Appendix B

Biological Resources Study

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DUNE PALMS MIXED USE PROJECT Assessor's Parcel Number 600-030-018

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

City of La Quinta, Riverside County, California



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20 December 2022

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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 WSP USA Environment & Infrastructure, Inc. (WSP) for the proposed Dune Palms Mixed Use Project (project) in the City of La Quinta, Riverside County, California (Figure 1). The project site is on the 8.92-acre assessor's parcel number (APN) 600-030-018. It is located immediately east of Dune Palms Road, north of Highway 111, and south of the Whitewater River / Coachella Valley Storm Drain. It is west of and contiguous with an existing retail shopping center. The site is located within Section 29 of Township 5 South, Range 7 East of the United States Geological Survey (USGS) 7.5' *La Quinta, CA* quadrangle. Onsite elevation ranges from approximately 55 – 65 feet (17 – 20 meters) above mean sea level (Figure 2). The project proposes mixed use construction of retail and residential facilities, see the conceptual site plan (Appendix 1).

Information contained herein is intended to be used for compliance with state and federal regulations intended to protect waters, 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] 2021). 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 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 the natural vegetation communities within areas identified as having high conservation value.

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c)

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Project Location



FIGURE 1

Regional Map Dune Palms Mixed Use Project Riverside County, California

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Project Boundary

FIGURE 2

USGS 7.5' Topo Quad: La Quinta Dune Palms Mixed Use Project Riverside County, California

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

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 listings 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 2022a). The Secretary of the Interior can issue permits for incidental take of migratory bird species. As with the FESA, 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 FESA*, as amended and which are also listed under the MBTA. For other birds protected by the MBTA, and not listed under the FESA, *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 (2022).

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."

3.0 METHODS

3.1 Literature Review

In preparation for the field visit, 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 five-mile radius of the site.

The literature review included the following documents:

- California Natural Diversity Data Base (CNDDB) RareFind 5 (CDFW 2022a)
- California Native Plant Society's (CNPS) Inventory of Rare, Threatened, and Endangered Plants of California (CNPS 2022)
- CVMSHCP (CVAG 2022)
- United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS). 2019. Web Soil Survey
- USGS 7.5' Cathedral City, Myoma, Rancho Mirage, and La Quinta, CA quadrangles
- The USFWS (2022b) Environmental Conservation Online System (ECOS) including critical habitat mapping and an Information for Planning and Consultation (IPaC) report.

This document utilized the following standard references: for plant communities, the CVMSHCP (2022); for flora, the Jepson Flora Project (2022) and USDA NRCS PLANTS Database (2022); for amphibians, reptiles, and mammals, CDFW (2016); and for birds, the California Bird Records Committee (2022).

3.2 Field Assessment

The field assessment was conducted on 21 November 2022 by WSP Senior Biologist John F. Green. General weather and site conditions were recorded at the beginning and end of the assessment. Temperatures and wind speeds were recorded with a handheld Kestrel anemometer. Temperatures during the 1240-1400 site visit ranged from 84.5 to 80.3 degrees Fahrenheit with winds from 0 to 3 miles per hour under 85-90% cloud cover. Suitable habitat was assessed based on the presence or absence of habitat components (e.g., soils, vegetation and topography) characteristic of special status biological resources which were determined by the literature review to be potentially present. Pedestrian transects were walked around and through the 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 assessment were recorded in field notes and are included in Appendices 2 and 3. Samples of plant species of uncertain identity were collected for later identification. Photos representing general site conditions were taken at various points (Appendix 4).

4.0 RESULTS

The project site is largely undeveloped, but extensively disturbed (Figure 3). A review of aerial photographs dating back to 1996 shows vegetation clearing and vehicle tracks becoming obvious in 2004 as the area began to develop. The surrounding area is now almost entirely developed with

the adjacent Whitewater River / Coachella Valley Storm Drain, which is also highly disturbed, providing the only link to other undeveloped lands. These adjacent developments have caused edge effects to the project site such as construction disturbance; intrusion of landscaping vegetation; trash and debris; and site entry by vehicles, domestic dogs, and pedestrians.

4.1 Hydrology / Jurisdictional Waters

There are no drainages or jurisdictional features onsite. Therefore, there will be no further discussion of hydrology or jurisdictional waters.

4.2 **Topography and Soils**

The Web Soil Survey (USDA, NRCS 2019) shows the following soil types on the site (Figure 4):

- Coachella fine sand, 0 2% slopes
- Myoma fine sand, 5 to 15 percent slopes

Coachella soils are well-drained, moderately rapidly permeable soils in lacustrine basins the sediments are from dominantly igneous rocks. Slopes are gently sloping to nearly level.

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.

Sandy soils are associated with several potentially occurring special status species.

4.3 Vegetation

A review of vegetation communities described by the CVMSHCP (natural communities) revealed "stabilized shielded desert sand fields" as the dominant community matching the physical and vegetative parameters of the site (Figure 5). These are sand fields for which the sand source and sand transport systems, which would supply sand to them have been interrupted or shielded. They are thus compromised by blockage or shielding of the sand source and sand transport systems by barriers such as roads, buildings, and vegetation. Fragmentation of these sand fields by roads results in further shielding and alteration of the sand transport system and may increase the likelihood of invasive plant species becoming established that may further stabilize the sand.

This community "includes perennial plant species typical of a creosote bush scrub matrix, with perennial shrub species including creosote bush (*Larrea tridentata*), four-wing saltbush (*Atriplex canescens*), California croton (*Croton californicus*), and indigo bush (*Psorothamnus* sp.)." All of these except California croton were found onsite during the field visit.

Small areas onsite contained other CVMSHCP natural communities, some intergrading with each other (Figure 5). These included desert saltbush scrub, Sonoran creosote bush scrub, and mesquite hummocks. The desert saltbush scrub community is dominated by and can include various species of saltbush (*Atriplex* spp.). One area of desert saltbush scrub onsite also contained a few blue palo verdes (*Parkinsonia florida*). Sonoran creosote bush scrub is the most widespread vegetation type in the Colorado Desert and it is dominated by creosote bush. The mesquite hummocks community



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1 inch = 150 feet 75



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FIGURE 3

150 TFeet

Site Location Dune Palms Mixed Use Project Riverside County, California

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Project Boundary

Soils

CpA - Coachella fine sand, 0 to 2 percent slopes

MaD - Myoma fine sand, 5 to 15 percent slopes 1 inch = 150 feet 0 75 150 Feet



FIGURE 4

Soils Dune Palms Mixed Use Project Riverside County, California

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1 inch = 150 feet 0 75 150 Feet

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FIGURE 5

Vegetation Communities Dune Palms Mixed Use Project Riverside County, California



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is composed of clumps of low growing honey mesquite (*Prosopis glandulosa* var. *torreyana*) shrubs. Twenty-nine plant species were detected during the field visit. A list including common and scientific names, is attached (Appendix 2). Nearly half of them (14) were not native. 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.

4.4 Wildlife

Vertebrate wildlife directly observed and/or detected otherwise (e.g., scat, bones, prints, feathers, burrows, etc.) during the assessment included a minimum of 10 species. This included nine birds and at least one mammal. See Appendix 3 for a list of the 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 invertebrates, amphibians, reptiles, birds, and mammals including, for example: diurnal netting/collecting and nocturnal black light traps for invertebrates, pitfall traps for amphibians and reptiles, and live trapping and/or the placement of tracking stations for the detection of nocturnal mammals.

4.5 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 FESA and/or CESA. 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 impacts to these species (if any) 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. This knowledge, along with the literature review and site reconnaissance resulted in the identification of 45 special status elements which were either observed on the site; had CNDDB records within an approximate five-mile radius of the site; which have potentially suitable habitat on the site; and/or were included in the "Endangered Species" section of the IPaC report. These included 19 plants, one vegetation community, three insects, one fish, three reptiles, ten birds, and eight mammals. Plant species not known to occur at or near site elevations were not included in the tables. IPaC species which lack on-site habitat and/or which are not known to occur within five miles of the project site were also not included in the tables. Tables 1 through 7 below 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, the presence of potentially suitable habitat, and the collective expertise of WSP biologists.

Table 1Special Status Plants

Species	Status	Habitat	Probability
Abronia villosa var. aurita chaparral sand-verbena	CVMSHCP = No F = ND C = S2 CNPS = 1B.1	Sandy areas in chaparral, coastal scrub, desert dunes60 to 1600 meters (m.). Blooms (B): January – September.	Low Habitat marginal for var. <i>aurita</i> . Species present onsite, but expected to be desert variety, not var. <i>aurita</i> . Nearest CNDDB record over a mile west, likely a misidentification.
Astragalus lentiginosus var. borreganus Borrego milk-vetch	CVMSHCP = No F: ND C: S4 CNPS: 4.3	Sandy places in Mojavean and Sonoran desert scrub. 30 - 895 m. B: February - May	Low Known from CNPS record. Habitat suitable but disturbed. Possibly a subspecies misidentification. Site is slightly below elevational range.
Astragalus lentiginosus var. coachellae Coachella Valley milk-vetch	CVMSHCP = Yes F = END C = S1 CNPS = 1B.2	Sonoran desert scrub; sandy flats, washes, outwash fans, sometimes on dunes. 35 to 665 m. B: January - September	Low Habitat suitable but disturbed. Nearest CNDDB record approximately 1 mile west. Site is slightly below elevational range.
Astragalus sabulonum 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 Habitat suitable. Nearest CNDDB record over 2 miles east. Site disturbed.
Ditaxis claryana glandular ditaxis	CVMSHCP = No 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 CNDDB record in immediate vicinity, but onsite habitat is marginal. Record likely from adjacent channel.
Ditaxis serrata var. californica California ditaxis	CVMSHCP = No F = ND C = S2? CNPS = 3.2	Sonoran desert scrub. 30 to 1000 m. B: March - December.	Moderate Habitat suitable but disturbed. Nearest CNDDB records over 3 miles to west and southwest.
Euphorbia abramsiana Abram's spurge	CVMSHCP = No F = ND C = S2 CNPS = 2B.2	Sandy sites in Mojave and Sonoran desert scrub 5 – 1,450 m. B: (August) September - November	Low Nearest known CNDDB record over 4.25 miles to northwest in a now developed area.
Euphorbia arizonica Arizona spurge	CVMSHCP = No F = ND C = S3 CNPS = 2B.3	Sonoran desert scrub. 50 – 300 m. B: March - April	Low Habitat suitable but disturbed. Known from CNPS record.

