rank/S-Rank CDFW	Habitat Requirements	Potential for Impact	Potential for Occurrence / Basis for Determination
Common Name	CVMSHCP	mesquite.		
<i>Neotoma lepida intermedia</i> San Diego desert woodrat	None/None G5T3T4/S3S4 SSC	Coastal scrub, moderate to dense canopies preferred, particularly abundant in rock outcrops & rocky cliffs & slopes	None	Not expected to occur. No suitable habitat/vegetation present
<i>Nyctinomops femorosaccus</i> pocketed free-tailed bat	None/None G4/S3 SSC WBWG: M-Medium Priority	Joshua tree woodland, pinon & juniper woodlands, riparian scrub, sonoran desert scrub	None	Not expected to occur. No suitable habitat/vegetation present
<i>Ovis canadensis nelson</i> desert bighorn sheep (Population 2)	FE/FT G4T3Q/S1 FP CVMSHCP Covered	Alpine, alpine dwarf scrub, chaparral, chenopod scrub, Great Basin scrub, Mojavean desert scrub, montane dwarf scrub, pinon & juniper woodlands	None	Not expected to occur. No suitable habitat/vegetation present
<i>Perognathus longimembris bangsi</i> Palm Springs pocket mouse	None/None G5T2/S2 SSC CVMSHCP Covered	Desert wash and riparian, Sonoran desert scrub, sagebrush habitats. Most common in creosote-dominated desert scrub	None	Not expected to occur. Site is disturbed. Whitewater River Stormwater channel is routinely managed and populated by invasive exotics. There is marginal habitat present
<i>Perognathus longimembris brevinasus</i> Los Angeles pocket mouse	None/None G5T1T2/S1S2 SSC	Lower elevation grasslands & coastal sage communities in and around the Los Angeles Basin.	None	Not expected to occur. No suitable habitat/vegetation present
<i>Taxidea taxus</i> American badger	None/None G5/S3 SSC	Alkali marsh, alkali playa, alpine, alpine dwarf scrub, bog and fen, brackish marsh, broadleaf upland forest, chaparral, chenopod scrub, cismontane	None	Not expected to occur. No suitable habitat/vegetation present

Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CDFW CVMSHCP	Habitat Requirements	Potential for Impact	Potential for Occurrence / Basis for Determination
<i>Xerospermophilus tereticaudus chlorus</i> Palm Springs round-tailed ground squirrel	None/None G5T2Q/S2 SSC CVMSHCP Covered	Sonoran desert scrub, chenopod scrub. Prefers desert succulent scrub, desert wash, desert scrub, alkali scrub, & levees	None	Not expected to occur. Site is disturbed/developed. Basins and Whitewater River Stormwater channel is routinely managed and populated by invasive exotics. There is marginal habitat present

Reptiles

<i>Anniella pulchra pulchra</i> silvery legless lizard	None/None G3G4T3T4/S3 SSC	Chaparral, coastal dunes, coastal scrub, sandy or loose loamy soils under sparse vegetation	None	Not expected to occur. No suitable habitat/vegetation present
<i>Crotalus ruber</i> red-diamond rattlesnake	None/None G4/S3 SSC	Mojavean desert scrub, Sonoran desert scrub, chaparral, woodland and grasslands	None	Not expected to occur. No suitable habitat/vegetation present
<i>Gopherus agassizii</i> desert tortoise	FT/ST G3/S2S3 CVMSHCP Covered	Mojavean desert scrub, Sonoran desert scrub, Joshua Tree woodland	None	Not expected to occur. No suitable habitat/vegetation present
<i>Phrynosoma blainvillii</i> coast horned lizard	None/None G3G4/S3S4 SSC	Coastal bluff scrub, desert wash, riparian scrub, riparian woodland, marsh, cismontane woodland, pinon & juniper woodlands, Sonoran desert scrub, chaparral, woodland and grasslands	None	Not expected to occur. Site is disturbed/developed. Basins and Whitewater River Stormwater channel is routinely managed and populated by invasive exotics.
<i>Phrynosoma mcallii</i> flat-tailed horned lizard	None/None G3/S2 SSC CVMSHCP Covered	Mojavean desert scrub, Sonoran desert scrub, desert dunes	None	Not expected to occur. No suitable habitat/vegetation present
<i>Uma inornata</i> Coachella Valley fringe-toed lizard	FT/SAE G1Q/S1 CVMSHCP Covered	Desert dunes, desert washes, desert flats	None	Not expected to occur. Site is disturbed/developed. Whitewater River Stormwater channel is routinely managed and

Scientific Name	Status		Potential for Impact	Potential for Occurrence / Basis for Determination
Common Name	Fed/State ESA	Habitat Requirements		
	G-Rank/S-Rank			
	CDFW			
	CVMSHCP			populated by invasive exotics.

Regional Vicinity refers to within a five (5) -mile radius of project site.

FT = Federally Threatened

SE = State Endangered

FC = Federal Candidate Species

ST = State Threatened

FE = Federally Endangered

SR = State Rare

FS = Federally Sensitive

SS = State Sensitive

G-Rank/S-Rank = Global Rank and State Rank as per NatureServe and CDFW's CNDDDB RareFind3

SSC = CDFW Species of Special Concern

FP = Fully Protected

WL = CDFW Watch List

WBWG = Western Bat Working Group Priority (High, Medium, Low)

CVMSCHP = Covered Species

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