

# 4.3 | BIOLOGICAL RESOURCES

## INTRODUCTION

This section identifies sensitive plant, wildlife, and habitat resources within the Coachella General Plan Update (CGPU) Planning Area. Resources used in the preparation of this report include the Final Recirculated Coachella Valley Multiple Species Conservation Plan (MSHCP) EIR (MSHCP, 2007), the City of Coachella General Plan 2020 EIR (City of Coachella, 1997), the California Department of Fish and Game (CDFG) California Natural Diversity Database (CNDDDB) (CDFG, 2011), and publicly available documents for projects within or adjacent to the Planning Area.

## EXISTING CONDITIONS

### ENVIRONMENTAL BASELINE SETTING

The CGPU Planning Area environmental baseline conditions outline the current physical ‘on-the-ground’ conditions of the Planning Area.

### REGIONAL SETTING

The Planning Area for the General Plan is in a portion of the Coachella Valley located within the Sonoran Desert region, a subdivision of the Colorado Desert. The Planning Area consists of the 18,564 acres within the City of Coachella Boundaries and 14,755 acres within Sphere of Influence (SOI), totaling 33,319 acres of land. The regional climate is greatly influenced by location and elevation, with associated differences in temperature and precipitation. These factors combine with physical features of the landscape to shape the locations of natural habitat and the unique plant and wildlife species they support.

The Planning Area ranges in elevation from 1,000 feet in the Mecca Hills to the east, to about 160 feet below sea level north of Thermal. Most of the Planning Area is relatively flat, sloping gently from northwest to southeast. Key geographic features in the area include the Santa Rosa Mountains to the west and south; the Mecca Hills to the east; and the Indio Hills to the north beyond which are the Little San Bernardino Mountains in the distance. The City of Coachella (City) is bisected by the Whitewater River and Coachella Canal, both of which traverse generally northwest to southeast. The character of the Planning Area outside the urban core of the City itself is primarily agricultural with few stands of undisturbed and disturbed Sonoran Creosote Bush Scrub and Colorado Saltbush Scrub (Holland, 1986).

The Coachella Valley is one of the hottest and driest parts of the County. The Valley floor is subject to hot summers and mild winters, with summer daytime temperatures regularly exceeding 100°F and sometimes exceeding 120 °F. Temperatures in winter range from a more moderate 30°F to 80°F. Annual rainfall on the Coachella Valley floor is low, averaging between four and six inches, to about 15 inches in mountain ranges located south and west of the valley. Rainfall is generally concentrated in winter months.

While the extreme heat and aridity on the Valley floor limit the development of complex vegetation communities in that area, plant diversity and density increase markedly with elevation on mountainous areas, hillsides and alluvial fans. The dominant vegetation community in the Planning Area is Sonoran Creosote Bush Scrub, as characterized by Holland (1986), which dominates the higher elevation areas, becoming sparser in undeveloped core portions of the Planning Area. Colorado Saltbush Scrub is another native vegetation type that dominates the low-lying basins and vacant land located within the Whitewater River floodplain. Finally, Sand Fields are a type of habitat with relatively minor distribution in the Planning Area. The presence of this habitat type is presumed based on reported observations and habitat requirements of the Coachella Valley fringe-toed lizard, which is dependent upon such habitat. These vegetation communities and habitat types are discussed below.

## **VEGETATION COMMUNITIES & WILDLIFE HABITAT**

Vegetation communities are assemblages of plant species that occur together in the same area, which are defined by species composition and relative abundance. To characterize plant communities, this EIR follows the CDFG (Holland, 1986) classification system used in the Multiple Species Habitat Conservation Plan (MSHCP). These communities also share a relationship with wildlife habitat types, which were classified and evaluated using CDFG's A Guide to Wildlife Habitats of California (Mayer and Laudenslayer, 1988). The vegetation communities and habitat types identified the Planning Area are presented in Figure 5.4-1, and described below.

### **Sonoran Creosote Bush Scrub**

Sonoran Creosote Bush Scrub is the most common vegetation type in the Colorado Desert and dominant vegetation type in the Planning Area. This community is dominated by creosote bush (*Larrea tridentata*) and is typical of well-drained secondary soils of slopes, fans and valleys (Holland, 1986). This community covers much of the bajadas (broad, gently sloped alluvial fans) and lower gradient desert slopes. Plants are widely spaced and usually interspersed with bare ground that may support annual herbs that flower in late winter and early spring, provided winter rains are sufficient. Other plants within this community include ocotillo (*Fouquieria splendens*), barrel cactus (*Ferocactus acanthodes*), jumping cholla (*Opuntia fulgida*), smoke tree (*Dalea spinosa*), mesquite (*Prosopis* sp.), and agave (*Agave* sp.).

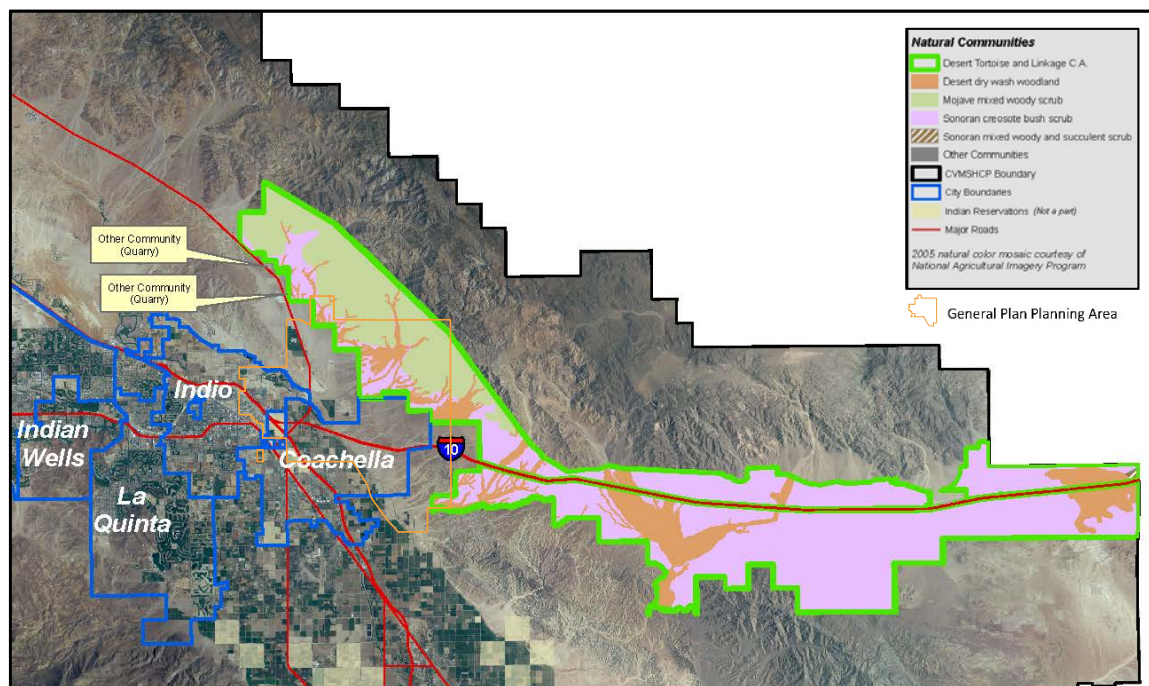
Special status plant and wildlife species that are regionally associated with this community include Coachella Valley grasshopper (*Spaniacris deserticola*), Coachella giant sand treater cricket (*Macrobaenetes valgum*), Casey's June beetle (*Dinacoma caseyi*), desert tortoise, burrowing owl (*Athene cucularia*), Palm springs pocket mouse (*Perognathus longimembris bangsi*) and Mecca aster (*Xylohiza cognata*)(Reclamation, 2006; MSHCP, 2007).

### Colorado Saltbush Scrub

The Colorado Saltbush Scrub community occurs in low-lying basins and areas of periodic flooding within the Coachella Valley. This community is characterized by moist sandy loam and relatively high soil salinity. Colorado Saltbush Scrub dominates much of the vacant land situated along the old Whitewater River floodplain and areas near the Coachella Valley Stormwater Channel, intermixing somewhat with elements of Sonoran Creosote Bush Scrub.

Special status species associated with this community include Coachella Valley grasshopper, flat-tailed horned lizard (*Phrynosoma mcallii*), Le Conte's thrasher (*Toxostoma lecontei*), and crissal thrasher (*Toxostoma crissale*).

Figure 4.3-1: Distribution of Vegetation Communities and Natural Habitat in the Planning Area<sup>1</sup>



### Desert Sand Fields

The Coachella Valley is subject to frequent and intense high winds that carry sand from the surrounding mountains to the Valley floor. Stabilized and partially stabilized desert sand fields are characterized as sand accumulations that are not worked into dune landforms and are considered by CDFG as a "Community of Highest Inventory Priority" (Holland, 1986).

Along with active desert dunes, this habitat historically occupied much of the Valley floor within the Planning Area. However, only remnants of this desert habitat remain within the few undeveloped portions of the core Planning Area and on the eastern edge of the Planning Area. Special Status plant and wildlife species that are endemic to dune and sand field habitats on the valley floor include the Coachella Valley fringe-toed lizard and Coachella Valley milk-vetch, among others.

## WILDLIFE

Common wildlife species in the Planning Area include a limited variety of species that are adapted to the arid desert conditions of the Coachella Valley. Reptiles that are common to the region and expected to occur where undisturbed native habitat is available include side-blotched lizard (*Uta stansburiana*), western whiptail (*Cnemidophorus tigris*), and coachwhip (*Masticophis flagellum*). Habitat for these species is considered most suitable in the undeveloped eastern portion of the Planning Area, though they may also be present elsewhere.

Birds expected to occur in association with barren and scrub habitats in the Planning Area include mourning dove (*Zenaida macroura*), house finch (*Carpodacus mexicanus*), California horned lark (*Eremophila alpestris*), common raven (*Corvus corax*), Gambel's quail (*Callipepla gambelli*), black-tailed gnatcatcher (*Polioptila melanura*), greater roadrunner (*Geococcyx californianus*), prairie falcon (*Falco mexicanus*) (foraging only) and red-tailed hawk (*Buteo jamaicensis*) (foraging only). Mammals expected to occur in the Planning Area include the desert cottontail (*Sylvilagus audubonii*), and coyote (*Canis latrans*).

## SPECIAL STATUS PLANTS AND WILDLIFE

Special status plant and wildlife species are those that are designated through Federal, state, or local process and regulated by a specific statute and/or the CEQA process. A full description of how these species are defined and designated, and the regulatory framework of Federal, State and local regulations addressing such species are presented in the Regulatory Framework portion of this section. The following discussion describes the special status plant and wildlife species that are known to occur or have potential to occur within or adjacent to the Planning Area.

