

Appendix C.1

Biological Report
MIG, Inc.

General Biological Resources Assessment and Coachella Valley Multiple Species Habitat Conservation Plan Consistency Analysis

42501 Monroe Street Warehouse Project
Indio, Riverside County, California



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List of Abbreviated Terms

AMSL	Above Mean Sea Level
APN	Assessor Parcel Number
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFGF	California Fish and Game Code
CFR	Code of Federal Regulations
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CWA	Clean Water Act
DBH	Diameter at Breast Height
EPA	Environmental Protection Agency
FESA	Federal Endangered Species Act
GIS	Geographic Information Systems
HCP	Habitat Conservation Plan
IPaC	Information for Planning and Consultation
MBTA	Migratory Bird Treaty Act
NCCP	Natural Community Conservation Planning
NOAA	National Oceanic Atmospheric Administration
NPPA	Native Plant Protection Act
NRCS	Natural Resource Conservation Service
RWQCB	Regional Water Quality Control Board
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
USACE	United States Army Corps Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

1.0 INTRODUCTION

This report presents the results of MIG's general biological resources assessment of the approximately on 180-acre 42501 Monroe Street Warehouse Project property (project site). The purpose of this report is to verify the type, location, and extent of potential sensitive biological resources within the project site and vicinity. This report provides a thorough description of the biological setting of the project site and surrounding area, as well as a description of the vegetation communities and wildlife observed at the project site. This report also includes information regarding potential wildlife movement/migration corridors, potential special-status species, sensitive natural communities, and potential for jurisdictional waters and wetlands to occur at the project site. An assessment of the Project impacts and recommended mitigation measures to avoid, minimize, or compensate for potential adverse impacts to sensitive habitats and species is also included in the report. The evaluation of potential project impacts follows the checklist items from Appendix G of the California Environmental Quality Act (CEQA) guidelines and has been prepared in a format suitable to support CEQA review and to submit with any future regulatory application packages. Additionally, a Consistency Analysis of the project in light of the Coachella Valley Multiple Species Habitat Conservation Plan is provided herein.

1.1 Project Site Location

The 180-acre project site is located south of Avenue 42 between Madison Street and Monroe Street and north of the 10 Freeway in the City of Indio, San Bernardino County, California. The project is located within Section 15, Township 5S, Range 7E within the United States Geological Survey (USGS) 7.5' series Indio quadrangle (Figure 1, *Regional Map*, Figure 2, *USGS Topographic Map*). The project site includes Assessor Parcel Numbers (APNs) 610-020-001, -010, -012, -013, -021, -034, and -036, (Figure 3, *Project Site Map*). The project site is flat with elevations ranging between 5-25 feet above mean sea level (AMSL) (Figure 2, *USGS Topographic Map*).

The project site is largely surrounded by a mix of land use types including agriculture and residential homes to the north; a gas station and shopping center to the east; vacant land with a dune berm and storm-flow ephemeral waterway to the west; and the 10 freeway, Thousand Palm Canyon Wash, and vacant lands to the south (Figure 3). The project site consists largely of vacant lots that have historically been used for agriculture, most recently for sod grass. The dune berm adjacent to the project site was previously covered in tamarisk and other stabilizing plants; however, in approximately 2020 all vegetation on the berm was burned in a fire attributed to the homeless population. The project site is highly disturbed due to previous agricultural uses and is covered in fine windblown dune sands mostly originating from dunes adjacent to the western site of the property. The site has been regularly maintained by mowing, and hence only emergent tamarisk, saltbush, and smaller herbs, grasses and shrubs have since emerged since agricultural operations. Most of the vegetation on the site is ruderal; however, some native plants were observed on site.

1.2 Project Site Description

The Project will consist of multi-family residential/commercial/retail on the north side of the site, approximately 75 acres total. The southern portion will contain approximately 95+ acres of industrial development. It is expected that just over 1.8 million square feet of industrial development will be constructed.

2.0 REGULATORY SETTING

The following discussion identifies federal, state, and local environmental regulations and policies that serve to protect sensitive biological resources relevant to the proposed project site and any subsequent CEQA review process.

2.1 Federal

2.1.1 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973, as amended, provides the regulatory framework for the protection of plant and animal species (and their associated critical habitats), which are formally listed, proposed for listing, or candidates for listing as endangered or threatened under the FESA. Both the U.S. Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries) share the responsibility for administration of the FESA. The FESA has the following four major components: (1) provisions for listing species, (2) requirements for consultation with the USFWS and/or the NOAA Fisheries, (3) prohibitions against "taking" (meaning harassing, harming, hunting, shooting, wounding, killing, trapping, capturing, or collecting, or attempting to engage in any such conduct) of listed species, and (4) provisions for permits that allow incidental "take". The FESA also discusses recovery plans and the designation of critical habitat for listed species. Section 7 requires Federal agencies, in consultation with, and with the assistance of the USFWS or NOAA Fisheries, as appropriate, to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of critical habitat for these species. Non-federal agencies and private entities can seek authorization for take of federally listed species under Section 10 of FESA, which requires the preparation of a Habitat Conservation Plan (HCP).

2.1.2 The Migratory Bird Treaty Act

The Federal Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703 et seq.), Title 50 Code of Federal Regulations (CFR) Part 10, prohibits taking, killing, possessing, transporting, and importing of migratory birds, parts of migratory birds, and their eggs and nests, except when specifically authorized by the Department of the Interior. As used in the act, the term "take" is defined as meaning, "to pursue, hunt, capture, collect, kill or attempt to pursue, hunt, shoot, capture, collect or kill, unless the context otherwise requires." Under the MBTA it is illegal to disturb a nest that is in active use, since this could result in killing a bird, destroying a nest, or destroying an egg.

2.1.3 Clean Water Act Sections 404 and 401

The U.S. Army Corps of Engineers (USACE) and the U.S. Environmental Protection Agency (EPA) regulate the discharge of dredged or fill material into waters of the United States, including wetlands, under Section 404 of the Clean Water Act (CWA) (33 USC 1344). Waters of the United States are defined in Title 33 CFR Part 328.3(a) and include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds. The lateral limits of jurisdiction in those waters may be divided into three categories – territorial seas, tidal waters, and non-tidal waters – and is determined depending on which type of waters is present (Title 33 CFR Part 328.4(a), (b), (c)). Activities in waters of the United States regulated under Section 404 include fill for development, water resource projects (e.g., dams and levees), infrastructure developments (e.g., highways, rail lines, and airports) and mining projects. Section 404 of the CWA requires a federal permit before dredged or fill material may be discharged into waters of the United States, unless the activity is exempt from Section 404 regulation (e.g., certain farming and forestry activities).

Section 401 of the CWA (33 U.S.C. 1341) requires an applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the United States to obtain a water quality certification from the state in which the discharge originates. The discharge is required to comply with the applicable water quality standards. A certification obtained for the construction of any facility must also pertain to the subsequent operation of the facility. The EPA has delegated responsibility for the protection of water quality in California to State Water Resources Control Board and its nine Regional Water Quality Control Boards (RWQCBs).

2.1.4 National Pollutant Discharge Elimination System (NPDES)

The NPDES program requires permitting for activities that discharge pollutants into waters of the United States. This includes discharges from municipal, industrial, and construction sources. These are considered point-sources from a regulatory standpoint. Generally, these permits are issued and monitored under the oversight of the State Water Resources Control Board and administered by each RWQCB. Construction activities that disturb one acre or more (whether a single project or part of a larger development) are required to obtain coverage under the state's General Permit for Dischargers of Storm Water Associated with Construction Activity. All dischargers are required to obtain coverage under the Construction General Permit. The activities covered under the Construction General Permit include clearing, grading, and other disturbances. The permit requires preparation of a Storm Water Pollution Prevention Plan (SWPPP) and implementation of Best Management Practices (BMPs) with a monitoring program. The Project will require coverage under the Construction General Permit.

2.2 State

2.2.1 California Endangered Species Act

The state of California enacted similar laws to the FESA, including the California Native Plant Protection Act (NPPA) in 1977 and the California Endangered Species Act (CESA) in 1984. The CESA expanded upon the original NPPA and enhanced legal protection for plants, but the NPPA remains part of the California Fish and Game Code (CFGF) (section 2.2.2). To align with the FESA, CESA created the categories of "threatened" and "endangered" species. It converted all designated "rare" animals into the CESA as threatened species but did not do so for special-status plants. Thus, these laws provide the legal framework for protection of California-listed rare, threatened, and endangered plant and animal species. The California Department of Fish and Wildlife (CDFW) implements NPPA and CESA, and its Wildlife and Habitat Data Analysis Branch maintains the California Natural Diversity Database (CNDDB), a computerized inventory of information on the general location and status of California's rarest plants, animals, and natural communities. During the CEQA review process, the CDFW is given the opportunity to comment on the potential of the proposed Project to affect listed plants and animals.

2.2.2 Native Plant Protection Act

The NPPA of 1977 (CFGF, §§ 1900 through 1913) directed the CDFW to carry out the Legislature's intent to "preserve, protect and enhance rare and endangered plants in this State." The NPPA is administered by the CDFW, which has the authority to designate native plants as endangered or rare and to protect them from "take."

2.2.3 California Environmental Quality Act

CEQA was enacted in 1970 to provide for full disclosure of environmental impacts to the public before issuance of a permit by state and local public agencies. CEQA (Public Resources Code Sections 21000 et.

seq.) requires public agencies to review activities which may affect the quality of the environment so that consideration is given to preventing damage to the environment. When a lead agency issues a permit for development that could affect the environment, it must disclose the potential environmental effects of the project. This is done with an Initial Study and Negative Declaration (or Mitigated Negative Declaration) or with an Environmental Impact Report. Certain classes of projects are exempt from detailed analysis under CEQA. CEQA Guidelines Section 15380 defines endangered, threatened, and rare species for purposes of CEQA and clarifies that CEQA review extends to other species that are not formally listed under the CESA or FESA but that meet specified criteria.

2.2.4 Fully Protected Species and Species of Special Concern

The classification of “fully protected” was the CDFW’s initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, amphibian and reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under CESA and/or FESA. The CFGC sections (fish at §5515, amphibian and reptiles at §5050, birds at §3511, and mammals at §4700) dealing with “fully protected” species states that these species “...may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected species,” (CDFW Fish and Game Commission 1998) although take may be authorized for necessary scientific research. This language makes the “fully protected” designation the strongest and most restrictive regarding the “take” of these species. In 2003, the code sections dealing with fully protected species were amended to allow the CDFW to authorize take resulting from recovery activities for state-listed species.

Species of special concern are broadly defined as animals not listed under the FESA or CESA, but which are nonetheless of concern to the CDFW because they are declining at a rate that could result in listing or they historically occurred in low numbers and known threats to their persistence currently exist. This designation is intended to result in special consideration for these animals by the CDFW, land managers, consulting biologist, and others, and is intended to focus attention on the species to help avert the need for costly listing under FESA and CESA and cumbersome recovery efforts that might ultimately be required. This designation also is intended to stimulate collection of additional information on the biology, distribution, and status of poorly known at-risk species, and focus research and management attention on them. Although these species generally have no special legal status, they are given special consideration under the CEQA during project review.

2.2.5 California Fish and Game Code Sections 3503 and 3513

According to Section 3503 of the CFGC, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 specifically protects birds in the orders Falconiformes and Strigiformes (birds-of-prey). Section 3513 prohibits the take or possession of any migratory non-game bird. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “take” by the CDFW.

2.2.6 Other Sensitive Plants – California Native Plant Society

The California Native Plant Society (CNPS), a non-profit plant conservation organization, publishes and maintains an Inventory of Rare and Endangered Vascular Plants of California in both hard copy and electronic version (<http://www.cnps.org/cnps/rareplants/inventory/>).

The Inventory assigns plants to the following categories:

- 1A Presumed extinct in California;
- 1B Rare, threatened, or endangered in California and elsewhere;
- 2 Rare, threatened, or endangered in California, but more common elsewhere;
- 3 Plants for which more information is needed – A review list; and
- 4 Plants of limited distribution – A watch list.

Additional endangerment codes are assigned to each taxon as follows:

- 1 Seriously endangered in California (over 80% of occurrences threatened/high degree of immediacy of threat).
- 2 Fairly endangered in California (20-80% occurrences threatened).
- 3 Not very endangered in California (<20% of occurrences threatened or no current threats known).

Plants on Lists 1A, 1B, and 2 of the CNPS Inventory consist of plants that may qualify for listing, by the CDFW, as well as other state agencies (e.g., California Department of Forestry and Fire Protection). As part of the CEQA process, such species should be fully considered, as they meet the definition of threatened or endangered under the NPPA and Sections 2062 and 2067 of the CFGC. California Rare Plant Rank 3 and 4 species are considered to be plants about which more information is needed or are uncommon enough that their status should be regularly monitored. Such plants may be eligible or may become eligible for state listing, and CNPS and CDFW recommend that these species be evaluated for consideration during the preparation of CEQA documents (CNPS 2018, CDFW 2018).

2.2.7 California Fish and Game Code Section 1600-1603

Streams, lakes, and riparian vegetation, as habitat for fish and other wildlife species, are subject to jurisdiction by the CDFW under Sections 1600-1616 of the CFGC. Any activity that will do one or more of the following: (1) substantially obstruct or divert the natural flow of a river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake generally require a 1602 Lake and Streambed Alteration Agreement. The term “stream”, which includes creeks and rivers, is defined in the California Code of Regulations (“CCR”) as follows: “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life”. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation” (14 CCR 1.72). In addition, the term stream can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife (CDFW 1994). Riparian vegetation is defined as, “vegetation which occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself” (CDFW 1994). In addition to impacts to jurisdictional streambeds, removal of riparian vegetation also requires a Section 1602 Lake and Streambed Alteration Agreement from the CDFW.

2.2.8 Sensitive Natural Communities

Sensitive natural communities are habitats that are either unique in constituent components, of relatively limited distribution in the region, or of particularly high wildlife value. These communities may or may not necessarily contain special-status species. Sensitive natural communities are usually identified in local or regional plans, policies or regulations, or by the CDFW or the USFWS. The CNDDDB identifies a number of

natural communities as rare, which are given the highest inventory priority (CDFW 2022a). Impacts to sensitive natural communities and habitats must be considered and evaluated under the CEQA (CCR: Title 14, Div. 6, Chap. 3, Appendix G).

2.3 Local

2.3.1 Coachella Valley Multiple Species Habitat Conservation Plan

The Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP), approved in 2008, was created with a goal of conservation of species and ecosystems and the ecosystems that support them while also supporting the economic development of the region. The multijurisdictional plan includes the following permittees: Coachella Valley Association of Governments, Coachella Valley Conservation Commission, Riverside County, Riverside County Flood Control, Riverside County Parks, Riverside County Department of Waste Resources, Coachella Valley Water District, Imperial Irrigation District, Mission Springs Water District, Caltrans, Cathedral City, Coachella (city), Desert Hot Springs (city), Indian Wells (city), Indio (city), La Quinta (city), Palm Desert (city), Palm Springs (city), Rancho Mirage (city), Coachella Valley Mountains Conservancy, and State Parks. The CVMSHCP is administered by the Coachella Valley Conservation Commission, as a joint powers authority with elected representatives. The CVMSHCP covers 27 sensitive habitats within designated Conservation Areas as well as 22 wildlife and 5 plant species. The Conservation Areas, where species and habitat preservation have distinct objectives for conservation of adequate habitat and reducing the impacts of habitat fragmentation, require more protection measures than undesignated areas within the CVMSHCP plan area. Other areas within the plan boundaries that are not targeted for conservation are generally required to pay a Local Development Mitigation Fee to support administration of the CVMSHCP.

3.0 METHODS

for ground- and tree-nesting birds to establish nests on the project site prior to initiation of project construction. This analysis of potential biological resources located on the project site includes a review of available background information in and around the vicinity of the project site and completion of a field survey.

