

APPENDIX C

VENTANA Project,
APNs 602-070-004-1, 602-080-001-9, & 602-080-002-0

FINAL Biological Resources Assessment &
Coachella Valley Multiple Species Habitat Conservation Plan
Compliance Report
February 23 2021

Prepared for

City of Indio
100 Civic Center Mall
Indio, CA 92201

Prepared by

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Ventana Project, APNs 602-070-004-1, 602-080-001-9, & 602-080-002-0

**FINAL Biological Resources Assessment & Coachella Valley
Multiple Species Habitat Conservation Plan Compliance Report**



City of Indio, Riverside County, California

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23 February 2021

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1.0 INTRODUCTION

At the request of Terra Nova Planning and Research, Inc., this biological resources assessment & Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) compliance report was prepared by Wood Environment & Infrastructure Solutions, Inc. (Wood) for the proposed Ventana residential development project in the City of Indio (project). The 45.17-acre project is located immediately north of Avenue 50 and generally south of Avenue 49, west of Madison Street and east of Jefferson Street (Figure 1). It is located within Section 33 of Township 5 South, Range 7 East of the United States Geological Survey (USGS) 7.5' *La Quinta, Calif.* quadrangle (Figure 2). The site is surrounded by existing residential and rural residential areas. The project site is on three assessor's parcel numbers (APNs): 602-070-004-1, 602-080-001-9, & 602-080-002-0.

Information contained herein is intended to be used for compliance with state and federal regulations intended to protect wildlife, special status elements, and their habitats.

2.0 REGULATORY FRAMEWORK

Several relevant biological and environmental regulations have been included in this section, but the CVMSHCP is the primary regulatory entity for this project.

2.1 Coachella Valley Multiple Species Habitat Conservation Plan

Finalized in October 2008, the CVMSHCP is a comprehensive regional plan that addresses the conservation needs of 27 species of native flora and fauna and 27 natural vegetation communities occurring throughout the Coachella Valley region of western Riverside County, California (Coachella Valley Association of Governments [CVAG] 2020). Permits for the CVMSHCP were issued by the California Department of Fish and Game (CDFG) [now the California Department of Fish and Wildlife (CDFW)] on September 9, 2008 and the United States Fish and Wildlife Service (USFWS) on October 1, 2008 (TE104604-0). The CVMSHCP serves two primary purposes: Balancing environmental protection and economic development objectives in the CVMSHCP area and simplifying compliance with endangered species related laws. The CVMSHCP accomplishes this by conserving unfragmented habitat to permanently protect and secure viable populations of the covered species.

The covered species include plants and animals that are either currently listed as threatened or endangered, are proposed for listing, or are believed by an USFWS and CDFW appointed Scientific Advisory Committee, to have a high probability of being proposed for listing in the future if not provided protection by the CVMSHCP. The goal of the CVMSHCP is to meet the requirements of the state and federal endangered species acts, while at the same time allowing for the economic growth (land development) within the CVMSHCP area without significant delay or hidden costs. Under the CVMSHCP, mitigation is required from all new development projects occurring in the CVMSHCP area for the purpose of assembling a preserve system for the covered species and natural vegetation communities within areas identified as having high conservation value.

Federal approval for the CVMSHCP was achieved under the Endangered Species Act (ESA or Act). The USFWS and the National Marine Fisheries Service are the designated federal agencies accountable for administering the ESA. ESA defines species as "endangered" or "threatened" and provides regulatory protection at the federal level. Section 10(a) of the ESA authorizes the issuance of incidental take permits and establishes standards for the content of habitat conservation plans, such as the CVMSHCP.



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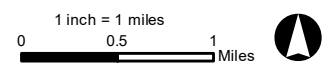


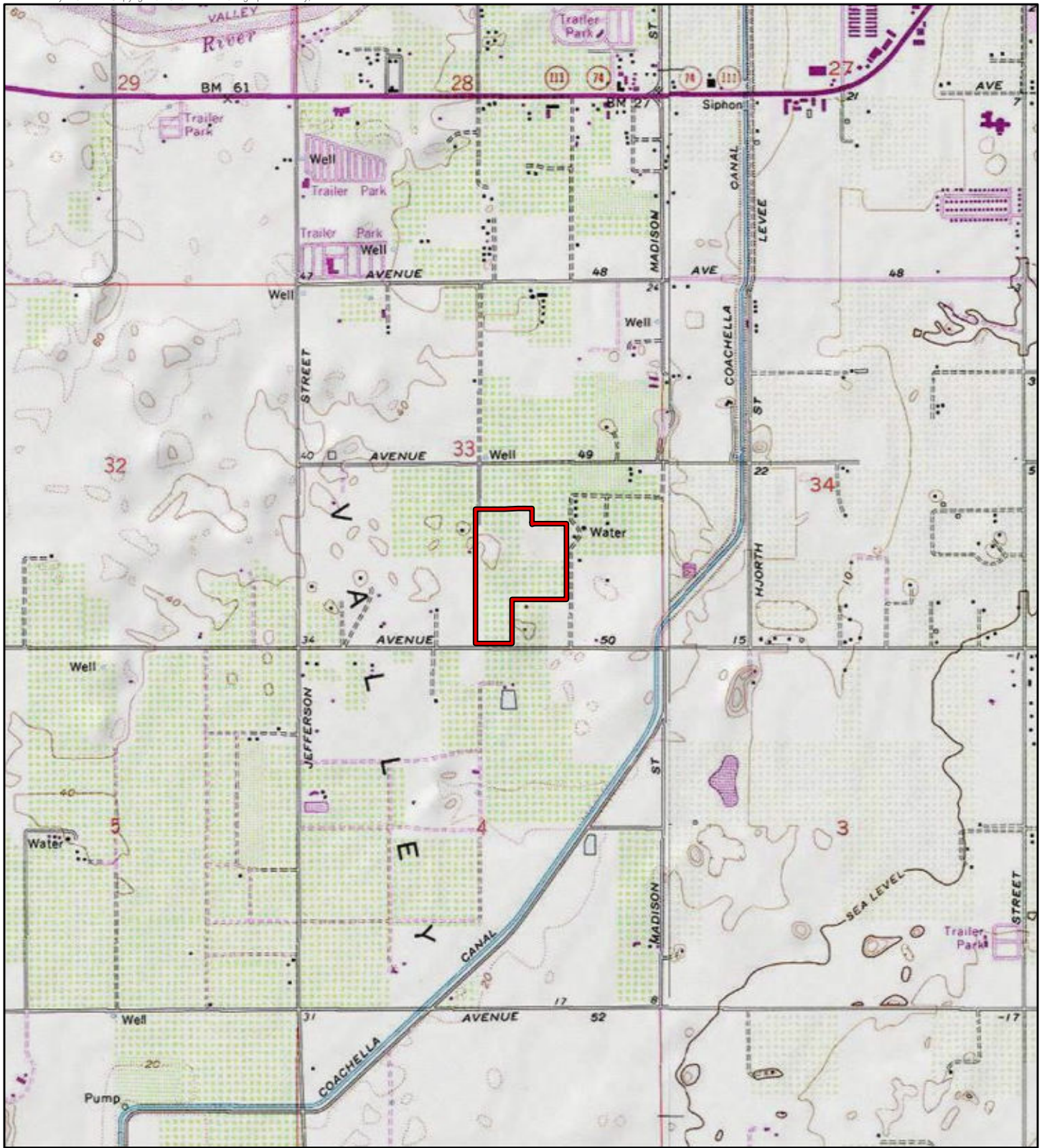
FIGURE 1

Vicinity & Location
Ventana Project
Biological Resources Assessment &
CVMHCP Compliance Report
Indio, CA

wood.