Ten special status plants and 31 wildlife species were identified with potential to occur in the regional vicinity of the Planning Area. Of these, two listed species and 18 otherwise special status plant and wildlife species were identified with some chance to occur in the Planning Area. These species and their respective distribution are described in Table 4.3-1 and Table 4.3-2, and detailed later in this section. The distribution of special status plant and wildlife resources in the Planning Area is illustrated in Figure 4.3-2.

Table 4.3-1: Special Status Plant Species observed or potentially occurring in the Planning Area.

Common Name <i>Scientific Name</i>	Status USFWS/ DFG/CNPS	General Habitat	Planning Area Distribution
Chaparral sand-verbena <i>Abronia villosa</i> var. <i>aurita</i>	--/--1B	Chaparral, coastal scrub	<b>Unlikely.</b> Two historic records are reported by CDFG: 4 miles south and 7 miles northwest of the Planning Area. No records are described from the Planning Area.
Coachella Valley milk-veitch <i>Astragalus lentiginosus</i> var. <i>coachellae</i>	FE/--1B	Sonoran desert scrub	<b>Unlikely.</b> Several extant populations are noted north of Palm Springs, the nearest 7.3 miles north of the Planning Area; historic populations are cited near Indio (1929) and La Quinta (1922) (CDFG, 2008).
Little-leaf elephant tree <i>Bursera microphylla</i>	--/--2	Sonoran desert scrub	<b>Absent.</b> A cluster of trees is described from a rugged canyon (Martinez Canyon) 10 miles southwest of the Planning Area.
Glandular ditaxis <i>Ditaxis claryana</i>	--/--2	Mojavean desert scrub, Sonoran desert scrub	<b>Absent.</b> Four extant populations are described roughly 8 miles west of the Planning Area in Deep Canyon, some 2 to 3 miles west of La Quinta. No other populations are described within 10 miles of the Planning Area.
Santa Rosa Mountains leptosiphon <i>Leptosiphon floribundus</i> ssp. <i>hallii</i>	--/--1B	Sonoran desert scrub	<b>Absent.</b> The only local record was mapped from Martinez Canyon in 1902, 10 miles southwest of the Planning Area (CDFG, 2008).
Slender woolly-heads <i>Nemacaulis denudata</i> var. <i>gracilis</i>	--/--2	Coastal dunes, desert dunes, Sonoran desert scrub	<b>Absent.</b> Three extant populations are described within 10 miles of the Planning Area. The nearest record is 5.5 miles to the west, east of Palm Desert.
Creamy blazing star <i>Mentzelia tridentata</i>	--/--1B	Mojavean desert scrub	<b>Low Potential.</b> The only record in Coachella Valley was a 1931 collection near Coachella. Though mapped locally, this species is not expected in the Planning Area.
Slender-stem bean <i>Phaseolus filiformis</i>	--/--2	Sonoran desert scrub	<b>Absent.</b> The only local occurrence was mapped from a gravelly wash at the base of Martinez Canyon, 9 miles south of the Planning Area.
Coves' cassia <i>Senna covesii</i>	--/--2	Sonoran desert scrub	<b>Absent.</b> Two populations are noted in a mountainous area greater than 9 miles west of the Planning Area.
Mecca-aster <i>Xylorhiza cognata</i>	--/--1B	Sonoran desert scrub	<b>Low Potential.</b> Populations noted at the base of the Mecca Hills east of Coachella Canal, and near Painted Canyon; nearest sites are 2.8 miles north and 5.4 miles south of the Planning Area.

**Status Codes:**

USFWS/CDFG

CNPS

"--" = No special status

List 1A = Plants presumed extinct in California  
 List 1B = Plants rare, threatened, or endangered in California  
 List 2 = Plants rare, threatened, or endangered in California, but more common elsewhere

SOURCE: CDFG, 2008; City of Coachella, 1997; Reclamation, 2006; USFWS, 2008

**Table 4.3-2: Special Status Wildlife Species Observed or Potentially Occurring in the City of Coachella Planning Area**

<b>Common Name Scientific Name</b>	<b>Status USFWS/ DFG</b>	<b>General Habitat</b>	<b>Project Area Distribution</b>
<b>Invertebrates</b>			
Coachella giant sand treader cricket <i>Macrobaenetes valgum</i>	--/--	Known from the sand dune ridges in the vicinity of Coachella Valley	<b>Low Potential.</b> Three historic records are reported. The nearest is 3.6 miles west of the Planning Area.
Cheeseweed owlfly (cheeseweed moth lacewing) <i>Oliarces clara</i>	--/--	It can be found under rocks or in flight over streams	<b>Unlikely.</b> Four occurrences are noted within 10 miles of the Planning Area; the nearest record is from 1906, located 4 miles to the south in the town of Mecca.
<b>Fish</b>			
Desert pupfish <i>Cyprinodon macularius</i>	FE/CT	Desert ponds, springs, marshes and streams in southern California	<b>Absent.</b> Sixteen populations are mapped by the CNDDDB (2011), all greater than 8 miles from the Planning Area. Habitat for this species is absent from the Planning Area.
<b>Reptiles</b>			
Desert tortoise <i>Gopherus agassizii</i>	FT/CT	Most common in desert scrub, desert wash, and Joshua tree habitats; occurs in almost every desert habitat	<b>Low Potential.</b> The easternmost portion of the Planning Area is within the recent historic range of the desert tortoise (CDFG, 2008). BLM identifies the Planning Area as Category 3 desert tortoise habitat (low likelihood of encountering this species).
Flat-tailed horned lizard <i>Phrynosoma mcalli</i>	--/CSC	Areas of fine sand and sparse vegetation in desert washes and desert scrub	<b>Moderate Potential.</b> This species is patchily distributed throughout the Coachella Valley, and is presently described from undisturbed natural habitats near Thousand Palms to the north, southward to Mecca.
Coachella Valley fringe-toed lizard <i>Uma inornata</i>	FT/CE	Limited to sandy areas in the Coachella Valley	<b>Moderate Potential.</b> As recently as 1975, this species was present throughout the project area and may be present in the project area in undisturbed, wind blown sand habitats.
<b>Birds</b>			
Golden eagle <i>Aquila chrysaetos</i>	--/CSC/FP	Forages over mountains and rangelands in the Planning Area	<b>Present (Seasonally).</b> Foraging habitat is present in undeveloped portions of the Planning Area.

Burrowing owl <i>Athene cunicularia</i>	--/CSC	Open, dry annual or perennial grasslands, deserts & scrublands characterized by low-growing vegetation	<b>Present.</b> Nesting and foraging habitat is present in grasslands throughout the Planning Area, and on the fringes of agricultural lands. Seven extant sightings are noted within the Planning Area (CDFG, 2008).
Swainson's hawk <i>Buteo swainsoni</i>	--/FT	Occasional migratory species that forages in Coachella Valley grasslands and agricultural lands	<b>Present (Seasonally).</b> Foraging habitat is present in grasslands and agricultural lands in the Planning Area.
Northern harrier <i>Circus cyaneus</i>	--/CSC	Forages and breeds in a variety of habitats, including marshes, meadows and fields in desert habitats	<b>Present (Seasonally).</b> Foraging individuals have been observed in the Planning Area (City of Coachella, 1997). The nesting status of the species in the Planning Area is not known.
Willow flycatcher <i>Empidonax traillii</i>	--/CT	Inhabits dense thickets of low, dense willows on the edges of wet meadows or ponds	<b>Unlikely.</b> Willow flycatcher is considered unlikely in the Planning Area due to the limited distribution of dense riparian habitat.
Prairie falcon <i>Falco mexicanus</i>	--/--	Inhabits dry, open terrain, either level or hilly	<b>Present.</b> Foraging habitat is present in grasslands and agricultural lands in the Planning Area.
Yellow-breasted chat <i>Icteria virens</i>	--/CSC	Summer resident; inhabits riparian thickets of willow & other brushy tangles near watercourses	<b>Unlikely.</b> A historic (1916) sighting of this bird near Mecca is the only record of this species within 10 miles of the Planning Area (CDFG, 2008).
Loggerhead shrike <i>Lanius ludovicianus</i>	--/CSC	Local resident in open, arid areas where suitable perches and/or nesting sites are available	<b>Present.</b> Observed locally in the Planning Area on the Cabazon Indian Reservation and within the Rancho La Quinta Specific Plan project area (City of Coachella, 1997). May be present in low to moderate abundance in the Planning Area.

Table 4.3-2 (Continued)

Common Name <i>Scientific Name</i>	Status	General Habitat	Project Area Distribution
	USFWS/ DFG		
Black-tailed gnatcatcher <i>Poliophtila melanura</i>	--/--	Primarily inhabits wooded desert wash habitats; also occurs in desert scrub habitat, especially in winter	<b>Moderate Potential.</b> The CNDDDB identifies two historic occurrences from the Planning Area. This species may be encountered in low densities in the Planning Area where suitable habitat is present.
Vermilion flycatcher <i>Pyrocephalus rubinus</i>	--/CSC	During nesting, inhabits desert riparian adjacent to irrigated fields, irrigation ditches, pastures, & other open, mesic	<b>Low Potential.</b> A 1948 record from the Thermal area is within the Planning Area (CDFG, 2008; though there is a low likelihood of encountering this species.
Yuma clapper rail <i>Rallus longirostris yumanensis</i>	FE/CT	Nests in fresh-water marshes along the Colorado River and along the south and east ends of the Salton Sea	<b>Absent.</b> Suitable habitat is not present in the Planning Area. Species is described 10 miles to the south, on the shore of the Salton Sea (CDFG, 2008).
Crissal thrasher <i>Toxostoma crissale</i>	--/CSC	Resident of southeastern deserts in desert riparian and desert wash habitats	<b>Moderate Potential.</b> This species is presumed extant in wooded areas in the regional vicinity; however, the distribution of these habitats is limited within the Planning Area.
Le Conte's thrasher <i>Toxostoma lecontei</i>	--/CSC	Resident of open desert washes, desert scrub, alkali desert scrub, and desert succulent shrub habitats	<b>Moderate Potential.</b> This species is presumed extant in wooded areas in the regional vicinity; however, the distribution of these habitats is limited within the Planning Area.