Table 1Special Status Plants

Species	Status	Habitat	Probability
Euphorbia platysperma flat-seeded spurge	CVMSHCP = No F = ND C = S1 CNPS = 1B.2	Desert dunes, Sonoran desert scrub. 65 – 100 m. B: February - September	Low Habitat suitable but disturbed. Known from CNPS record.
Horsfordia newberryi Newberry's velvet-mallow	CVMSHCP = No F = ND C = S4 CNPS = 4.3	Sonoran desert scrub. 3 - 800 m. B: February - December	Low Known from a CNPS record. Habitat suitable but disturbed. Shrub not seen onsite.
Johnstonella costata ribbed cryptantha	$\begin{array}{l} \text{CVMSHCP} = \text{No} \\ \text{F} = \text{ND} \\ \text{C} = \text{S4} \\ \text{CNPS} = 4.3 \end{array}$	Desert dunes in Mojavean & Sonoran desert scrub60 – 500 m. B: February - May	Low Habitat marginal. Known from a CNPS record.
Juncus acutus ssp. leopoldii southwestern spiny rush	$\begin{array}{l} CVMSHCP = No \\ F = ND \\ C = S4 \\ CNPS = 4.2 \end{array}$	Coastal dunes, marshes and swamps, meadows and seeps. 3- 900 m. B: (March) May-June.	Absent No suitable habitat.
Juncus cooperi Cooper's rush	$\begin{array}{l} \text{CVMSHCP} = \text{No} \\ \text{F} = \text{ND} \\ \text{C} = \text{S3} \\ \text{CNPS} = 4.3 \end{array}$	Meadows and seeps260 -1770 m. B: April-May (August).	Absent No suitable habitat.
Lycium torreyi Torrey's box-thorn	CVMSHCP = No F = ND C = S3 CNPS = 4.2	Rocky, sandy, areas, streambanks & washes in Mojavean & Sonoran desert scrub50 – 1220 m. B: (January-February) March-June (September-November).	Low Habitat marginal, disturbed. No focused survey conducted but is a large shrub unlikely to have been overlooked unless a seedling. Known from a CNPS record.
Nemacaulis denudata var. gracilis slender cottonheads	$\begin{array}{l} CVMSHCP = No \\ F = ND \\ C = S2 \\ CNPS = 2B.2 \end{array}$	Sandy places in coastal dunes, desert dunes, & Sonoran desert scrub. –50 to 400 m. B: March - May	Low Habitat suitable but disturbed. CNDDB records about 1 mile west.
Petalonyx linearis narrow-leaf sandpaper-plant	CVMSHCP = No F = ND C = S2S3 CNPS = 2B.3	Mojavean & Sonoran desert scrub in sandy or rocky canyons25 to 1,115 m. B: (January – February) March – May (June – December).	Low Habitat marginal, disturbed. Known from a CNPS record.
Pseudorontium cyathiferum Deep Canyon snapdragon	$\begin{array}{l} CVMSHCP = No \\ F = ND \\ C = S1 \\ CNPS = 2B.3 \end{array}$	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 not in immediate vicinity of Deep Canyon
Stemodia durantifolia purple stemodia	CVMSHCP: No F: None C: S2S3 CNPS: List 2B.1	Mesic sites on sandy soils in Sonoran desert scrub. 35-385 m. B: January-December	Low Habitat marginal, disturbed. Known from a CNPS record.

Table 1Special Status Plants

Species	Status	Habitat	Probability
Xylorhiza cognata Mecca-aster	CVMSHCP = Yes F = ND C = S2 CNPS = 1B.2	Sonoran desert scrub in the Mecca Hills. 20 - 400 m. B: January – June.	Low Site probably not within the range of the species. Habitat suitable but disturbed. Nearest record 5-miles northeast at the edge of the Mecca Hills.

Table 2 Special Status Vegetation (Natural) Community

Species	Status	Habitat	Probability
Desert Fan Palm Oasis Woodland	CVMSHCP = Yes F = ND C = S3.2	Not applicable	Absent No palm oasis onsite.

Table 3Special Status Insects

Species	Status	Habitat	Probability
Danaus plexippus monarch	CVMSHCP = No F = CAN (California overwintering population) C = S2	Winter roost sites extend along the coast from northern Mendocino County to Baja California in Mexico. Roosts located in wind- protected tree groves of trees such as <i>Eucalyptus</i> , Monterey pine, and cypress with nectar and water sources nearby.	Low WSP has seen foraging individuals in area, no CNDDB records. Species in the IPaC report. Expected only foraging or in migration. No larval food plants known/ no wind-protected tree groves present.
Dinacoma caseyi 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.
Macrobaenetes valgum Coachella giant sand treader cricket	CVMSHCP = Yes F = ND C = S1S2	Active sand dune hummocks & ridges. Sites most favorable include spring- moistened sands.	Low Habitat marginal. CNDDB records in immediate area, but mostly in now developed areas. Unlikely to have survived at this isolated location.

Table 4 Special Status Fish

Species	Status	Habitat	Probability
Cyprinodon macularius desert pupfish	CVMSHCP = Yes F = END C = END , S1	Desert ponds, springs, marshes and streams.	Absent No suitable habitat. Included only because it appeared on IPaC report.

Table 5Special Status Reptiles

Species	Status	Habitat	Probability
Gopherus agassizii Desert tortoise	CVMSHCP: Yes F: THR C: THR , S2S3	Prefers Joshua tree, desert wash & scrub (especially creosote bush) habitats, but in most desert habitats. Large wildflower blooms preferred. Burrows & nests require friable soil.	Absent Marginal habitat, but no records in the area and no possibility that this species could persist on this isolated disturbed parcel. Included only because it appeared on IPaC report.
Phrynosoma mcallii 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.	Low Habitat marginal. CNDDB records within approximately one mile, however, CVMSHCP surveys, have found the species to be extirpated over most of its former range in the Coachella Valley. Unlikely to have survived at this isolated location.
Uma inornata 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.	Low Habitat marginal. CNDDB records in immediate area, but mostly in now developed areas. Unlikely to have survived at this isolated location.

Table 6Special Status Birds

Species	Status	Habitat	Probability
Athene cunicularia 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 marginal. Nearest CNDDB records approximately 2.5 miles north and east.
Calypte costae 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 onsite.
Empidonax traillii extimus southwestern willow flycatcher	CVMSHCP: Yes * F: END , MBTA C: END , S1	Breeds in dense riparian areas.	Absent No suitable habitat. Included only because it appeared on IPaC report.
Falco mexicanus 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.
Lanius ludovicianus loggerhead shrike	CVMSHCP = No F = MBTA, BCC C = SSC, S4	Found in open habitats with widely spaced vegetation.	Low Nesting habitat marginal. Nearest CNDDB record approximately 5 miles northwest.
Polioptila melanura 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.	Moderate Nesting and foraging habitat present. CNDDB records 1 mile west.
Pyrocephalus rubinus vermilion 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 habitat marginal. Nearest CNDDB record approximately 1 mile west.
Toxostoma crissale 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.
Toxostoma lecontei 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.	Low Habitat marginal. Nearest CNDDB record approximately 1 mile west. Could potentially use adjacent Whitewater River / Coachella Valley Storm Drain as a corridor to reach the site, but unlikely to persist due to disturbance and proximity to development.

Table 6 Special Status Birds

Species	Status	Habitat	Probability
Vireo bellii pusillus least Bell's vireo	CVMSHCP: Yes * F: END , MBTA C: END , S2	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, <i>Baccharis</i> , mesquite.	Absent No suitable habitat. Included only because it appeared on IPaC report.

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

Table 7Special Status Mammals

Species	Status	Habitat	Probability
Dipodomys merriami collinus Earthquake Merriam's (Aguanga) kangaroo rat	CVMSHCP = No F = ND C = S1S2	Known only from San Diego & Riverside Counties. Associated with Riversidean sage scrub, chaparral, & non-native grassland. Needs sandy loam substrates for digging of burrows.	Absent The CNDDB records near the project are out of range and habitat for this subspecies. Presumably the records are in error and refer to a different subspecies.
Eumops perotis californicus western mastiff bat	F: None C: Species of Special Concern, S3S4 WBWG: H MSHCP: No	Occurs in many open, semi- arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees, and tunnels, and travels widely when foraging	Low Foraging only, no roost sites.
Lasiurus xanthinus 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.	Low No suitable roost trees onsite but could forage.
Nyctinomops femorosaccus pocketed free-tailed bat	CVMSHCP = No F: None C: Species of Special Concern, S3 WBWG: M	Roosts primarily in crevices of rugged cliffs, high rocky outcrops and slopes. It has been found in a variety of plant associations, including desert shrub and pine-oak forests.	Low Foraging only, no roost sites.
Ovis canadensis nelsoni pop. 2 Peninsular bighorn sheep DPS	CVMSHCP = Yes F: END C: THR , S1	Desert rocky slopes of the Peninsular Ranges in San Diego, Riverside, and Imperial Counties	Absent No suitable habitat. Included only because it appeared on IPaC report.

Species	Status	Habitat	Probability
Perognathus longimembris bangsi Palm Springs pocket mouse	CVMSHCP = Yes F = ND C = SSC, S2	Inhabits flat or gently sloping areas with sparse vegetative cover and packed or sandy soils.	Low Nearest CNDDB record over 4 miles. Could potentially use the adjacent Whitewater River / Coachella Valley Storm Drain as a corridor to reach the site, but unlikely to persist due to disturbance and proximity to development.
Taxidea taxus American badger	CVMSHCP = No F: ND C: SSC, S3	Most abundant in drier, open stages of most herbaceous, shrub, & forest habitats. Burrows in friable soils & open, uncultivated ground.	Low Habitat marginal, nearest CNDDB record over 2 miles east in a now largely developed area. Could potentially use the adjacent Whitewater River / Coachella Valley Storm Drain as a corridor to reach the site, but unlikely to persist due to disturbance and proximity to development.
Xerospermophilus tereticaudus chlorus Coachella Valley (Palm Springs) round-tailed ground squirrel	CVMSHCP = Yes F = ND 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, nearest CNDDB record less than one mile west, but in a now largely developed area. Could potentially use the adjacent Whitewater River / Coachella Valley Storm Drain as a corridor to reach the site, but unlikely to persist due to disturbance and proximity to development.

Table 7 Special Status Mammals

Definitions of status designations and occurrence probabilities for Tables 1-7 Definitions of occurrence probability:

Occurs: Observed onsite by WSP 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

<u>Federal designations</u>: (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 <u>threat</u> 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.

4.6 **CVMSHCP Conservation Areas**

The project site is not within or adjacent to any CVMSHCP conservation areas (Figure 6) so it is not subject to conservation area guidelines. Therefore, there will be no further discussion of CVMSHCP conservation areas.

5.0 DISCUSSION

5.1 Special Status Elements Tables

Of the 45 special status elements identified by the literature review and site visit as occurring, or potentially occurring in the site vicinity (see Tables 1-6 above), 12 were determined to be absent due to a lack of suitable habitat and/or presence (see the tables' probability columns). These 12 elements will therefore not be discussed further.

Of the remaining 33 species which have some occurrence potential, eight are fully covered and conserved through participation in the CVMSHCP: Coachella Valley milk-vetch, Mecca-aster, Coachella giant sand treader cricket, flat-tailed horned lizard, Coachella Valley fringe-toed lizard, western yellow bat, Palm Springs pocket mouse, and Coachella Valley (Palm Springs) round-tailed ground squirrel. Since potential impacts to these nine species will be mitigated through participation in the CVMSHCP they will also not be discussed further. The remaining 24 species are discussed below.