 Project Boundary

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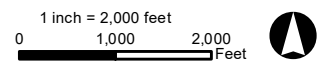


FIGURE 2

Site Topography
Ventana Project
Biological Resources Assessment &
CVMHCP Compliance Report
Indio, CA

wood.

 Project Boundary

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State approval for the CVMSHCP was under the Natural Community Conservation Planning (NCCP) Program, managed by the CDFW. NCCPs are intended to conserve multiple species and their associated habitats, while also providing for compatible use of private lands. Through local planning, the NCCP planning process is designed to provide protection for wildlife and natural habitats before the environment becomes so fragmented or degraded by development that species listing are required under the California Endangered Species Act (CESA). Instead of conserving small, often isolated “islands” of habitat for just one listed species, agencies, local jurisdictions, and/or other interested parties have an opportunity through the NCCP to work cooperatively to develop plans that consider broad areas of land for conservation that would provide habitat for many species. Partners enroll in the programs and, by mutual consent, areas considered to have high conservation priorities or values are set aside and protected from development. Partners may also agree to study, monitor, and develop management plans for these high value “reserve” areas. The NCCP provides an avenue for fostering economic growth by allowing approved development in areas with lower conservation value. The Coachella Valley NCCP is included as a part of the CVMSHCP.

2.2 Protection of Migratory Birds

2.2.1 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) signed by the U.S., Great Britain, Mexico, Japan, and the countries of the former Soviet Union make it unlawful to pursue, capture, kill, and/or possess, or attempt to engage in any such conduct to any migratory bird, nest, egg or parts thereof listed in the MBTA document (USFWS 2018). The Secretary of the Interior can issue permits for incidental take of migratory bird species. As with the ESA, the MBTA also allows the Secretary of the Interior to grant permits for the incidental take of these protected migratory bird species.

The USFWS permit for the CVMSHCP allows only for the take of covered bird species *which are also listed under the ESA*, as amended and which are also listed under the MBTA. For other birds protected by the MBTA and not listed under the ESA *no take is authorized* (including killing and wounding of any such birds or take of eggs and active nests). Take is defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct.”

2.2.2 Section 3503, 3505.5, & 3513 of the State Fish and Game Code

Section 3503 makes it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3505.5 makes it unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds-of-prey, i.e.: owls, hawks, eagles, etc.) or to take, possess, or destroy the nest or eggs of any bird-of-prey. Section 3513 makes it unlawful to take or possess any migratory nongame bird as designated in the MBTA. See California Legislative Information (2020).

2.3 Waters of the United States and the State of California

Impacts to federal and state jurisdictional waters are not covered by the CVMSHCP.

2.3.1 United States Army Corps of Engineers (USACE)

The USACE regulates the discharge of dredged or fill material in waters of the United States (WUS) pursuant to Section 404 of the Clean Water Act (CWA).

2.3.2 Regional Water Quality Control Board (RWQCB)

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

2.3.3 California Department of Fish and Wildlife

The CDFW regulates water resources under Section 1600-1616 of the California Fish and Game Code. Section 1602 states:

“An entity may not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake (CDFW 2015a).”

3.0 METHODS

3.1 Literature Review

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

The literature review included the following documents:

- California Natural Diversity Data Base (CNDDB) RareFind 5 (CDFW 2020a)
- California Native Plant Society's (CNPS) Inventory of Rare, Threatened, and Endangered Plants of California (CNPS 2020)
- CVMSHCP (CVAG 2020)
- United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS). 2019a. Web Soil Survey
- USGS 7.5' *La Quinta, Calif.* quadrangle

This document utilized the following standard references: for plant communities, the CVMSHCP (2020); for flora, the Jepson Flora Project (2020) and USDA NRCS PLANTS Database (2019b); for amphibians, reptiles, and mammals, CDFW (2016); and for birds, the California Bird Records Committee (2020).

3.2 Field Assessment

The field assessment visit was conducted on 9 October 2020 by Wood Senior Biologist John F. Green. Suitable habitat was assessed based on the presence or absence of habitat components (e.g., soils, vegetation and topography) characteristic of the potentially occurring special-status biological resources determined by the literature review. Pedestrian transects were walked around the entire site. All flora and fauna observed or otherwise detected (e.g., dead remains [primarily plants], vocalizations, presence of scat, tracks, and/or bones) during the course of this assessment were recorded in field notes and are included in Appendices 1 and 2. Plant species of uncertain identity were photographed for identification in the office. General weather and site

conditions were also recorded at the beginning and end of each visit. Temperatures and wind speeds were recorded with a handheld Kestrel anemometer. Temperatures during the morning visit ranged from 72 to 76 degrees Fahrenheit with winds from 1 to 6 miles per hour under partly cloudy skies. Representative photos were taken (Appendix 3).

4.0 RESULTS

4.1 Topography and Soils

The project site is relatively flat, with the exception of a small hill on the west central edge of the site. Onsite elevation ranges from approximately 25 – 45 feet (7.6 – 13.7 meters) above mean sea level (Figure 2).

The Web Soil Survey (USDA, NRCS 2019a) shows the following soil types on the site (Figure 3):

- Myoma fine sand, 0 - 5% slopes
- Gilman fine sandy loam, 0 - 2% slopes
- Indio fine sandy loam

Myoma soils are somewhat excessively drained with very slow runoff and rapid permeability. They are moderately alkaline fine and very fine sands which formed in sand blown from recent alluvium. Slopes are level to rolling.

The Gilman series consists of very deep, well drained soils that formed in stratified stream alluvium. Gilman soils are on flood plains and alluvial fans and have slopes of 0 to 3 percent.

The Indio series consists of very deep, well or moderately well drained soils formed in alluvium derived from mixed rock sources. Indio soils are on alluvial fans, lacustrine basins and flood plains and have slopes of 0 to 3 percent.

