

4.4 Biological Resources

4.4.1 Setting

The setting information for this section was compiled based on Environmental Science Associates field reconnaissance of the Proposed Project components and alternatives. Site visits were conducted by Environmental Science Associates biologists Suk Ann Yee on 3/21/08 and Mitchell Jenkins on 06/11/08 and 07/16/08. Further information was obtained from a review of the Southern California Edison's (SCE) Proponent's Biological Assessment (2007) and Environmental Assessment (PEA) (2008); biological resources surveys for the Proposed Project and alternative alignments and sites (EPG, 2006a, 2006b, and 2006c; SCE and TRC, 2009a, 2009b, and 2009c); the Coachella Valley Multi-Species Habitat Conservation Plan (CVMSHCP) (CVAG, 2007); resource agency websites and databases (U.S. Fish and Wildlife Service (USFWS), and California Department of Fish and Game (CDFG)); and field review and consultation with USFWS Section 7/10 coordinator for the region, Peggy Bartels.

This chapter breaks the Proposed Project components and alternatives into two study areas, Farrell-Garnet and Mirage-Santa Rosa. The Farrell-Garnet study area is in the western portion of the Proposed Project and includes the proposed Farrell-Garnet 115 kV subtransmission line alignment, the proposed transmission line reconfiguration at Date Palm Drive and Varner Road, and the Alternative 2, 3, 6, and 7 alignments. The Mirage-Santa Rosa study area covers the eastern portion of the Proposed Project and includes the proposed Mirage-Santa Rosa 115 kV subtransmission line alignment, the proposed Devers-Coachella 220 kV Loop-In alignment, the proposed reconfiguration at Bob Hope and Dinah Shore Drive, the proposed reconfiguration at Portola Avenue and Gerald Ford Drive, and the Alternative 5 alignment. The proposed substation modifications are within both study areas.

The study areas lie within the Coachella Valley, in west-central Riverside County, California. The biotic community present in the Coachella Valley is xeric and considered part of the Lower Colorado River Valley Subdivision of the Sonoran Desert; an area referred to as the Colorado Desert (Jaeger, 1957; Raven and Axelrod, 1978; Turner and Brown, 1982). Surface elevations of the study area range from approximately 215 to 875 feet (65 to 267 meters). The Lower Colorado River Valley Subdivision characteristically covers broad alluvial valley floors and is dominated by creosote bush (*Larrea tridentata*), in association with white bursage (also called burrobrush) (*Ambrosia dumosa*) on gravelly soils, and with big galleta grass (*Pleuraphis rigida*) on finer-textured soils. Washes that dissect valley bottoms of creosote-bush scrub support woodland-like communities of blue palo verde (*Parkinsonia florida*), ironwood (*Olneya tesota*), and several species of shrubs where soils are coarse and rocky. Where soils are finer-textured, mesquite (*Prosopis sp.*) may occur as dominant. Washes may also be inhabited by shrubs such as white burrobrush (also called cheeseweed) (*Hymenoclea salsola*), smoke tree (*Psoralea spinosa*), and sweetbush (*Bebbia juncea*).

The Coachella Valley receives great influxes of fine sand washed and blown down from drainages in the San Bernardino and San Jacinto mountains (Griffiths et al., 2002). As a result,

the landscape is spatially and temporally dynamic, with sand deposition and erosion occurring almost daily. Sand deposits form on the lee side of shrub hummocks and other obstructions, providing fine-scale topography across an otherwise flat landscape. Vegetation in the resultant sand dunes is sparse and dominated by creosote bush, sandpaper bush (*Petalonyx thurberi*), and white dalea (*Psorothamnus emoryi*). To reduce the infiltration of sandblows across roads, highways, and railroad tracks, windbreaks of tamarisk (*Tamarix* sp.) have been planted along major vehicular routes (e.g., Interstate 10 [I-10] and Union Pacific Railroad [UPRR] tracks). In addition, some established dune areas have retaining fences designed to minimize (or delay) the movement of sand across the landscape.