3.1 Literature Review

Prior to conducting field surveys, MIG biologists reviewed available background information pertaining to the biological resources on and in the vicinity of the project. Available literature and resource mapping reviewed included the occurrence records for special-status species and sensitive natural communities and numerous other information sources listed below:

- CNDDDB record search for State and Federally Listed Endangered, Threatened, and Wildlife and Rare Plants of California within the Indio and surrounding eight USGS quadrangles: La Quinta, West Berdoo Canyon, Myoma, Mecca, Valerie, Martinez Mountain, Thermal Canyon, and Rockhouse Canyon (CDFW CNDDDB 2022; Appendix A)
- CNPS Rare Plant Program, Inventory of Rare and Endangered Plants of California (CNPS 2022a) records search within the Indio and surrounding eight USGS quadrangles (Appendix A)
- USFWS Information for Planning and Consultation (IPaC; USFWS 2022a; Appendix A)
- Soil Survey Staff, Natural Resource Conservation Service (NRCS), United States Department of Agricultural (USDA NRCS 2022)
- CDFW California Natural Community List (CDFW 2022)
- USFWS National Wetlands Inventory (USFWS 2022b)
- iNaturalist, Search for Observations in Coachella Valley, Riverside County, CA (2022)
- eBird, Search for Hotspots in Coachella Valley, Riverside County, CA (2022)
- Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP)

3.2 Field Surveys

A biological field survey was conducted by MIG biologist Elizabeth Kempton, PhD, on November 17th and 23rd, 2022. The field survey was conducted on foot to assess the existing conditions of the project site, including recording observed plant and wildlife species, characterizing, and delineating the vegetation communities and associated wildlife habitats, and evaluating the potential for these habitats to support special-status species and sensitive communities.

3.2.1 Plant Communities

During the field survey, the MIG biologist traversed the entire project site by foot and evaluated the suitability of on-site vegetation communities to support special-status species. An attempt was made to classify plant communities according to the Second Edition of the Manual of California Vegetation (Sawyer et al. 2009) classification system, as this method is preferred (but not required) by CDFW. However, for certain vegetation types, this system is too species-specific in its definitions of plant associations and alliances and does not accurately characterize the highly variable species composition of plant communities. For this project site, it was necessary to identify variants of plant community types for ruderal and ornamental plant assemblages and unvegetated areas that are not described in the literature. The List of California Natural and Terrestrial Communities (CDFW 2022) was consulted to determine if any rare or sensitive plant communities are present. In addition, plant communities were evaluated to determine if they are considered sensitive under

federal and/or other state regulations and local policies. Plant communities within the project site were mapped in the field onto a color aerial photograph and digitized into ArcView Geographic Information System (GIS) shapefiles. The habitat types covered by the CVMSHCP are only covered in specified Conservation Areas of the CVMSHCP, and although discussed in this report these do not require additional mitigation.

3.2.2 Jurisdictional Habitats and Aquatic Features

The project site was inspected to determine if any wetlands and “other waters” or streambeds potentially subject to jurisdiction by the USACE, RWQCB, or CDFW were present. MIG certified wetland delineator Elizabeth Kempton, PhD, conducted a search for jurisdictional areas on the 180-acre project site on November 17th and 23rd, 2022. Where found, areas were delineated according to the USACE’s 1987 Wetland Delineation Manual (Environmental Laboratory 1987) in conjunction with the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Arid West Supplement) (USACE 2008a) and A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (USACE 2008b). Wetland vegetation, hydric soils, and hydrology information were collected according to the USACE’s routine methodology to determine if wetlands were present. The project site was also inspected for the presence of drainages, streams, and other aquatic features, including those that support stream-dependent (i.e., riparian) plant species that may be considered jurisdictional by CDFW. Evaluation of CDFW jurisdiction followed guidance in the CFGC and standard field practices by CDFW personnel.

3.2.3 Special-Status Species Habitat Assessment

The potential occurrence of special-status plant and animal species on the project site was initially evaluated by conducting a 9-quadrangle database records search¹ of CNDDDB, CNPS Electronic Inventory, and the USFWS IPaC database (Appendix A) to ensure a complete list of species was generated for the habitat assessment. Following the records search, the list of special-status species was developed (see Appendices B and C) and subsequently listing-status and habitat information was summarized for each species for comparison with habitats within the project site. The list of species was further refined by evaluating the habitat requirements of each species relative to the conditions observed during the field survey conducted by MIG biologists (see column titled “Discussion” in Appendices B and C). Species that would not be expected on-site are not evaluated further and no recommendations are provided for these species (see last column of Appendices B and C, species indicated with the classification of “None”). Recommendations (last column of Appendices B and C) are only provided for species that could occur on the project site and are intended to serve as avoidance and protection actions to reduce the potential for impacts to less than significant per CEQA.

Nomenclature used for plant names follows the Second Edition of The Jepson Manual (Baldwin et al. 2012). Nomenclature for wildlife follows CDFW’s Complete List of Amphibian, Reptile, Bird, And Mammal Species in California (CDFW 2016) and any changes made to species nomenclature as published in scientific journals since the publication of CDFW’s list.

¹ A 9-quadrangle search is conducted using a U.S. Geological Survey 7.5-minute topographic quadrangle map. The search includes the quadrangle where the project is located (Indio) and the eight surrounding quadrangles (La Quinta, West Berdoo Canyon, Myoma, Mecca, Valerie, Martinez Mountain, Thermal Canyon, and Rockhouse Canyon).

4.0 EXISTING CONDITIONS

The following provides a description of the soils, vegetation communities, wildlife, and wildlife movement corridors present on the project site. Wildlife and plant species that were observed on the project site during the biological field survey, on November 17th and 23rd, 2022 are listed in Appendix D.

4.1 Physical Characteristics

The project is located within the United States Geological Survey (USGS) 7.5' series Indio quadrangle (Figure 1, Regional Map, Figure 2, USGS Topographic Map). The project site is flat with elevations ranging between 5-25 feet above mean sea level (AMSL) (Figure 2, *USGS Topographic Map*). The project site consists largely of vacant lots that have historically been used for agriculture, most recently for sod grass. The project site is highly disturbed due to previous agricultural uses and is covered in fine windblown dune sands mostly originating from dunes adjacent to the western site of the property. The site has been regularly maintained by mowing, and hence only emergent tamarisk, saltbush, and smaller herbs, grasses and shrubs have emerged since agricultural operations. Most of the vegetation on the site is ruderal; however, some native plants were observed on site.

4.2 Soils

The USDA Web Soil Survey reports three soil units within the boundary of the 180-acre project site (USDA NRCS 2023), and none of these are classified as hydric soils:

- Is Indio very fine sandy loam
- CpA Coachella fine sand, 0 to 2 percent slopes
- GbA Gilman fine sandy loam, 0 to 2 percent slopes

The “Indio very fine sandy loam” soil type is generally comprised of alluvium and found in alluvial fans and floodplains. Overall slopes associated with this soil type are 0 to 2 percent, and this soil type is rarely flooded and would not be considered hydric. Conditions present on at the project site were consistent with those reported by the Web Soil Survey (USDA NRCS 2022) with the exception that the soils had marked disturbance from previous agricultural use, and therefore strata were indiscernible.

The “Coachella fine sand, 0 to 2 percent slopes” soil type is generally comprised of alluvium derived from igneous rock and found in alluvial fans and floodplains. Overall slopes associated with this soil type are 0 to 2 percent, and this soil type is rarely flooded and would not be considered hydric. Conditions present at the project site were consistent with those reported by the Web Soil Survey (USDA NRCS 2022) with the exception that the soils had marked disturbance from previous agricultural use, and therefore strata were indiscernible.

The “Gilman fine sandy loam, 0 to 2 percent slopes” soil type is generally comprised of alluvium and found in alluvial fans and floodplains. Overall slopes associated with this soil type are 0 to 2 percent, and this soil type is rarely flooded and would not be considered hydric. Conditions present on at the project site were consistent with those reported by the Web Soil Survey (USDA NRCS 2022) with the exception that the soils had marked disturbance from previous agricultural use, and therefore strata were indiscernible.

4.3 Plant Communities & Associated Wildlife Habitats

Plant communities on-site were evaluated to determine if they are considered sensitive under federal, state, or local regulations or policies. Biological communities were classified as sensitive or non-sensitive as defined by CEQA and other applicable laws and regulations. The 180-acre project site is considered highly disturbed due to previous agricultural uses and mowing and is covered in fine windblown dune sands mostly originating from dunes adjacent to the western site of the property. The majority of the 180-acre project site is unvegetated with sparse emergent tamarisk, saltbush, and smaller herbs, grasses, and shrubs. Most of the vegetation on the site is ruderal; however, some native plants were observed on site. The landcover type observed during the field survey is described in more detail below.

Disturbed and/or Developed (180 acres)

The entire project site has been historically altered by agriculture, and as such, all the landcover at the project site can be classified as Disturbed and/or Developed. The percent cover of dominant plants (tamarisk) is too low of total percent cover (<2%) and does not correspond to any membership rules for Tamarisk Thickets (*Tamarix* spp. Shrubland Semi-Natural Alliance) recognized by the MCV. In addition to tamarisk being present, the project site consists of evidence of previous fill from sod production, emergent native shrubs (primarily saltbush) and non-native herbs (primarily puncture vine and Saharan mustard), which can be common in disturbed areas. Much of the vegetation present on the site is non-native, and the site receives regular clearing to maintain compliance with fire code.

Aeolian sands. There are dune-like sands present on the project site that may qualify as aeolian sand dunes; however, these are covered by the establishment of the Conservation Areas included in CVMSHCP. Since these sands are not considered a Natural Vegetation Community or habitat considered sensitive by the CDFW and **the site is not within a Conservation Area mapped by the CVMSHCP, no additional mitigation is required.** Since aeolian sands are covered in Conservation Areas, no further discussion is warranted about this habitat type.

4.4 Sensitive Plant Communities

No sensitive plant communities were observed on the project site, and the site does not exhibit the characteristic attributes that may support (such as the known distribution and elevation, landscape position, plant species composition, soil and/or substrate type, water chemistry, and/or hydroperiod) as the project site is highly disturbed. **One Sensitive Plant Community was uncovered by the CDFW CNDDDB (2022) search, Desert Fan Palm Oasis Woodland, and is outlined at the end of Appendix B; however, none of these are expected to occur at the project site.** In addition, no USFWS-designated critical habitat areas for any federally listed animals are present.

4.5 Special-Status Plants

Special-status plants are defined here to include: (1) plants that are federal- or state-listed as rare, threatened, or endangered, (2) federal and state candidates for listing, (3) plants assigned a Rank of 1 through 4 by the CNPS Inventory, and (4) plants that qualify under the definition of "rare" in the CEQA, section 15380. The project site was initially determined to provide potentially suitable habitat for a total of 80 special-status plant species based on the proximity of the project to previously recorded occurrences in the region, vegetation types and habitat quality, topography, elevation, soil types, and other species-specific habitat requirements (CDFW CNDDDB 2022). Based on results of the habitat suitability analysis and focused late

season survey conducted on November 17th and 23rd, 2022, nine (9) of the 44 plant species are expected to occur on the project site, and recommendations are provided for avoidance of these species. A table presenting the special-status plant species considered and evaluated for their potential occurrence on the project site, including plant species' habitat requirements and reported blooming periods, is provided in Appendix B.

The sensitive plant species that may occur on the site include (asterisk indicates species covered by the CVMSHCP): chaparral sand-verbena (*Abronia villosa* var. *aurita*), Borrego milk-vetch (*Astragalus lentiginosus* var. *borreganus*), Coachella Valley milk-vetch (*Astragalus lentiginosus* var. *coachellae*)*, gravel milk-vetch (*Astragalus sabulonum*), glandular ditaxis (*Ditaxis claryana*), flat-seeded spurge (*Euphorbia platysperma*), ribbed cryptantha (*Johnstonella costata*), slender cottonheads (*Nemacaulis denudata* var. *gracilis*), and narrow-leaf sandpaper-plant (*Petalonyx linearis*). All of these species may occur in fine sands (dune sands) that are present in scattered locations of the project site, and especially on the southwest portion. While these plants have lowered potential to occur due to the agricultural uses previously occurring on the site, due to the ongoing establishment of wind-blown dune sand (and seeds of plants that may travel along with the sand), there is at least some potential that these species could occur on-site, and therefore a pre-construction survey is recommended to ensure avoidance of these species.

4.6 Special-Status Wildlife

Special-status wildlife species include those species listed as endangered or threatened under the FESA or CESA; candidates for listing by the USFWS or CDFW; and species of special concern to the CDFW; and birds protected by the CDFW under CFGC Sections 3503 and 3513 and the MBTA. It was initially determined that 37 special-status wildlife species have been recorded in the vicinity of the project site (CDFW CNDDDB 2022). Of these wildlife species, 31 are not expected to occur on the project site (species with Recommendations listed as "None" in the table provided in Appendix C). Reasons include the absence of essential habitat requirements for the species, the distance to known occurrences and/or the species distributional range, the limited availability of foraging and nesting habitat, amount of site disturbance from past and present land uses, and/or the proximity of existing human-related disturbances (see Discussion column in table). A table presenting the special-status wildlife species considered and evaluated for their potential occurrence on the project site, including species-specific habitat requirements, is provided in Appendix C.

Six (6) wildlife species occur or have some potential to occur on-site including (asterisk indicates species covered by the CVMSHCP): Coachella giant sand treater cricket (*Macrobaenetes valgum*)*, flat-tailed horned lizard (*Phrynosoma mcallii*)*, Coachella Valley fringe-toed lizard (*Uma inornata*)*, burrowing owl (*Athene cunicularia*)*, ferruginous hawk (*Buteo regalis*), and prairie falcon (*Falco mexicanus*). It is assumed that all of these species could potentially present at the site, even though the quality of the habitat is relatively poor (due to agricultural uses and mowing) most of these species have potential to occur because of the fine sands and/or open conditions present at the site. No USFWS Critical Habitat is located within or immediately adjacent to the project site (Figure 5).

Nesting Birds

Nesting birds are protected under CFGC 3503, 3503.5, and 3512 and the MBTA, which prohibits the take of active bird nests. Ruderal vegetation and ornamental trees within the project site provide marginally suitable nesting habitat for songbirds, including common species protected by the code.

No other special-status wildlife species are expected to be impacted by project construction due to a lack of suitable habitat (refer to Appendix C) and high degree of site disturbance due to existing development within and surrounding the project site.

4.7 Wildlife Movement Corridors

Providing functional habitat connectivity between natural areas is essential to sustaining healthy wildlife populations and allowing for the continued dispersal of native plant and animal species. The regional movement and migration of wildlife species has been substantially altered due to habitat fragmentation over the past century. This fragmentation is most commonly caused by development of open areas, which can result in large patches of land becoming inaccessible and forming a functional barrier between undeveloped areas. Additional roads associated with development, although narrow, may result in barriers to smaller or less mobile wildlife species. Habitat fragmentation results in isolated islands of habitat, which affects wildlife behavior, foraging activity, reproductive patterns, immigration and emigration or dispersal capabilities, and survivability. Wildlife corridors can consist of a sequence of stepping-stones across the landscape (i.e., discontinuous areas of habitat such as isolated wetlands), continuous lineal strips of vegetation and habitat (e.g., riparian strips and ridge lines), or they may be parts of larger habitat areas selected for its known or likely importance to local wildlife. The project site does not act as a wildlife movement corridor due to the current built environment as well as the presence of urban/suburban development surrounding the site. The project site is expected to be utilized by common, non-special-status wildlife for foraging and possibly breeding. However, the project site is situated in an urbanized area and does not represent a wildlife movement corridor as it is bound on all sides by residential and industrial land uses and therefore does not preclude wildlife movement in otherwise open areas.