## Mammals

Pallid bat <i>Antrozous pallidus</i>	--/CSC	Deserts, grasslands, shrublands, woodlands & forests. Most common in open, dry habitats with rocky areas for roosting	<b>Unlikely.</b> A recent (1982) sighting of this species from Painted Canyon in the Mecca Hills is considered extant. This location is 6.5 miles southeast of project area (CDFG, 2008).
Pallid San Diego pocket mouse <i>Chaetodipus fallax pallidus</i>	--/CSC	Desert border areas in eastern San Diego Co. In desert wash, desert scrub, desert succulent scrub, pinyon-juniper	<b>Unlikely.</b> This species has been identified in the southern Coachella Valley, 8 miles south of the Planning Area. An extant population is believed present on the Torres Martinez Indian Reservation (CDFG, 2008). It is considered unlikely in the Planning Area.
Spotted bat <i>Euderma maculatum</i>	--/CSC	Occupies a wide variety of habitats from arid deserts and grasslands through mixed conifer forests	<b>Unlikely.</b> An extant population is reported from the Mecca Hills Wilderness Area (CDFG, 2008; City of Coachella, 1997).
Western mastiff bat <i>Eumops perotis californicus</i>	--/CSC	Many open, semi-arid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, chaparral etc.	<b>Unlikely.</b> Historic populations are generally reported from the Coachella and Mecca areas; however, extant populations are only reported Painted Canyon, 6.5 miles southeast of project area (CDFG, 2008).
Western yellow bat <i>Lasiurus xanthinus</i>	--/--	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats	<b>Unlikely.</b> Three recent occurrences are generally identified from near Thermal, Coachella, and Indio; however, the status of these populations is not known.
Colorado Valley woodrat <i>Neotoma albigula venusta</i>	--/--	Low-lying desert areas in southeastern California. Closely associated with beaver-tail cactus & mesquite	<b>Low Potential.</b> This species historically inhabited the Mecca area (last identified in 1908) and local population status is largely unknown (CDFG, 2008). Suitable habitat for this species is present in the Planning Area.

Pocketed free-tailed bat <i>Nyctinomops femorosaccus</i>	--/CSC	Variety of arid areas in southern California; pine-juniper woodlands, desert scrub, palm oasis, desert wash, desert riparian	<b>Unlikely.</b> Populations from Painted Canyon, 6.5 miles southeast of project area, are considered extant.
Nelson's bighorn sheep <i>Ovis canadensis nelsoni</i>	--/--	.Desert slopes from the White Mtns. in Mono Co. to the Chocolate Mts in Imperial Co.	<b>Unlikely.</b> Widely distributed northeast of the Planning Area in the Little San Bernardino Mtns. This species' range flanks the eastern edge of the Planning Area and continues north into Joshua Tree National Park.
Peninsular bighorn sheep <i>Ovis canadensis cremnobates</i>	FE/ST/FP	Distributed on desert slopes in the of the San Jacinto and Santa Rosa Mtns	<b>Absent.</b> This population is restricted to the Peninsular Mtn. Range, which is greater than 6 miles west of the Planning Area.
Palm Springs pocket mouse <i>Perognathus longimembris bangsi</i>	--/CSC	Desert riparian, desert scrub, desert wash & sagebrush habitats. Most common in creosote-dominated desert scrub	<b>Present.</b> This species is associated with alluvial fans and small hills of the Little San Bernardino Mtn Range. Species distribution in the core portion of the Planning Area is not known.
Palm Springs round-tailed ground squirrel <i>Spermophilus tereticaudus chlorus</i>	FC/CSC	Restricted to the Coachella Valley. Prefers desert succulent scrub, desert wash, desert scrub, alkali scrub, & levees	<b>Present.</b> Extant populations are present in the Planning Area north of Interstate 10, north and west of the Coachella Canal (CDFG, 2008).
American badger <i>Taxidea taxus</i>	--/CSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils	<b>High Potential.</b> This species historically occupied the Coachella Valley floor and may occur in low densities in undisturbed portions of the Planning Area.

## Status Codes:

FT = Federal Threatened

FE = Federal Endangered

FC = Federal Candidate for Listing as Threatened or Endangered

"--" = No status

CE = California Endangered

CT = California Threatened

CSC = California Species of Special Concern

FP = California Fully Protected Species

Source: CDFG, 2008; City of Coachella, 1997; Reclamation, 2006; USFWS, 2008

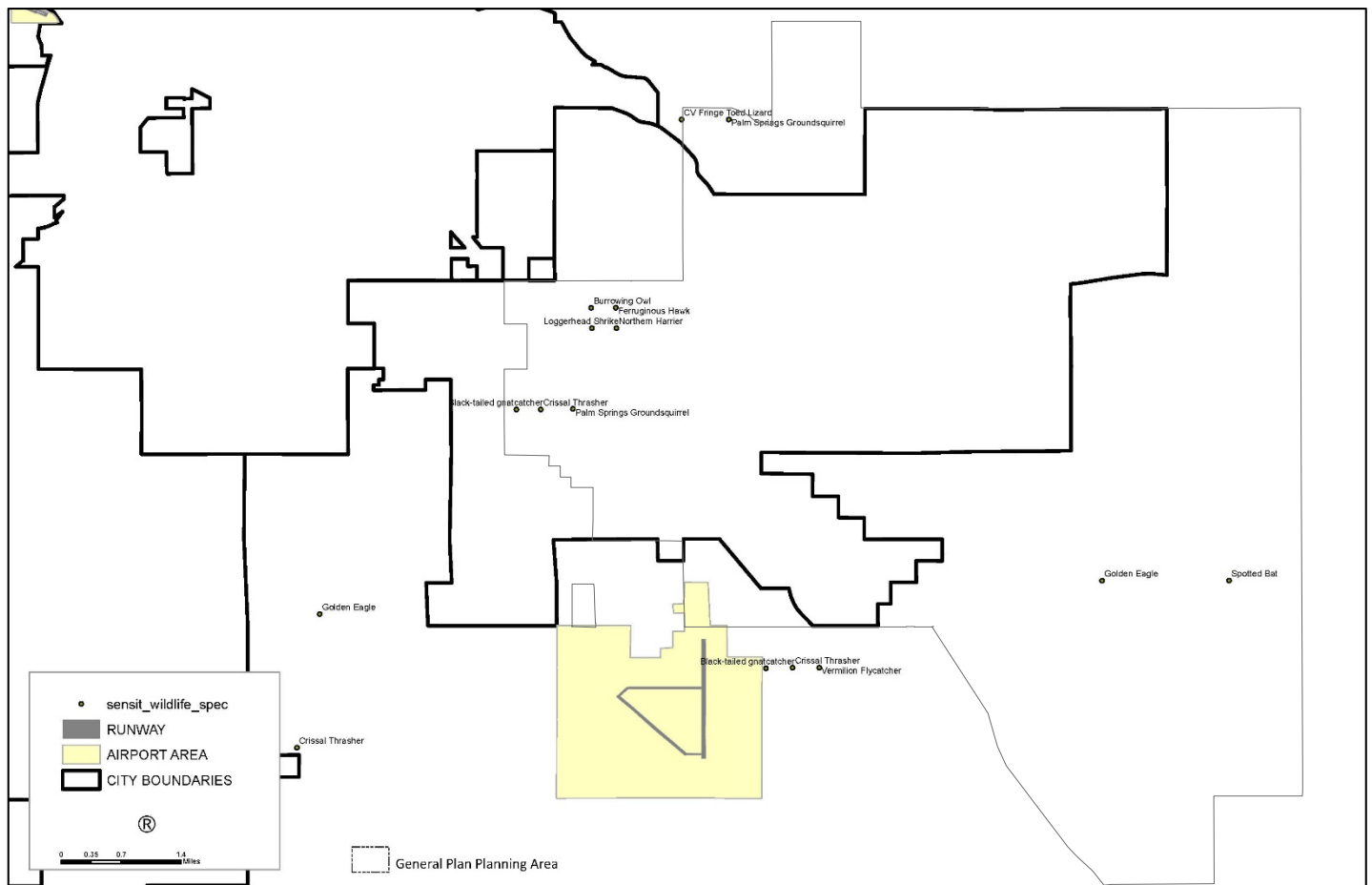
## SPECIAL STATUS SPECIES DESCRIPTIONS

### Plants

*California ditaxis* (*Ditaxis californica*) is a CNPS List 2 species with no State or Federal status. This perennial shrub grows within Sonoran Creosote Bush Scrub habitat and is infrequently found on in sandy washes and canyon floors. The California Department of Fish and Game have described four extant populations roughly eight miles west of the Planning Area in Deep Canyon, some 2 to 3 miles west of La Quinta. No other populations are described within 10 miles of the Planning Area (CDFG, 2008).

Slender woolly-heads (*Nemacaulis denudata* var. *gracilis*) are a CNPS List 2 species with no State or Federal status. This species has a limited range in California, but is more common elsewhere. An annual herb, it prefers sandy dunes at elevations below 1,200 feet. It blooms from March through May. Three extant populations are described within 10 miles of the Planning Area. The nearest of these is 5.5 miles to the west, just east of Palm Desert near Whitewater River. A population from the Mecca area, 5 miles south of the Planning Area, was last seen in 1922.

Figure 4.3-2: Distribution of Special Status Plants and Wildlife in the Planning Area



## Invertebrates

Coachella giant sand treader cricket (*Macrobaenetes valgum*) is tracked as a sensitive species by CDFG, but has no formal State or Federal status. Three historic records are reported; the nearest of these is 3.6 miles west of the Planning Area.

Cheeseweed owlfly (*Oliarces clara*) is tracked by CDFG as a rare species with restricted range. It can be found under rocks or in flight over streams. Four occurrences are noted within 10 miles of the Planning Area; the nearest record is from 1906, located 4 miles to the south in the town of Mecca.

## Reptiles

Desert tortoise (*Gopherus agassizii*). The Mohave population of this species is listed as threatened by the State and Federal governments. The Mohave population of tortoises includes those found north and west of the Colorado River in California, southern Nevada, southwestern Utah, and northwestern Arizona. It inhabits almost all desert habitats where soil is friable for burrow and nest construction. Widespread in many habitats, desert tortoise prefer areas with friable soils and large annual wildflower blooms. Desert tortoises have been recorded in the Chuckwalla Bench and Milpitas wash area to the east of the Planning Area. Five sightings of this species, including one shell, have been identified in the La Quinta area. The easternmost portion of the Planning Area is within the recent historic range of the desert tortoise (CDFG, 2008). The Bureau of Land Management (BLM) identifies the Planning Area as category 3 desert tortoise habitat, which indicates a low likelihood of encountering this species (0-20 tortoise per acre) (BLM).

Flat-tailed horned lizard (*Phrynosoma mcalli*) is a California species of special concern. This horned lizard occurs in areas with fine sand and sparse vegetation in desert washes and desert scrub in central Riverside, eastern San Diego and Imperial Counties. This species is patchily distributed throughout the Coachella Valley, and are presently described from undisturbed natural habitats near Thousand Palms to the north, southward to Mecca. Species distribution has been greatly reduced though urban development and recreational activities.

Coachella Valley Fringe-Toed Lizard (*Uma inornata*) is a Federal threatened and State endangered species. It requires habitat with fine, loose, windblown sand and its distribution is limited to sand dunes in the Coachella Valley. Records indicate that this species occurs in the Indio Hills northwest of the project area, and along Dillon Road approximately 2.5 miles east of Highway 111. As recently as 1975, this species was present throughout the project area and is considered extant within the project area in undisturbed, windblown sand habitats.

## Birds

Golden eagle (*Aquila chrysaetos*) is a CDFG species of special concern. Golden eagles nest in open areas on cliffs and in large trees, often constructing multiple nests in one breeding territory (Zeiner et al., 1988-1990). This species preferably nests in open habitats such as rolling grasslands, deserts, savannahs, and early successional forest and shrub habitats, with cliffs or large trees for nesting and cover (Zeiner et al., 1988-1990). Golden eagle foraging habitat is present in undeveloped portions of the Planning Area.