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Project Boundary

Soil Types

- GbA - Gilman fine sandy loam, 0 to 2 percent slopes
- Ip- Indio fine sandy loam
- MaB - Myoma fine sand, 0 to 5 percent slopes

1 inch = 250 feet
0 125 250 Feet



FIGURE 3

Soil Types
Ventana Project
Biological Resources Assessment &
CVMHCP Compliance Report
Indio, CA

wood.

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4.2 Hydrology / Jurisdictional Waters

No hydrological features such as washes or basins were present on site.

4.3 Vegetation

The site has predominately been utilized for agriculture, but is currently inactive. Agricultural areas of the site are currently covered by the dry remains of weedy annuals. Only the sandy hill along the northwest central edge of the site retains disturbed natural habitat. In the parlance of the CVMSHCP that area appears to be a natural community consisting of a stabilized, shielded desert sand field which includes mesquite hummocks (Figure 4).

A list of the plant species detected during the field visit, including common and scientific names, is attached (Appendix 1). It does not include horticultural species planted around the developed periphery of the site. It should be noted that short-term biological studies of this nature are limited by the seasonality of plants and the timing of field visits. Most annuals were identified from dried remains.

4.4 CVMSHCP Conservation Areas

The project site is not within or adjacent to any CVMSHCP conservation area.

4.5 Wildlife

Vertebrate wildlife directly observed and/or detected otherwise (e.g., scat, bones, prints, feathers, burrows, etc.) during the survey included 28 species. This included 25 birds and at least three mammals. See Appendix 2 for a complete list of all vertebrate wildlife species detected.

It should be noted that short-term biological studies of this nature are limited by seasonality (for example migratory birds and “hibernating” mammals and reptiles), the fossorial and nocturnal habits of many mammals and reptiles, and the timing of field surveys. A complete inventory of the wildlife on the site would require extensive year-round surveys for fish, amphibians, reptiles, birds, and mammals including, for example: pitfall traps for reptiles, and live trapping and/or the placement of tracking stations for the detection of nocturnal mammals.

No reptiles were observed on the site, likely owing to the relatively cool morning visit. Common species such as the side-blotched lizard (*Uta stansburiana*) are likely to occur.

The 25 species of birds observed on the site included primarily native species. Only two nonnative species were observed, the European starling (*Sturnus vulgaris*) and house sparrow (*Passer domesticus*), but others such as the Eurasian collared-dove (*Streptopelia decaocto*) and rock pigeon (*Columba livia*) may occur. Common native species of desert and desert riparian habitats observed included, but were not limited to: American kestrel (*Falco sparverius*), common raven (*Corvus corax*), and verdin (*Auriparus flaviceps*). Other common species expected to occur include, but are not limited to, white-winged dove (*Zenaida asiatica*), white-throated swift (*Aeronautes saxatalis*), and Anna's hummingbird (*Calypte anna*).

Mammals detected on the site included the Audubon's cottontail (*Sylvilagus audubonii*), coyote, (*Canis latrans*), and a variety of small mammal burrows and tracks were observed. Other common species that could occur on the site include black-tailed jackrabbit (*Lepus californicus*) and deer mouse (*Peromyscus maniculatus*).

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1 inch = 250 feet
0 125 250 Feet



- Project Boundary
- Vegetation Communities**
 - Agriculture (Inactive)
 - Stabilized, Shielded Desert Sand Field Including Mesquite Hummocks

FIGURE 4

Vegetation Communities
Ventana Project
Biological Resources Assessment &
CVMHCP Compliance Report
Indio, CA

wood.

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4.6 Special-status Elements

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

Knowledge of habitat associations, natural history, seasonality, and distribution is essential in the assessment of the potential for occurrence of the various sensitive plants and animals known to occur throughout the region. For these reasons, special-status species that were not observed on the site have the potential to occur based on their geographic distribution, habitat preferences, and the regional location of the site. Tables 1-7 below summarize sensitive species known to occur in the vicinity of the site and include their potential occurrence status on the site based on the best available information and the collective expertise of Wood biologists.

The CVMSHCP provides conservation for 27 imperiled plant and animal species and 27 natural communities (vegetation). These include federal and state-listed species, federal and state species of concern, and species on the CNPS rare plant species lists. The CVMSHCP has created modeled habitat polygons for many of those species. No modeled habitat is present within the project site. Several special-status species not covered by the CVMSHCP may also potentially occur on site.

The literature review and biological resources assessment resulted in the identification of 31 special-status elements which were observed on the site, had CNDDDB records within an approximate five-mile radius of the site, and/or which had habitat on the site. These included 12 plants, one vegetation community, two invertebrates, one amphibian, two reptiles, nine birds, and four mammals. Tables 1 through 7 provide a complete list of these sensitive biological resources, their associated status, their general habitat associations, and their respective site occurrence potential based on geographic distribution and presence of potentially suitable habitat.

Table 1. Special-status Plants

Species	Status	Habitat	Probability
<i>Abronia villosa</i> var. <i>aurita</i> chaparral sand-verbena	CVMSHCP = No F = ND C = S2 CNPS = 1B.1	Sandy areas in chaparral, coastal scrub, desert dunes. 75 to 1600 meters (m.). Blooms (B): January – September.	Absent Site below known elevational range
<i>Astragalus lentiginosus</i> var. <i>coachellae</i> Coachella Valley milk-vetch	CVMSHCP = Yes F = END C = S1 CNPS = 1B.2	Sonoran desert scrub; sandy flats, washes, outwash fans, sometimes on dunes. 40 to 665 m. B: January - September	Absent Site below known elevational range