4.8 Jurisdictional Waters/Wetlands

No waterways, wetlands, or riparian vegetation subject to regulation by the USACE, CDFW, or RWQCB are present on the project site. No features were detected by the National Wetlands Inventory (as shown on Figure 6) at or immediately adjacent the project site. There is an ephemeral stream west (unnamed wash) of the site that terminates just south of the project site at a larger waterway called Thousand Palm Canyon Wash. The site is separated from these waterways by a dune berm and the 10 freeway, respectively. There is no evidence (e.g., watermarks, vegetation, or other characteristics) that water flows from this stream enter the project site.

4.9 CVMSHCP Consistency Analysis

Covered Species. The Project Site may be suitable for one plant species (Coachella Valley milk-vetch) and four wildlife (Coachella giant sand treader cricket, burrowing owl, ferruginous hawk, and prairie falcon) that are covered by the CVMSHCP. Through payment of the local development mitigation fees required to implement the CVMSHCP no additional mitigation is required.

Compliance with laws for non-Covered species is also required within the CVMSHCP plan area. Additional measures should also be followed for non-covered species included Section 5.2 to maintain compliance with the MBTA, ESA, CDFG Code, and CESA, including measures to avoid and minimize potential impacts to special-status plants (BIO-1) and nesting birds (BIO-2).

Since burrowing owl have been found on the property, the CVMSCHP requires that “take avoidance” burrowing owl surveys be conducted and additional mitigation measures followed (included herein as BIO-3), please see Appendix E for measures and guidelines required for burrowing owl to maintain consistency with the CVMSHCP.

CVMSHCP Conservation Areas and Wildlife Movement Corridors/Linkages. The Project Site is not located within a Conservation Area or wildlife movement corridor/linkage outlined in the CVMSHCP (Figure 7). The Project Site is also not adjacent to a Conservation Area or Wildlife Movement Corridor/Linkage. See Figure 7 for locations of the site in relation to the CVMSHCP.

5.0 ENVIRONMENTAL IMPACTS

This section describes potential impacts to sensitive biological resources—including special-status plants and animals, and aquatic resources that may occur in the project site. Each impact discussion includes mitigation measures that would be implemented during the project to avoid and/or reduce the potential for and/or level of impacts to each resource. With the implementation of the recommended mitigation measures, all impacts to biological resources are anticipated to be reduced to less than significant pursuant to CEQA.

5.1 Thresholds of Significance

This section describes potential impacts to biological resources that may occur as a result of the construction of the proposed project. CEQA Guidelines provide guidance in evaluating project impacts and determining whether impacts may be significant. CEQA defines “significant effect on the environment” as “a substantial adverse change in the physical conditions which exist in the area affected by the proposed project.” In accordance with Appendix G of the CEQA Guidelines, a project could have a significant environmental impact on biological resources if it would:

- 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 CDFW or USFWS
- Have a substantial adverse effect on any sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS
- Have a substantial adverse effect on federally protected wetlands, as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrologic interruption, or other means
- 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
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance
- Conflict with the provisions of an adopted HCP, Natural Community Conservation Plan (NCCP), or other approved local, regional, or state HCP

5.2 Impacts and Mitigation Measures

Consistent with the requirements of CEQA and local regulations, the significance of potential impacts is evaluated through the application of the significance criteria described above. The objective of the biological resources analysis is to identify potential adverse effects and/or significant impacts on biological resources. Avoidance is often the preferred approach for the management of biological resources; however, it is not always possible to completely avoid impacts. Mitigation measures to avoid or minimize impacts are identified, as appropriate, including procedures to be followed if significant biological resources are identified prior to the initiation of construction.

Special Status Plant Communities, Jurisdictional Waters, and Other Sensitive Biological Resources

No special-status plant communities, jurisdictional waters, or other sensitive biological resources areas (i.e., Critical Habitat, Conservation Areas) are expected to be present on the project site due the lack of designation

or suitable habitat (refer to Appendix B); therefore, no impacts to these resources are anticipated as a result of Project implementation, and no further mitigation is required.

Special-Status Plants

Impact BIO-1: Special-status Plants

Due to the presence of actively-moving aeolian fine/dune sands on the project site a number of Special-status plant species could have the potential to occur on the site. Species potentially present on the site include: chaparral sand-verbena (*Abronia villosa* var. *aurita*), Borrego milk-vetch (*Astragalus lentiginosus* var. *borreganus*), Coachella Valley milk-vetch (*Astragalus lentiginosus* var. *coachellae*)*, gravel milk-vetch (*Astragalus sabulonum*), glandular ditaxis (*Ditaxis claryana*), flat-seeded spurge (*Euphorbia platysperma*), ribbed cryptantha (*Johnstonella costata*), slender cottonheads, (*Nemacaulis denudata* var. *gracilis*), and narrow-leaf sandpaper-plant (*Petalonyx linearis*). These species could be affected by project construction and habitat loss due to the construction of the project. Recommendation BIO-1 would be required to reduce potential impacts to rare plants to a less than significant level.

Special-Status Wildlife

Impact BIO-2: Nesting Birds (including special-status birds)

Native and ornamental trees, as well as various other substrates on the project site, have the potential to provide nesting habitat for bird species protected by the CFGC Sections 3503 and 3513 and the MBTA. There is potential for ground- and tree-nesting birds to establish nests on the project site prior any project-related construction. Construction activities including site mobilization, tree removal, other vegetation clearing, grubbing, grading, and noise and vibration from the operation of heavy equipment have the potential to result in significant direct (i.e., death or physical harm) and/or indirect (i.e., nest abandonment) impacts to nesting birds. The loss of an active nest of common or special-status bird species and/or their eggs or young as a result of project construction would be considered a violation of the CFGC, Section 3503, 3503.5, 3513 and the MBTA, and therefore would be considered a potentially significant impact. Implementation of Recommendation BIO-2 would be required to reduce impacts to nesting birds to a less than significant level.

Impact BIO-3: Burrowing Owl

Burrowing Owls are currently present on the project site. Burrows and other round structures present on the property provide habitat for burrowing owl. Suitable habitat type (Disturbed and/or Developed) for burrowing owl was also determined to be present on-site. Construction activities may impact burrowing owl in a manner like those already described under Impact-Bio-2 for nesting birds. Recommendation BIO-3 would be required to reduce impacts to burrowing owl to a less than significant level.

CVMSHCP Consistency Analysis

The project is consistent with the CVMSHCP as currently designed, with incorporation of the mitigation measures required on the CVMSHCP. If any changes to the Covered Activities provided in the project description to this report are made, a reassessment would be required to determine consistency with the CVMSHCP.

Recommendations

BIO-1 Pre-construction Surveys for Special-status. If the project is not developed within two years subsequent to CEQA document approval, a pre-construction survey for Special-status plants shall be required. Surveys shall be limited to areas with the aeolian fine/dune sands on-site, and shall be conducted prior to ground disturbance at the project site. Surveys shall be conducted by a Qualified Botanist as determined by CVCC and Wildlife Agencies. Special-status plant surveys shall be conducted in accordance with accepted protocols, including the *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (CDFW 2018), *CNPS Botanical Survey Guidelines* (1983, rev. 2001). If a special-status plant is found on the site, in consultation with the Wildlife Agencies, the Applicant shall develop a mitigation and avoidance plan that incorporates avoiding plants during flowering times, topsoil salvage, seed collection, and/or relocation of plants.

A Qualified Botanist is an individual who has a degree in biological sciences or related resource management with a minimum of two seasonal years post-degree experience conducting surveys for Special-status plants. During or following academic training, the qualified biologist will have achieved a high level of professional experience and knowledge in special-status plant species identification, ecology, and habitat requirements.

BIO-2 Pre-construction Surveys for Nesting Birds. To the extent feasible, construction activities should be scheduled to avoid the nesting season. If construction activities are scheduled to take place outside the nesting season, all impacts to nesting birds protected under the MBTA and California Fish and Game Code would be avoided. The nesting season in Riverside County extends from February 1 through September 1.

If it is not possible to schedule construction activities between September 1 and January 31, then pre-construction surveys for nesting birds will be conducted by a qualified biologist to ensure that no nests would be disturbed during project implementation. These surveys will be conducted no more than five (5) days prior to the initiation of any site disturbance activities and equipment mobilization, including tree, shrub, or vegetation removal, fence installation, grading, etc. If project activities are delayed by more than five (5) days, an additional nesting bird survey will be performed. During this survey, the biologist will inspect all trees and other potential nesting habitats (e.g., trees and shrubs) in and immediately adjacent to the impact area for nests. Active nesting is present if a bird is building a nest, sitting in a nest, a nest has eggs or chicks in it, or adults are observed carrying food to the nest. The results of the surveys will be documented.

If an active nest is found sufficiently close to work areas to be disturbed by these activities, the qualified biologist will determine the extent of a construction-free buffer zone to be established around the nest (typically up to 300 feet for raptors and up to 100 feet for other species), to ensure that no nests of species protected by the MBTA and California Fish and Game Code will be disturbed during project implementation. Within the buffer zone, no site disturbance and mobilization of heavy equipment, including but not limited to equipment staging, fence installation, clearing, grubbing, vegetation removal, demolition, and grading will be permitted until the chicks have fledged.

A qualified biologist is an individual who has a degree in biological sciences or related resource management with a minimum of two seasonal years post-degree experience conducting surveys for nesting birds. During or following academic training, the qualified biologist will have achieved a high

level of professional experience and knowledge in biological sciences and special-status species identification, ecology, and habitat requirements.

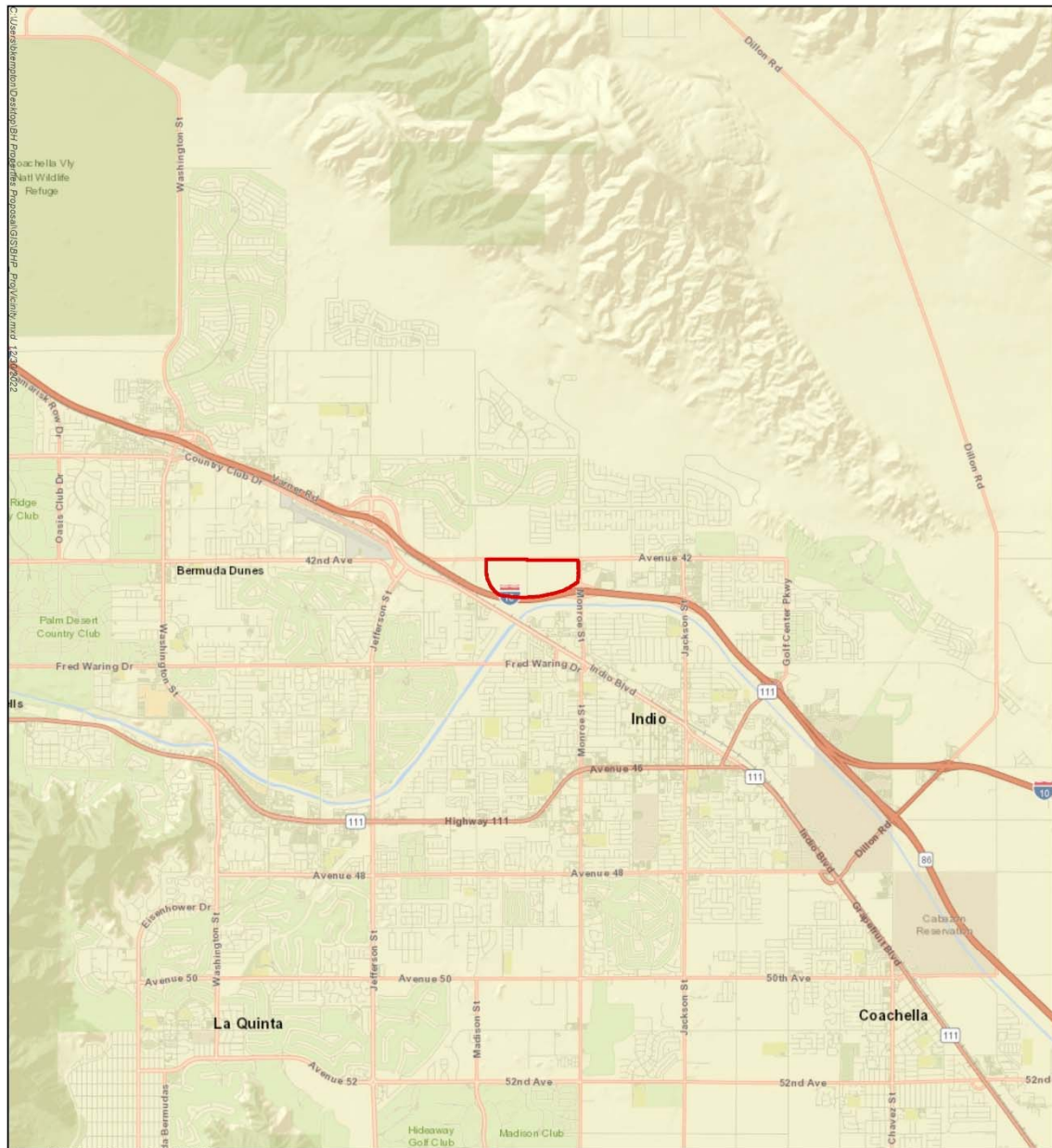
BIO-3: Burrowing Owl Preconstruction Surveys and Translocation. Burrowing owls were located as part of the general biological survey, and therefore a pre-construction survey for burrowing owl is required. Additionally, burrowing owls may encroach or migrate to the property at any time, and therefore steps should be taken to ensure avoidance, including reevaluating the locations/presence of burrowing owl or burrows. Pre-construction surveys shall be conducted in accordance with an accepted protocol (as determined by in coordination with the Permittees and the Wildlife Agencies). If burrowing owls are observed on-site during the pre-construction survey, coordination with Wildlife Agencies shall be done as soon as practical prior to construction to develop a plan for avoidance and/or translocation prior to construction crews initiating any ground disturbance on the project site.