**Burrowing owl (*Athene cunicularia*)** is a California species of special concern. Resident populations of this relatively small, semicolonial owl reside in open dry grasslands and desert areas. They occupy burrows for breeding and roosting, chiefly using burrows excavated by ground squirrels and other small mammals and human-made burrows or cavities. Nesting and foraging habitat is present in grasslands throughout the Planning Area, and on the fringes of agricultural lands. Seven extant sightings are noted within the Planning Area (CDFG, 2008).

**Swainson's hawk (*Buteo swainsoni*)** is listed as threatened by the State of California. This large migratory hawk breeds in North America and winters in the pampas of southern South America. Swainson's hawks begin arriving in California in late February and depart for their wintering grounds in early September (Woodbridge, 1998). Nests are typically constructed in sturdy trees within or near agricultural lands, riparian corridors, and roadside trees. Though nesting is not expected in the Planning Area, migrating Swainson's hawks have been observed foraging over open grasslands and agricultural fields in the Coachella Valley (City of Coachella, 1997).

**Northern harrier (*Circus cyaneus*)** is a California species of special concern. This ground-nesting hawk occupies a wide variety of habitats from annual grasslands up to lodgepole pines and alpine meadow habitats. They are known to frequent meadows, grasslands, grain fields, open rangelands, desert sinks, and wetlands. Foraging individuals have been observed in the Planning Area (City of Coachella, 1997). The nesting status of the species in the Planning Area is not known.

**Willow flycatcher (*Empidonax traillii*)** is listed as endangered by the State of California. This migratory bird species inhabits extensive thickets of low, dense willows on edges of wet meadows, ponds or backwaters from 2,000 to 8,000 feet in elevation. This species requires dense willow thickets for nesting and roosting. Low, exposed branches are used as perching or hunting posts. The last local observation of this species was in the Mecca area south of the Planning Area. Willow flycatchers are considered unlikely in the Planning Area due to the limited distribution of dense riparian habitat.

**Prairie Falcon (*Falco mexicanus*)** is a California species of special concern. This bird is a winter resident in Southern California. It inhabits dry, open, hilly, or level terrain, and forages over great distances to find prey. One nesting pair has been recorded in Painted Canyon, southeast of the project area, and three nesting pairs have been observed on the cliffs of the La Quinta Cove area (CDFG, 2008). Although suitable nesting habitat for this species does not occur over most of the Planning Area, foraging activities are probable over agricultural and vacant land (City of Coachella, 1997).

**Yellow-breasted chat (*Icteria virens*)** is a California species of special concern. This summer resident nests and forages in dense thickets of willow (*Salix* sp.), blackberry (*Rubus* sp.) and other dense riparian vegetation near watercourses. A historic (1916) sighting of this bird near Mecca is the only record of this species within 10 miles of the Planning Area.

**Loggerhead shrike (*Lanius ludovicianus*)** is a California species of special concern. This semi-permanent California resident occurs in abundance in the Central Valley and Central Coast where native shrub habitats are available. Shrikes generally forage on the fringes of open habitats where suitable hunting perches are available. This species has been observed in the project area on the Cabazon Indian Reservation (Section 32, Township 5 south, Range 8 east) and within the Rancho La Quinta Specific Plan project area (City of Coachella, 1997). This species is expected in low- to moderate densities in undisturbed scrub habitat within the Planning Area.

Black-tailed gnatcatcher (*Polioptila melanura*) is considered a special animal whose populations are monitored by CDFG. It is a year-round resident of wooded desert wash habitats and can also be found in desert scrub habitats, especially in winter. This species nests in desert washes containing mesquite, paloverde (*Cercidium floridum*), ironwood (*Olneya tesota*), and acacia (*Acacia sp.*). It is absent from areas where salt cedar (*Tamarix ramosissima*) has been introduced. The CNDDDB identifies two historic occurrences (from 1934 and 1940) within the Planning Area, with other historic sightings near Mecca and La Quinta. This species may be encountered in low densities in the Planning Area where suitable habitat is present.

Vermilion flycatcher (*Pyrocephalus rubinus*) is a CDFG species of special concern. This spring migrant inhabits desert riparian habitats adjacent to watercourses including irrigated fields, irrigation ditches, pastures and other open, mesic areas. It nests in cottonwood (*Populus sp.*), willow, mesquite, and other large desert riparian trees. Two historic vermilion flycatcher records are reported within 10 miles of the Planning Area. Of these, a 1948 record from the Thermal area is within the Planning Area (CDFG, 2008).

Crissal thrasher (*Toxostoma dorsale*) is CDFG species of special concern. It is a year-round resident of southeastern deserts in desert riparian and desert wash habitats. This species nests in dense vegetation along streams and washes in mesquite, screwbean mesquite (*Prosopis pubescens*), ironwood, catclaw (*Acacia greggii*), acacia, arrow weed (*Pulchea sericea*) and willow (*Salix sp.*). Records indicate this species was observed in Coachella and Thermal, within the project area, and in Mecca, south of the project area. Records of this species in the Planning Area are historic, the most recent account dating to 1941 (CDFG, 1986). More recently, crissal thrasher has been recorded from a bajada south of La Quinta (City of Coachella, 1997). This species is presumed extant in wooded areas in the regional vicinity; however, the distribution of these habitats is limited within the Planning Area.

Le Conte's thrasher (*Toxostoma lecontei*) is a CDFG species of special concern. It is a year-round resident of open desert washes, desert scrub, alkali desert scrub, and desert succulent shrub habitats. It commonly nests in dense, spiny shrubs or densely branched cactus in desert wash habitat, usually 2 to 8 feet above ground level. Three historic records (1908, 1919 and 1924) were identified within 10 miles of the Planning Area, from the Mecca, La Quinta and Indio areas, respectively (CDFG, 2008). This species is presumed extant in wooded areas in the regional vicinity; however, the distribution of these habitats is limited within the Planning Area.

### Mammals

Pallid bat (*Antrozous pallidus*) is a CDFG species of special concern. It inhabits grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests. It prefers rocky outcrops, cliffs and crevices with access to open habitats for foraging. This bat is slow flying and extremely maneuverable. It is adapted to feeding on large, hard-shelled prey on the ground or on roosts in trees, shrubs, or man made structures. This species is very sensitive to disturbance while roosting. A recent (1982) sighting of this species from Painted Canyon in the Mecca Hills is considered extant. This location is 6.5 miles southeast of project area (CDFG, 2008). Roosting habitat is not present in the Planning Area.

**Spotted bat** (*Euderma maculatum*) is a California species of special concern. In desert regions, this species roosts in rocky cliffs and canyons. An extant population is reported from the Mecca Hills Wilderness Area (CDFG, 2008), beyond the Planning Area.

**California (Western) mastiff bat** (*Eumops perotis californicus*) is CDFG species of special concern. It inhabits steep, narrow, dry, desert canyons, preferring extensive open areas with abundant roosting locations in rock outcrops or buildings. Historic populations are generally reported from the Coachella and Mecca areas; however, extant populations are only reported Painted Canyon, 6.5 miles southeast of Planning Area.

**Western yellow bat** (*Lasiurus xanthinus*) is a California species of special concern. This species is described from desert riparian, desert wash and palm oasis habitats. Three recent occurrences are generally identified from near Thermal, Coachella, and Indio; however, the status of these populations is not known (CDFG, 2008).

**Colorado Valley Woodrat** (*Neotoma albigula venusta*) is a resident of low-lying desert areas in southeastern California. This rodent is associated with beavertail cactus (*Opuntia bigelovii*) and creosote-mesquite habitat. This species historically inhabited the Mecca area (last identified in 1908) and local population status is largely unknown (CDFG, 2008). Suitable habitat for this species is potentially present in the Planning Area.

**Pocketed free tailed bat** (*Nyctinomops femorasaccus*) is a CDFG species of special concern with an extremely restricted range. It inhabits a variety of arid regions including, but not limited to, pine-juniper woodlands, desert scrub, palm oasis, desert wash, and desert riparian habitats. It prefers rocky areas with high cliffs or rock outcrops. Populations from Painted Canyon, approximately 7 miles southeast of Planning Area, are considered extant.

**Peninsular bighorn sheep** (*Ovis canadensis cremnobates*) is a State threatened and Federal endangered species; **Nelson's bighorn sheep** (*Ovis canadensis nelsoni*) populations are considered sensitive and are tracked by CDFG. Bighorn sheep inhabit steep, rocky, open terrain including bajadas and alluvial fans where escape cover, lambing sites, water, and forage are available. The Peninsular subspecies is found west of the Planning Area in the San Jacinto and Santa Rosa Mountains below 4,000 feet elevation. Nelson's subspecies is found to the northeast of the project area in the Little San Bernardino Mountains and ranges south into the Chocolate Mountains and north into the White Mountains. Bighorn sheep are not expected in the Planning Area.

**Palm Springs pocket mouse** (*Perognathus longimembris bangsi*) is a California species of special concern. Described habitat in the local area generally consists of creosote bush scrub on sandy or gravelly soils, though this species has also been identified from desert riparian, desert washes, and sagebrush habitats. In 2001, a large Palm Springs pocket mouse population was identified in the eastern portion of the Planning Area, on either side of Interstate 10. This species also occurs at the base of the Indio Hills, east of the Planning Area (CDFG, 2008). This mouse appears to be associated with alluvial fans and small hills of the Little San Bernardino Mtn Range. Species distribution in the core portion of the Planning Area is not known.

Palm Springs round-tailed ground squirrel (*Spermophilus tereticaudus chlorus*) is a CDFG species of special concern. This species is restricted to the Coachella Valley and inhabits desert succulent shrub, desert wash, desert scrub, alkali scrub, and levees. It prefers open, flat, grassy areas in fine-textured, sandy soils. Urbanization, cultivation, and development have reduced the habitat range and population of this species. Extant populations are present in the Planning Area north of Interstate 10, north and west of the Coachella Canal (CDFG, 2008).

American badger (*Taxidea taxus*) is a California species of concern. Badgers occupy a diversity of habitats including grasslands, savannas and desert areas. Their principal requirements seem to be sufficient food, friable soils, and relatively open, uncultivated ground. This species historically occupied the Coachella Valley floor and may occur in low densities in undisturbed portions of the Planning Area.

## **JURISDICTIONAL WATERS AND WETLANDS**

Jurisdictional features in the Planning Area that are regulated by the ACOE, CDFG, and RWQCB include Whitewater River and its tributary washes. Some blueline channels and washes located in the Planning Area, and in particular, east of the Coachella Canal, in the eastern portion of the Planning Area may also be subject to agency regulation. Riparian habitat that is associated with these features is subject to CDFG jurisdiction.