Table 1. Special-status Plants

Species	Status	Habitat	Probability
<i>Astragalus preussii</i> var. <i>laxiflorus</i> Lancaster milk-vetch	CVMSHCP = No F = ND C = S1 CNPS = List 1B.1	Chenopod scrub. 700-735 m. B: Mar-May	Absent Site below known elevational range
<i>Astragalus sabulorum</i> gravel milk-vetch	CVMSHCP = No F = ND C = S2 CNPS = 2B.2	Sandy or gravelly flats, washes, and roadsides in desert dunes, Mojavean desert scrub, & Sonoran desert scrub. -60 to 930 m. B: February – June.	Low Limited habitat
<i>Ditaxis claryana</i> glandular ditaxis	CVMSHCP = Considered F = ND C = S2 CNPS = 2B.2	Sandy soils in dry washes and on rocky hillsides in Mojavean & Sonoran desert scrub. 0 to 465 m. B: October – March.	Low Habitat limited / absent
<i>Ditaxis serrata</i> var. <i>californica</i> California ditaxis	CVMSHCP = No F = ND C = S2? CNPS = List 3.2	Sonoran Desert scrub. 30-1000 m. B: March - December.	Absent Site below known elevational range
<i>Euphorbia abramsiana</i> Abram's spurge	CVMSHCP = No F = ND C = S2 CNPS List = 2B.2	Sandy sites in Mojave and Sonoran desert scrub. - 5 – 1,450 m. B: (August) September - November	Low Limited habitat
<i>Johnstonella costata</i> ribbed cryptantha	CVMSHCP = No F = ND C = S4 CNPS List = 4.3	Desert dunes in Mojave and Sonoran desert scrub. -60 – 500 m. B: February - May	Low Habitat limited / absent
<i>Juncus acutus</i> ssp. <i>leopoldii</i> southwestern spiny rush	CVMSHCP = No F = ND C = S4 CNPS List = 4.2	Meadows & alkaline seeps, coastal salt marshes. 3 – 900 m. B: (March) May – June.	Absent No suitable habitat
<i>Nemacaulis denudata</i> var. <i>gracilis</i> slender cottonheads	CVMSHCP = No F = ND C = S2 CNPS = 2B.2	Sandy places in coastal dunes, desert dunes, & Sonoran desert scrub. -50 to 400 m. B: March - May	Low Limited habitat
<i>Petalonyx linearis</i> narrow-leaf sandpaper-plant	CVMSHCP = No F = ND C = S2S3 CNPS = 2B.3	Mojavean desert scrub and Sonoran desert scrub in sandy or rocky canyons. -25 to 1,115 m. B: (January – February) March – May (June – December).	Low Habitat limited / absent
<i>Pseudorontium cyathiferum</i> Deep Canyon snapdragon	CVMSHCP = No F = ND C = S1 CNPS = List 2B.3	Sonoran desert scrub in rocky washes and on rocky slopes in the immediate vicinity of Deep Canyon. 0-800 m. B: February -April	Absent Site east of known range in California

Table 1. Special-status Plants

Species	Status	Habitat	Probability
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Table 2. Special Status Vegetation Communities

Community	Status	Habitat	Probability
Mesquite Bosque	CVMSHCP = Yes (Mesquite hummocks) F = ND C = S2.1	Honey mesquite thickets (<i>Prosopis glandulosa</i> var. <i>torreyana</i>)	Occurs

Table 3. Special-status Invertebrates

Species	Status	Habitat	Probability
<i>Dinacoma caseyi</i> Casey's June beetle	CVMSHCP = No F = END C = S1	Found only in two populations in a small area of southern Palm Springs (Palm Canyon Wash)	Absent Site not in range of the species
<i>Macrobaenetes valgum</i> Coachella giant sand treader cricket	CVMSHCP = Yes F = ND C = S1S2	Active sand dune hummocks and ridges. Sites favorable to permanent habitation include spring-moistened sands.	Low Habitat marginal / absent

Table 4. Special-status Amphibians

Species	Status	Habitat	Probability
<i>Batrachoseps major aridus</i> desert slender salamander	MSHCP = No F = END C = END , S1	Known only from Hidden Palm & Guadalupe Canyons in palm oases, microhabitat is under limestone sheets, rocks, and talus at the base of shaded and moist west and north-facing walls.	Absent Out of range, no habitat

Table 5. Special-status Reptiles

Species	Status	Habitat	Probability
<i>Phrynosoma mcallii</i> flat-tailed horned lizard	CVMSHCP = Yes F = ND C = SSC, S2	Restricted to desert washes and desert flats; requires vegetative cover, ants, and fine sand.	Absent Isolated patch of marginal habitat insufficient to sustain a population

<i>Uma inornata</i> Coachella Valley fringe-toed lizard	CVMSHCP = Yes F = THR C = END , S1	Requires fine, loose, windblown sand interspersed with hardpan and widely spaced desert shrubs.	Absent Isolated patch of marginal habitat insufficient to sustain a population
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Table 6. Special-status Birds

Species	Status	Habitat	Probability
<i>Athene cunicularia</i> burrowing owl	CVMSHCP = Yes* F = MBTA, BCC C = SSC, S2	Open, dry annual or perennial grassland, deserts & scrublands characterized by low-growing vegetation. Burrows essential.	Low Habitat limited and isolated, few potential burrow sites
<i>Calypte costae</i> Costa's hummingbird	CVMSHCP = No F = MBTA, BCC C = S4	Primary habitats are desert wash, edges of desert riparian and valley foothill riparian, coastal scrub, desert scrub, desert succulent shrub, lower-elevation chaparral, and palm oasis.	Occurs Nesting and foraging habitat on site.
<i>Falco mexicanus</i> prairie falcon	CVMSHCP = No F = MBTA, BCC C = SSC, S3	Breeding sites located on cliffs, but forages far afield.	Low No nesting habitat, potential for foraging only
<i>Lanius ludovicianus</i> loggerhead shrike	CVMSHCP = No F = MBTA, BCC C = SSC, S4	Found in open habitats with widely spaced vegetation.	Occurs Suitable nesting and foraging habitat present
<i>Phalacrocorax auritus</i> double-crested cormorant	CVMSHCP = No F = MBTA C = WL, S4	Colonial nester on coastal cliffs, offshore islands, and along lake margins.	Occurs Flyover only, no nesting or foraging habitat
<i>Poliophtila melanura</i> black-tailed gnatcatcher	CVMSHCP = No F = MBTA C = WL, S3S4	Primarily inhabits wooded desert wash habitats; also occurs in desert scrub habitat, especially in winter.	Occurs Suitable nesting and foraging habitat present
<i>Pyrocephalus rubinus</i> vermillion flycatcher	CVMSHCP = No F = MBTA C = SSC (nesting), S2S3	During nesting, inhabits desert riparian adjacent to irrigated fields, irrigation ditches, pastures, & other open, mesic areas with nest in cottonwood, willow, mesquite, or other large desert riparian trees.	Low Nesting, foraging habitat at margins of site
<i>Toxostoma crissale</i> crissal thrasher	CVMSHCP = Yes* F = MBTA C = SSC, S3	Resident of deserts in riparian and wash habitats. Nests in dense vegetation.	Absent No suitable habitat

Table 6. Special-status Birds

Species	Status	Habitat	Probability
<i>Toxostoma lecontei</i> LeConte's thrasher	CVMSHCP = Yes * F = MBTA, BCC C = SSC (San Joaquin population only), S3	Primarily utilizes open desert washes, desert scrub, alkali desert scrub, and desert succulent scrub habitats; commonly nests in a dense, spiny shrub or densely branched cactus.	Absent Habitat too limited and isolated to support this species

* Species is to be conserved under the CVMSHCP, but is still protected by the MBTA