6.0 REFERENCES

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7.0 FIGURES

Figure 1: Vicinity Map



Source: ESRI, Riverside County GIS, MIG, 2023

Legend
 Project Area



Figure 1. Project Vicinity Map
 42501 Monroe Street Warehouse Project
 Indio, CA

BH Properties

Figure 2: USGS Topographic Map

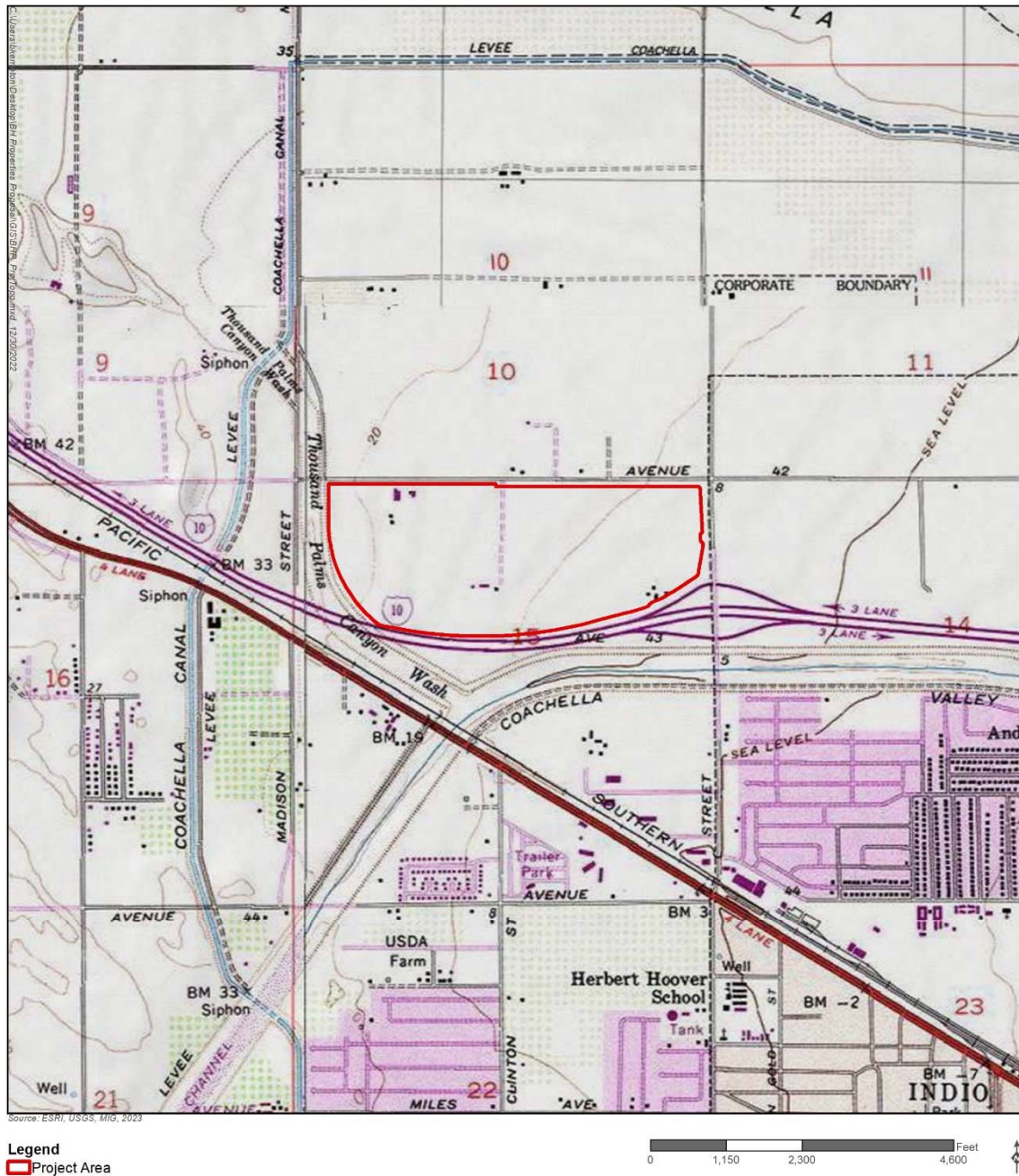


Figure 2. USGS Topographic Map
 42501 Monroe Street Warehouse Project
 Indio, CA

BH Properties

Figure 3: Project Site Map



Source: ESRI, Riverside County, MIG, 2023

Legend
 Project Area



Figure 3. Project Location
 42501 Monroe Street Warehouse Project
 Indio, CA
 BH Properties

Figure 4: SSURGO Soils Map



Source: ESRI, USDA-NRCS, Riverside County, MIG, 2023

Legend

Project Area

Soils

- Coachella fine sand, 0 to 2 percent slopes
- Gilman fine sandy loam, 0 to 2 percent slopes
- Indio very fine sandy loam



Figure 4. Soils Map
 42501 Monroe Street Warehouse Project
 Indio, CA

BH Properties

Figure 5: Critical Habitat Map

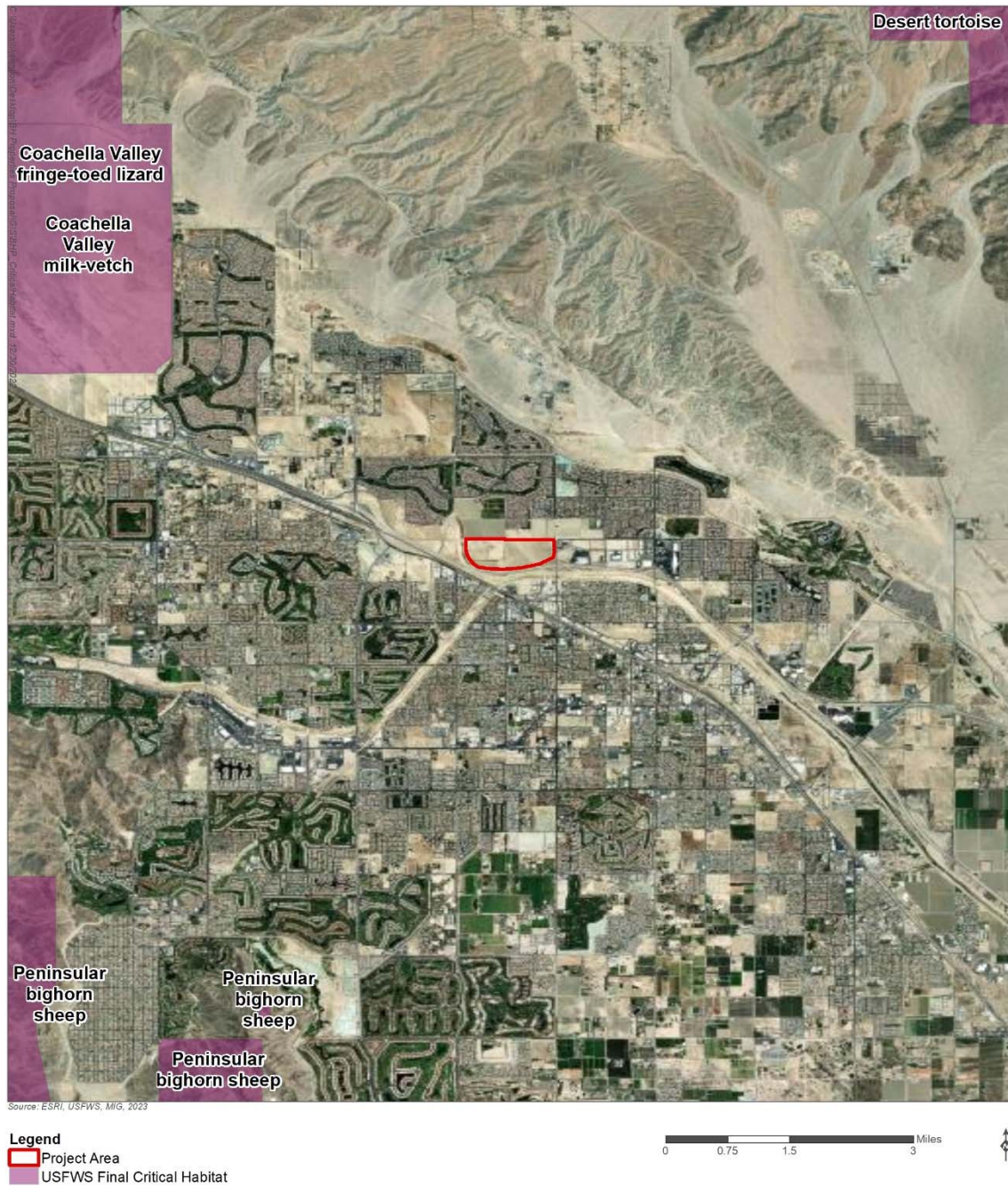


Figure 5. USFWS Critical Habitat Map
 42501 Monroe Street Warehouse Project
 Indio, CA
 BH Properties

Figure 6: National Wetland Inventory Map



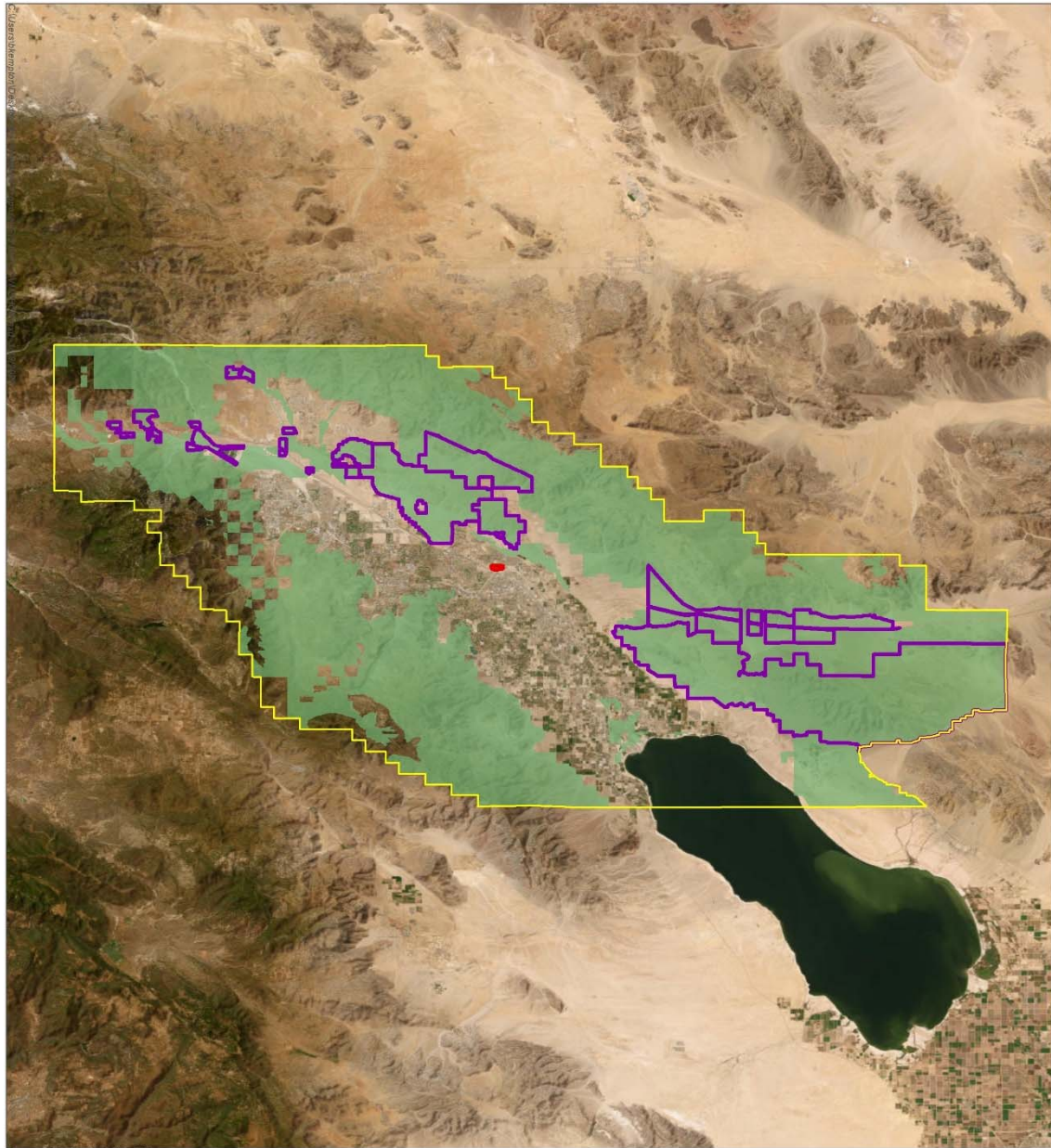
Source: ESRI, USFWS, MIG, 2023

- Legend**
- Project Area
- NWI Wetland Types:**
- Estuarine and Marine Deepwater
 - Estuarine and Marine Wetland
 - Freshwater Emergent Wetland
 - Freshwater Forested/Shrub Wetland
 - Freshwater Pond
 - Lake
 - Other
 - Riverine

Figure 6. National Wetlands Inventory Map
 42501 Monroe Street Warehouse Project
 Indio, CA

BH Properties

Figure 7: Coachella Valley MSHCP Sensitive Areas Map



Source: ESRI, USFWS, MIG, 2023

- Legend**
- Project Area
 - CVMSHCP Boundary
 - CVMSHCP Linkages and Biological Corridors
 - CVMSHCP Conservation Areas



Figure 7. Coachella Valley MSHCP Sensitive Areas Map
 42501 Monroe Street Warehouse Project
 Indio, CA
 BH Properties

Figure 8: Current Project Site Photographs



Figure 8 (cont.): Current Project Site Photographs



Photo 7. View of windblown sands on the west side of the project area.



Photo 8. Looking southeast toward 10 freeway and southern side of project area from berm on west side of property.



Photo 9. Image of dune adjacent to site and bee boxes on the project site. This dune was previously covered in tamarisk, but was subject to burning in approximately 2020.



Photo 10. Looking at burrow with signs of activity (whitewash and pellets).



Photo 11. View of burrowing owl. Numerous burrows were present on the north side of the project area.



Photo 12. Looking northwest from east side of property toward burrowing owl on property.

APPENDICES

Appendix A
Special Status Species Database Search Results



Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad (La Quinta (3311663) OR Rockhouse Canyon (3311671) OR West Berdoo Canyon (3311672) OR Myoma (3311673) OR Mecca (3311651) OR Valerie (3311652) OR Martinez Mtn. (3311653) OR Thermal Canyon (3311661) OR Indio (3311662))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Abronia villosa</i> var. <i>aurita</i> chaparral sand-verbena	PDNYC010P1	None	None	G5T2?	S2	1B.1
<i>Ambrosia monogyra</i> singlewhorl burrobrush	PDAST50010	None	None	G5	S2	2B.2
<i>Antrozous pallidus</i> pallid bat	AMACC10010	None	None	G4	S3	SSC
<i>Ardea alba</i> great egret	ABNGA04040	None	None	G5	S4	
<i>Ardea herodias</i> great blue heron	ABNGA04010	None	None	G5	S4	
<i>Astragalus bernardinus</i> San Bernardino milk-vetch	PDFAB0F190	None	None	G3	S3	1B.2
<i>Astragalus lentiginosus</i> var. <i>coachellae</i> Coachella Valley milk-vetch	PDFAB0FB97	Endangered	None	G5T1	S1	1B.2
<i>Astragalus preussii</i> var. <i>laxiflorus</i> Lancaster milk-vetch	PDFAB0F721	None	None	G4T2	S1	1B.1
<i>Astragalus sabulonum</i> gravel milk-vetch	PDFAB0F7R0	None	None	G4G5	S2	2B.2
<i>Astragalus tricarinatus</i> triple-ribbed milk-vetch	PDFAB0F920	Endangered	None	G2	S2	1B.2
<i>Athene cunicularia</i> burrowing owl	ABNSB10010	None	None	G4	S3	SSC
<i>Ayenia compacta</i> California ayenia	PDSTE01020	None	None	G4	S3	2B.3
<i>Batrachoseps major aridus</i> desert slender salamander	AAAAD02042	Endangered	Endangered	G4T1	S1	
<i>Bursera microphylla</i> little-leaf elephant tree	PDBUR01020	None	None	G4	S2	2B.3
<i>Buteo regalis</i> ferruginous hawk	ABNKC19120	None	None	G4	S3S4	WL
<i>Chaetodipus fallax pallidus</i> pallid San Diego pocket mouse	AMAFD05032	None	None	G5T3T4	S3S4	SSC
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	AMACC08010	None	None	G4	S2	SSC
<i>Crotalus ruber</i> red-diamond rattlesnake	ARADE02090	None	None	G4	S3	SSC



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Cyprinodon macularius</i> desert pupfish	AFCNB02060	Endangered	Endangered	G1	S1	
<i>Desert Fan Palm Oasis Woodland</i> Desert Fan Palm Oasis Woodland	CTT62300CA	None	None	G3	S3.2	
<i>Dinacoma caseyi</i> Casey's June beetle	IICOLX5010	Endangered	None	G1	S1	
<i>Dipodomys merriami collinus</i> Earthquake Merriam's kangaroo rat	AMAFD03144	None	None	G5T2?	S2	
<i>Ditaxis claryana</i> glandular ditaxis	PDEUP080L0	None	None	G3G4	S2	2B.2
<i>Ditaxis serrata var. californica</i> California ditaxis	PDEUP08050	None	None	G5T3T4	S2?	3.2
<i>Egretta thula</i> snowy egret	ABNGA06030	None	None	G5	S4	
<i>Empidonax traillii extimus</i> southwestern willow flycatcher	ABPAE33043	Endangered	Endangered	G5T2	S1	
<i>Eremothera boothii ssp. boothii</i> Booth's evening-primrose	PDONA03052	None	None	G5T4	S3	2B.3
<i>Eriastrum harwoodii</i> Harwood's eriastrum	PDPLM030B1	None	None	G2	S2	1B.2
<i>Euderma maculatum</i> spotted bat	AMACC07010	None	None	G4	S3	SSC
<i>Eumops perotis californicus</i> western mastiff bat	AMACD02011	None	None	G4G5T4	S3S4	SSC
<i>Euparagia unidentata</i> Algodones euparagia	IIHYMBC010	None	None	G1G2	S1S2	
<i>Euphorbia abramsiana</i> Abrams' spurge	PDEUP0D010	None	None	G4	S2	2B.2
<i>Euphorbia arizonica</i> Arizona spurge	PDEUP0D060	None	None	G5	S3	2B.3
<i>Euphorbia platysperma</i> flat-seeded spurge	PDEUP0D1X0	None	None	G3	S1	1B.2
<i>Falco mexicanus</i> prairie falcon	ABNKD06090	None	None	G5	S4	WL
<i>Funastrum crispum</i> wavyleaf twinvine	PDASC0F020	None	None	G4	S1	2B.2
<i>Gelochelidon nilotica</i> gull-billed tern	ABNNM08010	None	None	G5	S1	SSC
<i>Gopherus agassizii</i> desert tortoise	ARAAF01012	Threatened	Threatened	G3	S2S3	
<i>Icteria virens</i> yellow-breasted chat	ABPBX24010	None	None	G5	S3	SSC