## **REGULATORY SETTING**

### **FEDERAL AND STATE REGULATIONS**

#### **Endangered Species Act**

The Federal Endangered Species Act (FESA) of 1973 provides legal protection for threatened and endangered plant and animal species and requires definitions of critical habitat and development of recovery plans for specific species. Section 7 of the FESA requires Federal agencies to make a finding on the potential to jeopardize the continued existence of any listed species potentially impacted by all Federal actions, including the approval of a public or private action, such as the issuance of a permit pursuant to Sections 10 and 404 of the U.S. Clean Water Act (CWA). Section 9 of the FESA prohibits the take of any member of an endangered species. Take is defined by the FESA as "...to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Section 10(a) of the FESA permits the incidental take of listed species if the take is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Projects adversely affecting Federally-listed threatened or endangered species are required to obtain take permission from the USFWS prior to project implementation. If a Federal agency is involved (i.e., if a wetlands permit is required, project has Federal funding, etc.), take permission can be obtained through FESA Section 7 consultation with the USFWS. Consultation will determine whether the project would adversely impact a protected species or designated critical habitat and identify mitigation measures that would be required to avoid or reduce impacts on the species or its habitat. Following this consultation, the USFWS issues a Biological Opinion (BO), which dictates the conditions of take that are allowed for the project. If no Federal agency is involved, project applicants are required to obtain an Incidental Take Permit through Section 10 of the FESA, which requires preparation of a Habitat Conservation Plan (HCP) and results in the issuance of an Incidental Take Permit.



## **Clean Water Act**

### **Section 404**

The objective of the Federal Clean Water Act (CWA) is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. Section 401 prohibits the discharge of any pollutant into the Nation's waters without a permit, and Section 402 establishes the permit program. Section 404 of the CWA regulates activities that result in discharge of dredged or fill material into waters of the United States. The United States Army Corps of Engineers (ACOE) is responsible for permitting certain types of activities affecting wetlands and other waters of the United States. Under Section 404 of the CWA, the ACOE has the authority to regulate activity that could discharge fill or dredge material or otherwise adversely modify wetlands or other waters of the U.S. The ACOE implements the Federal policy embodied in Executive Order 11990, which, when implemented, is intended to result in no net loss of wetland values or acres.

### **Section 401**

The State Water Resources Control Board (SWRCB) has authority over wetlands in California through Section 401 of the CWA, as well as the Porter-Cologne Act, California Code of Regulations Section 3831(k), and California Wetlands Conservation Policy. The CWA requires that an applicant for a Section 404 permit (to discharge dredged or fill material into waters of the United States) first obtain a certificate from the appropriate State agency stating that the fill is consistent with the State's water quality standards and criteria. In California, the authority to either grant certification or waive the requirement for permits is delegated by the SWRCB to the nine regional boards. A request for certification is submitted to the regional board at the same time that an application is filed with the ACOE.

## **Migratory Bird Treaty Act**

The Federal Migratory Bird Treaty Act (MBTA) (16 USC, Sec. 703, Supp. I, 1989) prohibits killing, possessing, or trading in migratory birds, except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs. The MBTA, which is primarily a "hunting" statute that prohibits the "pursuing, hunting, taking, capturing and killing" of migratory birds.

## **California Endangered Species Act**

The CDFG administers a number of laws and programs designed to protect fish and wildlife resources. Principal among these is the California Endangered Species Act of 1984 (CESA - Fish and Game Code, Section 2050), which regulates the listing and take of state-endangered and state-threatened species. The CESA declares that deserving species will be given protection by the State because they are of ecological, educational, historical, recreational, aesthetic, economic, and scientific value to the people of the state. The CESA established that it is State policy to conserve, protect, restore, and enhance endangered species and their habitats. Species listed under the CESA cannot be "taken" without adequate mitigation and compensation. The definition of take under CESA is the same as described above for the FESA. However, based on findings of the California Attorney General's Office, take under CESA does not prohibit indirect harm by way of habitat modification. Typically, the CDFG implements endangered species protection and take determinations by entering into management agreements (California Fish and Game Code, Section 2081 Management Agreements) with project applicants.

## California Environmental Quality Act

Although threatened and endangered species are protected by specific Federal and State statutes, Section 15380(b) of the California Environmental Quality Act (CEQA) Guidelines provides that a species not listed on the Federal or State list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after definitions in the FESA and the section of the California Fish and Game Code dealing with rare or endangered plants and animals. Section 15380(b) requires public agencies to undertake reviews to determine if projects would result in significant effects on species that are not listed by either the USFWS or CDFG (i.e., candidate species). Thus, CEQA provides an agency with the ability to protect a species from a project's potential impacts until the respective government agencies have an opportunity to designate the species as protected, if warranted.

### Fish and Game Code, Section 3503

Birds of prey are protected in California under the State Fish and Game Code, Section 3503.5 (1992). Section 3503.5 states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "taking" by the CDFG. Any loss of fertile eggs, nesting raptors, or any activities resulting in nest abandonment would constitute a significant impact. Project impacts to these species would not be considered significant unless they are known or have a high potential to nest in the project area or to rely on it for primary foraging.

## Plants

The legal framework and authority for the state's program to conserve plants is derived from various legislative sources, including CESA, the California Native Plant Protection Act (Fish and Game Code Sections 1900 – 1913), the CEQA Guidelines, and the Natural Communities Conservation Planning Act.

Vascular plants that are identified as rare or endangered by the California Native Plant Society (CNPS), but which may have no designated status or protection under Federal or State endangered species legislation, are defined as follows:

List 1A: Plants Presumed Extinct.

List 1B: Plants Rare, Threatened, or Endangered in California and elsewhere.

List 2: Plants Rare, Threatened, or Endangered in California, but more numerous elsewhere.

List 3: Plants About Which More Information is Needed – A Review List.

List 4: Plants of Limited Distribution – A Watch List.

In general, plants appearing on CNPS List 1A, 1B, or 2 are considered to meet the criteria of Section 15380 of the CEQA Guidelines, and effects on these species are considered "significant." Additionally, plants identified on CNPS List 1A, 1B or List 2 meet the definition of Section 1901, Chapter 10 (Native Plant Protection Act) and Sections 2062 and 2067 (California Endangered Species Act) of the California Fish and Game Code.

### California Department of Fish and Game

Under Sections 1600–1616 of California Fish and Game Code, the CDFG regulates activities that would substantially divert, obstruct the natural flow, or substantially change of rivers, streams and lakes. The jurisdictional limits of CDFG are defined in Section 1602 of the California Fish and Game Code as, “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....” The CDFG requires a Lake and Streambed Alteration Agreement for activities within its jurisdictional area. Impacts to the CDFG jurisdictional areas of would be considered potentially “significant.”

## HABITAT CONSERVATION PLANS/NATURAL COMMUNITY CONSERVATION PLANS

### Existing Regional Programs

The Coachella Valley Fringe-Toed Lizard Habitat Conservation Plan (HCP) was prepared in response to the 1980 listing of this species as threatened by the Federal government and endangered by the State of California. The HCP was completed in 1985 and approved by the USFWS in April 1986. Over the 30-year term of the permit, the nine participating cities are allowed to “take” Coachella Valley fringe-toed lizard (*Uma inornata*) and their habitat provided that the provisions of the HCP are satisfied. The HCP is funded by development mitigation fees (formerly \$600/acre; presently \$100/acre) collected by participating cities and Riverside County, which support the creation and maintenance of a Coachella Valley fringe-toed lizard preserve system.

### Proposed Conservation Plans

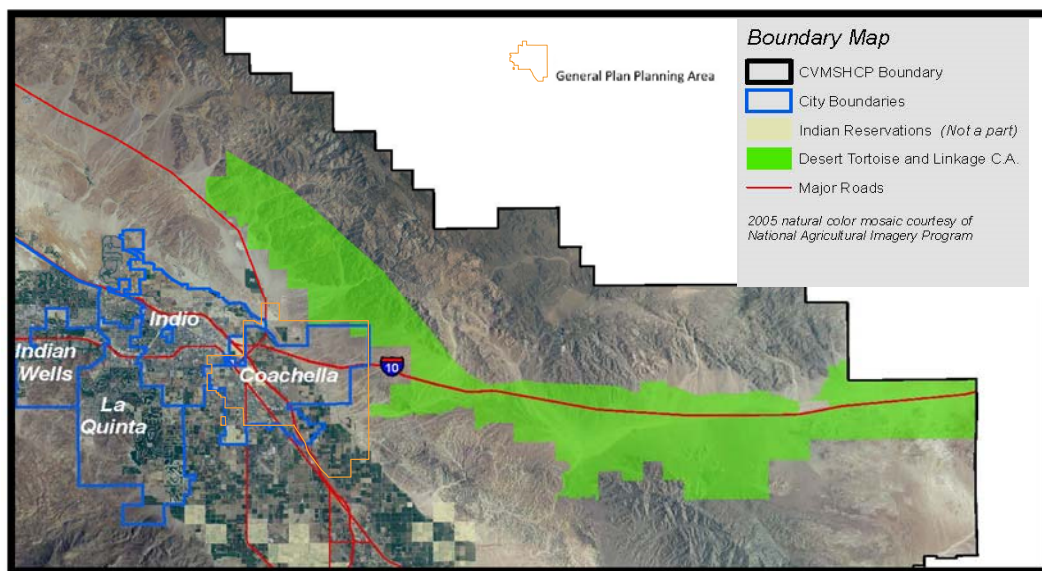
The Coachella Valley Multiple Species Conservation Plan/Natural Community Conservation Plan was approved in October 2008 and provides ongoing comprehensive framework for species and ecosystem conservation, and short- and long-term local land use decision making in the Coachella Valley. The MSHCP program was undertaken by the Coachella Valley Association of Governments (CVAG), a joint powers authority with eight participating cities (Cathedral City, Coachella, Indian Wells, Indio, La Quinta, Palm Desert, Palm Springs and Rancho Mirage) along with the County of Riverside, Coachella Valley Water District and Imperial Irrigation District. With the plan’s approval in 2008, each the participating local jurisdictions are now able to authorize development and other activities without proposing additional mitigation or conservation measures for covered species. The 30-year term of the MSHCP coincides with the timeline applicable to all assessments made in the plan. The MSHCP geographic scope or “inventory area,” wherein evaluation of impacts and conservation planning are anticipated, roughly includes the entire Coachella Valley and adjacent mountainous areas. The City of Coachella, including its SOI and the General Plan Planning Area, is located entirely within the MSHCP boundaries.