The climate of the biological resources study area is typical of the Colorado Desert, with high daytime temperatures, low humidity, and low average annual precipitation. Temperatures are high in the summer, with common maxima near 120 degrees Fahrenheit. Winter maximum temperatures average in the upper 60 degrees Fahrenheit. Daily variations of 30 to 50 degrees are common, because of the minimal cloudiness and lack of vegetative cover to hold heat. Low relative humidity accompanies the high summer temperatures, with daytime relative humidity readings frequently between five and 10 percent. Precipitation occurs primarily in the winter months (from December to February). The Lower Colorado River Valley Subdivision is the driest of the Sonoran Desert subdivisions (Turner and Brown, 1982) because of the high temperatures and low precipitation, with as little as two inches of annual rainfall in some places. The City of Palm Springs receives an average of 5.3 inches of rainfall per year (Turner, 1994).

The primary land uses in the Coachella Valley are open space, residential, commercial, roads and highways, golf resorts, wind power generation stations, an airport, and habitat preserves. In both Palm Springs and Thousand Palms, there is on-going construction of, and plans for, new residential developments and infrastructure. Roads in the area receive a high volume of traffic and serve as feeder routes to I-10.

A series of protected areas have been set aside in the Coachella Valley to preserve dune-endemic plants and animals and to maintain sand transport processes. Of particular relevance to the Proposed Project and alternatives is the CVMSHCP and Coachella Valley fringe-toed lizard (*Uma inornata*) USFWS-designated critical habitat.

The CVMSHCP is split into 21 conservation areas. Of these, the Farrell-Garnet study area partially overlaps with the Whitewater River Floodplain Conservation Area and borders the Willow Hole Conservation Area; and the Mirage-Santa Rosa study area is along the western boundary of the Thousand Palms Conservation Area. The CVMSHCP is discussed below under *Regulatory Framework*. The CVMSHCP supersedes the Coachella Valley Fringe-Toed Lizard Habitat Conservation Plan (HCP) that covers the Farrell-Garnet study area, which is also discussed below under *Regulatory Framework*. USFWS-designated critical habitat for the Coachella Valley fringe-toed lizard is also located north and east of the Mirage Substation, and the Devers-Coachella 220 kV Loop-In would cross through this critical habitat.

Vegetation Communities and Wildlife Habitats

Biological resources are determined largely by vegetation communities and by the related, but not identical, wildlife habitats. Vegetation communities are assemblages of plant species that occur together in the same area, and are defined by species composition and relative abundance.

A dominant feature of the study area is the Whitewater Wash, which is also referred to as the Whitewater River. The floodplain is a large desert wash containing active desert dunes and sand fields, ephemeral sand fields, and some areas of stabilized sand fields. The sand fields and dunes provide habitat for several sand endemic species which are species of special concern discussed below.

The following descriptions of natural vegetation communities in the study areas are based on the Holland classification system (1986).

Sonoran Creosote Bush Scrub (Holland Code 33100)

Sonoran creosote bush scrub is a low, widely spaced natural community characterized by shrubs spaced by bare ground. Ephemeral herbs may flower in the spring if winter rains are sufficient. This habitat is dominated by creosote bush (*Larrea tridentata*) and white bursage. Other species present in this natural community in the project area include white dalea (*Psoralea emoryi*), and Mediterranean schizmus (*Schizmus barbatus*).

Sonoran creosote bush scrub is the most common community in the study area, and is present along the portion of the proposed Farrell-Garnet 115 kV alignment north of the UPRR, and along Alternatives 2, 3, 6, and 7. This natural vegetation community is also present along the proposed Mirage-Santa Rosa 115 kV alignment, Devers-Coachella Valley 220 kV Loop-In, and Alternative 5, although it is more disturbed in these areas.