Table 7. Special-status Mammals

Species	Status	Habitat	Probability
<i>Lasiurus xanthinus</i> western yellow bat	CVMSHCP = Yes F = ND C = SSC, S3 WBWG = H	Found in valley foothill riparian, desert riparian & wash, & palm oasis habitats. Forages over water & among trees. Roosts in trees, particularly palms.	Moderate A few palms provide potential roosts on site. Foraging habitat as well.
<i>Nyctinomops femorosaccus</i> pocketed free-tailed bat	CVMSHCP = Considered F = ND C = S3 WBWG = M	Roosts in crevices on rugged cliffs, on high rocky outcrops and slopes. May also roost in buildings, caves, and under roof tiles.	Low No roosting habitat present, potential foraging habitat only
<i>Taxidea taxus</i> American badger	MSHCP = No F = ND C = SSC, S3	Inhabits areas herbaceous, shrub, and open stages of most habitats with dry, friable soils.	Absent Habitat too disturbed, limited, and isolated to support this species
<i>Xerospermophilus tereticaudus chlorus</i> Coachella Valley (Palm Springs) round-tailed ground squirrel	CVMSHCP = Yes F = None C = SSC, S1S2	Prefers open, flat, grassy areas in fine-textured, sandy soil in desert succulent scrub, desert wash, desert scrub, alkali scrub, & levees.	Low Habitat marginal and isolated, but many rodent burrows on site

Definitions of status designations and occurrence probabilities for Tables 1-8

Definitions of occurrence probability:

Occurs: Observed onsite by Amec Foster Wheeler personnel or recently reported onsite by another reliable source.

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

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

Low: Site is within the known range of the species but habitat onsite is rarely used by the species

Absent: A focused study failed to detect the species, suitable habitat not present, or site is outside the geographic distribution of the species.

Unknown: No focused surveys have been performed in the region, species' distribution and habitat are poorly known.

CVMSHCP designations

Yes: Conserved by the CVMSHCP

No: Not Specifically Conserved by the CVMSHCP

Considered: Considered, but not included in the CVMSHCP

Federal designations: (F = federal Endangered Species Act or USFWS designations)

END:Federally listed, Endangered

THR:Federally listed, Threatened

CAN:Candidate for Federal listing

MBTA: Migratory Bird Treaty Act

BEPA:Bald Eagle Protection Act (also protects Golden Eagles)

BCC:Birds of Conservation Concern

ND:No designation

State designations: (C = California Endangered Species Act or CDFW designations)

END:State listed, Endangered

THR:State listed, Threatened

CAN:Candidate for State listing

RARE:State listed, Rare

FP:Fully Protected Species

SSC:Species of Special Concern

WL:Watch List Species

ND:No designation

CDFW state rankings are a reflection of the overall condition of an element throughout its California range. The number after the decimal point represents a **threat** designation attached to the rank:

S1 = Critically Imperiled. Less than (<) 6 Element Occurrences (EOs) OR < 1,000 individuals OR < 2,000 acres

S1.1 = very threatened

S1.2 = threatened

S1.3 = no current threats known

S2 = Imperiled. 6-20 EOs OR 1,000-3,000 individuals OR 2,000-10,000 acres

S2.1 = very threatened

S2.2 = threatened

S2.3 = no current threats known

S3 = Vulnerable. 21-80 EOs OR 3,000-10,000 individuals OR 10,000-50,000 acres

S3.1 = very threatened

S3.2 = threatened

S3.3 = no current threats known

S4 = Apparently Secure. Uncommon but not rare in the state; some cause for long-term concern.

S5 = Secure. Common, widespread, and abundant in the state.

SH = All known California sites are historical, not extant

California Native Plant Society (CNPS) designations:

Primary Categories

LIST 1A: Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere

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

LIST 2A: Plants Presumed Extirpated in California, But Common Elsewhere

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

LIST 3: Plants About Which More Information is Needed - A Review List

LIST 4: Plants of Limited Distribution - A Watch List

Subdivisions within Categories

0.1: Seriously threatened in California

0.2: Moderately threatened in California

0.3: Not very threatened in California

Western Bat Working Group (WBWG) designations:

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

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

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

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

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

5.0 DISCUSSION

5.1 Discussion of the Special-status Elements Tables

Of the 31 special-status elements identified by the literature review and site visit to occur in the site vicinity (see Tables 1-7 above), 13 were determined to be absent as shown in the probability column. Since they are not expected to occur onsite or be impacted, those 13 species will not be discussed further.

Of the remaining 18 species which have some occurrence potential, four are fully covered and conserved through participation in the CVMSHCP: Mesquite Bosque (Mesquite Hummocks), Coachella giant sand treader cricket, western yellow bat, and Coachella Valley (Palm Springs) round-tailed ground squirrel. Since potential impacts to these four species will be mitigated through participation in the CVMSHCP they will not be discussed further. The remaining 14 species will be discussed below.

5.1.1 Plants and Vegetation

Six special-status plant species not covered by the CVMSHCP have a remote probability of occurrence onsite in the remnant disturbed natural habitat: gravel milk-vetch, glandular ditaxis, Abram's spurge, ribbed cryptantha, slender cottonheads, and narrow-leaf sandpaper plant. Due to the extensive conversion of the site to agriculture, and the isolated nature of the site, no significant population of any of these species is expected. We are not recommending any further action.

5.1.2 Burrowing Owl

The burrowing owl is a covered species under the CVMSHCP, but the federal permit for the CVMSHCP does not allow take of this species under the MBTA. This species nests and roosts underground, and is thus particularly vulnerable to ground disturbing activities. Marginal habitat is present onsite for the owl, but the isolated nature of the site and limited burrowing opportunities observed makes the possibility of occurrence quite low. To avoid take of the burrowing owl the "CDFW recommends two take avoidance surveys. The first should occur between 14 and 30 days prior to ground disturbance and the second within 24 hours of ground disturbance" (CDFG 2012, CDFW 2014).

5.1.3 Bird Species Not Covered by the CVMSHCP Which Do Not Nest Onsite

The double-crested cormorant is a special-status species which nests colonially. It occurred onsite only in passing overhead. Nesting and foraging habitat is not present. Prairie falcon is a special-status species which could occur as a forager, but no nesting habitat is available on site. We do not recommend any action in regard to these species.

5.1.4 Special-Status Bird Species Not Included in the CVMSHCP

The Costa's hummingbird, loggerhead shrike, vermilion flycatcher, and black-tailed gnatcatcher are all special-status species which may nest onsite and in the project area. None are covered by the CVMSHCP. Regardless of their status, all are protected from take by the MBTA and state code. Nesting bird surveys for compliance with the MBTA and state code will prevent impacts to these species. This will be discussed further below.