The MSHCP covers 27 special status plant and wildlife that meet certain regulatory and ecological criteria. Of these, 10 covered species are known or have at least a low potential to occur within or near the City of Coachella General Plan Planning Area. Federal or state-listed species that are covered by the MSHCP and have potential to occur in the City of Coachella Planning Area are: desert tortoise (*Gopherus agassizii*) and Coachella Valley fringe-toed lizard (*Uma inornata*). Non-listed species with MSHCP coverage that have some potential to occur in the Planning Area are: the Palm Springs round-tailed ground squirrel (*Spermophilus tereticaudus chlorus*), Mecca aster (*Xylorhiza cognate*), Coachella Valley giant sand-treader cricket (*Macrobaenetes valgum*), flat-tailed horned lizard (*Phrynosoma mcalli*), burrowing owl (*Athene cunicularia*), crissal thrasher (*Toxostoma crissale*), Le Conte’s thrasher (*Toxostoma lecontei*), and Palm Springs pocket mouse (*Perognathus longimembris bangsi*).

Based on their described range and/or lack of suitable habitat in the Planning Area, the following Federal and/or State-listed species that are covered by the MSHCP are not expected in the City of Coachella Planning Area: triple-ribbed milk-vetch (*Astragalus tricarinatus*), desert pupfish (*Cyprinodon macularius*), arroyo toad (*Bufo californicus*), Yuma clapper rail (*Rallus longirostris yumanensis*), southwestern willow flycatcher (*Empidonax traillii extimus*), least Bell's vireo (*Vireo bellii pusillus*), and Peninsular bighorn sheep (*Ovis canadensis cremnobates*).

There are three identified MSHCP conservation areas that occur within, adjacent to and/or nearby the Planning Area boundaries. These are the Mecca Hills/Orocopia Mountains Conservation area, situated southeast of Coachella; the Desert Tortoise and Linkage Conservation Area to the north and east of the Planning Area, and the Indio Hills Conservation Area to the north (MSHCP, 2007) (Figure 4.3-4<sup>1</sup>, 4.3-5, 4.3-6, 4.3-7).

Figure 4.3-3: Active and Proposed MSHCP Conservation Areas near the General Plan Planning Area



<sup>1</sup> CVMSHCP, CVAG, County of Riverside GIS [http://www.cvmshcp.org/Plan\\_Maps.htm](http://www.cvmshcp.org/Plan_Maps.htm)

Figure 4.3-4: CVMHCP Biological Resources Map<sup>2</sup>

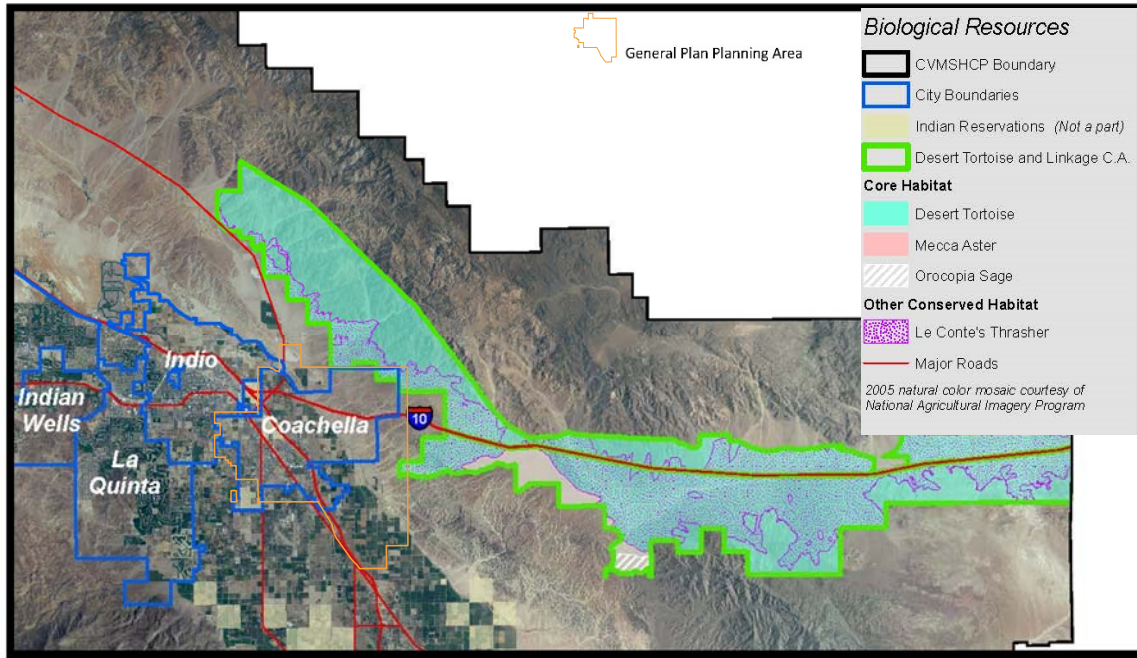
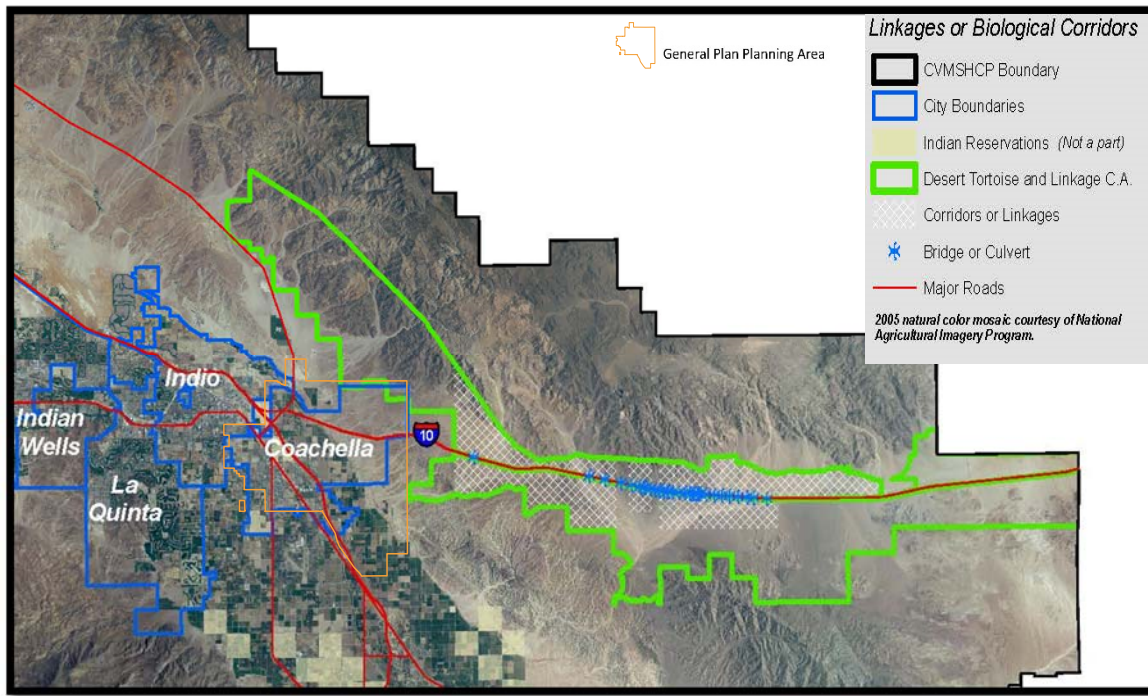


Figure 4.3-5: CVMHCP Natural Communities



<sup>2</sup> CVMHCP, CVAG, County of Riverside GIS [http://www.cvmshcp.org/Plan\\_Maps.htm](http://www.cvmshcp.org/Plan_Maps.htm)

Figure 4.3-6: CVMSHCP Biological Corridors<sup>3</sup>

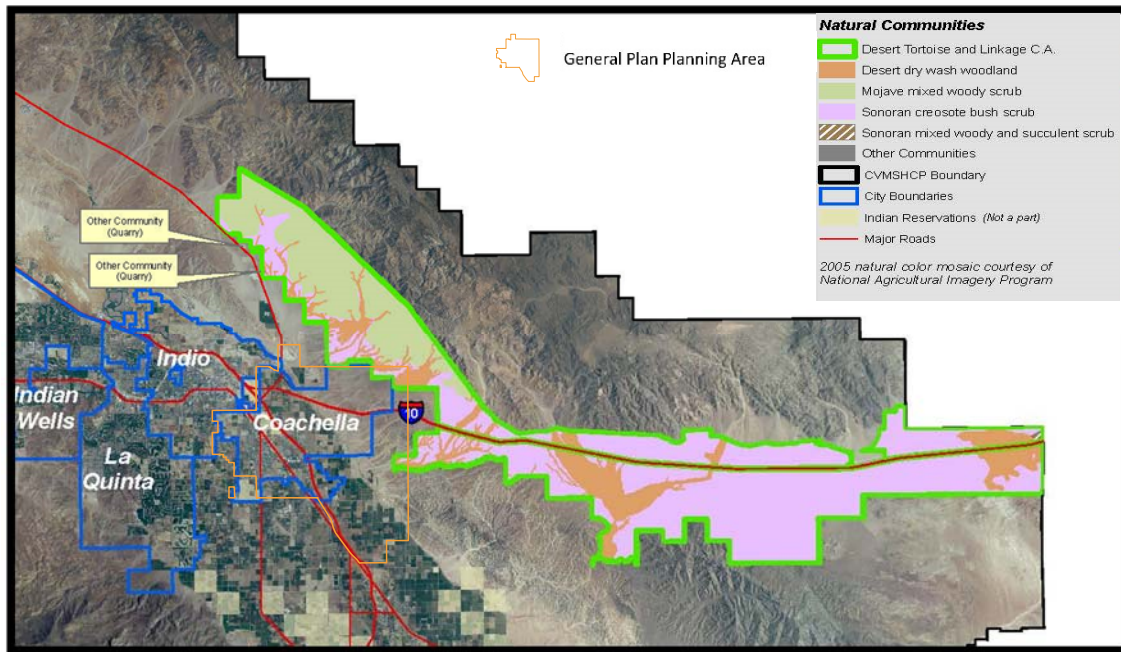
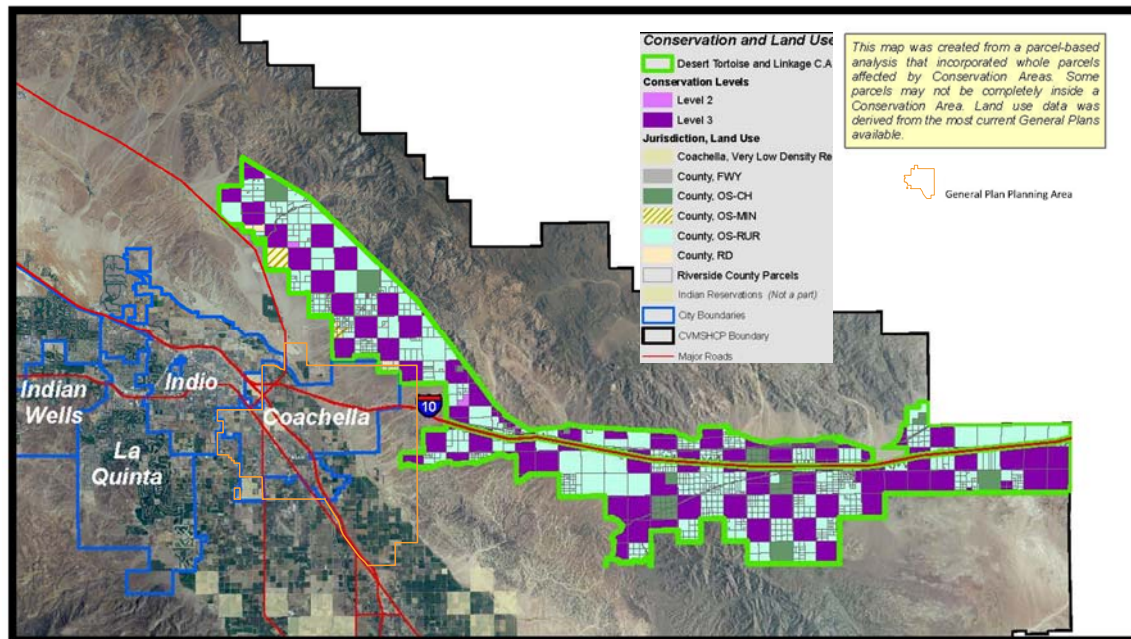