Project Boundary CVMSHCP Conservation Area **FIGURE 6**

1 • Miles

CVMSHCP Conservation Areas Dune Palms Mixed Use Project Riverside County, California

0.5

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5.1.1 Plants

Fourteen special status plant species not covered by the CVMSHCP have potential to occur onsite: chaparral sand-verbena, Borrego milk-vetch, gravel milk-vetch, glandular ditaxis, California ditaxis, Abram's spurge, Arizona spurge, flat-seeded spurge, Newberry's velvet-mallow, ribbed cryptantha, Torrey's box-thorn, slender cottonheads, narrow-leaved sandpaper plant, and purple stemodia. None are state or federally listed as endangered or threatened. The site is disturbed and isolated by development, becoming a small island of habitat. Research has shown that such sites tend to lose biodiversity over time, so even if any of these plant species persist now, they are likely to decline and be lost even if the site was to remain undeveloped. Given this, we do not anticipate the presence of any populations of significance and recommend only a preconstruction survey. If populations of any of these species are detected at that time, plants, topsoil, and/or seed could be salvaged and translocated to a site with long-term conservation value.

5.1.2 Monarch

Monarch butterfly was included in the IPaC report and WSP has seen foraging individuals in the area in the past. The population of this species which winters in coastal California is in steep decline and is a Candidate for federal listing as an endangered species. There were no groves suitable for wintering and no larval food plants or their dried remains were seen. No impacts to this species are anticipated.

5.1.3 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 make the possibility of occurrence quite low. Nevertheless, 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).

5.1.4 Non-Nesting Special Status Bird Species Potentially Occurring

Prairie falcon could occur onsite as a migrant and/or forager, but no nesting habitat is available. We do not recommend any further action regarding this species.

5.1.5 Special Status Bird Species

The Costa's hummingbird, loggerhead shrike, black-tailed gnatcatcher, vermilion flycatcher, and LeConte's thrasher are all special status species which may nest onsite and in the project area. Costa's hummingbird was present onsite during the field assessment. Of these five, only the LeConte's thrasher is 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

Virtually all native migratory and resident bird species, including many of the birds already known to occur in the vicinity (Appendix 3) are protected by the MBTA and state code. 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 an active nest is detected, a buffer would be established around it and no work would be permitted in that area 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 listed species, and 100 – 300 feet for unlisted songbirds. These measures will protect nesting birds, including the occurring and potentially occurring special status species listed in Table 6 and the migratory birds listed in the IPaC report (Appendix 8).

5.3 Special Status Mammals

Only one special status terrestrial mammal not covered by the CVMSHCP was identified as being of potential occurrence: American badger. The possibility of occurrence is very low, due to the site's isolation and disturbed nature. Because of that, and for the reasons outlined in Section 5.1.1, even if present this species would not be expected to persist in the long term. We do not anticipate the presence of any population of significance and have no further recommendations. Two bat species not covered by the CVMSHCP may forage in the area, but there are no potential roosts onsite. Therefore, no impacts to bats are anticipated.

6.0 CONCLUSION

Implementation of the proposed project would result in permanent impacts to the project site (see Appendix 1) including the biological resources occurring or potentially occurring in the impacted area. Project impacts will be mitigated through participation in the CVMSHCP. CVMSHCP landscaping suggestions are included in Appendices 5 and 6.

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

7.0 LITERATURE CITED AND REFERENCES

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APPENDIX 1

PRELIMINARY SITE PLAN


APPENDIX 2

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.

t= 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 albus

Asteraceae

Geraea canescens Palafoxia arida

Brassicaceae

*Hirschfeldia incana *Brassica tournefortii

Chenopodiaceae

Atriplex canescens Atriplex polycarpa *Chenopodium murale *Salsola tragus

Ehretiaceae Tiquilia plicata

Euphorbiaceae

Euphorbia cf. serpillifolia

Fabaceae

Dalea mollis *Parkinsonia aculeata Parkinsonia florida Prosopis glandulosa var. torreyana Psorothamnus emoryi

Nyctaginaceae

Abronia villosa

Onagraceae Chylismia claviformis

Plantaginaceae Plantago ovata

Portulacaceae *Portulaca oleracea

Amaranth Family tumbleweed **Sunflower Family** desert-sunflower Spanish-needle **Mustard Family** shortpod mustard Sahara mustard **Goosefoot Family** four-wing saltbush allscale saltbush nettleleaf goosefoot Russian thistle **Ehretia Family** fan-leaved tiquilia Spurge Family cf. thyme-leafed spurge **Pea Family** hairy prairie clover Mexican palo verde blue palo verde honey mesquite dyebush Four O'Clock Family sand verbena **Evening-Primrose Family** browneyes **Plantain Family** desert Indianwheat

Purslane Family purslane

DICOT FLOWERING PLANTS

Solanaceae

Datura discolor

Tamaricaceae *Tamarix ramosissima

Zygophyllaceae

Larrea tridentata *Tribulus terrestris

MONOCOTYLEDONEAE

Poaceae

*Eragrostissp. *Pennisetum ciliare *Schismus sp. *Sorghum bicolor *Stipa capensis

Nightshade Family

desert thorn-apple

Tamarisk Family saltcedar

Caltrop Family creosote bush puncture vine

MONOCOT FLOWERING PLANTS

Grass Family

love grass buffel grass Mediterranean grass sorghum cape rice grass

APPENDIX 3

SPECIES LIST: VERTEBRATE ANIMALS

Species List: Vertebrate Animals

This list reports only 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

BIRDS

Columbidae Zenaida macroura

Cuculidae Geococcyx californianus

Trochilidae *†Calypte costae*

Falconidae Falco sparverius

Tyrannidae Sayornis saya

Corvidae Corvus corax

Sturnidae *Sturnus vulgaris

Remizidae Auriparus flaviceps

Fringillidae Haemorhous mexicanus

MAMMALIA

Rodentia ≥ one species Pigeons and Doves mourning dove Cuckoos, Roadrunners, and Anis

greater roadrunner

Hummingbirds Costa's hummingbird

Caracaras and Falcons American kestrel

Tyrant Flycatchers Say's phoebe

Crows and Jays common raven

Starlings European starling

Penduline Tits and Verdins verdin

Fringilline & Cardueline Finches and Allies house finch

MAMMALS

Rodents burrows

APPENDIX 4

PHOTOGRAPHIC EXHIBITS



Photo 1. View along east project boundary. Desert saltbush scrub in foreground.



Photo 2. View from southeast corner. Desert saltbush scrub/Sonoran creosote bush scrub.



Photo 3. View of mesquite hummock from southern-central site.



Photo 4. Stabilized shielded desert sand fields as seen from southwest site corner.



Photo 5. Stabilized shielded desert sand fields and at right, desert saltbush scrub with palo verdes. View from northwestern area of site.



Photo 6. Disturbed stabilized shielded desert sand fields along north site boundary. The offsite Whitewater River / Coachella Valley Storm Drain at right.



Photo 7. Evidence of past removal of woody vegetation in northern site area.



Photo 8. Onsite debris such as this can create burrowing owl habitat.



Photo 9. Evidence of past "plumbing" onsite. Open pipes can create burrowing owl habitat.



Photo 10. Evidence of past "plumbing" onsite. Open pipes can create burrowing owl habitat.

APPENDIX 5

COACHELLA VALLEY NATIVE PLANTS RECOMMENDED FOR LANDSCAPING

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 (2022).

BOTANICAL NAME

Trees

Washingtonia filifera Cercidium floridum Chilopsis linearis Olneya tesota Prosopis glandulosa var. torreyana

Shrubs

Acacia greggii Ambrosia dumosa Atriplex canescens Atriplex lentiformis Atriplex polycarpa Baccharis sergiloides Bebia juncea Cassia (Senna) covesii Condalia parrvi Crossosoma bigelovii Dalea emoryi Dalea (Psorothamnus) schottii Datura meteloides Encelia farinosa Ephedra aspera Eriogonum fasciculatum Eriogonum wrightii membranaceum Fagonia laevis Gutierrezia sarothrae Haplopappus acradenius Hibiscus denudatus Hoffmannseggia microphylla Hymenoclea salsola Hyptis emoryi Isomeris arborea Juniperus californica Krameria grayi Krameria parvifolia Larrea tridentata Lotus rigidus

COMMON NAME

California fan palm blue palo verde desert willow ironwood tree honey mesquite cat's claw acacia burro bush four wing saltbush quailbush cattle spinach squaw water-weed sweet bush desert senna crucillo crossosoma dye weed indigo bush jimson weed brittle bush Mormon tea California buckwheat Wright's buckwheat no common name matchweed goldenbush desert hibiscus rush pea cheesebush desert lavender bladder pod California juniper ratany little-leaved ratany creosote bush desert rock pea

Asclepias subulata

BOTANICAL NAME	COMMON NAME
Lycium andersonii	box thorn
Petalonyx linearis	long-leaved sandpaper plant
Petalonyx thurberi	sandpaper plant
Peucephyllum schottii	pygmy cedar
Prunus fremontii	desert apricot
Rhus ovata	sugar-bush
Salazaria mexicana	paper-bag bush
Salvia apiana	white sage
Salvia eremostachya	Santa Rosa sage
Salvia vaseyi	wand sage
Simmondsia chinensis	jojoba
Sphaeralcia ambigua	desert mallow
Sphaeralcia ambigua rosacea	apricot mallow
Trixis californica	trixis
Zauschneria californica	California fuchsia
Groundcovers	
Mirabilis biaelovii	wishbone bush
Mirabilis tenuiloba	white four o'clock
Vines	
vitis giralana	desert grape
Accent	
Muhlenbergia rigens	deer grass
Herbaceous Perennials	
Adiantum capillus-veneris	maiden-hair fern (w)
Carex alma	sedge (w)
Dalea parryi	Parry dalea (w)
Eleocharis montevidensis	spike rush (w)
Equisetum laevigatum	horsetail (w)
Juncus bufonis	toad rush (w)
Juncus effuses	juncus (w)
Juncus macrophyllus	juncus (w)
Juncus mexicanus	Mexican rush (w)
Juncus xiphioides	juncus (w)
Notholaena parryi	Parry cloak fern
Pallaea mucronata	bird-foot fern
Cacti and Succulents	
Agave deserti	desert agave
Asclepias albicans	desert milkweed

ajamete

TANICAL NAME	COMMON NAME
Dudleya arizonica	live-forever
Dudleya saxosa	rock dudleya
Echinocereus engelmannii	calico hedgehog cactus
Ferocactus acanthodes	barrel cactus
Fouquieria splendens	ocotillo
Mamillaria dioica	nipple cactus
Mamillaria tetrancistra	corkseed cactus
Nolina parryi	Parry nolina
Opuntia acanthocarpa	stag-horn cholla
Opuntia bigelovii	teddy bear or jumping cholla
Opuntia basilaris	beavertail cactus
Opuntia echinocarpa	silver or golden cholla
Opuntia ramosissima	pencil cholla
Yucca schidigera	Mojave yucca, Spanish dagge
Yucca whipplei	our Lord's candle

APPENDIX 6

PROHIBITED INVASIVE ORNAMENTAL PLANTS

PROHIBITED INVASIVE ORNAMENTAL PLANTS BOTANICAL NAME

Acacia spp. (all species except A. greggii) Arundo donax¹ Atriplex semibaccata¹ Avena barbata Avena fatua Brassica tournefortii² Bromus madritensis ssp. rubens¹ Bromus tectorum² Cortaderia jubata [syn.C. atacamensis] Cortaderia dioica [syn. C. selloana] Descurainia sophia Eichhornia crassipes Elaegnus angustifolia Foeniculum vulgare Hirschfeldia incana Lepidium latifolium Lolium multiflorum Nerium oleander Nicotiana glauca¹ Oenothera berlandieri³ Olea europea Parkinsonia aculeata¹ Pennisetum clandestinum Pennisetum setaceum² Phoenix canariensis³ Phoenix dactylifera³ *Ricinus communis*¹ Salsola tragus¹ Schinus molle Schinus terebinthifolius Schismus arabicus Schismus barbatus² Stipa capensis² Tamarix spp. (all species)² Taeniatherum caput-medusae Tribulus terrestris Vinca major Washingtonia robusta Yucca gloriosa³

COMMON NAME

acacia (all except native catclaw acacia) giant reed Australian saltbush slender wild oat wild oat African or Saharan mustard red brome cheat grass Jubata crass or Andean pampas grass pampas grass tansy mustard water hyacinth Russian olive sweet fennel short-pod mustard perennial pepperweed Italian ryegrass oleander tree tobacco Mexican evening primrose European olive tree Mexican palo verde Kikuyu grass fountain grass Canary Island date palm date palm castorbean Russian thistle Peruvian pepper tree Brazilian pepper tree Mediterranean grass Saharan grass no common name tamarisk or salt cedar Medusa-head puncturevine periwinkle Mexican fan palm 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

Note: Many scientific names have undergone taxonomic changes in recent years. Refer to Jepson Flora Project (2022).