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Jaffueliobryum raui</i> Rau's jaffueliobryum moss	NBMUS97010	None	None	G4	S2	2B.3
<i>Juniperella mirabilis</i> juniper metallic wood-boring beetle	IICOLX9010	None	None	G1	S1	
<i>Lanius ludovicianus</i> loggerhead shrike	ABPBR01030	None	None	G4	S4	SSC
<i>Lasiurus xanthinus</i> western yellow bat	AMACC05070	None	None	G4G5	S3	SSC
<i>Leptosiphon floribundus ssp. hallii</i> Santa Rosa Mountains leptosiphon	PDPLM090J3	None	None	G4T1T2	S1S2	1B.3
<i>Macrobaenetes valgum</i> Coachella giant sand treader cricket	IORT22020	None	None	G1G2	S1S2	
<i>Marina orcuttii var. orcuttii</i> California marina	PDFAB2F031	None	None	G2G3T1T2	S2?	1B.3
<i>Matelea parvifolia</i> spear-leaf matelea	PDASC0A0J0	None	None	G5	S3	2B.3
<i>Nemacaulis denudata var. gracilis</i> slender cottonheads	PDPGN0G012	None	None	G3G4T3?	S2	2B.2
<i>Neotoma albigula venusta</i> Colorado Valley woodrat	AMAFF08031	None	None	G5T3T4	S1S2	
<i>Neotoma lepida intermedia</i> San Diego desert woodrat	AMAFF08041	None	None	G5T3T4	S3S4	SSC
<i>Nycticorax nycticorax</i> black-crowned night heron	ABNGA11010	None	None	G5	S4	
<i>Nyctinomops femorosaccus</i> pocketed free-tailed bat	AMACD04010	None	None	G5	S3	SSC
<i>Oliarces clara</i> cheeseweed owlfly (cheeseweed moth lacewing)	IINEU04010	None	None	G1G3	S2	
<i>Ovis canadensis nelsoni</i> desert bighorn sheep	AMALE04013	None	None	G4T4	S3	FP
<i>Ovis canadensis nelsoni pop. 2</i> Peninsular bighorn sheep DPS	AMALE04012	Endangered	Threatened	G4T3Q	S2	FP
<i>Perognathus longimembris bangsi</i> Palm Springs pocket mouse	AMAFD01043	None	None	G5T2	S1	SSC
<i>Petalonyx linearis</i> narrow-leaf sandpaper-plant	PDLOA04010	None	None	G4	S3?	2B.3
<i>Phaseolus filiformis</i> slender-stem bean	PDFAB330P0	None	None	G5	S1	2B.1
<i>Phrynosoma mcallii</i> flat-tailed horned lizard	ARACF12040	None	None	G3	S3	SSC
<i>Plegadis chihi</i> white-faced ibis	ABNGE02020	None	None	G5	S3S4	WL



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Polioptila melanura</i> black-tailed gnatcatcher	ABPBJ08030	None	None	G5	S3S4	WL
<i>Pseudorontium cyathiferum</i> Deep Canyon snapdragon	PDSCR2R010	None	None	G4G5	S1	2B.3
<i>Pyrocephalus rubinus</i> vermillion flycatcher	ABPAE36010	None	None	G5	S2S3	SSC
<i>Rallus obsoletus yumanensis</i> Yuma Ridgway's rail	ABNME0501A	Endangered	Threatened	G3T3	S1S2	FP
<i>Rynchops niger</i> black skimmer	ABNNM14010	None	None	G5	S2	SSC
<i>Saltugilia latimeri</i> Latimer's woodland-gilia	PDPLM0H010	None	None	G3	S3	1B.2
<i>Scaphiopus couchii</i> Couch's spadefoot	AAABF01020	None	None	G5	S2	SSC
<i>Selaginella eremophila</i> desert spike-moss	PPSEL010G0	None	None	G4	S2S3	2B.2
<i>Senna covesii</i> Cove's cassia	PDFAB491X0	None	None	G5	S3	2B.2
<i>Stemodia durantifolia</i> purple stemodia	PDSCR1U010	None	None	G5	S2	2B.1
<i>Taxidea taxus</i> American badger	AMAJF04010	None	None	G5	S3	SSC
<i>Toxostoma crissale</i> Crissal thrasher	ABPBK06090	None	None	G5	S3	SSC
<i>Toxostoma lecontei</i> Le Conte's thrasher	ABPBK06100	None	None	G4	S3	SSC
<i>Trichinorhipis knulli</i> Knull's metallic wood-boring beetle	IICOLX1100	None	None	G1	S1	
<i>Uma inornata</i> Coachella Valley fringe-toed lizard	ARACF15010	Threatened	Endangered	G1Q	S1	
<i>Wislizenia refracta ssp. refracta</i> jackass-clover	PDCPP09013	None	None	G5T5?	S1	2B.2
<i>Xerospermophilus tereticaudus chlorus</i> Palm Springs round-tailed ground squirrel	AMAFB05161	None	None	G5T2Q	S2	SSC
<i>Xylorhiza cognata</i> Mecca-aster	PDASTA1010	None	None	G2	S2	1B.2
<i>Xyrauchen texanus</i> razorback sucker	AFCJC11010	Endangered	Endangered	G1	S1S2	FP

Record Count: 79



Search Results

44 matches found. Click on scientific name for details

Search Criteria: 9-Quad include [3311663:3311671:3311672:3311673:3311651:3311652:3311653:3311661:3311662]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	PHOTO
<i>Abronia villosa</i> <i>var. aurita</i>	chaparral sand-verbena	Nyctaginaceae	annual herb	(Jan)Mar-Sep	None	None	G5T2?	S2	1B.1	 © 2011 Aaron E. Sims
<i>Ambrosia monogyra</i>	singlewhorl burrobrush	Asteraceae	perennial shrub	Aug-Nov	None	None	G5	S2	2B.2	 © 2014 Keir Morse
<i>Astragalus bernardinus</i>	San Bernardino milk-vetch	Fabaceae	perennial herb	Apr-Jun	None	None	G3	S3	1B.2	No Photo Available
<i>Astragalus lentiginosus</i> var. <i>borreganus</i>	Borrego milk-vetch	Fabaceae	annual herb	Feb-May	None	None	G5T5?	S4	4.3	No Photo Available
<i>Astragalus lentiginosus</i> var. <i>coachellae</i>	Coachella Valley milk-vetch	Fabaceae	annual/perennial herb	Feb-May	FE	None	G5T1	S1	1B.2	No Photo Available
<i>Astragalus preussii</i> var. <i>laxiflorus</i>	Lancaster milk-vetch	Fabaceae	perennial herb	Mar-May	None	None	G4T2	S1	1B.1	No Photo Available
<i>Astragalus sabulonum</i>	gravel milk-vetch	Fabaceae	annual/perennial herb	Feb-Jun	None	None	G4G5	S2	2B.2	No Photo Available
<i>Astragalus tricarinatus</i>	triple-ribbed milk-vetch	Fabaceae	perennial herb	Feb-May	FE	None	G2	S2	1B.2	No Photo Available
<i>Ayenia compacta</i>	California ayenia	Malvaceae	perennial herb	Mar-Apr	None	None	G4	S3	2B.3	No Photo Available
<i>Bursera microphylla</i>	little-leaf elephant tree	Burseraceae	perennial deciduous tree	Jun-Jul	None	None	G4	S2	2B.3	No Photo Available
<i>Chorizanthe leptotheca</i>	Peninsular spineflower	Polygonaceae	annual herb	May-Aug	None	None	G3	S3	4.2	No Photo Available
<i>Ditaxis claviana</i>	glandular	Euphorbiaceae	perennial herb	Oct-Mar	None	None	G3G4	S2	2B.2	

<u><i>Ditaxis carlyana</i></u>	granular ditaxis	Euphorbiaceae	perennial herb	Oct-Mar	None	None	G5G7	S2	2B.2	No Photo Available
<u><i>Ditaxis serrata</i></u> <u>var. <i>californica</i></u>	California ditaxis	Euphorbiaceae	perennial herb	Mar-Dec	None	None	G5T3T4	S2?	3.2	No Photo Available
<u><i>Eremothera boothii</i></u> ssp. <u><i>boothii</i></u>	Booth's evening-primrose	Onagraceae	annual herb	Apr-Sep	None	None	G5T4	S3	2B.3	No Photo Available
<u><i>Eriastrum harwoodii</i></u>	Harwood's eriastrum	Polemoniaceae	annual herb	Mar-Jun	None	None	G2	S2	1B.2	No Photo Available
<u><i>Eschscholzia androuxii</i></u>	Joshua Tree poppy	Papaveraceae	annual herb	Feb-May(Jun)	None	None	G3	S3	4.3	No Photo Available
<u><i>Euphorbia abramsiana</i></u>	Abrams' spurge	Euphorbiaceae	annual herb	(Aug)Sep-Nov	None	None	G4	S2	2B.2	No Photo Available
<u><i>Euphorbia arizonica</i></u>	Arizona spurge	Euphorbiaceae	perennial herb	Mar-Apr	None	None	G5	S3	2B.3	No Photo Available
<u><i>Euphorbia platysperma</i></u>	flat-seeded spurge	Euphorbiaceae	annual herb	Feb-Sep	None	None	G3	S1	1B.2	No Photo Available
<u><i>Funastrum crispum</i></u>	wavyleaf twinvine	Apocynaceae	perennial herb	May-Aug	None	None	G4	S1	2B.2	 © 2016 Keir Morse
<u><i>Horsfordia alata</i></u>	pink velvet-mallow	Malvaceae	perennial shrub	Feb-Dec	None	None	G5	S4	4.3	No Photo Available
<u><i>Horsfordia newberryi</i></u>	Newberry's velvet-mallow	Malvaceae	perennial shrub	Feb-Dec	None	None	G5	S4	4.3	No Photo Available
<u><i>Jaffueliobryum raui</i></u>	Rau's jaffueliobryum moss	Grimmiaceae	moss		None	None	G4	S2	2B.3	 © 2021 Scot Loring
<u><i>Johnstonella costata</i></u>	ribbed cryptantha	Boraginaceae	annual herb	Feb-May	None	None	G4G5	S4	4.3	No Photo Available
<u><i>Johnstonella holoptera</i></u>	winged cryptantha	Boraginaceae	annual herb	Mar-Apr	None	None	G4G5	S4	4.3	No Photo Available
<u><i>Juncus acutus</i></u> ssp. <u><i>leopoldii</i></u>	southwestern spiny rush	Juncaceae	perennial rhizomatous herb	(Mar)May-Jun	None	None	G5T5	S4	4.2	 © 2019 Belinda Lo

<i>Juncus cooperi</i>	Cooper's rush	Juncaceae	perennial herb	Apr-May(Aug)	None	None	G4	S3	4.3	
										© 2018 Neal Kramer
<i>Leptosiphon floribundus</i> ssp. <i>hallii</i>	Santa Rosa Mountains leptosiphon	Polemoniaceae	perennial herb	May-Jul(Nov)	None	None	G4T1T2	S1S2	1B.3	
										© 2016 Keir Morse
<i>Lycium torreyi</i>	Torrey's box-thorn	Solanaceae	perennial shrub	(Jan-Feb)Mar-Jun(Sep-Nov)	None	None	G4G5	S3	4.2	No Photo Available
<i>Marina orcuttii</i> var. <i>orcuttii</i>	California marina	Fabaceae	perennial herb	May-Oct	None	None	G2G3T1T2	S2?	1B.3	No Photo Available
<i>Matelea parvifolia</i>	spear-leaf matelea	Apocynaceae	perennial herb	Mar-May(Jul)	None	None	G5	S3	2B.3	No Photo Available
<i>Mirabilis tenuiloba</i>	slender-lobed four o'clock	Nyctaginaceae	perennial herb	(Feb)Mar-May	None	None	G5	S4	4.3	No Photo Available
<i>Nemacaulis denudata</i> var. <i>gracilis</i>	slender cottonheads	Polygonaceae	annual herb	(Mar)Apr-May	None	None	G3G4T3?	S2	2B.2	No Photo Available
<i>Petalonyx linearis</i>	narrow-leaf sandpaper-plant	Loasaceae	perennial shrub	(Jan-Feb)Mar-May(Jun-Dec)	None	None	G4	S3?	2B.3	No Photo Available
<i>Phaseolus filiformis</i>	slender-stem bean	Fabaceae	annual herb	Apr	None	None	G5	S1	2B.1	No Photo Available
<i>Pseudorontium cyathiferum</i>	Deep Canyon snapdragon	Plantaginaceae	annual herb	Feb-Apr	None	None	G4G5	S1	2B.3	No Photo Available
<i>Saltugilia latimeri</i>	Latimer's woodland-gilia	Polemoniaceae	annual herb	Mar-Jun	None	None	G3	S3	1B.2	No Photo Available
<i>Selaginella eremophila</i>	desert spike-moss	Selaginellaceae	perennial rhizomatous herb	(May)Jun(Jul)	None	None	G4	S2S3	2B.2	No Photo Available
<i>Senna covesii</i>	Cove's cassia	Fabaceae	perennial herb	Mar-Jun(Aug)	None	None	G5	S3	2B.2	No Photo Available
<i>Stemodia durantifolia</i>	purple stemodia	Plantaginaceae	perennial herb	(Jan)Apr-Dec	None	None	G5	S2	2B.1	No Photo Available

<i>Tetracoccus hallii</i>	Hall's tetracoccus	Picrodendraceae	perennial deciduous shrub	Jan-May	None	None	G4	S4	4.3	No Photo Available
<i>Wislizenia refracta</i> ssp. <i>refracta</i>	jackass-clover	Cleomaceae	annual herb	Apr-Nov	None	None	G5T5?	S1	2B.2	No Photo Available
<i>Xylorhiza cognata</i>	Mecca-aster	Asteraceae	perennial herb	Jan-Jun	None	None	G2	S2	1B.2	No Photo Available
<i>Yucca brevifolia</i>							GNR	SNR	CBR	No Photo Available

Showing 1 to 44 of 44 entries

Suggested Citation:

California Native Plant Society, Rare Plant Program. 2022. Rare Plant Inventory (online edition, v9-01 1.5). Website <https://www.rareplants.cnps.org> [accessed 17 November 2022].