Stabilized and Partially Stabilized Desert Dunes (Holland Code 22200)

Stabilized and partially stabilized desert dunes are sand dune accumulations that are stabilized or partially stabilized by evergreen and/or deciduous shrubs, scattered low annuals, and perennial grasses. These dunes are characterized by prominent dune features, with consistent cover of vegetation. This community may intergrade with active desert dunes in windier sites, and with stabilized and partially stabilized desert sand fields, or sandier phases of creosote bush scrub. This community includes perennial plant species typical of a creosote bush scrub matrix, with perennial shrub species including creosote bush, four-wing saltbush, California croton, and indigo bush. However, the dune characteristics are the defining feature. The total cover of vegetation increases as the dunes are progressively stabilized. Stabilization varies based on input of sand, rainfall, which influences vegetative cover, and other factors (CVAG, 2007).

This natural community is present along the proposed Farrell-Garnet alignment, and Alternatives 2, 3, 6, and 7.

Developed

Developed areas occur where the Proposed Project and alternatives intersect residential or commercial development. In these areas, ornamental trees, lawns, hedges, and golf courses comprise the vegetation, and paved city streets, sidewalks, parking lots, and buildings are the dominant topographic features. Vehicular traffic may be very heavy at times in these areas. The proposed modifications at the Devers Substation, Eisenhower Substation, Farrell Substation, Garnet Substation, Thornhill Substation, Mirage Substation, Concho Substation, Indian Wells Substation, Santa Rosa Substation, and Tamarisk Substation are all within developed areas that lack native habitat. All of the Proposed Project subtransmission lines and alternatives go through at least a portion of developed habitat.

Ruderal

Parts of the Proposed Project and alternatives occur in areas previously developed or routinely disturbed but that have retained a naturalistic setting. Some native vegetation may occur in these areas, such as arrowweed (*Pluchea sericea*), fanleaf crinklemat, California croton, brittlebush, and desert sand verbena (*Abronia villosa*). A high proportion of vegetation is comprised of weedy introduced species such as mustard, Russian thistle (*Salsola tragus*), Arabian grass (*Schismus arabicus*), and tamarisk. Soils in these areas tend to be sandy but compacted and exhibit frequent signs of human influence in the forms of litter or off-road vehicle tracks.

The vegetation community in the vicinity of the subtransmission line reconfiguration at the intersection of Date Palm Drive and Varner Road is ruderal. Soils consist of compacted sands with a source for windblown sand existing 0.25 miles to the west. Non-native mustard and Arabian grass are the dominant species within the area surrounding this intersection. This area is impacted by a high volume of street traffic and contains an abundance of litter.

The vegetation community in the vicinity of the subtransmission line reconfiguration at Bob Hope Drive and Dinah Shore Drive is ruderal. The southwestern and southeastern corners are urban and developed, with a vacation resort at the southwestern corner and new construction at the southeastern corner. The northwestern and northeastern corners are vacant lots consisting primarily of bare ground and non-native, early successional plants (e.g., mustard, Russian thistle).

The vegetation community in the vicinity of the subintersection of Portola Avenue and Gerald Ford Drive is ruderal and developed. There is a 1993 California Natural Diversity Database (CNDDB) record for Coachella Valley (CV) milkvetch immediately southeast of this intersection (CDFG, 2009). However, the property owner recently graded the area surrounding this intersection, and the plants present during the 2006 biological surveys consisted only of early successional, non-native annuals.

Sensitive Vegetation Communities

Active Desert Dunes and Sand Fields (Holland Code 22000)

Active sand fields are areas of active sand movement with little or no vegetation, where accumulated sand is not of sufficient depth to form classic formations that characterize dune systems. The distinction between active sand fields and active desert sand dunes is the absence in sand fields of prominent dune landforms. Sand fields may intergrade with active dunes, and stabilized and partially stabilized dunes and sand fields. They may be characterized by hummocks of sand forming behind individual shrubs or clumps of vegetation. Vegetation varies from scant cover of widely scattered shrubs and annual wildflowers to denser shrub cover. This community occurs within a creosote bush scrub matrix. Typical plant species include four wing saltbush, creosote bush, and indigo bush (CVAG, 2007).