APPENDIX 7

CNDDB REPORT

Scientific Name	Common Name	Quadrangle	Section	Extant?	Date	ESA	CESA	State Rank	CNPS RANK	CDFW Status	Other Status	Location	Location Details	Habitat	General Information	Threat
Euphorbia abramsiana	Abrams' spurge	Myoma	T05S, R06E, Sec. 02 (S)	Presumed Extant	19680305	None	None	S2	28.2		SB_CalBG/ RSABG	Palm desert; country club rd, coachella valley.	Exact location unknown. Mapped by cnddb as best guess along country club dr around 200 ft in elevation.	Sandy flat.	Only source of information is a vague 1968 myrick collection. Needs fieldwork.	
Ditaxis serrata var. californica	California ditaxis	La Quinta	T06S, R06E, Sec. 12, NW (S)	Presumed Extant	19971106	None	None	52?	3.2			La quinta; just w of avenida montezuma and calle nogales, e foot of indio mtn, coachella valley.		Rocky, and gravelly area near mouth of wash; creosote bush scrub with encelia farinosa, hymenoclea salsola, cercidium floridum, allionia incarnata, perityle emoryi, ditaxis lanceolata, larrea tridentata, psorothamnus schottii, etc.	<10 plants seen in 1997. A vague 1905 hall collection from "marshall canyon, 7 miles w of coachella" also attributed to this site.	
Ditaxis serrata var. californica	California ditaxis	La Quinta	T05S, R06E, Sec. 33, SE (S)	Presumed Extant	197805XX	None	None	S2?	3.2			Nw side of hidden valley, s of town of palm desert.				

Ditaxis serrata var. californica	California ditaxis	La Quinta	T05S, R06E, Sec. 28, SE (S)	Presumed Extant	19840213	None	None	S2?	3.2		Living desert reserve on eisenhower mtn trail along wash, s of palm desert.	Location mapped in sec 28 se 1/4 of se 1/4 based on field survey form.	In a sandy wash associated with creosote bush scrub, larrea, encelia, ambrosia, dalea schottii, and ditaxis neomexicana.	46 plants observed in 1984.	
Abronia villosa var. aurita	chaparral sand- verbena	La Quinta	T05S, R06E, Sec. 24 (S)	Presumed Extant	19220414	None	None	52	18.1	BLM_S; SB_CalBG/ RSABG; USFS_S	Indian wells.	Exact location unknown. Mapped by cnddb as a best guess centered on the city of indian wells.	Sandy desert.	Site based on 1920 & 1922 collections from "indian wells". Barrus describes plants as "very common in colorado desert at this time, in places the desert floor was pink with [the flowers] for miles" in 1920. Needs fieldwork.	This vicinity has been extensively developed.

Abronia villosa var. aurita	chaparral sand- verbena	Indio	T05S, R07E, Sec. 23 (S)	Presumed Extant	19490409	None	None	52	1B.1	BLM_S; SB_CalBG/ RSABG; USFS_S	Indio.	Exact location unknown. Mapped by cnddb as a best guess centered on the city of indio.	Rocky, sandy type soil. Side of dry river bed.	Only source of information for this occurrence is a 1949 collection by lage, et al. Collection may have originated from along the adjacent whitewater river channel. Needs fieldwork.	The riverbeds in this vicinity have been channelized by flood protection projects and development.
Astragalus lentiginosus var. coachellae	Coachella Valley milk-vetch	La Quinta	T05S, R06E, Sec. 24 (S)	Presumed Extant	19220414	Endan gered	None	S1	1B.2	SB_CalBG/ RSABG; SB_USDA	Indian wells.	Exact location unknown. Mapped by cnddb as best guess at indian wells.	Sand hills.	Only source of information is a 1922 munz & keck collection. Needs fieldwork.	
Astragalus lentiginosus var. coachellae	Coachella Valley milk-vetch	Indio	T05S, R07E, Sec. 23 (S)	Presumed Extant	19290316	Endan gered	None	S1	18.2	SB_CalBG/ RSABG; SB_USDA	Near indio, colorado desert.	Exact location unknown. Mapped by cnddb as best guess in vicinity of the town of indio.	Sandy desert.	Occurrence based on a 1926 minthorn collection. A 1929 clark collection from "n. Indio" also attributed to this site. Needs fieldwork.	

Astragalus lentiginosus var. coachellae	Coachella Valley milk-vetch	Myoma	T04S, R06E, Sec. 36 (S)	Presumed Extant	20190303	Endan gered	None	S1	18.2	SB_CalBG/ RSABG; SB_USDA	North of i-10 and west of washington street, northwest of myoma.	Mapped as many polygons according to 2005, 2006, 2009, 2017, & 2019 coordinates, datasets provided by ucr center for conservation biology and the coachella valley mshcp, and a 2007 meinke report.	Sparse desert scrub. Associated species: camissonia claviformis, brassica tournefortii, abronia villosa var. Villosa, schismus barbatus, lotus strigosus, malacothrix glabrata, larrea tridentata, cryptantha intermedia, etc.	Pop #s for portions of site: <10 plants in 1987, 309 seen in 1995 by barrows (reported in coachella valley mshcp) among 3 dune systems, 72 plants across site in 2001, 2500+ in 2005/2006, seen in 2009, 2017, 2019. Includes former eo #39.	Flood control. Extensive sahara mustard infestation has likely negatively impacted this population.
Astragalus lentiginosus var. coachellae	Coachella Valley milk-vetch	Myoma	T05S, R06E, Sec. 02, SE (S)	Presumed Extant	20010511	Endan gered	None	S1	1B.2	SB_CalBG/ RSABG; SB_USDA	Adjacent to oasis club drive, east of the golf course, south of highway 10, 2.3 air miles wnw of myoma.	Located on top of small sand dune adjacent to paved road. Mapped within the se 1/4 se 1/4 section 2.	Undisturbed creosote scrub community on top of small sand dune.	8 plants observed in 2001.	Possible development.
Ditaxis claryana	glandular ditaxis	La Quinta	T05S, R07E, Sec. 29 (S)	Presumed Extant	xxxxxx x	None	None	S2	2B.2		4 miles west of indio, coachella valley.	Observed at t05s r06e section 29.		Only source of information for this site is undated site report by blm.	

Ditaxis claryana	glandular ditaxis	Indio	T05S, R07E, Sec. 23 (S)	Presumed Extant	19060427	None	None	52	28.2		Indio.	Exact location unknown. Mapped by cnddb as best guess at indio.		Only source of information for this site are two 1906 collections by jones. Needs fielwork.	
Ditaxis claryana	glandular ditaxis	La Quinta	T05S, R06E, Sec. 28 (S)	Possibly Extirpated	19320314	None	None	52	28.2		Deep canyon, coachella valley.	Exact location unknown. Mapped by cnddb as best guess around the portion of deep canyon at about 300 feet in elevation.	On dry, stony slopes.	Only source of information for this site is a 1932 munz collection. Needs fieldwork.	Much development has occurred in this area since 1932; possibly extirpated.
Ditaxis claryana	glandular ditaxis	La Quinta	T06S, R06E, Sec. 01 (S)	Presumed Extant	19590108	None	None	52	28.2		La quinta area, about 8 mi west of coachella.	Mapped by cnddb as per blm directions: t6s r6e section 1.		1932 and 1933 clary collections from "coral reef ranch, 8 mi west of coachella" and a 1959 rose collection from "la quinta" are attributed to this site. Needs fieldwork.	

Astragalus sabulonum	gravel milk-vetch	Indio	T05S, R07E, Sec. 23 (S)	Presumed Extant	19060430	None	None	S2	28.2		Indio.	Exact location unknown. Mapped by cnddb centered on the city of indio.	Only sources of information for this occurrence are an 1891 orcutt collection and a 1906 jones collection, both with localities given only as "indio." needs fieldwork.	Much of this area has been developed since these collections were made.
Astragalus preussii var. laxiflorus	Lancaster milk-vetch	La Quinta	T06S, R07E, Sec. 21 (S)	Possibly Extirpated	19280404	None	None	S1	1B.1		Coral reef ranch, coachella valley.	Exact location unknown. Mapped as best guess by cnddb based on historic description for "coral reef" near rau ranch located at the northwest corner of ave 58 and madison st.	Only source of information for this occurrence is a 1928 collection by ackley. Needs fieldwork.	Aerial photos from 2009 show development in area.

Xylorhiza cognata	Mecca- aster	West Berdoo Canyon	T05S, R07E, Sec. 01, NW (S)	Presumed Extant	20060126	None	None	52	18.2	BLM_S; SB_CalBG/ RSABG	Nne of indio; approximately 2.3 miles southeast of biskra palms, indio hills.	Se poly mapped according to 2006 benigno coords. Nw poly mapped according to 1984 trs from stewart: t05s r7e ne1/4 of ne1/4 sec 2 and se1/4 of ne1/4 sec 2; nw1/4 of nw1/4 sec 1; t04s r7e se1/4 of se1/4 sec 35 and sw1/4 of sw1/4 sec 36.	On gypsum clay. Associated with hymenoclea salsola, peucephyllum schottii, atriplex polycarpa, dalea spinosa, coldenia palmeri, & atriplex canescens.	200 plants observed in 1984. 2006: 1 plant seen in the se1/4 of the ne1/4 of section 2 and 17 plants seen in southeast polygon. Includes former occurrence #33.	Illegal off-road vehicle trails.
Nemacaulis denudata var. gracilis	slender cottonhea ds	La Quinta	T05S, R06E, Sec. 24, NW (S)	Possibly Extirpated	19800520	None	None	S2	28.2		North side of whitewater wash, west of miles ave and north of hwy 111, indian wells.		Dune.	Only source of information for this site is 1980 collection by ertter and strachan. Needs fieldwork.	Based on 2009 aerial imagery, a golf course covers much of this area; possibly extirpated.
Nemacaulis denudata var. gracilis	slender cottonhea ds	La Quinta	T05S, R06E, Sec. 24, SE (S)	Extirpated	198XXXXX	None	None	S2	28.2		Southwest of intersection of highway 111 and bay club drive, indian wells.		Sand dunes.	Site based on a 1978 sanders collection.	According to sanders (1993) site has been destroyed and a country club built on the site.