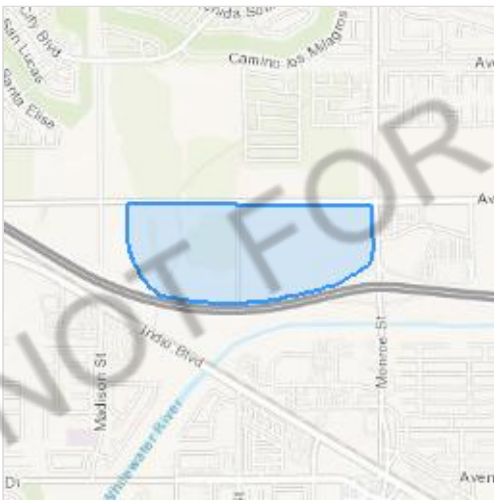
IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Riverside County, California



Local office

Carlsbad Fish And Wildlife Office

☎ (760) 431-9440

📠 (760) 431-5901

2177 Salk Avenue - Suite 250

Carlsbad, CA 92008-7385

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

-
1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
 2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS
<p>Least Bell's Vireo <i>Vireo bellii pusillus</i></p> <p>Wherever found</p> <p>There is final critical habitat for this species. Your location does not overlap the critical habitat.</p> <p>https://ecos.fws.gov/ecp/species/5945</p>	Endangered
<p>Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i></p> <p>Wherever found</p> <p>There is final critical habitat for this species. Your location does not overlap the critical habitat.</p> <p>https://ecos.fws.gov/ecp/species/6749</p>	Endangered

Reptiles

NAME	STATUS
<p>Coachella Valley Fringe-toed Lizard <i>Uma inornata</i></p> <p>Wherever found</p> <p>There is final critical habitat for this species. Your location does not overlap the critical habitat.</p> <p>https://ecos.fws.gov/ecp/species/2069</p>	Threatened
<p>Desert Tortoise <i>Gopherus agassizii</i></p> <p>There is final critical habitat for this species. Your location does not overlap the critical habitat.</p> <p>https://ecos.fws.gov/ecp/species/4481</p>	Threatened

Insects

NAME	STATUS
<p>Monarch Butterfly <i>Danaus plexippus</i></p> <p>Wherever found</p> <p>No critical habitat has been designated for this species.</p> <p>https://ecos.fws.gov/ecp/species/9743</p>	Candidate

Flowering Plants

NAME	STATUS
------	--------

Coachella Valley Milk-vetch *Astragalus lentiginosus* var.

Endangered

coachellae

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

<https://ecos.fws.gov/ecp/species/7426>

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location.

To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects

that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
<p>Bald Eagle <i>Haliaeetus leucocephalus</i></p> <p>This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.</p>	Breeds Oct 15 to Aug 31
<p>Costa's Hummingbird <i>Calypte costae</i></p> <p>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9470</p>	Breeds Jan 15 to Jun 10
<p>Lawrence's Goldfinch <i>Carduelis lawrencei</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9464</p>	Breeds Mar 20 to Sep 20
<p>Marbled Godwit <i>Limosa fedoa</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9481</p>	Breeds elsewhere
<p>Western Grebe <i>aechmophorus occidentalis</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/6743</p>	Breeds Jun 1 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

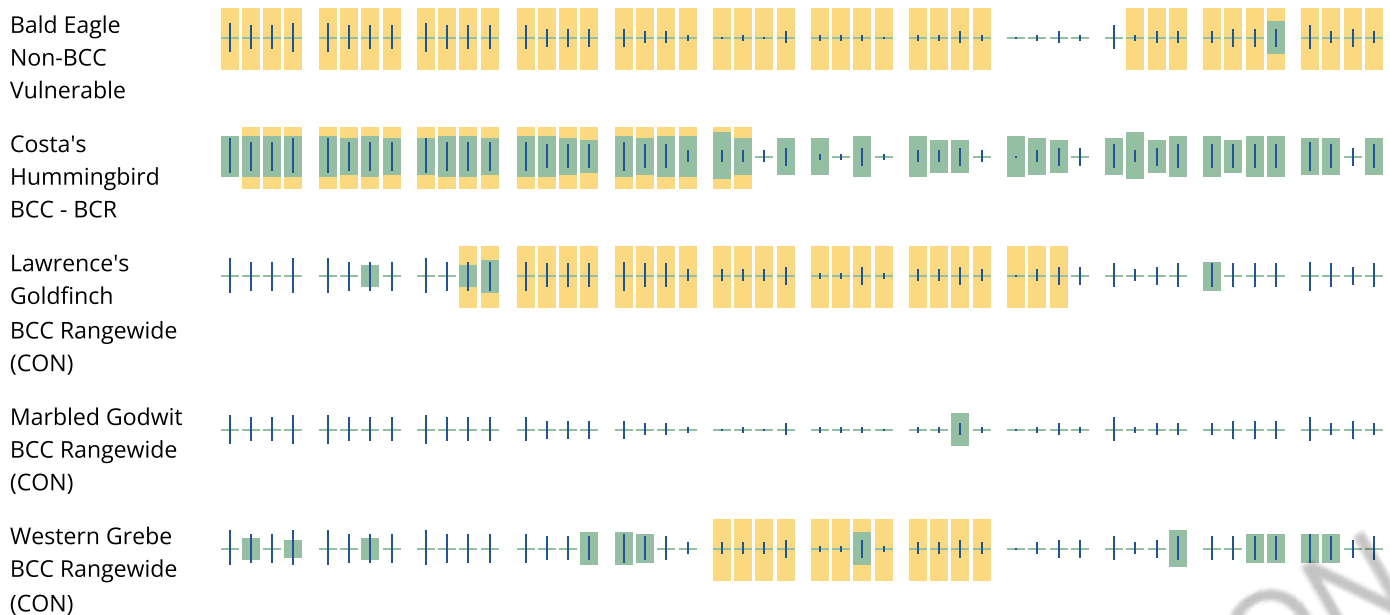
No Data (-)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

This location did not intersect any wetlands mapped by NWI.

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Appendix B
Special-Status Plant Species With Potential to Occur on the Project Site

Appendix B: Special Status Plant Species with Potential to Occur on the Project Site.

Species	Status ^{1, 2}			General Habitat and Micro Habitat Requirements ¹	Elevation Range; Lifeform; Blooming Period ²	Discussion ³	Recommendations
	Federal	State	CNPS CRPR				
DICOTS							
Chaparral sand-verbena <i>Abronia villosa</i> var. <i>aurita</i>	--	--	1B.1	Chaparral, Coastal scrub, Desert dunes; Sandy	75-1,600 m; Annual herb; Blooms (January) March to September	The sands present within the project site may support this species.	Yes.
Singlewhorl burrobrush <i>Ambrosia monogyra</i>	--	--	2B.2	Chaparral, Sonoran Desert scrub; Sandy	10-500 m; Perennial shrub; Blooms August to November	Habitats present at the project site would not support this species. The vegetation types that could support this species are not present at the project site. This perennial species was not observed at the project site.	None.
San Bernardinomilk-vetch <i>Astragalus bernardinus</i>	--	--	1B.2	Joshua tree "woodland", Pinyon and juniper woodland; Carbonate (often), Granitic (often)	900-2000m; Perennial herb; Blooms April-June	Habitats present at the project site would not support this species. The project site is outside of the known elevation range of this species.	None.
Borrego milk-vetch <i>Astragalus lentiginosus</i> var. <i>borreganus</i>	--	--	4.3	Mojave Desert scrub, Sonoran Desert scrub; Sandy	30-895m; Annual herb; Blooms February-May	The sands present within the project site may support this species.	Yes.
Coachella Valley milk-vetch <i>Astragalus lentiginosus</i> var. <i>coachellae</i>	FE	--	1B.2	Desert dunes, Sonoran Desert scrub	40-655m; Annual/perennial herb; Blooms February-May	The fine sands present within the project site may support this species.	Yes.
Lancaster milk-vetch <i>Astragalus preussii</i> var. <i>laxiflorus</i>	--	--	1B.1	Chenopod scrub	700m; Perennial herb; Blooms from March-May	Habitats present at the project site would not support this species. The project site is outside of the known elevation range of this species.	None.

Appendix B: Special Status Plant Species with Potential to Occur on the Project Site.

Species	Status ^{1, 2}			General Habitat and Micro Habitat Requirements ¹	Elevation Range; Lifeform; Blooming Period ²	Discussion ³	Recommendations
	Federal	State	CNPS CRPR				
Gravel milk-vetch <i>Astragalus sabulorum</i>	--	--	2B.2	Desert dunes, Mojave Desert scrub, Sonoran Desert scrub; Flats, Gravelly (sometimes), Roadsides, Sandy (usually), Washes	60-930m; Annual/perennial herb; Blooms February-June	The fine sands present within the project site may support this species.	Yes.
triple-ribbed milk-vetch <i>Astragalus tricarinatus</i>	FE	--	1B.2	Joshua tree "woodland", Sonoran Desert scrub; Gravelly (sometimes), Sandy (sometimes)	450-1190m; Perennial herb; Blooms February-May	Habitats present at the project site would not support this species. The project site is outside of the known elevation range of this species.	None.
California ayenia <i>Ayenia compacta</i>	--	--	2B.3	Mojave Desert scrub, Sonoran Desert scrub; Rocky	150-1095m; Perennial herb; Blooms March-April	Habitats present at the project site would not support this species. The project site is outside of the known elevation range of this species.	None.
Little-leaf elephant tree <i>Bursera microphylla</i>	--	--	2B.3	Sonoran Desert scrub	200-700m; Perennial deciduous tree; Blooms June-July	Habitats present at the project site would not support this species. The project site is outside of the known elevation range of this species.	None.
Peninsular spineflower <i>Chorizanthe leptotheca</i>	--	--	4.2	Chaparral, Coastal scrub, Lower montane coniferous forest; Granitic	300-1,900 m; Annual herb; Blooms May-August	Habitats present at the project site would not support this species. The project site is outside of the known elevation range of this species.	None.
Glandular ditaxis <i>Ditaxis claryana</i>	--	--	2B.2	Mojave Desert scrub, Sonoran Desert scrub; Sandy	0-465m; Perennial herb; Blooms October-March	The fine sands present within the project site may support this species.	Yes.

Appendix B: Special Status Plant Species with Potential to Occur on the Project Site.

Species	Status ^{1, 2}			General Habitat and Micro Habitat Requirements ¹	Elevation Range; Lifeform; Blooming Period ²	Discussion ³	Recommendations
	Federal	State	CNPS CRPR				
California ditaxis <i>Ditaxis serrata var. californica</i>	--	--	3.2	Sonoran Desert scrub	30-1,000m; Perennial herb; Blooms March-December	Habitats present at the project site would not support this species. The vegetation types that could support this species are not present at the project site. This perennial species was not observed at the project site	None.
Booth's evening-primrose <i>Eremothera boothii ssp. boothii</i>	--	--	2B.3	Joshua tree "woodland", Pinyon and juniper woodland	815-2,400m; Annual herb; Blooms April-September	Habitats present at the project site would not support this species. The project site is outside of the known elevation range of this species.	None.
Harwood's eriastrum <i>Eriastrum harwoodii</i>	--	--	1B.2	Desert dunes	125-915m; Annual herb; Blooms March-June	Habitats present at the project site would not support this species. The project site is outside of the known elevation range of this species.	None.
Joshua Tree poppy <i>Eschscholzia androuxii</i>	--	--	4.3	Joshua tree "woodland", Mojave Desert scrub; Flats, Gravelly, Rocky, Sandy, Slopes, Washes	585-1,685m; Annual herb; Blooms February-May (June)	Habitats present at the project site would not support this species. The project site is outside of the known elevation range of this species.	None.
Abrams' spurge <i>Euphorbia abramsiana</i>	--	--	2B.2	Mojave Desert scrub, Sonoran Desert scrub; Sandy	-5-1,310m; Annual herb; Blooms (August) September-November	Habitats present at the project site would not support this species. The vegetation types that could support this species are not present at the project site. This perennial species was not observed at the project site	None.

Appendix B: Special Status Plant Species with Potential to Occur on the Project Site.

Species	Status ^{1, 2}			General Habitat and Micro Habitat Requirements ¹	Elevation Range; Lifeform; Blooming Period ²	Discussion ³	Recommendations
	Federal	State	CNPS CRPR				
Arizona spurge <i>Euphorbia arizonica</i>	--	--	2B.3	Sonoran Desert scrub	50-300m; Perennial herb; Blooms March-April	Habitats present at the project site would not support this species. The vegetation types that could support this species are not present at the project site. This perennial species was not observed at the project site	None.
Flat-seeded spurge <i>Euphorbia platysperma</i>	--	--	1B.2	Desert dunes, Sonoran Desert scrub	65-100m; Annual herb; Blooms February-September	The fine sands present within the project site may support this species.	Yes.
wavyleaf twinvine <i>Funastrum crispum</i>	--	--	2B.2	Chaparral, Pinyon and juniper woodland	1,165-1,840m; Perennial herb; Blooms May-August	Habitats present at the project site would not support this species. The project site is outside of the known elevation range of this species.	None.
pink velvet-mallow <i>Horsfordia alata</i>	--	--	4.3	Sonoran Desert scrub	100-500m Perennial shrub; Blooms February-December	Habitats present at the project site would not support this species. The project site is outside of the known elevation range of this species.	None.
Newberry's velvet-mallow <i>Horsfordia newberryi</i>	--	--	4.3	Sonoran Desert scrub	3-800; Perennial shrub; Blooms February-December	Habitats present at the project site would not support this species. The vegetation types that could support this species are not present at the project site. This perennial species was not observed at the project site	None.
Ribbed cryptantha <i>Johnstonella costata</i>	--	--	4.3	Desert dunes, Mojave Desert scrub, Sonoran Desert scrub; Sandy	-60-500m; Annual herb; Blooms February-May	The fine sands present within the project site may support this species.	Yes.

Appendix B: Special Status Plant Species with Potential to Occur on the Project Site.

Species	Status ^{1, 2}			General Habitat and Micro Habitat Requirements ¹	Elevation Range; Lifeform; Blooming Period ²	Discussion ³	Recommendations
	Federal	State	CNPS CRPR				
Winged cryptantha <i>Johnstonella holoptera</i>	--	--	4.3	Mojave Desert scrub, Sonoran Desert scrub	100-1,690m; Annual herb; Blooms March-April	Habitats present at the project site would not support this species. The vegetation types that could support this species are not present at the project site.	None.
Santa Rosa Mountains leptosiphon <i>Leptosiphon floribundus</i> ssp. <i>hallii</i>	--	--	1B.3	Pinyon and juniper woodland, Sonoran Desert scrub	1,000-2,000m; Perennial herb; Blooms May-July (November)	Habitats present at the project site would not support this species. The project site is outside of the known elevation range of this species.	None.
Torrey's box-thorn <i>Lycium torreyi</i>	--	--	4.2	Mojave Desert scrub, Sonoran Desert scrub; Rocky, Sandy, Streambanks, Washes	-50-1,220m; Perennial shrub; Blooms (January -February) March-June (September-November)	Habitats present at the project site would not support this species. The vegetation types that could support this species are not present at the project site. This perennial species was not observed at the project site	None.
California marina <i>Marina orcuttii</i> var. <i>orcuttii</i>	--	--	1B.3	Chaparral, Pinyon and juniper woodland, Sonoran Desert scrub; Rocky	1,050-1,160; Perennial herb; Blooms May-October	Habitats present at the project site would not support this species. The project site is outside of the known elevation range of this species.	None.
Spear-leaf matelea <i>Matelea parvifolia</i>	--	--	2B.3	Mojave Desert scrub, Sonoran Desert scrub; Rocky	440-1,095m; Perennial herb; Blooms March-May (July)	Habitats present at the project site would not support this species. The project site is outside of the known elevation range of this species.	None.
Slender-lobed four o'clock <i>Mirabilis tenuiloba</i>	--	--	4.3	Sonoran Desert scrub	230-1,095m; Perennial herb; Blooms (February) March-May	Habitats present at the project site would not support this species. The project site is outside of the known elevation range of this species.	None.

Appendix B: Special Status Plant Species with Potential to Occur on the Project Site.