5.2 Migratory Bird Treaty Act (MBTA) and State Code

Excluded from coverage under the CVMSHCP are a variety of common bird species that are protected by the MBTA. This includes virtually all native migratory and resident bird species,

including many of the birds already known to occur in the vicinity (Appendix 2). Exceptions are discussed above. Avoidance of impacts to nesting migratory and resident birds is a requirement of the federal permit issued for the CVMSHCP. In order to avoid impacting nesting birds, either avoidance of project-related disturbance during the nesting season (generally from approximately 1 February to 31 August) or nesting bird surveys conducted by a qualified ornithologist or biologist immediately prior to site disturbance during the nesting season would be required. If nesting birds are present, no work would be permitted near the nest until young have fledged. While there is no established protocol for nest avoidance, when consulted, the CDFW generally recommends avoidance buffers of about 500 feet for birds-of-prey, and 100 – 300 feet for songbirds.

5.2.1 Mammals (Bats)

Besides the CVMSHCP covered western yellow bat, there are CNDDDB records of one other bat species in the area, the pocketed free-tailed bat, and others likely occur. The pocketed free-tailed bat and potentially other bat species may forage on site, but they are not expected to roost so the project is unlikely to have any significant impact on uncovered bat species. We do not recommend any further action on behalf of bats.

5.3 CVMSHCP Consistency

The site is not within or adjacent to any CVMSHCP Conservation Area so will not interfere with any conservation area objectives and there will be no edge effects. No wildlife corridors or biological linkages are mapped, known, or expected onsite, so there will be no effects to them.

6.0 CONCLUSION

Implementation of the proposed project would result in permanent impacts to the entire project site, including the biological resources occurring or potentially occurring on the project site. Project impacts will be mitigated through participation in the CVMSHCP. Landscaping suggestions are included in Appendices 4 and 5.

With the implementation of the recommendations above, impacts to special-status species potentially occurring in the project area and their habitats would be expected to be less than significant. Recommendations include surveys as needed for the burrowing owl and MBTA protected nesting birds.

7.0 LITERATURE CITED AND REFERENCES

- California Bird Records Committee. 2020. Official California Checklist. Accessed online at: http://californiabirds.org/ca_list.asp
- California Department of Fish and Wildlife (CDFW). 2020a. California Natural Diversity Database (CNDDB) RareFind 5 records of sensitive elements.
- CDFW. 2020b. Special Animals List. July. Periodic publication. Sacramento, CA. Accessed online at: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline>
- CDFW. 2016. Complete List of Amphibian, Reptile, Bird and Mammal Species in California. May. Accessed online at: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=87155&inline>
- CDFW. 2014. Email to Amec Foster Wheeler from Karen Riesz, CDFW Environmental Scientist, regarding CDFW recommendations for burrowing owl take avoidance within non-conservation areas in the CVMSHCP area. December 7th.
- CDFG. 2012. Staff Report on Burrowing Owl Mitigation. March 7.
- California Legislative Information. 2020. Fish and Game Code of California. <http://leginfo.legislature.ca.gov/faces/codesTOCSelected.xhtml?tocCode=FGC&tocTitle=+Fish+and+Game+Code+-+FGC>
- CNPS. 2020. Inventory of Rare, Threatened, and Endangered Plants of California. Accessed online at: <http://www.rareplants.cnps.org>
- CVAG. 2020. Coachella Valley Multiple Species Habitat Conservation Plan, including Major Amendment. Accessed online at: cvmshcp.org
- Jepson Flora Project. 2020. Jepson eFlora. Accessed online at: <http://ucjeps.berkeley.edu/IJM.html>
- Riverside County Information Technology. 2020. Map My County. Accessed online at: https://gis.countyofriverside.us/Html5Viewer/?viewer=MMC_Public
- USDA, NRCS. 2019a. Web Soil Survey. Accessed online at: <http://websoilsurvey.nrcs.usda.gov/app/>
- USDA, NRCS. 2019b. The PLANTS Database. National Plant Data Team. Accessed online at: <https://plants.usda.gov/java/>
- USFWS. 2018. Bird Laws and Treaties. Accessed online at: <http://www.fws.gov/migratorybirds/RegulationsandPolicies.html>

APPENDIX 1
SPECIES LIST: VASCULAR PLANTS

Species List: Vascular Plants

This list reports only plants observed onsite by this study. Other species may have been overlooked or undetectable due to their growing season.

† = special-status species, * = non-native species, sp. = identified only to genus, spp. = two or more species, cf = compares favorably with, var. = variety, ssp. = subspecies

DICOTYLEDONEAE

Amaranthaceae

Amaranthus palmeri

Apocynaceae

Funastrum cynanchoides var. *hartwegii*

Asteraceae

Helianthus annuus

Heterotheca grandiflora

Isocoma acradenia

**Lactuca serriola*

Palafoxia arida

Brassicaceae

**Brassica tournefortii*

**Sisymbrium* sp.

Boraginaceae

Cryptantha sp.

Chenopodiaceae

Atriplex canescens

Atriplex lentiformis

cf. *Atriplex polycarpa*

Chenopodium sp.

**Salsola tragus*

Euphorbiaceae

Stillingia spinulosa

Fabaceae

* cf *Acacia*

Prosopis glandulosa var. *torreyana*

Malvaceae

**Malva parviflora*

Polygonaceae

cf. *Rumex* sp.

Tamaricaceae

**Tamarix aphylla*

**Tamarix ramosissima*

Viscaceae

Phoradendron californicum

Zygophyllaceae

Larrea tridentata

DICOT FLOWERING PLANTS

Amaranth Family

Palmer's amaranth

DOGBANE FAMILY

climbing milkweed

Sunflower Family

common sunflower

telegraph weed

alkali goldenbush

prickly lettuce

Spanish-needle

Mustard Family

Sahara mustard

mustard

Borage Family

forget me not

Goosefoot Family

four-wing saltbush

big saltbush

allscale saltbush

goosefoot

Russian thistle

Spurge Family

annual toothleaf

Pea Family

acacia

honey mesquite

Mallow Family

cheeseweed

Buckwheat Family

dock

Tamarisk Family

athel

saltcedar

MISTLETOE FAMILY

desert mistletoe

Caltrop Family

creosote bush

MONOCOTYLEDONEAE

Arecaceae

cf. *Phoenix dactylifera*
Washingtonia sp.