Taxidea taxus	American badger	Indio	T05S, R07E, Sec. 23 (S)	Presumed Extant	xxxxxxx x	None	None	S3	SSC	IUCN_LC	Indio.			1 collected, ucla.	
Polioptila melanura	black- tailed gnatcatch er	La Quinta	T05S, R06E, Sec. 24, SW (S)	Presumed Extant	19190316	None	None	S3S4	WL	IUCN_LC	Indian wells.			Sbcm specimen #8137 and wfvz egg set (1930-04- 13).	
Polioptila melanura	black- tailed gnatcatch er	La Quinta	T06S, R06E, Sec. 13, S (S)	Presumed Extant	19840502	None	None	S3S4	WL	IUCN_LC	Bajada s of la quinta in the vicinity of bear creek and santa rosa wildlife area, blm.	Mapped to "bajada s of la quinta" and provided map, where population densities were observed to be the highest.	Habitat described as rocky and sandy creosote bajada; wash with palo verde, mesquite, and smoke tree. Visible disturbances include dumping and orv use.	50+ observed on 9 jul 1983; mainly in bajada, with lower densities through la quinta and n of town. 6 obs breeding & feeding in area on 2 may 1984; lower detections may be due to less survey effort, smaller area covered, &/or dryer winter.	Possibly threatened by flood control project and orv use.
Polioptila melanura	tailed gnatcatch er	La Quinta	R06E, Sec. 36 (S)	Presumed Extant	19530113	None	None	S3S4	WL	IUCN_LC	2 mi s of indian wells.			Csulb specimen #525.	
Polioptila melanura	black- tailed gnatcatch er	Indio	T06S, R08E, Sec. 05 (S)	Presumed Extant	19340226	None	None	S3S4	WL	IUCN_LC	Coachella.			Lacm specimen #18414 and sbcm egg #6121 (1928- 03-27).	

Polioptila melanura	black- tailed gnatcatch er	La Quinta	T06S, R07E, Sec. 08, SW (S)	Presumed Extant	19840501	None	None	\$3\$4	WL	IUCN_LC	Approximately 1.5 mi e of la quinta po (historical), just w of coachella canal, coachella vzalley.	Mapped to provided map. Locality described as "rocky slopes and small bajada between la quinta and lake cahuilla."	Habitat described as debris chutes, alluvial fan, rocky slope and bajada vegetation consisting of encilia sp, larrea sp, and prosopis sp.	2 individuals observed breeding and feeding in area between 30 apr and 1 may 1984.	Possibly threatened by development.
Athene cunicularia	burrowing owl	Indio	T05S, R07E, Sec. 23 (S)	Presumed Extant	19270320	None	None	S3	SSC	BLM_S; IUCN_LC; USFWS_B CC	Indio.			Sbcm egg set #2579 collected 20 mar 1927.	
Athene cunicularia	burrowing owl	La Quinta	T05S, R07E, Sec. 09, SW (S)	Presumed Extant	20070515	None	None	\$3	SSC	BLM_S; IUCN_LC; USFWS_B CC	East side of i-10, se of the jefferson street junction, indio.	Burrow was located near the toe of the ne- facing manufactured slope below the freeway offramp for the westbound lanes. Block code 3730-565 - location code a. Mapped to provided coordinates.	Slope surrounding burrow was vegetated by atriplex canescens, tidestomia oblongifolia, conyza canadensis, encelia farinosa, brassica tournefortii, salsola tragus, avena fatua, cynodon dactylon, and schismus barbatus.	Pair was observed defending this burrow on 12 aug and 6-8 sep 2006; no young observed. 1 adult observed and 1 breeding pair estimated to occur in area on 15 may 2007.	Threatened by plans to modify and realign the freeway interchange and urbanization of surrounding foraging habitat.

Athene cunicularia	burrowing owl	Myoma	T05S, R07E, Sec. 08 (S)	Presumed Extant	20060906	None	None	\$3	SSC	BLM_S; IUCN_LC; USFWS_B CC	North side of the i- 10 offramp to jefferson st, indio.	Mapped according to location discription not coordinates provided. Coordinates put location about 0.50 mi ne of the offramp.	Habitat consists of low dunes and hummocks with scattered saltbush. Surrounding area is residential, trailer park and i- 10 freeway.	Burrow site. 1 buow observed, on a post, on the north facing slope of i-10 westbound jefferson st offramp.	Threatened by freeway interchange construction & residential development.
Athene cunicularia	burrowing owl	Indio	T05S, R07E, Sec. 36, NW (S)	Extirpated	200312XX	None	None	\$3	SSC	BLM_S; IUCN_LC; USFWS_B CC	Sw of the intersection of avenue 48 and calhoun street, indio.		Burrow consists of an agricultural stand pipe in an area of fallow agriculture, which was developed by dec 2003.	1 individual observed on 30 jun 2003 at the stand pipe entrance; by dec 2003 no owls could be found, and the site was developed.	
Dinacoma caseyi	Casey's June beetle	La Quinta	T05S, R06E, Sec. 24 (S)	Extirpated	19530425	Endan gered	None	S1			Indian wells.		Found on alluvial fans where dissipating flows deposit finer silts and sands.	Historical locality, cited in emergency listing petition. Two specimens in la county museum of natural history, collected 24-25 apr 1953.	

Macrobaenet es valgum	Coachella giant sand treader cricket	La Quinta	T05S, R06E, Sec. 17, W (S)	Presumed Extant	19590521	None	None	S1S2		IUCN_VU	1 mile north of palm desert.	Found on wind- swept sand dune ridges. Although this species is largely regulated in abundance by winter rains, some spots, where springs keep the sand damp, are favorable to permanent habitation.	In very dry years, the species disappears over most of the sand areas.	
Macrobaenet es valgum	Coachella giant sand treader cricket	La Quinta	T05S, R07E, Sec. 19, W (S)	Presumed Extant	19580503	None	None	S1S2		IUCN_VU	4 miles west of indio.	Found on wind- swept sand dune ridges. Although this species is largely regulated in abundance by winter rains, some spots, where springs keep the sand damp, are favorable to permanent habitation.	In very dry years, the species disappears over most of the sand areas.	

Macrobaenet es valgum	Coachella giant sand treader cricket	La Quinta	T05S, R07E, Sec. 21, W (S)	Presumed Extant	xxxxxx x	None	None	S152		IUCN_VU	2 miles west of indio.		Found on wind- swept sand dune ridges. Although largely regulated in abundance by winter rains, there are some spots, where springs keep the sand damp, that are favorable to permanent habitation.	In very dry years, the species disappears over most of the sand areas.	
Uma inornata	Coachella Valley fringe- toed lizard	La Quinta	T05S, R07E, Sec. 30 (S)	Presumed Extant	197507XX	Threat ened	Enda ngere d	S1		IUCN_EN	Area from miles ave to 1.2 mile south & washington street to 1.3 miles west; vic of whitewater river, east indian wells.	England and nelson: t5s r7e sw 1/4 of ne 1/4 section 30. Davis: t5s r6e ne 1/4 section 25, se 1/4 section 24; t5s r7e nw 1/4 section 30, sw 1/4 section 19. Ssc #768: 1 mi e indian wells. Sdnhm #10893: indian wells.	New golf course occupies a large portion of the habitat. Probably some lizards left in remaining habitat according to barrows (1988).	England and nelson locality for july 1975. Davis records for time period 1969-1975. Historical collection (sdnhm #10893, collection date unknown). Ssc collection #768. Includes locations from recovery plan (1984).	

Uma inornata	Coachella Valley fringe- toed lizard	Myoma	T04S, R06E, Sec. 36 (S)	Presumed Extant	20050519	Threat ened	Enda ngere d	S1		IUCN_EN	Coachella valley ecological reserve & nwr, nw of 38th & washington st jct, 3.75 mi s of thousand palms oasis, riv co.	Dune system ('88) sec22, 23, 26, 27, 35, 36. Davis record:t4sr6e ne1/4 ne1/4 sec36; t4sr7e nw1/4nw1/4 sec31. England&nelson:t 4sr6e se1/4se1/4 sec25, se1/4ne1/4 sec36. Turner: plots 2,4. Aug '94: sw1/4sw1/4, nw1/4nw1/4 sec36. '05:nw1/4 sec 1	Aeolian sand, creosote hummocks, "barchan" dune, creosote scrub. Good habitat & viable lizard population, but development to east may have extirpated other populations.	1970:1 dor, washington st. Turner, 1980:68 cap/released. Pop reduced btwn '86&'88 (drought?). Data through '92 show pop stable in short term. Aug '94:25 obs, 23 adults c/r. 2001: 1 obs during fthl surveys se corner of preserve. '05:3 adults.	Threatened by non-native and invasive plants, continuing development, and agriculture in surrounding area.
Uma inornata	Coachella Valley fringe- toed lizard	Myoma	T05S, R06E, Sec. 03 (S)	Presumed Extant	198004XX	Threat ened	Enda ngere d	S1		IUCN_EN	2.4 miles nne of palm desert, coachella valley.	Vicinity of country club dr and cook st. Turner study plot 7: 38 lizards captured and marked in 1980. England and nelson: t5s r6e nw 1/4 of nw 1/4 section 10.	Habitat of sandy plains. Habitat has been degraded but some extant habitat of poor quality and possibly some lizards.	England and nelson locality for july 1975. Turner study data for april 1980. Includes locations from recovery plan (1984).	Development.
Uma inornata	Coachella Valley fringe- toed lizard	La Quinta	T05S, R07E, Sec. 31, NW (S)	Presumed Extant	1975XXXX	Threat ened	Enda ngere d	S1		IUCN_EN	1.3 miles south of state route 111, 0.5 mile west of washington street; sw indian wells.	Davis record: t5s r7e nw 1/4 of nw 1/4 section 31.		Davis record for time period 1969- 1975. Includes data from recovery plan (1984).	

Uma inornata	Coachella Valley fringe- toed lizard	La Quinta	T06S, R07E, Sec. 05 (S)	Possibly Extirpated	197507XX	Threat ened	Enda ngere d	S1		IUCN_EN	Located between avenue 50 and avenue 52, west of jefferson street; 1 mile east of la quinta.	Ssc #769: 1 mi e la quinta. England and nelson: t6s r7e se 1/4 of nw 1/4 section 5.	England and nelson locality from 1975. Historical collection #769 ssc. Collected 4 sep 1968. Includes data from recovery plan (1984). 2006 satellite imagery shows that this site has been completely developed with houses and golf courses.	
Uma inornata	Coachella Valley fringe- toed lizard	Myoma	T04S, R07E, Sec. 32, SW (S)	Presumed Extant	197507XX	Threat ened	Enda ngere d	S1		IUCN_EN	4.5 miles sse of thousand palms oasis.	Between adams st and jefferson st. T4s r7e se 1/4 of sw 1/4 section 32.	England and nelson locality for july 1975. Includes data from recovery plan (1984).	