Active sand fields are present along portions of the east side of the Gene Autry Trail south of the UPRR where the Farrell-Garnet 115 kV subtransmission line is proposed, as well as east of the proposed Devers-Coachella Valley 220 kV Loop-In. This is considered a sensitive community by CDFG.

Jurisdictional Waters of the U.S., Including Wetlands

Wetlands are ecologically productive habitats that support a rich variety of both plant and animal life. They are recognized as important natural systems because of their value to fish and wildlife, and their functions as storage areas for flood flows, groundwater recharge, nutrient recycling, and water quality improvement. Wetlands are defined as areas that are periodically or permanently inundated by surface or ground water and support vegetation adapted to saturated soils.

A formal wetland delineation has not been prepared for the Proposed Project or alternatives; however, one primary drainage crosses through the study area, known as the Whitewater Wash. The Whitewater Wash (also called Whitewater River) spans the length of the Coachella Valley. The upper part of the river, in the San Gorgonio Wilderness, is dry throughout most of its length with the exception of its most westerly end, which quickly percolates into the groundwater basin or is diverted for use. The feature is fed by several tributaries, including the San Gorgonio River, Mission Creek, Little and Big Morongo Creeks, and Box Canyon Wash. Within the Farrell-Garnet study area, the bed of the wash is composed of sand fields. The Whitewater Wash is likely a jurisdictional wetland as defined by the Clean Water Act (CWA), and impacts to this potentially jurisdictional feature would be regulated by a CWA Section 401 permit from the Regional Water Quality Control Board (RWQCB), and a CWA section 404 permit from the U.S. Army Corps of Engineers (USACE). In addition, this feature is under the jurisdiction of CDFG, and would require a Streambed Alteration Agreement (see *Regulatory Context*, below) as required by under section 1600 et. seq. of the California Fish and Game Code.

Special-Status Species

Species known to occur on or in the vicinity of the study areas are accorded “special-status” because of their recognized rarity or vulnerability to various causes of habitat loss or population decline. Some of these receive specific protection defined in federal or State endangered species legislation. Others have been designated as “sensitive” on the basis of adopted policies and expertise of State resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies such as counties, cities, and special districts to meet local conservation objectives. These species are referred to collectively as “special-status species” in this EIR, following a convention that has developed in practice but has no official sanction. The various categories encompassed by the term, and the legal status of each, are presented in the *Regulatory Context* discussion of this section.