Figure 4.3-7: CVMSHCP Land Uses



<sup>3</sup> CVMSHCP, CVAG, County of Riverside GIS [http://www.cvmshcp.org/Plan\\_Maps.htm](http://www.cvmshcp.org/Plan_Maps.htm)

# ENVIRONMENTAL IMPACTS AND MITIGATION

## SIGNIFICANCE CRITERIA

The following thresholds for determining the significance of impacts related to biological resources are contained in the environmental checklist form contained in Appendix G of the most recent update of the California Environmental Quality Act (CEQA) Guidelines, and will be used in the Environmental Impact Report. Impacts related to biological resources are considered significant if implementation of the General Plan would:

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

## SENSITIVE SPECIES

*Impact 4.3-1: Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

**Significance: Less than significant with mitigation.**

Sensitive species are determined by State and Federal organizations to have less than sufficient species counts or habitat area to properly thrive in natural landscapes, and could potentially be at risk of extinction without proper conservation of certain species. Human development and activities create a number of environmental effects that can harm sensitive species and their habitat, and can lead to decreased species counts or habitat areas. Some factors include air quality degradation, increased nighttime glare, noise, land use changes, physical development, and infrastructure construction.

A number of sensitive plant and wildlife species recognized by the California Department of Fish and Game or U.S. Fish and Wildlife Service are identified earlier in this Section 4.3 on page 4.3-4. These species are considered threatened by federal, state, or local organizations, due to low density or decreasing population of wildlife and habitat. Development or implementation of the Coachella General

Plan Update (CGPU) could cause a direct or indirect decrease in land that supports sensitive species and would conflict with the existing efforts to preserve or restore the sensitive species.

The existing on-the-ground development in the Planning Area consists of the urban development in the western area of the City, as the eastern area remains largely undeveloped. It is within this eastern portion of the Planning Area that sensitive species are present. Coachella's varying habitat that supports sensitive species includes sandy dunes, areas where vegetation is sparse and ground is sandy, grasslands, and agriculture lands. Because the City is not fully developed, the biodiversity surrounding the existing developed areas could experience negative affects due to growth under the CGPU. The following analysis will determine if the effects will be significant.

### Wildlife

Sensitive wildlife within and around the Planning Area include the Coachella giant sand treader cricket (*Macrobaenetes valgum*), Desert tortoise (*Gopherus agassizii*), Flat-tailed horned lizard (*Phrynosoma mcalli*), Coachella Valley fringetoes Lizard (*Uma inornata*), Golden Eagle (*Aquila chrysaetos*), Burrowing Owl (*Athene cunicularia*), Swainson's Hawk (*Buteo swainsoni*), Northern harrier (*Circus cyaneus*), Prairie falcon (*Falco mexicanus*), Loggerhead shrike (*Lanius ludovicianus*), Black-tailed gnatcatcher (*Poliophtila melanura*), Vermillion flycatcher (*Pyrocephalus rubinus*), Crissal thrasher (*Toxostoma crissale*), Le Conte's thrasher (*Toxostoma lecontei*), Colorado Valley woodrat (*Neotoma albigula venusta*), Palm Springs round-tailed ground squirrel (*Spermophilus tereticaudus chlorus*), and American badger (*Taxidea taxus*).

As mentioned in the Existing Baseline Conditions above, the Coachella Valley Multiple Species Habitat Plan (MSHCP) has also identified the following endangered species existing within the Planning Area.

- Round-tailed Ground Squirrel located in the Mecca Hills, and along SR 86.
- Crissal Thrasher located along SR 86 and southern portion of SR 11, and the Southwestern border of the City.
- Desert Tortoise: Habitat is located in the Mecca Hills
- Flat-Tailed Horned Lizard: Located east of the Coachella Canal
- Le Conte's Thrasher: Located east of the Coachella Canal

The listed sensitive species from the CVMSHCP are located within subarea 1, 7, 9, 11, 13, 14 and 15. Habitat within subareas 13, 15, 16 and 17 represent a large proportion of the habitat land in the Planning Area. It is within these same subareas that the CGPU plans for limited access and limited development because of the sensitive habitat and biodiversity located within the Planning Area. Subareas 15, 16 and 17 are to remain largely undisturbed and will not be the central focus for development and growth during the horizon line of the CGPU. Subarea 13 is planned for limited urban development with extensive open space and preservation. Subarea 16 and 17 have specifically been set aside as agricultural preservation and habitat preservation land.

Though a majority of sensitive species and habitats occur in the eastern portion of the Planning Area, there is some limited potential for the occurrence of sensitive species in the western portion of the. Subareas 1, 7, 9, and 14 include sensitive species and call for increased development and infill that could impact the habitats located in the CGPU Planning Area.

Subarea 1 is currently covered by a large proportion of single family homes. The CGPU vision for this Subarea is to increase development, support infill projects to improve existing conditions, and provide a large proportion of the City's single-family and multi-family housing. As presented in the existing conditions description above and data from the Coachella Valley Multiple-Species Habitat Conservation



Plan, sensitive species that could occur in this area are the Coachella Valley Round-Tailed Ground Squirrel and Crissal Thrasher. It is possible that these sensitive species might occur in Subarea 1 but the potential is considered moderate to low. The limited presence of the sensitive species is likely due to existing developed land covering a large portion of the subarea. With an increase in development and infill projects within the subarea, impact on the sensitive species could occur. However, given the low potential of these sensitive species' presence and minor development plans in subarea 1, it is unlikely that the development will have a significant impact on sensitive species within subarea 1.

In subareas 5, 6, and 7, the Coachella Valley Round-Tailed Ground Squirrel and Crissal Thrasher also have potential to occur. Existing land uses in these areas are primarily agricultural and vacant land, low density residential and some industrial uses. Implementation of the CGPU for subarea 5, 6, and 7 would result in agricultural lands being replaced by industrial, commercial, and civic uses as an economic base for the City. The possible sensitive species in these subareas have a moderate potential for occurrence and also make up less than half of the Planning Area's habitat coverage. Given the increased development plans for these areas, the CGPU may impact the sensitive species. However, the protected habitat species occur with only moderate potential and are seen in these subareas periodically compared to other areas of the Planning Area and the region. With this moderate potential occurrence predictions and proportion of coverage within the Planning Area, the potential impacts are less than significant. If mitigation is applied, that prevents harm from coming to these animals. As such, the following mitigation is recommend.

### Plants

Two of the region's ten sensitive plant species that are either threatened or have low population densities have been sighted outside of the Planning Area, within the greater Coachella Valley. These two plants species are; Creamy Blazing Star (*Mentzelia tridentatata*) and Meccaaster (*Xylorhiza cognata*).

Both species are not known to be located within the Planning Area, but have been noted within close proximity to the Planning Area, and currently have a low potential of occurring within the Planning Area. Due to this low potential, and extreme limited existence within the Planning Area, the implementation of the CGPU would result in less than significant impact.

The majority of sensitive species with potential to occur in the Planning Area are in, or expected to occur in, the undeveloped areas of the Planning Area that are to remain undeveloped under the implementation of the CGPU. Policies within the CGPU address the preservation and importance of these species and habitats. Ecological buffers, agriculture buffers, and preservation land are all incorporated in the Sustainability + Natural Environment element to protect potential impacts on sensitive wildlife and plan species. Additionally, developing more efficiently by using less land per capita than the older business-as-usual sprawl development types of the last few decades, sets aside large tracts of land in subareas 13, 16, and 17. With this, efficient design in street patterns and land use outlines the environmental sensitivity of the CGPU. Along with the CGPU design, additional policies will guide development and allow decision makers to enforce environmental protection policies as development occurs under the CGPU. The following policies address the protection and preservation of sensitive species within the Planning Area and can be found in Chapter 7, Sustainability + Natural Environment Element of the CGPU.

- 5.6 **Habitat restoration.** Allow unviable and abandoned farmland to revert to desert, habitat area and open space, especially in areas contiguous to existing habitat and desert.

- 9.1 **Buffers from new development.** Require new developments adjacent to identified plant and wildlife habitat areas to maintain a protective buffer.
- 9.2 **Agriculture and natural habitat.** Promote the creation and maintenance of natural habitat and wildlife corridors on agricultural lands through wildlife-compatible farm management practices.
- 9.4 **Conservation and preservation easements.** Develop a program to facilitate the creation of conservation and preservation easements that identifies key habitat areas, habitat corridors and sensitive biological resources and:
- Establishes a simple process for land owners to grant easements, including identifying organizations or agencies capable of holding the easements; and
  - Provides information to the landowners of identified properties about the benefits of conservation and preservation easements.
- 10.7 **Wildlife corridors.** Establish and preserve wildlife corridors.

A large proportion of the Planning Area is to be preserved with strategies that discourage development until future population needs require growth, setting aside large areas of open space. These areas include subarea 15, 16, and 17 that have policies restricting development until other portions of the Planning Area have developed. Additionally, the multiple policies propose to preserve sensitive land and protect sensitive species, making development under the CGPU to have as much of a reduced impact as possible on sensitive species within the Planning Area. However, there is some potential for impacts to sensitive species to occur with implementation of the CGPU. To prevent these impacts an additional policy will be added to the CGPU to reduce impacts on biological resources.

### **Mitigation Measures**

Prior to adoption of the Final EIR and CGPU, update CGPU Chapter 7 with new policy. Policy will state: Require projects proposing to develop in subareas 5, 6, and 7 to conduct survey to determine if there is occurrence of sensitive species within the project area. If sensitive species are present, projects must implement mitigation measures necessary as prescribed by a qualified biologist and approved by any applicable resource agency in order to receive necessary City permits

## **RIPARIAN HABITAT OR OTHER SENSITIVE HABITAT**

*Impact 4.3-2: Would the Project Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations; or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

### **Significance: Less than significant.**

Riparian habitats and wetlands are made up of a diverse combination of flora and fauna along a water source, wetland, or streams. Sensitive natural communities account for land areas supporting a varied eco-system but are at risk of permanent damage or extinction. Riparian and other sensitive natural communities serve as a valuable ecosystem, and can be subject to harm or degradation from a number environmental effects caused by natural and man-made disturbances. Disturbing sensitive habitats can create a permanent loss in valuable biological resources within the Planning Area.