Uma inornata	Coachella Valley fringe- toed lizard	Myoma	T05S, R07E, Sec. 05 (S)	Presumed Extant	197507XX	Threat ened	Enda ngere d	S1		IUCN_EN	Located between adams street and jefferson street, north of i-10 and myoma.	England & nelson: t5s r7e nw 1/4 of nw 1/4 section 8. Davis record: t5s r7e sw area section 5. Bordered to west by adams street (0.75 mile) & north & south of avenue 40 (0.5 mile). Recovery plan: various locations in sections 5 & 8.	England and nelson locality for july 1975. Davis record for time period 1969-1975. Includes data from recovery plan (1984).	
Uma inornata	Coachella Valley fringe- toed lizard	Myoma	T05S, R07E, Sec. 06 (S)	Presumed Extant	1975XXXX	Threat ened	Enda ngere d	S1		IUCN_EN	Vicinity of washington street and i-10, wnw of myoma.	Davis records: t5s r6e se 1/4 of se 1/4 section 1 and ne 1/4 of ne 1/4 section 1, t5s r7e nw 1/4 of nw 1/4 section 6 and sw 1/4 of sw 1/4 section 6. Recovery plan: various locations section 6.	Davis record for time period 1969- 1975. Includes locations from recovery plan (1984).	

Uma inornata	Coachella Valley fringe- toed lizard	La Quinta	T05S, R07E, Sec. 20, SW (S)	Presumed Extant	19680609	Threat ened	Enda ngere d	S1		IUCN_EN	South of miles avenue and north of whitewater river, east of indian wells.	Lacm #115546- 7:off dune palms road nr palm desert. M. Long fg 756: dune palms rd off miles ave. M. Long: n end dune palms rd, 1/2 mi s bermuda dunes country club. Davis record: t5s r7e sw 1/4 section 20.	Large area with some extant habitat but mostly degraded. Presumably a few lizards but probably not a viable population.	Lacm #115546-7 collected on 9 jun 1968. M. Long: specimens collected 27 apr 1968. Davis record for time period 1969-1975. Includes data from recovery plan (1984).	
Uma inornata	Coachella Valley fringe- toed lizard	La Quinta	T05S, R07E, Sec. 17 (S)	Presumed Extant	1975XXXX	Threat ened	Enda ngere d	S1		IUCN_EN	Vicinity of bermuda dunes country club, east of adams street and north of avenue 44, south of myoma.	Davis: t5s r7e nw 1/4 of se 1/4 section 17.		Davis record for time period 1969- 1975. Includes data from recovery plan (1984).	
Uma inornata	Coachella Valley fringe- toed lizard	La Quinta	T06S, R07E, Sec. 09, NW (S)	Presumed Extant	1975XXXX	Threat ened	Enda ngere d	S1		IUCN_EN	Vicinity of the coachella canal & avenue 52, 2 miles east of la quinta.	East of jefferson street and south of avenue 52. England and nelson record: t6s r7e ne 1/4 of nw 1/4 section 9. Davis record: t6s r7e nw 1/4 of nw 1/4 section 9.		England and nelson locality for july 1975. Davis record for time period 1969-1975. Includes data from recovery plan (1984).	

Uma inornata	Coachella Valley fringe- toed lizard	Indio	T05S, R07E, Sec. 35, SE (S)	Presumed Extant	197507XX	Threat ened	Enda ngere d	S1		IUCN_EN	2 miles south of state route 111; south indio.	Bordered to the south by avenue 50 and to the east by jackson street. England and nelson, davis: t5s r7e se 1/4 of se 1/4 section 35.	England and nelson locality for july 1975. Davis record for time period 1969-1975. Includes data from recovery plan (1984).	
Uma inornata	Coachella Valley fringe- toed lizard	La Quinta	T05S, R07E, Sec. 20 (S)	Presumed Extant	1975XXXX	Threat ened	Enda ngere d	S1		IUCN_EN	Area 1 mile north of state route 111, east of indian wells.	North/south of miles avenue and east/west of jefferson street. Davis record: t5s r7e ne 1/4 of se 1/4 section 20.	Davis record for time period 1969- 1975. Includes data from recovery plan (1984).	
Uma inornata	Coachella Valley fringe- toed lizard	La Quinta	T06S, R07E, Sec. 06 (S)	Possibly Extirpated	197507XX	Threat ened	Enda ngere d	S1		IUCN_EN	2 miles south of state route 111, north of la quinta.	1/4 mile south and north of avenue 50, bordered to the east by washington street. England and nelson: t5s r7e se 1/4 of sw 1/4 section 31. Davis: t6s r7e nw 1/4 of nw 1/4 section 6.	England and nelson locality for july 1975. Davis record for time period 1969-1975. Includes data from recovery plan (1984). 2006 satellite imagery shows that this area is completely developed with houses and golf courses.	

Uma inornata	Coachella Valley fringe- toed lizard	La Quinta	T05S, R07E, Sec. 32 (S)	Presumed Extant	197507XX	Threat ened	Enda ngere d	S1		IUCN_EN	Area 0.5 mile south of state route 111 and bordered to the east by jefferson street, ne of la quinta.	England and nelson: t5s r7e ne 1/4 of ne 1/4 section 32. Davis: t5s r7e se 1/4 of se 1/4 section 29.	England and nelson locality for july 1975. Davis record for time period 1969-1975. Includes data from recovery plan (1984).		
Uma inornata	Coachella Valley fringe- toed lizard	La Quinta	T05S, R06E, Sec. 14 (S)	Presumed Extant	197507XX	Threat ened	Enda ngere d	S1		IUCN_EN	Approximately 1.4 miles west of washington st, north of the whitewater river, between palm desert and indian wells.	North and south of avenue 44. England and nelson: t5s r6e sw 1/4 of se 1/4 section 14. Museum record: t5s r6e nw 1/4 of ne 1/4 section 23.	England and nelson record for july 1975. Museum record (museum unidentified) from the 1900's. Includes data from recovery plan (1984).		
Uma inornata	Coachella Valley fringe- toed lizard	Indio	T05S, R08E, Sec. 07, SW (S)	Presumed Extant	1975XXXX	Threat ened	Enda ngere d	S1		IUCN_EN	Ne of the intersection of avenue 42 and van buren street, ne indio.	T5s r8e sw 1/4 of sw 1/4 section 7.	Davis record for time period 1969- 1975. Includes data from recovery plan (1984).		
Uma inornata	Coachella Valley fringe- toed lizard	La Quinta	T05S, R07E, Sec. 21, SE (S)	Presumed Extant	197507XX	Threat ened	Enda ngere d	S1		IUCN_EN	Vicinity of whitewater river / coachella valley stormwater channel, 0.9 mile north of hwy 111; east of indian wells.	Bordered to north by miles avenue. T5s r7e nw 1/4 of se 1/4 section 21.		England and nelson locality for july 1975.	
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Uma inornata	Coachella Valley fringe- toed lizard	La Quinta	T05S, R06E, Sec. 36, SE (S)	Presumed Extant	19XXXXX X	Threat ened	Enda ngere d	S1		IUCN_EN	0.5 mile north of avenue 50 and bordered to the west by eisenhower drive; approximately 1 mile north of la quinta.	Sdnhm #39750: 1 mi n of la quinta. Unidentified museum record: t5s r6e ne 1/4 of se 1/4 section 36.	Some habitat and lizards extant according to barrows (1988).	Museum record (museum not identified) from the 1900's. Historical collection #39750 sdnhm, collection date unknown. Includes locations from recovery plan (1984).	
Uma inornata	Coachella Valley fringe- toed lizard	Myoma	T05S, R07E, Sec. 06, SE (S)	Presumed Extant	197507XX	Threat ened	Enda ngere d	S1		IUCN_EN	Approximately 0.4 mile north of i-10 and 0.3 mile west of adams street, nw of myoma.	T5s r7e nw 1/4 of se 1/4 section 6.		England and nelson record for july 1975.	

Uma inornata	Coachella Valley fringe- toed lizard	La Quinta	T05S, R07E, Sec. 29, SW (S)	Presumed Extant	197507XX	Threat ened	Enda ngere d	S1		IUCN_EN	0.4 mile west of dunes palm road, just south of state route 111; east of indian wells.	T5s r7e nw 1/4 of sw 1/4 section 29.	England and nelson locality for july 1975.	
Uma inornata	Coachella Valley fringe- toed lizard	La Quinta	T05S, R07E, Sec. 08, SE (S)	Presumed Extant	1975XXXX	Threat ened	Enda ngere d	S1		IUCN_EN	Vicinity of bermuda dunes airport, south of i- 10; myoma.	T5s r7e nw 1/4 of se 1/4 section 8.	Davis record for time period 1969- 1975.	
Uma inornata	Coachella Valley fringe- toed lizard	La Quinta	T05S, R07E, Sec. 31, SE (S)	Presumed Extant	19750506	Threat ened	Enda ngere d	S1		IUCN_EN	1.5 mile south of state route 111 and 0.4 mile east of washington street, north of la quinta.	Bordered to south by avenue 50. Brode and cordone: rd 50 jct e washington st 1 mi n la quinta. Davis record: t5s r7e se 1/4 of se 1/4 section 31.	Brode and cordone: collected 6 may 1975. Davis record for time period 1969-1975. Includes data from recovery plan (1984).	
Uma inornata	Coachella Valley fringe- toed lizard	Indio	T06S, R07E, Sec. 02, NW (S)	Presumed Extant	1975XXXX	Threat ened	Enda ngere d	S1		IUCN_EN	Area se intersect of monroe street and avenue 50, 2 miles south of indio.	T6s r7e nw 1/4 of nw 1/4 section 2.	Davis record for time period 1969- 1975. Includes data from recovery plan (1984).	

Uma inornata	Coachella Valley fringe- toed lizard	Myoma	T05S, R07E, Sec. 06, NE (S)	Presumed Extant	1975XXXX	Threat ened	Enda ngere d	S1		IUCN_EN	Area sw of intersection of avenue 39 and adams street, 1 mile north of i-10; nnw of myoma.	T5s r7e ne 1/4 of ne 1/4 section 6.	Davis record for time period 1969- 1975. Includes data from recovery plan (1984).	
Uma inornata	Coachella Valley fringe- toed lizard	West Berdoo Canyon	T05S, R07E, Sec. 10, NE (S)	Presumed Extant	1975XXXX	Threat ened	Enda ngere d	S1		IUCN_EN	0.7 mile north of i- 10 and south of indio hills, north of indio.	Bordered to east by monroe street & just south of coachella canal. T5s r7e ne 1/4 of ne 1/4 section 10.	Davis record for time period 1969- 1975. Includes data from recovery plan (1984).	
Uma inornata	Coachella Valley fringe- toed lizard	Indio	T06S, R07E, Sec. 11, NW (S)	Presumed Extant	1975XXXX	Threat ened	Enda ngere d	S1		IUCN_EN	Area se of intersection of monroe street and avenue 52, 3.2 miles west of coachella.	T6s r7e nw 1/4 of nw 1/4 section 11.	Davis record for time period 1969- 1975. Includes data from recovery plan (1984).	
Uma inornata	Coachella Valley fringe- toed lizard	Indio	T06S, R07E, Sec. 13, NW (S)	Presumed Extant	1975XXXX	Threat ened	Enda ngere d	S1		IUCN_EN	Area se of intersection of jackson street and avenue 54, 2.8 miles sw of coachella.	T6s r7e nw 1/4 of nw 1/4 section 13.	Davis record for time period 1969- 1975. Includes data from recovery plan (1984).	