Species	Status ^{1, 2}			General Habitat and Micro Habitat Requirements ¹	Elevation Range; Lifeform; Blooming Period ²	Discussion ³	Recommendations
	Federal	State	CNPS CRPR				
Slender cottonheads <i>Nemacaulis denudata</i> var. <i>gracilis</i>	--	--	2B.2	Coastal dunes, Desert dunes, Sonoran Desert scrub	-50-400; Annual herb; Blooms (March) April-May	The fine sands present within the project site may support this species.	Yes.
Narrow-leaf sandpaper-plant <i>Petalonyx linearis</i>	--	--	2B.3	Mojave Desert scrub, Sonoran Desert scrub; Rocky (sometimes), Sandy (sometimes)	-25-1,115m; Perennial shrub; Blooms (January-February) March-May (June-December)	The fine sands present within the project site may support this species.	Yes.
Slender-stem bean <i>Phaseolus filiformis</i>	--	--	2B.1	Sonoran Desert scrub	125-125m; Annual herb; Blooms in April	Habitats present at the project site would not support this species. The project site is outside of the known elevation range of this species.	None.
Deep Canyon snapdragon <i>Pseudorontium cyathiferum</i>	--	--	2B.3	Sonoran Desert scrub	0-800m; Annual herb; Blooms February-April	Habitats present at the project site would not support this species. The vegetation types that could support this species are not present at the project site.	None.
Latimer's woodland-gilia <i>Saltugilia latimeri</i>	--	--	1B.2	Chaparral, Mojave Desert scrub, Pinyon and juniper woodland; Granitic (often), Rocky (sometimes), Sandy (sometimes), Washes (sometimes)	400-1,900m; Annual herb; Blooms March-June	Habitats present at the project site would not support this species. The project site is outside of the known elevation range of this species.	None.
Cove's cassia <i>Senna covesii</i>	--	--	2B.2	Sonoran Desert scrub; Dry, Sandy, Slopes, Washes	225-1,295m; Perennial herb; Blooms March-June (August)	Habitats present at the project site would not support this species. The project site is outside of the known elevation range of this species.	None.

Appendix B: Special Status Plant Species with Potential to Occur on the Project Site.

Species	Status ^{1, 2}			General Habitat and Micro Habitat Requirements ¹	Elevation Range; Lifeform; Blooming Period ²	Discussion ³	Recommendations
	Federal	State	CNPS CRPR				
Purple stemodia <i>Stemodia durantifolia</i>	--	--	2B.1	Sonoran Desert scrub	180-300m; Perennial herb; Blooms (January) April-December	Habitats present at the project site would not support this species. The project site is outside of the known elevation range of this species.	None.
Hall's tetraococcus <i>Tetraococcus hallii</i>	--	--	4.3	Mojave Desert scrub, Sonoran Desert scrub	30-1,200m; Perennial deciduous shrub; Blooms January- May	Habitats present at the project site would not support this species. The vegetation types that could support this species are not present at the project site. This perennial species was not observed at the project site	None.
Jackass-clover <i>Wislizenia refracta</i> ssp. <i>refracta</i>	--	--	2B.2	Desert dunes, Mojave Desert scrub, Playas, Sonoran Desert scrub	600-800m; Annual herb; Blooms April- November	Habitats present at the project site would not support this species. The project site is outside of the known elevation range of this species.	None.
Mecca-aster <i>Xylorhiza cognata</i>	--	--	1B.2	Sonoran Desert scrub	20-400m; Perennial herb; January-June	Habitats present at the project site would not support this species. The vegetation types that could support this species are not present at the project site. This perennial species was not observed at the project site	None.
<i>Yucca brevifolia</i>	--	CE	CBR	Joshua tree woodland	various	Habitats present at the project site would not support this species. The vegetation types that could support this species are not present at the project site. This perennial species was not observed at the project site.	None.
MONOCOTS							

Appendix B: Special Status Plant Species with Potential to Occur on the Project Site.

Species	Status ^{1, 2}			General Habitat and Micro Habitat Requirements ¹	Elevation Range; Lifeform; Blooming Period ²	Discussion ³	Recommendations
	Federal	State	CNPS CRPR				
Southwestern spiny rush <i>Juncus acutus</i> ssp. <i>leopoldii</i>	--	--	4.2	Coastal dunes, Marshes and swamps, Meadows and seeps	3-900m; Perennial rhizomatous herb; (March) May-June	Habitats present at the project site would not support this species. The project site is not sufficiently mesic enough to support this species.	None.
Cooper's rush <i>Juncus cooperi</i>	--	--	4.3	Meadows and seeps	-260-1,770m; Perennial herb; Blooms April-May (August)	Habitats present at the project site would not support this species. The project site is not sufficiently mesic enough to support this species.	None.
Ferns/Moss							
Rau's jaffueliobryum moss <i>Jaffueliobryum raui</i>	--	--	2B.3	Alpine dwarf scrub, Chaparral, Mojave Desert scrub, Sonoran Desert scrub; Carbonate, Dry, Openings, Rock crevices	490-2,100m; moss	Habitats present at the project site would not support this species. The project site is outside of the known elevation range of this species.	None.
desert spike-moss <i>Selaginella eremophila</i>	--	--	2B.2	Chaparral, Sonoran Desert scrub	200-1,295m; Perennial rhizomatous herb; Blooms (May) June (July)	Habitats present at the project site would not support this species. The project site is outside of the known elevation range of this species.	None.
Plant Communities							
Desert Fan Palm Oasis Woodland						This plant community is not present on the Project Site. While fan palms are present on the project site, these plants established due to water availability from previous agricultural uses and would not constitute a natural oasis woodland.	None.

NOTES:

Appendix B: Special Status Plant Species with Potential to Occur on the Project Site.

¹ Excerpted from CNDDDB (2022) and/or CNPS (2022)

² Excerpted from CNPS (2022)

³ The potential for occurrence is based on occurrences recorded in the CNDDDB (2022) and CNPS (2022), knowledge of species requirements, and site inspections during 2022 field survey

STATUS KEY:

Federal

FE: Federally-listed Endangered

FT: Federally-listed Threatened

State

SE: California-listed Endangered

ST: California-listed Threatened

California Native Plant Society (CNPS): CNPS has developed five categories of rarity known as the California Rare Plant Ranking (CRPR). CRPR designations are defined as follows:

1A: Presumed extinct in California

1B: Plants listed as rare, threatened, or endangered in California and elsewhere

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

3: Plants about which we need more information

4: Species of limited distribution in California, but whose existence does not appear to be susceptible to threat

CNPS also adds a decimal threat rank to the List rank to parallel that used by the CNDDDB. CNPS rank designations therefore appear as: 1B.1, 1B.2, etc. Threat code extensions are defined as follows:

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

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

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

Appendix C
Special-Status Wildlife Species With Potential to Occur on the Project Site

Appendix C: Special-Status Animal Species with Potential to Occur on the Project Site.

Species	Status		Habitat Requirements ¹	Discussion	Recommendations
	Federal	State			
INVERTEBRATES					
Monarch Butterfly <i>Danaus plexippus</i>	FC	--	Roosts in tree groves (especially eucalyptus and conifer). Requires wind breaks to sustain populations.	Due to the high levels of wind and scant vegetation this species is not expected to roost on the site.	None.
Casey's June beetle <i>Dinacoma caseyi</i>	FE	--	This species generally requires sandy washes and is only known from two populations in south Palm Springs.	This species is generally found in native habitats, and the site is too disturbed to support this species. While found in sandy soils, females of this species live their lives underground. Hence, due to the agricultural history and fire abatement mowing of the site it is unlikely that this species would be found at this location.	None.
Coachella Giant Sand Treader Cricket <i>Macrobaenetes valgum</i>	--	--	This species occurs in fine sands within the Coachella Valley area. This species is covered by the CVMSHCP.	Habitat is present for this species at the project site. The wind-blown sand present on this site supports this species.	Yes.
FISHES					
Desert pupfish <i>Cyprinodon macularius</i>	FE	SE	Desert ponds, springs, marshes and streams in Southern California.	No streams or waterways occur within the boundary of the project site that could support this species.	None.
Razorback sucker <i>Xyrauchen texanus</i>	FE	SE, FP	Found in the Colorado River bordering California.	No streams or waterways occur within the boundary of the project site that could support this species.	None.
AMPHIBIANS					
desert slender salamander <i>Batrachoseps major aridus</i>	FE	SE	Occurs in moist desert washes generally under limestone sheets, rocks, and talus. This species is only known from Hidden Palm Canyon and Guadalupe creeks.	No sufficiently mesic habitats that would support amphibians are within or have connectivity to the project site.	None.
Couch's spadefoot <i>Scaphiopus couchii</i>	--	CSC	Occurs in desert rain pools.	No mesic habitats (i.e., insufficient pooling) that would support amphibians are within or have connectivity to the project site.	None.
REPTILES					

Appendix A: Special-Status Animal Species with Potential to Occur on the Project Site.

Species	Status		Habitat Requirements ¹	Discussion	Recommendations
	Federal	State			
Red-diamond rattlesnake <i>Crotalus ruber</i>	--	CSC	Occurs in rocky areas within dense vegetation, generally within chaparral, Mojavean desert scrub, and Sonoran desert scrub habitats	The habitats that support this species are not present at the project site. The project site is very scant in vegetation cover and is not sufficiently rocky.	None.
Desert tortoise <i>Gopherus agassizii</i>	FT	ST	Generally occurs in Joshua Tree Woodland, Mojavean desert scrub, and Sonoran desert scrub habitats; requires loose soils for den construction	The habitats that support this species are not present at the project site. The project site is very scant in vegetation cover and does not have the food plants present that could support this species. The project site is separated from contiguous desert tortoise habitats by development and physical features. No desert tortoise burrows, or other signs (e.g., scat. tracks) were observed on site.	None.
Flat-tailed horned lizard <i>Phrynosoma mcallii</i>	--	CSC	Requires sandy soils for burrowing and is restricted to desert washes and flats. Requires vegetative cover.	There is some marginal habitat present for this species in sandy soils of the project site.	Yes.
Coachella Valley fringe-toed lizard <i>Uma inornata</i>	FT	SE	Found in sandy/dune soils, only known to occur in the Coachella Valley, Riverside County, CA.	There is some marginal habitat present for this species in sandy soils of the project site.	Yes.
BIRDS					
Burrowing owl <i>Athene cunicularia</i>	--	CSC	Inhabits open arid habitats within many habitat types, including areas with previous disturbance.	This species was found at the project site.	Yes.
Ferruginous hawk <i>Buteo regalis</i>	--	WL	Known to inhabit grasslands, Great Basin scrub, desert scrub and low foothills of pinyon and juniper woodlands.	There is suitable habitat present at the project site that could support this species.	Yes.
Southwestern willow flycatcher <i>Empidonax traillii extimus</i>	FE	SE	Inhabits riparian and wetland in dense vegetation typically consisting of willow species.	No mesic or riparian habitats that would support this species are within or adjacent to the project site.	None.

Appendix A: Special-Status Animal Species with Potential to Occur on the Project Site.

Species	Status		Habitat Requirements ¹	Discussion	Recommendations
	Federal	State			
Prairie falcon <i>Falco mexicanus</i>	--	WL	Occupies a variety of desert, scrub, and grassland habitats. Requires cliffs for breeding.	There is suitable habitat present at the project site that could support this species. The pole line that crosses the property, and the I-10 bridge that is adjacent to the site, could provide suitable area for roosting/nesting, and sufficient prey is present for foraging on the site.	Yes.
Gull-billed tern <i>Gelochelidon nilotica</i>	--	CSC	Only known from islets and sandy areas adjacent to the San Diego Bay and Salton Sea.	No sufficiently mesic waterbody is present at or adjacent to the project site that could support this species.	None.
Yellow-breasted chat <i>Icteria virens</i>	--	CSC	Inhabits riparian and wetland in dense vegetation typically consisting of willow species.	No mesic or riparian habitats that would support this species are within or adjacent to the project site.	None.
Loggerhead shrike <i>Lanius ludovicianus</i>	--	CSC	Found in a variety of desert, riparian, woodland, and scrub habitats. Nests in dense vegetation and forages in open habitats.	The project site does not provide dense vegetation for this species to nest in. Due to the levels of disturbance on the project site this species would not be expected.	None.
White-faced ibis <i>Plegadis chihi</i>	--	WL	Inhabits marshes and swamps.	No mesic or riparian habitats that would support this species are within or adjacent to the project site.	None.
Black-tailed gnatcatcher <i>Polioptila melanura</i>	--	WL	Desert scrub type habitats, or desert washes with woody vegetation.	The habitats that support this species are not present at the project site. The project site is very scant in vegetation cover and does not have amount of vegetative cover that could support this species.	None.
Vermilion flycatcher <i>Pyrocephalus rubinus</i>	--	CSC	Occupies marshes/swamps, riparian, and wetland habitats.	No mesic or riparian habitats that would support this species are within or adjacent to the project site.	None.
Yuma Ridgway's rail <i>Rallus obsoletus yumanensis</i>	FE	ST, FP	Occupies marshes/swamps, riparian, and wetland habitats	No mesic or riparian habitats that would support this species are within or adjacent to the project site.	None.

Appendix A: Special-Status Animal Species with Potential to Occur on the Project Site.

Species	Status		Habitat Requirements ¹	Discussion	Recommendations
	Federal	State			
Black skimmer <i>Rynchops niger</i>	--	CSC	Occupies lands near bodies of water, such as beaches, gravel bars, and islets.	No mesic or riparian habitats that would support this species are within or adjacent to the project site.	None.
Crissal thrasher <i>Toxostoma crissale</i>	--	CSC	Found in riparian wash and woodlands, requires dense vegetation for nesting.	No mesic or riparian habitats that would support this species are within or adjacent to the project site. The project site is very scant in vegetation cover and does not have dense vegetative cover that could support this species.	None.
Le Conte's thrasher <i>Toxostoma lecontei</i>	--	CSC	Known to occur in a variety of desert wash and scrub habitats, requires dense vegetation for nesting.	The project site is very scant in vegetation cover and does not have type or quality of vegetative cover that could support this species.	None.
MAMMALS					
Pallid bat <i>Antrozous pallidus</i>	--	CSC	Occupies a variety of southern California habitats such as, deserts, grasslands, shrublands, woodlands and forest. Requires rocky areas for roosting.	The project site is very scant in vegetation and does not have sufficiently rocky areas that could support colonies of this species.	None.
Pallid San Diego pocket mouse <i>Chaetodipus fallax pallidus</i>	--	CSC	Occupies desert wash, scrub, and woodland habitats; generally associated with sandy areas with low vegetation and rocky or coarse gravel for burrowing.	Soils present at the project site would not support this species; the site does not have rocky or coarse sands that would support this species.	None.
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	--	CSC	This species is found in a large variety of habitats, but generally is found in mesic sites without much human disturbance.	The project site is too disturbed due to its historical use and proximity to the I-10 freeway to support this species.	None.
Spotted bat <i>Euderma maculatum</i>	--	CSC	Occupies a variety of habitats generally in the vicinity of washes and rock crevices/cliffs.	No sufficiently mesic habitats or rock crevices/cliffs that would support this species are within or adjacent to the project site.	None.
Western mastiff bat <i>Eumops perotis californicus</i>	--	CSC	Occupies a variety of habitats generally in the vicinity of rock crevices/cliffs, high buildings or trees/tunnels.	No sufficiently tall buildings, trees or rock crevices/cliffs that would support this species are within or adjacent to the project site.	None.

Appendix A: Special-Status Animal Species with Potential to Occur on the Project Site.