Poaceae

**Arundo donax*
**Cynodon dactylon*
cf. *Elymus triticoides*
**Hordeum murinum*
**Schismus* sp.

MONOCOT FLOWERING PLANTS

Palm Family

date palm
fan palm

Grass Family

giant reed
Bermuda grass
beardless wild-rye
wall barley
Mediterranean grass

APPENDIX 2
SPECIES LIST: VERTEBRATE ANIMALS

Species List: Vertebrate Animals

This list reports only the vertebrate animals observed by this study. Other species may have been overlooked or undetectable due to their activity patterns or weather conditions. [† = *special-status species*, * = non-native species, sp. = identified only to genus, spp. = two or more species, cf = compares favorably with]

AVES

Odontophoridae

Callipepla gambelii

Columbidae

Zenaida macroura

Cuculiformes

Geococcyx californianus

Trochilidae

†*Calypte costae*

Charadriidae

Charadrius vociferous

Phalacrocoracidae

†*Phalacrocorax auritus*

Accipitridae

Buteo jamaicensis

Picidae

Dryobates scalaris

Falconidae

Falco sparverius

Tyrannidae

Sayornis nigricans

Sayornis saya

Laniidae

†*Lanius ludovicianus*

Corvidae

Corvus brachyrhynchos

Alaudidae

Eremophila alpestris

Remizidae

Auriparus flaviceps

Troglodytidae

Campylorhynchus brunneicapillus

Poliophtidae

†*Poliophtila melanura*

BIRDS

New World Quail

Gambel's quail

Pigeons and Doves

mourning dove

Cuckoos and Allies

greater roadrunner

Hummingbirds

Costa's hummingbird

Lapwings and Plovers

killdeer

Cormorants

double-crested cormorant

Hawks, Kites, Eagles, and Allies

red-tailed hawk

Woodpeckers and Allies

ladder-backed woodpecker

Caracaras and Falcons

American kestrel

Tyrant Flycatchers

black phoebe

Say's phoebe

Shrikes

loggerhead shrike

Crows, Jays, and Magpies

American crow

Larks

horned lark

Penduline Tits and Verdins

verdin

Wrens

cactus wren

Gnatcatchers and Gnatwrens

black-tailed gnatcatcher

Mimidae

Mimus polyglottos

Sturnidae

**Sturnus vulgaris*

Passeridae

**Passer domesticus*

Fringillidae

Haemorhous mexicanus

Passerellidae

Zonotrichia leucophrys

Melospiza aberti

Icteridae

Quiscalus mexicanus

Parulidae

Setophaga coronata

MAMMALIA

Leporidae

Sylvilagus audubonii

Rodentia

≥ two spp.

Canidae

Canis latrans

Mockingbirds and Thrashers

northern mockingbird

Starlings

European starling

Old World Sparrows

house sparrow

Fringilline & Cardueline Finches and Allies

house finch

New World Sparrows

white-crowned sparrow

Abert's Towhee

Blackbirds

great-tailed grackle

Wood-Warblers

yellow-rumped warbler

MAMMALS

Rabbits and Hares

Audubon's cottontail

Rodents

burrows & tracks cf. mice, kangaroo rats, etc.

Foxes, Wolves and Relatives

coyote (tracks & scat)

APPENDIX 3

PHOTOGRAPHIC EXHIBITS



Photo 1. Looking north from Avenue 50 at typical site view. Weedy, dry annuals on former agricultural land with small site hill and surrounding residential.



Photo 2. Burrowing owl habitat, such as it is, consists only of a few debris piles, here in northwestern site.

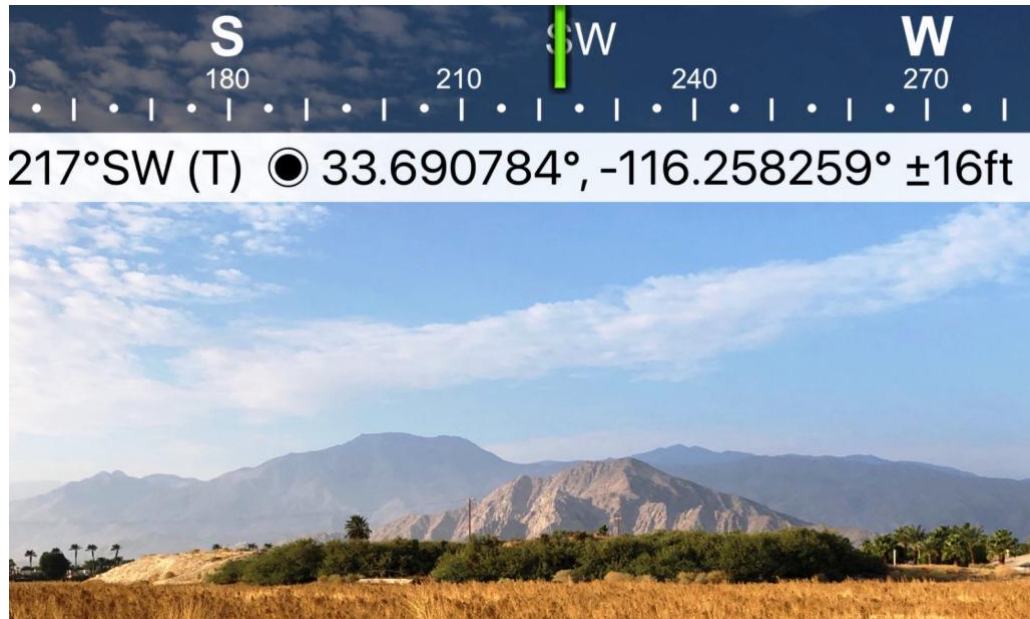


Photo 3. Looking southwest from north-central site at the small, relatively natural hill onsite with stabilized, shielded desert sand fields and mesquite hummocks.

APPENDIX 4

COACHELLA VALLEY NATIVE PLANTS RECOMMENDED FOR LANDSCAPING

APPENDIX 4

COACHELLA VALLEY NATIVE PLANTS RECOMMENDED FOR LANDSCAPING

Note: Many of the following scientific names have undergone taxonomic changes in recent years. Refer to Jepson Flora Project (2020).

BOTANICAL NAME	COMMON NAME
Trees	
<i>Washingtonia filifera</i>	California fan palm
<i>Cercidium floridum</i>	blue palo verde
<i>Chilopsis linearis</i>	desert willow
<i>Olneya tesota</i>	ironwood tree
<i>Prosopis glandulosa</i> var. <i>torreyana</i>	honey mesquite
Shrubs	
<i>Acacia greggii</i>	cat's claw acacia
<i>Ambrosia dumosa</i>	burro bush
<i>Atriplex canescens</i>	four wing saltbush
<i>Atriplex lentiformis</i>	quailbush
<i>Atriplex polycarpa</i>	cattle spinach
<i>Baccharis sergiloides</i>	squaw water-weed
<i>Bebia juncea</i>	sweet bush
<i>Cassia (Senna) covesii</i>	desert senna
<i>Condalia parryi</i>	crucillo
<i>Crossosoma bigelovii</i>	crossosoma
<i>Dalea emoryi</i>	dye weed
<i>Dalea (Psoralea) schottii</i>	indigo bush
<i>Datura meteloides</i>	jimson weed
<i>Encelia farinosa</i>	brittle bush
<i>Ephedra aspera</i>	Mormon tea
<i>Eriogonum fasciculatum</i>	California buckwheat
<i>Eriogonum wrightii membranaceum</i>	Wright's buckwheat
<i>Fagonia laevis</i>	no common name
<i>Gutierrezia sarothrae</i>	matchweed
<i>Haplopappus acradenius</i>	goldenbush
<i>Hibiscus denudatus</i>	desert hibiscus
<i>Hoffmannseggia microphylla</i>	rush pea
<i>Hymenoclea salsola</i>	cheesebush
<i>Hyptis emoryi</i>	desert lavender
<i>Isomeris arborea</i>	bladder pod
<i>Juniperus californica</i>	California juniper
<i>Krameria grayi</i>	ratany
<i>Krameria parvifolia</i>	little-leaved ratany
<i>Larrea tridentata</i>	creosote bush
<i>Lotus rigidus</i>	desert rock pea
<i>Lycium andersonii</i>	box thorn
<i>Petalonyx linearis</i>	long-leaved sandpaper plant