Uma inornata	Coachella Valley fringe- toed lizard	La Quinta	T05S, R06E, Sec. 16, SE (S)	Presumed Extant	1975XXXX	Threat ened	Enda ngere d	S1		IUCN_EN	0.9 mile north of state route 111, vicinity of whitewater river; palm desert.	T5s r6e ne 1/4 of se 1/4 section 16.	Davis record for time period 1969- 1975. Includes data from recovery plan (1984).	
Uma inornata	Coachella Valley fringe- toed lizard	Indio	T05S, R07E, Sec. 35, NE (S)	Presumed Extant	1975XXXX	Threat ened	Enda ngere d	S1		IUCN_EN	1 mile south of state route 111, south indio.	Bordered to the north by avenue 48 and to the east by jackson street. T5s r7e ne 1/4 of ne 1/4 section 35.	Davis record for time period 1969- 1975. Includes data from recovery plan (1984).	
Uma inornata	Coachella Valley fringe- toed lizard	Indio	T06S, R07E, Sec. 14, NW (S)	Presumed Extant	1975XXXX	Threat ened	Enda ngere d	S1		IUCN_EN	Area se of intersection of monroe street and avenue 54, 3.6 miles sw of coachella.	T6s r7e nw 1/4 of nw 1/4 section 14.	Davis record for time period 1969- 1975. Includes data from recovery plan (1984).	
Uma inornata	Coachella Valley fringe- toed lizard	Indio	T06S, R07E, Sec. 11, NE (S)	Presumed Extant	1975XXXX	Threat ened	Enda ngere d	S1		IUCN_EN	Area sw intersect of jackson street and avenue 52, 2.6 miles west of coachella.	T6s r7e ne 1/4 of ne 1/4 section 11.	Davis record for time period 1969- 1975. Includes data from recovery plan (1984).	

Uma inornata	Coachella Valley fringe- toed lizard	Indio	T05S, R07E, Sec. 26, SW (S)	Presumed Extant	1975XXXX	Threat ened	Enda ngere d	S1		IUCN_EN	1 mile south of state route 111; south indio.	Bordered to south by avenue 48 and to west by monroe street. Davis record from t5s r7e sw 1/4 of sw 1/4 section 26.	Davis record for time period 1969- 1975. Includes data from recovery plan (1984).	
Uma inornata	Coachella Valley fringe- toed lizard	Indio	T05S, R07E, Sec. 11, SE (S)	Presumed Extant	1975XXXX	Threat ened	Enda ngere d	S1		IUCN_EN	0.5 mile north of i- 10, north indio.	Bordered to south by avenue 42 and to the east by jackson street. T5s r7e se 1/4 of se 1/4 section 11.	Davis record for time period 1969- 1975. Includes data from recovery plan (1984).	
Uma inornata	Coachella Valley fringe- toed lizard	La Quinta	T05S, R07E, Sec. 19, NW (S)	Presumed Extant	197507XX	Threat ened	Enda ngere d	S1		IUCN_EN	South of avenue 44 and north of state route 111, indian wells.	Bordered to north by avenue 44 and to west by washington street. T5s r7e nw 1/4 of nw 1/4 section 19.	England and nelson locality for july 1975. Includes data from recovery plan (1984).	
Uma inornata	Coachella Valley fringe- toed lizard	West Berdoo Canyon	T05S, R07E, Sec. 11, NE (S)	Presumed Extant	1975XXXX	Threat ened	Enda ngere d	S1		IUCN_EN	0.7 mile north of i- 10 and south of indio hills, north of indio.	Bordered to east by jackson street. T5s r7e ne 1/4 of ne 1/4 of 11.	Davis record for time period 1969- 1975. Includes data from recovery plan (1984).	

Uma inornata	Coachella Valley fringe- toed lizard	La Quinta	T05S, R06E, Sec. 14, SW (S)	Presumed Extant	1975XXXX	Threat ened	Enda ngere d	S1		IUCN_EN	Ne of the intersection of avenue 44 and the whitewater river, 0.6 mile north of state route 111; nw indian wells.	Bordered to south by avenue 44. T5s r6e sw 1/4 of sw 1/4 section 14.	Davis record for time period 1969- 1975. Includes data from recovery plan (1984).	
Toxostoma crissale	Crissal thrasher	La Quinta	T05S, R06E, Sec. 24, SE (S)	Presumed Extant	19321229	None	None	S3	SSC	BLM_S; IUCN_LC	Indian wells.		#32325 ucla.	
Toxostoma crissale	Crissal thrasher	Indio	T05S, R07E, Sec. 23, SE (S)	Presumed Extant	19240419	None	None	S3	SSC	BLM_S; IUCN_LC	Indio.	Location only stated as indio.	1 collected on 19 apr 1924 by joseph mailliard.	
Toxostoma crissale	Crissal thrasher	Indio	T06S, R08E, Sec. 05, NW (S)	Presumed Extant	19410330	None	None	S3	SSC	BLM_S; IUCN_LC	Coachella.		Egg set #6837 sbcm.	
Dipodomys merriami collinus	Earthquak e Merriam's kangaroo rat	Myoma	T04S, R06E, Sec. 36, SE (S)	Presumed Extant	20030626	None	None	S2			0.8 mile north & 0.25 mile west of the intersection of interstate 10 and washington street, indio.	Mapped according to stated coordinates. Along and north of 38th avenue, 0.1 mile west of washington street.	1 breeding female adult trapped & released on 25 june 2003, and 1 female & 1 male breeding adults trapped and released on 26 june 2003.	

Phrynosoma mcallii	flat-tailed horned lizard	Myoma	T04S, R06E, Sec. 26 (S)	Presumed Extant	20141011	None	None	53	SSC	BLM_S; IUCN_NT	N side of i-10, vicinity of chase school, 2-6 miles se of thousand palms, coachella valley preserve.	1967: on ramon rd. 1990: ne1/4 sec 35. 2001: s 1/2 of sec 25 & 36. 2005: private property at s edge of preserve. 2006: sec 22, 26, 35, & 36. 2003-11: up to 177 plots in sec 25: 27, 35, & 36. 2003- 04, 2012, 2014: mainly se corner of preserve.	Aeolian sand, creosote hummocks, barchan dune, creosote scrub.	Collected in 1967, 1970 & 2002. Observed 1987, '88, '89, '90, '91, '97, '98, 2000. ~294 obs, 2001. 197 in '03. 82 in '04. 3 in '05. 9 in '06. #/yr on plots: 56/03, 31/04, 17/05, 30/06, 17/07, 12/08, 17/09, 5/10, 24/11. 3 obs, '12. 5 in '14.	Non-native plants, development. Susceptible to "edge effect;" increased shrike predation at preserve boundaries.
Phrynosoma mcallii	flat-tailed horned lizard	La Quinta	T05S, R06E, Sec. 24 (S)	Possibly Extirpated	19680608	None	None	53	SSC	BLM_S; IUCN_NT	Indian wells.	Exact location unknown. Mapped by cnddb based on a series of historical collections from indian wells, and washington st, 1.1 miles north of miles ave.		Collections were made in 1923, 1936, 1938, and 1968.	This area has been heavily developed.
Phrynosoma mcallii	flat-tailed horned lizard	La Quinta	T06S, R07E, Sec. 08 (S)	Presumed Extant	19350429	None	None	S3	SSC	BLM_S; IUCN_NT	2 miles east of la quinta.	Mapped according to locality description "2 miles east of la		Sdnhm #23368 collected on 29 april 1935 by I. M. Klauber.	

Phrynosoma mcallii	flat-tailed horned lizard	Indio	T05S, R07E, Sec. 23 (S)	Presumed Extant	xxxxxx x	None	None	S3	SSC	BLM_S; IUCN_NT	Indio.	Location stated as "indio".		Usnm #84029 collected by d. Moore on an unknown date.	
Phrynosoma mcallii	flat-tailed horned lizard	La Quinta	T05S, R06E, Sec. 36, NE (S)	Possibly Extirpated	197806XX	None	None	53	SSC	BLM_S; IUCN_NT	About 1.2 miles north of la quinta post office and 1.5 miles east of eisenhower mountain.	Plot 17 in 1978 survey; mapped according to provided trs, "ne 1/4 of section 36 t5s, r6e."	1978: dominant plants were camissonia claviformis, atriplex canescens, larrea tridentata, cryptantha angustifolia. 57 nests of 6 ant species found. Soil was rositas loamy sand.	10 observed during june 1978 in stand of larrea & atriplex in dunes.	Aerial imagery shows most of this 1/4 section has been developed since the time of survey.
Toxostoma lecontei	Le Conte's thrasher	La Quinta	T05S, R06E, Sec. 24, SE (S)	Presumed Extant	19190316	None	None	S3	SSC	BLIM_S; IUCN_LC; NABCI_R WL; USFWS_B BEIM_S;	Indian wells.			Sbcm specimen #s 4151.	
Toxostoma lecontei	Le Conte's thrasher	Indio	Sec. 23, SE (S)	Presumed Extant	19240419	None	None	S3	SSC	NABCI_R WL; USFWS_B	Indio.			Cas specimen #26589.	

Lanius ludovicianus	loggerhea d shrike	Myoma	T05S, R06E, Sec. 01, NW (S)	Presumed Extant	20050519	None	None	54	SSC	IUCN_NT	Coachella valley, 0.7 mi e of i-10 at 38th ave, 1 mi w of chuckwalla ranch (historical), 3.5 mi n of indian wells po.	Along southern border of the coachella valley national wildlife refuge, just south of 38th avenue. Mapped to coordinates provided.	Silt and fine sands with patches of coarse sands and gravel. Visible disturbances: non- native invasive plant species. Coachella valley giant sand-treader cricket also observed at this site.	2 adults & 3 fledglings observed on 19 may 2005.	Non-native invasive plants & development.
Perognathus longimembris bangsi	Palm Springs pocket mouse	West Berdoo Canyon	T05S, R08E, Sec. 07 (S)	Presumed Extant	199906XX	None	None	S1	SSC	BLM_S	At the base of the southern end of the indio hills, ne of indio.	Traplines set on both the east and west sides of indio hills.	Habitat consists of desert scrub and riparian, dominated by c. Linearis, larrea tridentata, e. Farinosa, a. Dumosa, and h. Salsola. Site has ~15% shrub cover on sandy/gravelly soils (level).	4 adults captured during jun 1999 surveys.	Threatened by shooting and orv activity.