Within the Planning Area, Riparian habitat occurs in very limited amounts north of the City along the Whitewater River. There are currently no other sensitive habitats within the Planning Area. Based on environmental analysis, the Riparian Habitat in the Planning Area is too dispersed to support any species and very limited to areas surrounding the Whitewater River corridor. Due to the low occurrence of Riparian Habitat and the inability to support sensitive species, implementation of the CGPU would not substantially affect any Riparian Habitat in the Planning Area. Impacts on riparian habitat or other sensitive habitats are considered less than significant.

### **Wetlands**

The Whitewater River, its tributary washes, and channels located east of the Coachella Canal make up the existing waterways and wetlands in the Planning Area. The Whitewater River runs between planning subareas 1, 5, 6, 7, 9, 10, and 11. These subarea's current uses range from agriculture land, open space, tribal land, and some residential neighborhoods. Throughout the lifespan of the CGPU, the area around the Whitewater River will experience increased residential density, downtown expansion, development of an employment center and an industrial district. Waters in the eastern portion of the Planning Area are located where development would be low density or restricted under the implementation of the CGPU.

Within the CGPU policies under the Sustainability + Natural Environment Element, the CGPU calls for a number of strategies to regulate water quality in the Planning Area. These policies include conservation performance targets, low impact development on urban run-off and storm water management. In addition to these strategies to avoid impacts on waters in the Planning Area, federal law also regulates whether the waterways can be impacted by development, requiring mitigation for impacts for the treatment and mitigation of these same waterways and wetlands. The Clean Water Act Section 404 and 401 serve as another regulatory system to ensure low impact of waterways and wetlands of the United States, like those within the City of Coachella and its Sphere of Influence. The following policies in the Sustainability + Natural Environment Element of the CGPU address riparian habitat and wetland protection.

- 7.1 **Pollution prevention.** Limit the amount and concentration of pollutants released into the City's waterways.
- 7.2 **Development impacts.** When considering development applications, require consideration of onsite detainment of stormwater runoff and require the incorporation of appropriate stormwater treatment and control measures.
- 7.6 **Waterways as amenities.** When considering development applications and infrastructure improvements, treat waterways as amenities, not hazards, and encourage designs that embrace the waterways.
- 10.2 **Whitewater river corridor.** Preserve a public open space corridor of trails and wildlife habitat along the Whitewater River.
- 10.8 **Preservation of natural land features.** Preserve significant natural features and incorporate into all developments. Such features may include ridges, rock outcroppings, natural drainage courses, wetland and riparian areas, steep topography, important or landmark trees and views.

The CGPU Land Use Plan has been designed to allocated development away from sensitive habitats including wetlands and riparian habitats. The Land Use Plan is supported with policies listed above which will provide decision makers guidance during the development review process. As development occurs under the CGPU, the Land Use Plan policy set will provide the City with the authority to protect the riparian and wetland resources as projects inconsistent with these policies and the Land Use Plan will not be eligible for approval Thus, aiding the City into protecting sensitive riparian wetlands and habitats. Based on these intrinsic environmental benefits of the CGPU as opposed to the older business-as-usual general plan the City is currently growing under, the CGPU and the policies listed above will reduce impacts on riparian or other sensitive habitats have been found to be less than significant.

### **Mitigation Measures**

No mitigation measures are necessary.

## **NATIVE SPECIES MIGRATION**

*Impact 4.3-3: Would the Project Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

### **Significance: Less than significant.**

Native resident species are native to the land and have historically habituated an area as it supports sustainable habitat conditions. Native migratory species are also native to the land and use the habitats seasonally and are not present for the duration of the year. Though a species may not be present throughout the year, development can affect the habitat in which the native migratory species depends on for survival during seasons of habitation. Degradation of migratory species habitat, through development and increased human activity, can threaten the sustainability of native residents or migratory wildlife corridors.

Among the native resident or migratory fish or wildlife species documented in the existing conditions section, two migratory species reside seasonally within the Planning Area: Golden Eagle (*Aquila chrysaetos*) and Swainson's Hawk (*Buteo swainsoni*). Both species migrate through undeveloped areas, grasslands, and agriculture lands in the Planning Area. Currently, there is a significant portion of land that is undeveloped or used for agriculture located in the eastern portion of Planning Area. The combined 11,174 acres of agriculture land, 18,224 acres of vacant land, and 109 acres of parks and open space account for 29,507 acres of the total 34,322 acres that make up the Planning Area. This proportion of Planning Area that is available for migratory species provides a significant amount of land for seasonal presence. Under the CGPU, some agriculture and undeveloped land is planned to be transformed into various land uses in response to the projected population growth over the coming decades, which will result in a loss of forage area for these species.

Though there is potential for impact on migratory species from the loss of forage areas for these species from such growth as projected by the CGPU, these impacts are expected to be less than significant due to the significant tracts of land that would be set-aside as open space as proposed by the CGPU Land Use Plan. Subarea 13 is proposed to set aside open space for habitat protection and low impact recreation. Subarea 16 is proposed to be agricultural land and Subarea 17 is proposed to be permanent open space. Additionally, as development occurs under the CGPU, decision makers use policies in the CGPU during the development review stages of growth to ensure minimal impact on sensitive species in the Planning Area; no development can be approved if it is inconsistent with the

policies of the CGPU. The following policies in the CGPU's Sustainability + Natural Environment Element will provide decision makers with the tools to identify and preserve sensitive wildlife corridors, agriculture, and open space and ensure minimal impact on sensitive species, including the habitat of migratory species.

- 5.6 **Habitat restoration.** Allow unviable and abandoned farmland to revert to desert, habitat area and open space, especially in areas contiguous to existing habitat and desert.
- 9.2 **Agriculture and natural habitat.** Promote the creation and maintenance of natural habitat and wildlife corridors on agricultural lands through wildlife-compatible farm management practices.
- 9.6 **Native habitat management.** Develop a program to restore native habitat on undeveloped portions of City-owned properties, where feasible, and remove invasive species where they occur.
- 9.7 **Landscape design.** Encourage new developments to incorporate native vegetation materials into landscape plans and prohibit the use of species known to be invasive according to the California Invasive Plant Inventory.

Based on CGPU's development plan to use land more efficiently with higher density, increase walkability, allow for better street connectivity, and support the preservation of natural open space areas, and sensitive species, impacts would be less than significant because substantial forage and agricultural land would be preserved. Additionally, the listed policies and other regulatory framework will be used in the development review process of the CGPU implementation, thus decreasing potential impact of native species migration patterns to a level less than significant.

#### **Mitigation Measures**

No mitigation measures are necessary.

## **CONFLICTS WITH ANY LOCAL POLICIES OR ORDINANCES PROTECTING BIOLOGICAL RESOURCES**

*Impact 4.3-4: Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?*

#### **Significance: Less than significant.**

Local policies and conservation plans are created to protect an identified sensitive habitat or species. Approval of a project that conflicts with an adopted strategy by local, regional, state, or federal agencies, could result in confusion and harm of the species that are being protected under existing policies, ordinances or conservation plans.

The City of Coachella and its Sphere of Influence are located within the area for the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP). The CVMSHCP identifies sensitive and endangered species and habitats in the Coachella Valley and works to preserve and protect natural habitats. The CVMSHCP identifies land that contains sensitive habitats in specific planning areas and sets to allocate these lands as undevelopable to prevent harm to sensitive or endangered species.

Additionally, the CVMSCHP's overall goal is to conserve land and safeguard the habitats for sensitive and endangered species.

Based on the CVMSHCP list of sensitive species, there are few sensitive or threatened species expected to occur within the City of Coachella and Sphere of Influence. As shown by Figure 4.3-3, there is very little CVMSHCP Conservation Land within the Planning Area, occurring in subarea 17 only. Under the CGPU, these areas are proposed for preservation as open space. This was done specifically to comply with the endangered species of the CVMSHCP. Additionally, the CGPU identifies and provides policy for the City to support and adhere to the CVMSHCP. To further ensure compliance with the CVMSHCP, the following policies can be found in the Sustainability + Natural Environment Element of the CGPU.

- 9.4 Conservation and preservation easements.** Develop a program to facilitate the creation of conservation and preservation easements that identifies key habitat areas, habitat corridors and sensitive biological resources and:
- Establishes a simple process for land owners to grant easements, including identifying organizations or agencies capable of holding the easements; and
  - Provides information to the landowners of identified properties about the benefits of conservation and preservation easements.
- 9.5 Multiple species habitat conservation plan.** Support and adhere to the Coachella Valley Multiple Species Habitat Conservation Plan.
- 10.2 Whitewater river corridor.** Preserve a public open space corridor of trails and wildlife habitat along the Whitewater River.
- 10.7 Wildlife corridors.** Establish and preserve wildlife corridors.

The CGPU has also set aside preserved land, as open space, to protect sensitive species and habitats within the planning area. Based on these findings, the CGPU Update will have less than significant impact on any local policies or ordinances protecting biological resources.

### **Mitigation Measures**

No mitigation measures are necessary.

## **CUMULATIVE IMPACTS**

Because the proposed project is a General Plan Update, which takes into account existing and potential development over approximately the next twenty years, the analysis of biological resource-related impacts contained within this chapter of the EIR is already cumulative in nature. The City of Coachella and Sphere of Influence are located in a desert eco-system and adjacent to identified sensitive species and habitats mostly inhabiting the eastern portion of the Planning Area close to the Mecca Hills. The identified sensitive habitat areas have been preserved through land use allocation of the CGPU as well as regional protection plans and agencies including the Multiple Species Habitat Conservation Plan. Full implementation of the CGPU will grow the Planning Area into a mid-sized City, and part of the large population growth expected in the Coachella Valley. The CGPU is equipped with a land use plan and policies that protect such sensitive biological resources through the preservation of thousands of acres of open space. Furthermore, the CVMSHCP was prepared and adopted specifically to address and

prevent cumulative environmental impacts to sensitive species in the Coachella Valley. The proposed Land Use Plan is directly compatible with the preservation area of the CVMSHCP. Thus, in considering the intrinsic benefits of the open space preservation and habitat preservation of the CGPU and the CVMSHCP, cumulative impacts have been found to be less than significant. The accumulation of policies, land use designations, and requirements to adhere to regional plans or regulations allows the CGPU to have minimal environmental impact on biological resources in the Coachella Valley.

## **SIGNIFICANT AND UNAVOIDABLE IMPACTS**

Based on findings of impacts to be less than significant for biological resources, no significant and unavoidable impacts are expected. The implementation of the CGPU will have no significant and unavoidable impacts.

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