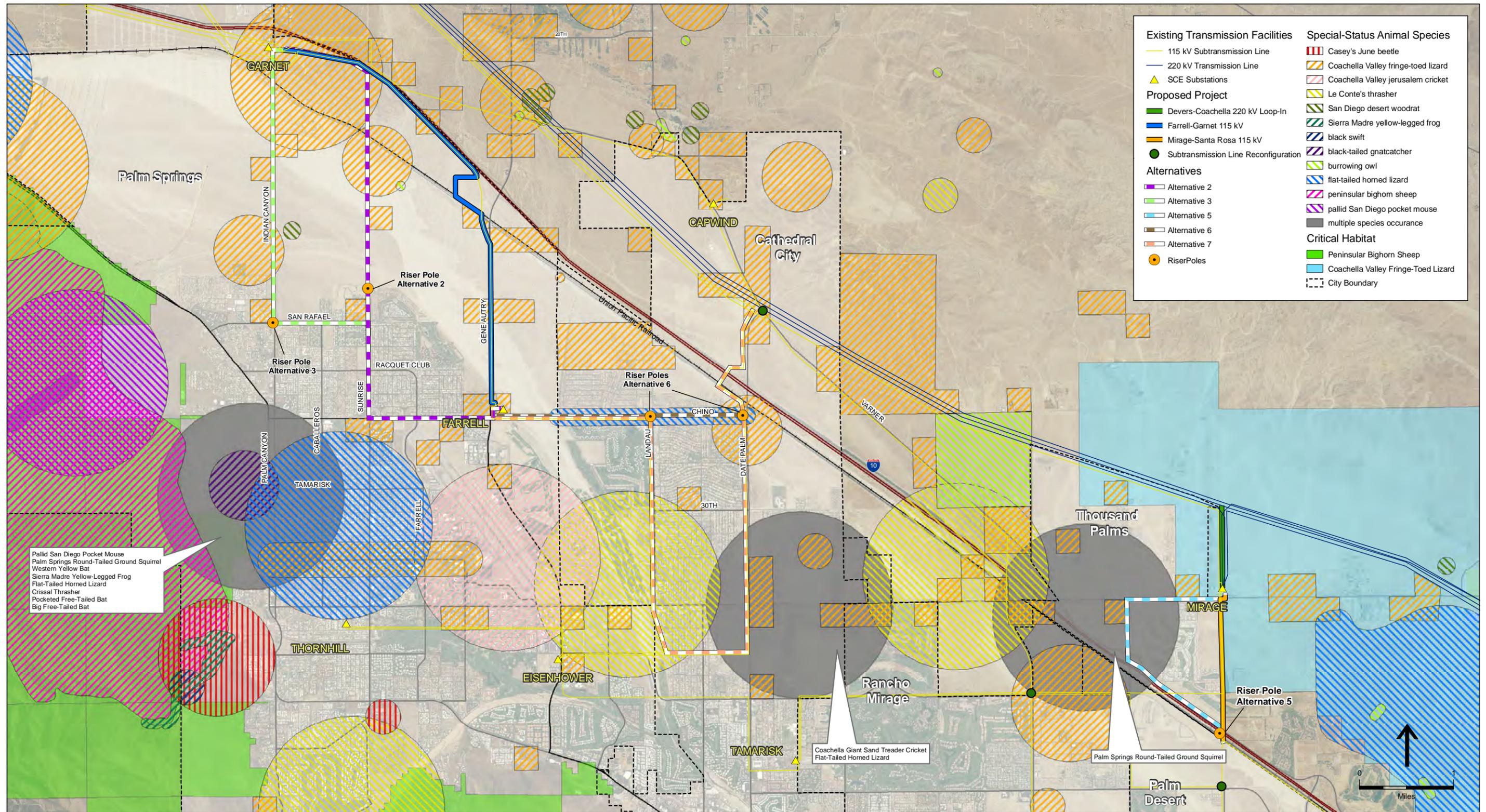
Special-status plant and wildlife species with potential to occur in the study area are discussed in the following sections. Figures 4.4-1 and 4.4-2 display known occurrences of special-status animal and plant species, respectively, for the Farrell-Garnet and Mirage-Santa Rosa study areas.

A list of special-status plant and animal species reported or expected to occur within the vicinity of the study area was compiled on the basis of data in the CNDDDB (CDFG, 2009), consultation with the CDFG, California Native Plant Society (CNPS) (2009), Draft Biological Resources Survey Report for Coachella Valley Milkvetch for the Mirage System Split 115 kV Transmission Line Project (SCE and TRC, 2009a), Coachella Valley Fringe-Toed Lizard Focused Survey Results (SCE and TRC, 2009b), and biological literature of the region (Stebbins, 2003; Wheeler, 2003; Zeiner et al., 1990a and 1990b). The list is intended to be comprehensive and the “Potential for Occurrence” designations (see Table 4.4-1) apply to species and their habitats in the vicinity of the study areas, although species with potential to occur in the project vicinity would not necessarily be impacted by project activities.