Perognathus longimembris bangsi	Palm Springs pocket mouse	Myoma	T05S, R06E, Sec. 01, NW (S)	Presumed Extant	20050519	None	None	S1	SSC	BLM_S	South of avenue 38, 0.7 mile east of the junction of avenue 38 and varner road, north of palm desert.		Habitat consists of silt and fine sands with patches of coarse gravel/sand.	1 adult detected on 19 may 2005.	Threatened by non-native, invasive plants and development.
Xerospermop hilus tereticaudus chlorus	Palm Springs round- tailed	Indio	T06S, R08E, Sec. 05 (S)	Presumed Extant	1938XXXX	None	None	S2	SSC	BLM_S	Coachella.			Pg 359.	
Xerospermop hilus tereticaudus chlorus	Palm Springs round- tailed ground squirrel	La Quinta	T05S, R07E, Sec. 30, NE (S)	Presumed Extant	20020824	None	None	S2	SSC	BLM_S	East of washington street, north of 47th avenue, west of highway 111, and south of simon drive, la quinta.		Habitat consists of highly-disturbed creosite bush scrub.	One juvenile captured/released on 20 aug 2002, during a 775- trapnight survey for palm springs pocket mouse.	Threatened by development.
Nyctinomops femorosaccus	pocketed free-tailed bat	La Quinta	T06S, R07E, Sec. 07 (S)	Presumed Extant	19940413	None	None	53	SSC	IUCN_LC	La quinta.	Mapped according to lat/long coordinates provided by manis, with uncertainty of 762 m (0.5 mi).		1 male specimen (mvz #186386) collected at "la quinta" by denny g. Constantine of riverside county health laboratory on 13 apr 1994.	
Falco mexicanus	prairie falcon	Martinez Mtn.		Presumed Extant	19770510	None	None	S4	WL	IUCN_LC			Nest was in a pothole 175 ft up a 225 ft scarp.		

Falco mexicanus	prairie falcon	La Quinta		Presumed Extant	19800505	None	None	S4	WL	IUCN_LC			Nest was comprosed of sticks about 30 ft up a scarp.		
Falco mexicanus	prairie falcon	Myoma		Presumed Extant	19760605	None	None	S4	WL	IUCN_LC			Nest was in a pothole 50 ft up a scarp.		
Pyrocephalus rubinus	vermilion flycatcher	La Quinta	T05S, R06E, Sec. 24, S (S)	Presumed Extant	19300511	None	None	S2S3	SSC	IUCN_LC	Indian wells.			Ucla dickey collection #32572.	
Eumops perotis californicus	western mastiff bat	Indio	T06S, R08E, Sec. 05 (S)	Presumed Extant	19390315	None	None	S3S4	SSC	BLM_S	Coachella.	Mapped in the general vicinity of coachella.		1 female specimen collected by b.l. clary on 15 mar 1939, lacm #30978.	
Lasiurus xanthinus	western yellow bat	La Quinta	T06S, R07E, Sec. 07 (S)	Presumed Extant	19871019	None	None	53	SSC	IUCN_LC	La quinta.	Exact location not given. Mapped at the lat-long coordinates given. Location uncertainty given as 762 m (0.5 mi).		2 female & 1 male specimens collected 6 aug 1975, 29 sep 1982 & 19 oct 1987 by d. Constantine at "la quinta." deposited at mvz #181901-181903.	
Lasiurus xanthinus	western yellow bat	La Quinta	T05S, R06E, Sec. 29 (S)	Presumed Extant	19770916	None	None	53	SSC	IUCN_LC	City of palm desert.	Exact location not known. Mapped in the vicinity of city of palm desert.		2 male specimens collected 2 jun 1976 & 16 sep 1977 by d. Constantine at "palm desert." deposited at mvz #181905 & 181906.	

Lasiurus xanthinus	western yellow bat	La Quinta	T05S, R06E, Sec. 24 (S)	Presumed Extant	19790324	None	None	S3	SSC	IUCN_LC	Indian wells.	Lat-long given (33.43068 - 115.1869 with 1 mi uncertainty), is 0.57 mi nw of the well "indian well" which is in imperial co. But riverside is given as county of collection therefore, mapped at community of "indian wells" in riverside co.	2 male specimens collected 4 nov 1977 & 24 mar 1979 by d. Constantine at "indian wells." deposited ay mvz #181896 & 181897.	
Lasiurus xanthinus	western yellow bat	Indio	T05S, R07E, Sec. 23 (S)	Presumed Extant	19850917	None	None	S3	SSC	IUCN_LC	Indio.	Exact location not known. Mapped in the vicinity of indio and the lat- long coordinates given. Location uncertainty given as 1066.8 m (0.66 mi).	2 male & 1 female specimens collected 4 oct 1977, 24 jun 1982 & 17 sep 1985 by d. Constantine at "indio." deposited at mvz #181898, 181899 & 181900.	
Lasiurus xanthinus	western yellow bat	Indio	T06S, R08E, Sec. 05 (S)	Presumed Extant	19810618	None	None	\$3	SSC	IUCN_LC	Coachella.	Exact location unknown. Mapped in the vicinty of coachella.	One female specimen collected 18 jun 1981 by d. Constantine at "coachella." deposited at mvz #181880.	

Desert Fan Palm Oasis Woodland	Desert Fan Palm Oasis Woodland	West Berdoo Canyon	T05S, R07E, Sec. 02 (S)	Presumed Extant	19880924	None	None	S3.2				Indio hills native palms natural area. Badland topography of indio hills is to the north.	Washingtonia filifera along san andreas fault w/23 trees. 80 to 320 feet. 20 acres. One of the indio hills faults group of oases.	Sandstone banks with loose sand in the washes. Over 100 washingtonia filifera growing in arroyos. Assoc. Include prosopis glandulosa torreyana, phoradendron californicum, atriplex hymenelytra and chorizanthe rigida.	See https://wildlife.ca. gov/data/vegcam p/natural- communities to interpret and address the presence of rare communities.	Unprotected, used frequently as picnic site.	
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Dune Palms Mixed Use Project Biological Resources Assessment & MSHCP Compliance Report December 2022

APPENDIX 8

INFORMATION FOR PLANNING AND CONSULTATION (IPAC) REPORT

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.

Project information

NAME

Dune Palms/111

LOCATION

Riverside County, California



DESCRIPTION

Some(Mixed use development)

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. Log in to IPaC.
- 2. Go to your My Projects list.
- 3. Click PROJECT HOME for this project.
- 4. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the <u>Ecological Services Program</u> 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 <u>NOAA Fisheries</u> for <u>species under their jurisdiction</u>.

- 1. Species listed under the <u>Endangered Species Act</u> are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the <u>listing status page</u> for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
- 2. <u>NOAA Fisheries</u>, 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:

Mammals

NAME

Peninsular Bighorn Sheep Ovis canadensis nelsoni There is final critical habitat for this species. Your location does not overlap the critical habitat. <u>https://ecos.fws.gov/ecp/species/4970</u>

Birds

NAME	STATUS
Least Bell's Vireo Vireo bellii pusillus Wherever found There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher Empidonax traillii extimus Wherever found There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/6749	Endangered
Reptiles	1
NAME	STATUS
Coachella Valley Fringe-toed Lizard Uma inornata Wherever found There is final critical habitat for this species. Your location does not overlap the critical habitat. <u>https://ecos.fws.gov/ecp/species/2069</u>	Threatened
Desert Tortoise Gopherus agassizii There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/4481	Threatened
Fishes	
NAME	STATUS
Desert Pupfish Cyprinodon macularius Wherever found There is final critical habitat for this species. Your location does not overlap	Endangered

the critical habitat.

https://ecos.fws.gov/ecp/species/7003

Insects

NAME

Endangered

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

Flowering Plants

NAME	STATUS
Coachella Valley Milk-vetch Astragalus lentiginosus var. coachellae	Endangered
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 <u>below</u>.

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

The birds listed below are birds of particular concern either because they occur on the <u>USFWS Birds of</u> <u>Conservation Concern</u> (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 <u>below</u>. 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 <u>E-bird data mapping tool</u> (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 <u>below</u>.

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
Bald Eagle Haliaeetus leucocephalus 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.	Breeds Oct 15 to Aug 31
Clark's Grebe Aechmophorus clarkii This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jun 1 to Aug 31
Costa's Hummingbird Calypte costae 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	Breeds Jan 15 to Jun 10
Golden Eagle Aquila chrysaetos 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. <u>https://ecos.fws.gov/ecp/species/1680</u>	Breeds Dec 1 to Aug 31
Lawrence's Goldfinch Carduelis lawrencei This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9464	Breeds Mar 20 to Sep 20
Western Grebe aechmophorus occidentalis This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <u>https://ecos.fws.gov/ecp/species/6743</u>	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 (I)

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.



Golden Eagle Non-BCC Vulnerable	++++	++++	++∎+	++++	++++	++++	++++	++++	++++	++++	++++	++++
Lawrence's Goldfinch BCC Rangewide (CON)	++++	┼┼╫┼	++ # 1	++++	+++•	·· · · · ·		• • • •	···+	+++	++++	++++
Western Grebe BCC Rangewide (CON)	****		****	₩ ++ ₩	∎∎∎+	1++1	111	1+1+	++++	****	+	

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

<u>Nationwide Conservation Measures</u> 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. <u>Additional measures</u> or <u>permits</u> 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 <u>Birds of Conservation Concern (BCC)</u> 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 <u>Avian Knowledge Network (AKN)</u>. The AKN data is based on a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen science datasets</u> 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 (<u>Eagle Act</u> 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 <u>Rapid Avian Information Locator (RAIL) Tool</u>.

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 <u>Avian</u> <u>Knowledge Network (AKN)</u>. This data is derived from a growing collection of <u>survey, banding, and citizen science datasets</u>.

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 <u>RAIL Tool</u> 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 <u>Birds of Conservation Concern</u> (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 <u>Eagle Act</u> 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 <u>Northeast Ocean Data Portal</u>. 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 <u>NOAA NCCOS Integrative Statistical Modeling</u> and <u>Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf</u> 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 <u>Diving Bird Study</u> and the <u>nanotag studies</u> or contact <u>Caleb Spiegel</u> or <u>Pam Loring</u>.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to <u>obtain a permit</u> 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 I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Coastal Barrier Resources System

Projects within the John H. Chafee Coastal Barrier Resources System (CBRS) may be subject to the restrictions on Federal expenditures and financial assistance and the consultation requirements of the Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501 et seq.). For more information, please contact the local

<u>Ecological Services Field Office</u> or visit the <u>CBRA Consultations website</u>. The CBRA website provides tools such as a flow chart to help determine whether consultation is required and a template to facilitate the consultation process.

There are no known coastal barriers at this location.

Data limitations

The CBRS boundaries used in IPaC are representations of the controlling boundaries, which are depicted on the <u>official</u> <u>CBRS maps</u>. The boundaries depicted in this layer are not to be considered authoritative for in/out determinations close to a CBRS boundary (i.e., within the "CBRS Buffer Zone" that appears as a hatched area on either side of the boundary). For projects that are very close to a CBRS boundary but do not clearly intersect a unit, you may contact the Service for an official determination by following the instructions here: <u>https://www.fws.gov/service/coastal-barrier-resources-system-property-documentation</u>

Data exclusions

CBRS units extend seaward out to either the 20- or 30-foot bathymetric contour (depending on the location of the unit). The true seaward extent of the units is not shown in the CBRS data, therefore projects in the offshore areas of units (e.g., dredging, breakwaters, offshore wind energy or oil and gas projects) may be subject to CBRA even if they do not intersect the CBRS data. For additional information, please contact <u>CBRA@fws.gov</u>.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> 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 <u>NWI wetlands</u> 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>U.S. Army Corps of Engineers</u> <u>District</u>. Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

RIVERINE

<u>R4SBJ</u>

A full description for each wetland code can be found at the National Wetlands Inventory website

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 tuberficid 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.