BOTANICAL NAME	COMMON NAME
<i>Petalonyx thurberi</i>	sandpaper plant
<i>Peucephyllum schottii</i>	pygmy cedar
<i>Prunus fremontii</i>	desert apricot
<i>Rhus ovata</i>	sugar-bush
<i>Salazaria mexicana</i>	paper-bag bush
<i>Salvia apiana</i>	white sage
<i>Salvia eremostachya</i>	Santa Rosa sage
<i>Salvia vaseyi</i>	wand sage
<i>Simmondsia chinensis</i>	jojoba
<i>Sphaeralcia ambigua</i>	desert mallow
<i>Sphaeralcia ambigua rosacea</i>	apricot mallow
<i>Trixis californica</i>	trixis
<i>Zauschneria californica</i>	California fuchsia
Groundcovers	
<i>Mirabilis bigelovii</i>	wishbone bush
<i>Mirabilis tenuiloba</i>	white four o'clock
Vines	
<i>Vitis girdiana</i>	desert grape
Accent	
<i>Muhlenbergia rigens</i>	deer grass
Herbaceous Perennials	
<i>Adiantum capillus-veneris</i>	maiden-hair fern (w)
<i>Carex alma</i>	sedge (w)
<i>Dalea parryi</i>	Parry dalea (w)
<i>Eleocharis montevidensis</i>	spike rush (w)
<i>Equisetum laevigatum</i>	horsetail (w)
<i>Juncus bufonis</i>	toad rush (w)
<i>Juncus effuses</i>	juncus (w)
<i>Juncus macrophyllus</i>	juncus (w)
<i>Juncus mexicanus</i>	Mexican rush (w)
<i>Juncus xiphioides</i>	juncus (w)
<i>Notholaena parryi</i>	Parry cloak fern
<i>Pallaea mucronata</i>	bird-foot fern
Cacti and Succulents	
<i>Agave deserti</i>	desert agave
<i>Asclepias albicans</i>	desert milkweed
<i>Asclepias subulata</i>	ajamete
<i>Dudleya arizonica</i>	live-forever
<i>Dudleya saxosa</i>	rock dudleya
<i>Echinocereus engelmannii</i>	calico hedgehog cactus
<i>Ferocactus acanthodes</i>	barrel cactus
<i>Fouquieria splendens</i>	ocotillo

BOTANICAL NAME	COMMON NAME
<i>Mamillaria dioica</i>	nipple cactus
<i>Mamillaria tetrancistra</i>	corkseed cactus
<i>Nolina parryi</i>	Parry nolina
<i>Opuntia acanthocarpa</i>	stag-horn cholla
<i>Opuntia bigelovii</i>	teddy bear or jumping cholla
<i>Opuntia basilaris</i>	beavertail cactus
<i>Opuntia echinocarpa</i>	silver or golden cholla
<i>Opuntia ramosissima</i>	pencil cholla
<i>Yucca schidigera</i>	Mojave yucca, Spanish dagger
<i>Yucca whipplei</i>	our Lord's candle

APPENDIX 5

PROHIBITED INVASIVE ORNAMENTAL PLANTS

APPENDIX 5

PROHIBITED INVASIVE ORNAMENTAL PLANTS

BOTANICAL NAME	COMMON NAME
<i>Acacia</i> spp. (all species except <i>A. greggii</i>)	acacia (all species except native catclaw acacia)
<i>Arundo donax</i> ¹	giant reed
<i>Atriplex semibaccata</i> ¹	Australian saltbush
<i>Avena barbata</i>	slender wild oat
<i>Avena fatua</i>	wild oat
<i>Brassica tournefortii</i> ²	African or Saharan mustard
<i>Bromus madritensis</i> ssp. <i>rubens</i> ¹	red brome
<i>Bromus tectorum</i> ²	cheat grass
<i>Cortaderia jubata</i> [syn. <i>C. atacamensis</i>]	Jubata crass or Andean pampas grass
<i>Cortaderia dioica</i> [syn. <i>C. selloana</i>]	pampas grass
<i>Descurainia sophia</i>	tansy mustard
<i>Eichhornia crassipes</i>	water hyacinth
<i>Elaeagnus angustifolia</i>	Russian olive
<i>Foeniculum vulgare</i>	sweet fennel
<i>Hirschfeldia incana</i>	short-pod mustard
<i>Lepidium latifolium</i>	perennial pepperweed
<i>Lolium multiflorum</i>	Italian ryegrass
<i>Nerium oleander</i>	oleander
<i>Nicotiana glauca</i> ¹	tree tobacco
<i>Oenothera berlandieri</i> ³	Mexican evening primrose
<i>Olea europea</i>	European olive tree
<i>Parkinsonia aculeata</i> ¹	Mexican palo verde
<i>Pennisetum clandestinum</i>	Kikuyu grass
<i>Pennisetum setaceum</i> ²	fountain grass
<i>Phoenix canariensis</i> ³	Canary Island date palm
<i>Phoenix dactylifera</i> ³	date palm
<i>Ricinus communis</i> ¹	castorbean
<i>Salsola tragus</i> ¹	Russian thistle
<i>Schinus molle</i>	Peruvian pepper tree
<i>Schinus terebinthifolius</i>	Brazilian pepper tree
<i>Schismus arabicus</i>	Mediterranean grass
<i>Schismus barbatus</i> ²	Saharan grass
<i>Stipa capensis</i> ²	no common name
<i>Tamarix</i> spp. (all species) ²	tamarisk or salt cedar
<i>Taeniatherum caput-medusae</i>	Medusa-head
<i>Tribulus terrestris</i>	puncturevine
<i>Vinca major</i>	periwinkle
<i>Washingtonia robusta</i>	Mexican fan palm
<i>Yucca gloriosa</i> ³	Spanish dagger

¹indicates species known to be invasive in the Plan Area

² indicates particularly troublesome invasive species

³ indicates species not on CalEPPC October 1999 "Exotic Pest Plants of Greatest Ecological Concern"