Special-status species with the potential for occurrence within the study areas *and* anticipated to be exposed to project-related impacts (i.e., species either known to occur or with a high potential for occurrence) are described below. Descriptions of species are taken from various CNPS or CDFG sources unless otherwise cited. Several of the species are associated with the moving fine sand fields and dunes found throughout the area. These local endemics are collectively referred to throughout this document as “Coachella Valley sand endemics” and include the Coachella Valley fringe toed lizard (*Uma inornata*), and Coachella Valley milkvetch (*Astragalus lentiginosus* var. *coachellae*), among others.

Special Status Plants with Potential to Occur

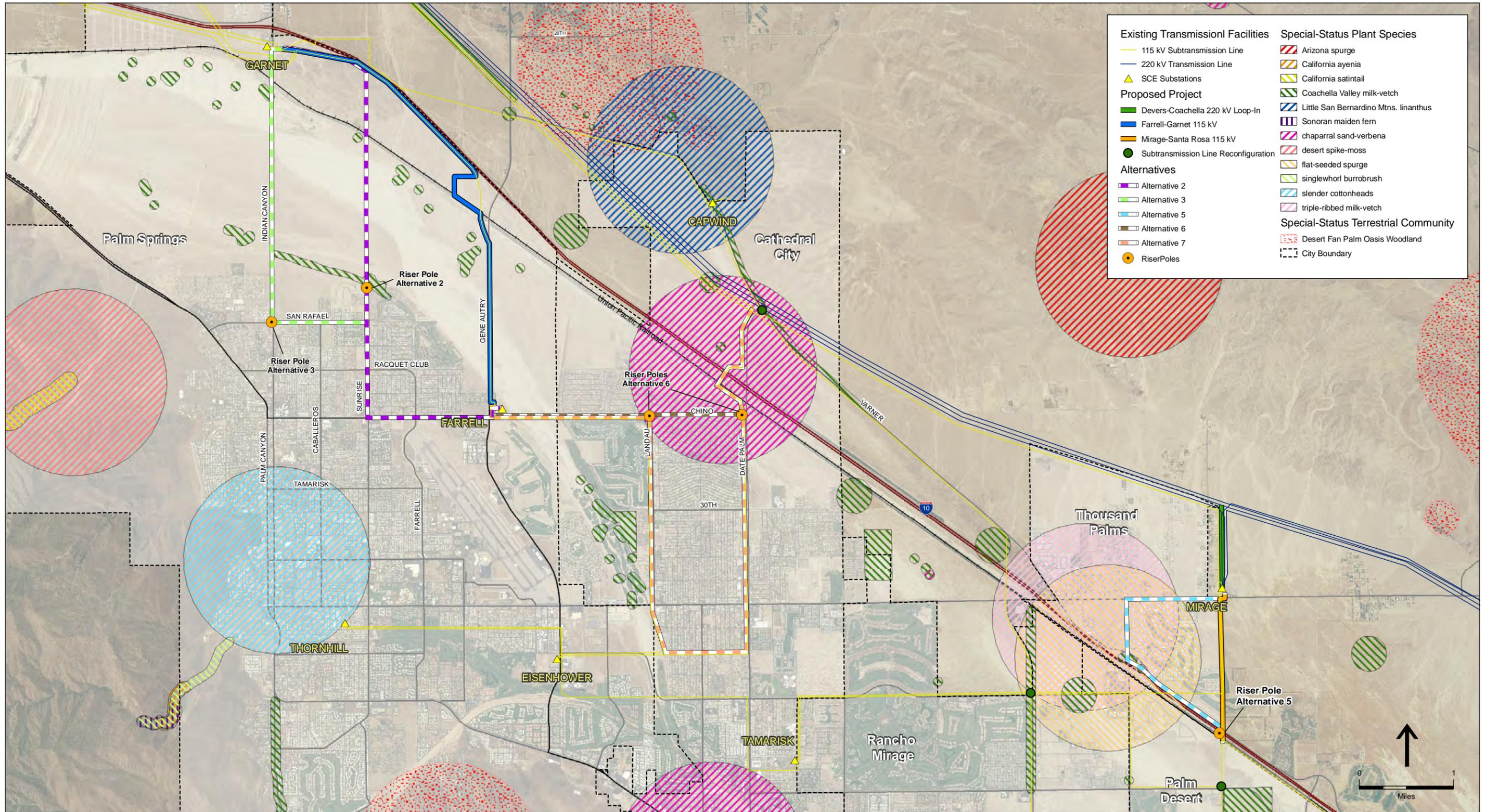
Special status plants with the potential to occur in the biological resources study areas are listed in Table 4.4-1. This table includes conservation status, habitat, and whether the species has been observed in the study areas. Two plants on the list carry federal or State status as listed endangered species; however, only one plant species on the list, Coachella Valley milkvetch, has been documented to occur in the Farrell-Garnet study area (SCE and TRC, 2009a). The second, Mojave tarplant (*Deinandra mohavensis*), is generally associated with riparian scrub communities and has a low probability of occurrence in the study areas. The remainder of the plants listed in