Species	Status		Habitat Requirements ¹	Discussion	Recommendations
	Federal	State			
Western yellow bat <i>Lasiurus xanthinus</i>	--	CSC	Found in a variety of mesic desert habitats, including riparian, wash, and desert oasis.	No mesic or riparian habitats that would support this species are within or adjacent to the project site.	None.
San Diego desert woodrat <i>Neotoma lepida intermedia</i>	--	CSC	Generally this species prefers dense vegetation to create nests, more common in coastal scrub in steep rocky areas.	The project site does not provide coastal sage scrub or similar native habitats with sufficient canopies or rocky areas that may support this species.	None.
Pocketed free-tailed bat <i>Nyctinomops femorosaccus</i>	--	CSC	Generally this species prefers dense vegetation to create nests, more common in woodlands and scrub in steep rocky areas.	The project site does not provide native habitats with sufficient canopies or rocky areas that may support this species.	None.
Desert bighorn sheep <i>Ovis canadensis nelson</i> (Including Peninsular bighorn sheep DPS (pop. 2))	FE	ST, FP	Occupies steep mountainous areas and canyons.	The project site does not provide native habitats with sufficient steep/mountainous or rocky areas that may support this species.	None.
Palm Springs pocket mouse <i>Perognathus longimembris bangsi</i>	--	CSC	Generally occurs in desert wash, riparian, scrub, and sagebrush habitats	Due to the historical cultivation of this site and the levels of human disturbance, this species would not be expected to occur at the project site.	None.
American badger <i>Taxidea taxus</i>	--	CSC	Occurs in a large variety of desert habitats	Due to the historical cultivation of this site and the levels of human disturbance, this species would not be expected to occur at the project site.	None.
Palm Springs round-tailed ground squirrel <i>Xerospermophilus tereticaudus chlorus</i>	--	CSC	Generally occurs in desert wash, alkali, scrub, and levees in sandy habitats	Due to the historical cultivation of this site and the levels of human disturbance, this species would not be expected to occur at the project site.	None.

STATUS KEY:

Federal

FE: Federally-listed Endangered

FT: Federally-listed Threatened

FD: Federally-delisted

Appendix A: Special-Status Animal Species with Potential to Occur on the Project Site.

FC: Federal Candidate for ESA Listing

State

SE: State-listed Endangered

ST: State-listed Threatened

CSC: California Species of Special Concern

WL: State Watch List

SOURCES:

¹ Excerpted from CNDDDB (2022)

² The potential for occurrence is based on occurrences recorded in the CNDDDB (2022) and CNPS (2022), knowledge of species requirements, and site inspections during 2022 field survey

Appendix D
Floral and Faunal Compendium

Floral and Faunal Compendium

Note: This is a list of species observed as part of the site visit on November 17 and 23, 2022. This species list does not represent a comprehensive study consisting of multiple visits and is does not constitute a protocol-level or focused survey for plants or animals.

Kingdom Plantae	
DICOTS	
Aizoaceae (Fig-Marigold Family)	
Horse purslane	<i>Trianthema portulacastrum</i>
Amaranthaceae (Amaranth Family)	
Tumbleweed	<i>Amaranthus albus*</i>
Lamb's quarters	<i>Chenopodium album*</i>
Hoary saltbush	<i>Atriplex canescens</i>
Big saltbush	<i>Atriplex lentiformis</i>
Cattle spinach	<i>Atriplex polycarpa</i>
California goosefoot	<i>Chenopodium californicum</i>
Russian thistle	<i>Salsola tragus*</i>
Bush seepweed	<i>Suaeda nigra</i>
Apocynaceae (Dogbane Family)	
Fringed twinevine	<i>Funastrum cynanchoides</i>
Asteraceae (Sunflower Family)	
Annual burrweed	<i>Ambrosia acanthicarpa</i>
Hairy desert sunflower	<i>Geraea canescens</i>
Spanish needle	<i>Palafoxia arida</i>
Arrow weed	<i>Pluchea sericea</i>
Brassicaceae (Mustard Family)	
Mustard	<i>Brassica tournefortii*</i>
Cucurbitaceae (Gourd Family)	
Coyote melon	<i>Cucurbita palmata</i>
Boraginaceae (Borane Family)	
Plicate coldenia	<i>Tiquilia plicata</i>
Euphorbiaceae (Spurge Family)	
Smallseed sandmat	<i>Euphorbia polycarpa</i>
Fabaceae (Pea Family)	
Jerusalem thorn	<i>Parkinsonia aculeata</i>
Velvet mesquite	<i>Prosopis velutina</i>
Emory's indigo bush	<i>Psoralea emoryi*</i>
Geraniaceae (Geranium Family)	
Coastal heron's bill	<i>Erodium cicutarium*</i>
Malvaceae (Mallow Family)	
White mallow	<i>Eremalche exilis</i>
Cheeseweed	<i>Malva parviflora*</i>

Nyctaginaceae (Four O'clock Family)	
Desert sand verbena	<i>Abronia villosa</i> var. <i>villosa</i>
Solanaceae (Nightshade Family)	
Jimsonweed	<i>Datura wrightii</i>
TAMARICACEAE (Tamarisk Family)	
Tamarisk	<i>Tamarix ramosissima</i> *
Zygophyllaceae (Caltrop Family)	
Puncture vine	<i>Tribulus terrestris</i> *
MONOCOTS	
Agavaceae (Agave Family)	
American century plant	<i>Agave americana</i> *
Arecaceae (Palm Family)	
California fan palm	<i>Washingtonia filifera</i>
Poaceae (Grass Family)	
Bermuda grass	<i>Cynodon dactylon</i> *
Old han schismus	<i>Schismus barbatus</i> *
Red brome	<i>Bromus rubens</i> *
Kingdom Animalia	
LIZARDS	
Phrynosomatidae (Spiny Lizard Family)	
Fence lizard	<i>Sceloporus occidentalis</i>
BIRDS	
Columbidae (Pigeon and Dove Family)	
Rock pigeon	<i>Columba livia</i>
Eurasian collared dove	<i>Streptopelia decaocto</i> *
Mourning dove	<i>Zenaida macroura</i>
Corvidae (Crow Family)	
Common raven	<i>Corvus corax</i>
Cuculidae (Cuckoo Family)	
Greater Roadrunner	<i>Geococcyx californianus</i>
Strigidae (True Owls)	
Burrowing Owl	<i>Athene cunicularia</i>
Tyrannidae (Tyrant Flycatcher Family)	
Say's phoebe	<i>Sayornis saya</i>
MAMMALS	
Canidae (Canid Family)	
Domestic dog (scat)	<i>Canis latrans</i> *
Asterisk (*) denotes non-native or invasive species.	

Appendix E
CVMSHCP Required Avoidance, Minimization, and Mitigation Measures

4.4 Required Avoidance, Minimization, and Mitigation Measures

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

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

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

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

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

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

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

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

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

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

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

If fresh sign is located, the Development area must be fenced with tortoise-proof fencing and a clearance survey conducted during the clearance window. Desert tortoise clearance surveys shall be conducted during the clearance window from February 15 to June 15 and September 1 to October 31 or in accordance with the most recent Wildlife Agency protocols. Clearance surveys must cover 100% of the Development area. A

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clearance survey must be conducted during different tortoise activity periods (morning and afternoon). All tortoises encountered will be moved from the Development site to a specified location. Prior to issuance of the Permits, CVCC will either use the *Permit Statement Pertaining to High Temperatures for Handling Desert Tortoises* and *Guidelines for Handling Desert Tortoises During Construction Projects*, revised July 1999, or develop a similar protocol for relocation and monitoring of desert tortoise, to be reviewed and approved by the Wildlife Agencies. Thereafter, the protocol will be revised as needed based on the results of monitoring and other information that becomes available.

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

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

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

1. A person from the entity contracting the construction shall act as the contact person with the representative of the appropriate RMUC. He/she will be responsible for overseeing compliance with the protective stipulations as stated in this protocol.
2. Prior to any construction activity within the Conservation Areas, the contact person will meet with the representative of the appropriate RMUC to review the plans for the project. The representative of the appropriate RMUC will review alignment, pole spacing, clearing limits, burrow locations, and other specific project plans which have the potential to affect the desert tortoise. He or she may recommend modifications to the contact person to further avoid or minimize potential impacts to desert tortoise.

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3. The construction area shall be clearly fenced, marked, or flagged at the outer boundaries to define the limits of construction activities. The construction right-of-way shall normally not exceed 50 feet in width for standard pipeline corridors, access roads and transmission corridors, and shall be minimized to the maximum extent Feasible. Existing access roads shall be used when available, and rights-of-way for new and existing access roads shall not exceed 20 feet in width unless topographic obstacles require greater road width. Other construction areas including well sites, storage tank sites, substation sites, turnarounds, and laydown/staging sites which require larger areas will be determined in the pre-construction phase. All construction workers shall be instructed that their activities shall be confined to locations within the fenced, flagged, or marked areas.
4. An Acceptable Biologist shall conduct pre-construction clearance surveys of all areas potentially disturbed by the proposed project. Any winter burrows discovered in the Conservation Areas during the pre-construction survey shall be avoided or mitigated. The survey shall be submitted to the representative of the appropriate RMUC as part of plan review.
5. All site mitigation criteria shall be determined in the pre-construction phase, including but not limited to seeding, barrier fences, leveling, and laydown/staging areas, and will be reviewed by the representative of the appropriate RMUC prior to implementation.
6. A worker education program shall be implemented prior to the onset of each construction project. All construction employees shall be required to read an educational brochure prepared by the representative of the appropriate RMUC and/or the RMOC and attend a tortoise education class prior to the onset of construction or site entry. The class will describe the sensitive species which may be found in the area, the purpose of the MSHCP Reserve System, and the appropriate measures to take upon discovery of a sensitive species. It will also cover construction techniques to minimize potential adverse impacts.
7. All pre-construction activities which could Take tortoises in any manner (e.g., driving off an established road, clearing vegetation, etc.) shall occur under the supervision of an Acceptable Biologist.
8. If there are unresolvable conflicts between the representative of the appropriate RMUC and the contact person, then the matter will be arbitrated by the RMOC and, if necessary, by CVCC.

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

- An Acceptable Biologist shall oversee construction activities to ensure compliance with the protective stipulations for the desert tortoise.
- Desert tortoises found above ground inside the project area during construction shall be moved by an Acceptable Biologist out of harm's way and placed in a winter

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den (at a distance no greater than 250 feet). If a winter den cannot be located, the USFWS or CDFG shall determine appropriate action with respect to the tortoise. Tortoises found above ground shall be turned over to the Acceptable Biologist

- No handling of tortoises will occur when the air temperature at 15 centimeters above ground exceeds 90 degrees Fahrenheit.
- Desert tortoise burrows shall be avoided to the maximum extent Feasible. An Acceptable Biologist shall excavate any burrows which cannot be avoided and will be disturbed by construction. Burrow excavation shall be conducted with the use of hand tools only, unless the Acceptable Biologist determines that the burrow is unoccupied immediately prior to burrow destruction.
- Only burrows within the limits of clearing and surface disturbance shall be excavated. Burrows outside these limits, but at risk from accidental crushing, shall be protected by the placement of deterrent barrier fencing between the burrow and the construction area. Installation and removal of such barrier fencing shall be under the direction and supervision of an Acceptable Biologist.
- For electrical transmission line and road construction projects, only burrows within the right-of-way shall be excavated. Burrows outside the right-of-way, but at risk from accidental crushing, shall be protected by the placement of deterrent barrier fencing between the burrow and the right-of-way. Installation and removal of such barrier fencing shall be under the direction and supervision of an Acceptable Biologist.
- Tortoises in the Conservation Areas are not to be removed from burrows until appropriate action is determined by USFWS or CDFG with respect to the tortoise. The response shall be carried out within 72 hours.
- Blasting is not permissible within 100 feet of an occupied tortoise burrow.

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

- All trenches, pits, or other excavations shall be inspected for tortoises by an Acceptable Biologist prior to filling.
- All pipes and culverts stored within desert tortoise Habitat shall have both ends capped to prevent entry by desert tortoises. During construction, all open ended pipeline segments that are welded in place shall be capped during periods of construction inactivity to prevent entry by desert tortoises.
- Topsoil removed during trenching shall be re-spread on the pipeline construction area following compaction of the backfill. The area shall be restored as determined during the environmental review.
- All test pump water will be routed to the nearest wash or natural drainage. The route will be surveyed by an Acceptable Biologist. If tortoises are found in the drainage area the Acceptable Biologist will remove the tortoises.
- Powerlines associated with water development, such as to provide power for

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pumps, should be buried underground adjacent to the pipe. All above ground structures deemed to be necessary shall be equipped with functional anti-perching devices that would prevent their use by ravens and other predatory birds, and shall adhere to the electrical distribution protocol which follows.

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

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

- Work areas shall be inspected for desert tortoises within 24 hours of the onset of construction. To facilitate implementation of this condition, burrow inspection and excavation may begin no more than seven (7) days in advance of construction

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activities, as long as a final check for desert tortoises is conducted at the time of construction.

- All pre-construction activities which could Take tortoises in any manner (e.g., driving off an established road, clearing vegetation, etc.) shall occur under the overall supervision of an Acceptable Biologist. Any hazards to tortoises created by this activity, such as drill holes, open trenches, pits, other excavations, or any steep-sided depressions, shall be checked three times a day for desert tortoises. These hazards shall be eliminated each day prior to the work crew leaving the site, which may include installing a barrier that will preclude entry by tortoises. Open trenches, pits or other excavations will be backfilled within 72 hours, whenever possible. A 3:1 slope shall be left at the end of every open trench to allow trapped desert tortoises to escape. Trenches not backfilled within 72 hours shall have a barrier installed around them to preclude entry by desert tortoises. All trenches, pits, or other excavations shall be inspected for tortoises by a biological monitor trained and approved by the Acceptable Biologist prior to filling.
- If a desert tortoise is found, the biological monitor shall notify the Acceptable Biologist who will remove the animal as soon as possible.
- Only burrows within the limits of clearing and surface disturbance shall be excavated. Burrows outside these limits, but at risk from accidental crushing, shall be protected by the placement of deterrent barrier fencing between the burrow and the construction area. The barrier fence shall be at least 20 feet long and shall be installed to direct the tortoise leaving the burrow away from the construction area. Installation and removal of such barrier fencing shall be under the direction and supervision of the biological monitor.
- If blasting is necessary for construction, all tortoises shall be removed from burrows within 100 feet of the blast area.

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

Fluvial Sand Transport. Activities, including O&M of facilities and construction of permitted new projects, in fluvial sand transport areas in the Cabazon, Stubbe and Cottonwood Canyons, Snow Creek/Windy Point, Whitewater Canyon, Whitewater Floodplain, Upper Mission Creek/Big Morongo Canyon, Mission Creek/Morongo Wash, Willow Hole, Long Canyon, Edom Hill, Thousand Palms, West Deception Canyon, and

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Indio Hills/Joshua Tree National Park Linkage Conservation Areas will be conducted in a manner to maintain the fluvial sand transport capacity of the system.

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

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

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

For new projects in the above listed Conservation Areas, no toxic or invasive plant species may be used for landscaping. For existing public infrastructure facilities which have landscaping in Peninsular bighorn sheep Habitat in the Cabazon, Snow Creek/Windy Point, and Santa Rosa and San Jacinto Mountains Conservation Areas, the Permittees who have such facilities will, with respect to those facilities, develop and implement a plan and schedule to remove or prevent access to oleander and any other plants known to be toxic to Peninsular bighorn sheep. The plan and schedule will be prepared within one (1) year of Permit issuance.

Triple-ribbed milkvetch. This measure does not apply to single-family residences and any non-commercial accessory uses and structures including but not limited to second units on an existing legal lot, or to O&M of Covered Activities. It is understood that O&M for infrastructure developed as part of a private development approved in compliance with the MSHCP that is later transferred to a public entity is included as a Covered Activity. For

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Covered Activities within modeled triple-ribbed milkvetch Habitat in the Whitewater Canyon, Whitewater Floodplain, Upper Mission Creek/Big Morongo Canyon, and Santa Rosa and San Jacinto Mountains Conservation Areas, surveys by an Acceptable Biologist will be required for activities during the growing and flowering period from February 1 - May 15. Any occurrences of the species will be flagged and public infrastructure projects shall avoid impacts to the plants to the maximum extent Feasible. In particular, known occurrences on a map maintained by CVCC shall not be disturbed.

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

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

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

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