SOURCE: CNDDDB, 2009; USFWS, 2009; SCE, 2008; NAIP, 2005

Devers-Mirage 115 kV Subtransmission System Split Project . 207059

Figure 4.4-1
Special-Status Animal Species Occurrence
California Natural Diversity Database and
Designated Critical Habitat



SOURCE: SCE, 2008; CNDDDB, 2009; NAIP, 2005

Devers-Mirage 115 kV Subtransmission System Split Project . 207059

Figure 4.4-2
Special Status Plant and Terrestrial Community Occurrence
California Natural Diversity Database

**TABLE 4.4-1
SPECIAL-STATUS PLANTS AND ANIMALS WITH POTENTIAL TO OCCUR
WITHIN OR IN THE VICINITY OF THE PROJECT SITES**

Scientific Name Common Name	Listing Status (USFWS/ CDFG/CNPS)	Habitat Requirements	Occurrence and/or Potential Occurrence in Study Areas
Plants			
<i>Abronia villosa</i> var. <i>Aurita</i> Chaparral sand-verbena	--/--/1B.1	Chaparral, coastal scrub, desert dunes.	Low potential , limited habitat, not observed during recent special-status plant surveys (SCE and TRC, 2009a and 2009b), no CNDDDB records within study areas.
<i>Ambrosia monogyra</i> Singlewhorl burrobrush	--/--/1B.1	Chaparral, Sonoran desert scrub.	Low potential , limited habitat, not observed during recent special-status plant surveys (SCE and TRC, 2009a and 2009b), no CNDDDB records within study areas.
<i>Astragalus lentiginosus</i> var. <i>cochellae</i> Coachella Valley milkvetch	FE/--/1B.2	Shifting sands <350 m restricted to Coachella Valley, fewer than 20 occurrences documented.	Present , documented on proposed Farrell-Garnet alignment, and along the Alternative 2 alignment. Historical CNDDDB records throughout the project area (CDFG, 2009).
<i>Astragalus tricarinatus</i> Triple-ribbed milkvetch	FE/--/1B.2	Sandy and gravelly soils of dry washes or on decomposed granite or gravelly soils at the base of canyon slopes. May require some disturbance, natural or man-made.	Low potential , limited habitat, no records within study areas.
<i>Atriplex parishii</i> Parish's brittle scale	--/--/1B.1	Chenopod scrub, playas, vernal pools.	Low potential , limited habitat, no records within study areas.
<i>Ayenia compacta</i> California ayenia	--/--/2.3	Mojavean desert scrub, Sonoran desert scrub.	Low potential , limited habitat, not observed during recent special-status plant surveys (SCE and TRC, 2009a and 2009b), no CNDDDB records within study areas.
<i>Chamaesyce arizonica</i> Arizona spurge	--/--/2.3	Sandy Sonoran desert scrub 50-300 meters.	Low potential , limited habitat, no records within study areas.
<i>Chamaesyce platysperma</i> Flat-seeded spurge	--/--/1B.2	Desert dunes, Sonoran desert scrub.	Low potential , not observed during recent special-status plant surveys (SCE and TRC, 2009a and 2009b), and no recent CNDDDB records for this species in the study areas (CDFG, 2009).
<i>Chorizanthe parryi</i> var. <i>parryi</i> Parry's spineflower	--/--/1B.1	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland, sandy or rocky openings, 275-1220 meters.	Low potential , limited habitat, no records within study areas.
<i>Chorizanthe xanti</i> var. <i>leucotheca</i> White-bracted spineflower	--/--/1B.2	Mojave desert scrub, pinyon-juniper woodlands, 300-1200 meters.	Low potential , limited habitat, no records within study areas.
<i>Ditaxis clariana</i> Glandular ditaxis	--/--/2.2	Sandy Mojave and Sonoran desert scrub 0-465 meters.	Low potential , limited habitat, no records within study areas.
<i>Eriastrum harwoodii</i>	--/--/1B.2	Desert dunes, 200-915 meters.	Low potential , no recent CNDDDB records within study area (CDFG, 2009), and not detected during recent special-status plant surveys.
<i>Euphorbia misera</i> Cliff spurge	--/--/2.2	Coastal, coastal bluff, or Mojavean desert scrub 10-500 meters.	Low potential , no recent CNDDDB records within study area (CDFG, 2009), and not detected during recent special-status plant surveys.

TABLE 4.4-1 (Continued)
SPECIAL-STATUS PLANTS AND ANIMALS WITH POTENTIAL TO OCCUR
WITHIN OR IN THE VICINITY OF THE PROJECT SITES

Scientific Name Common Name	Listing Status (USFWS/ CDFG/CNPS)	Habitat Requirements	Occurrence and/or Potential Occurrence in Study Areas
Plants (cont.)			
<i>Heuchera hirsutissima</i> Shaggy-haired alumroot	--/--/1B.3	Subalpine or upper montane coniferous forests with rocky/granitic areas, 1520-3500 meters.	Absent , suitable habitat not present for this species.
<i>Imperata brevifolia</i> California satintail	--/--/2.1	Coastal, riparian, or Mojavean desert scrub, chaparral, meadows and seeps, 0-500 meters.	Low potential , suitable habitat is not present for this species.
<i>Linanthus jaegeri</i> San Jacinto linanthus	--/--/1B.2	Subalpine or upper montane coniferous forests with rocky/granitic areas, 1520-3500 meters	Absent , suitable habitat not present for this species.
<i>Linanthus maculatus</i> Little San Bernardino Mountains linanthus	--/--/1B.2	Loose, soft, sandy soils on low benches along washes, generally where the substrate shows some evidence of water flow. Generally associated with creosote bush scrub, but avoids growing in the shadow of other plants.	Low potential , distribution very limited, no records within study areas.
<i>Matelea parvifolia</i> Spearleaf	--/--/2.3	Mojave and Sonoran desertscrub, 440-1095 meters.	Low potential , limited habitat, no records within study areas.
<i>Nemacaulis denudata var. gracilis</i> Slender cottonheads	--/--/2.2	Coastal and desert dunes, Sonoran desertscrub 50-400 meters.	Low potential , limited habitat, no records within study areas.
<i>Phaseolus filiformis</i> Slender-stem bean	--/--/2.3	Sonoran desertscrub at approximately 125m. Known only from Coachella Valley.	Low potential , distribution very limited, no records within study areas.
<i>Saltugilia latimeri</i> Latimer's woodland-gilia	--/--/1B.2	Chaparral, Mojavean desert scrub, pinyon and juniper woodland or sandy, often granitic, sometimes washes.	Low potential , distribution very limited, no records within study areas.
<i>Selaginella eremophila</i> Desert spike-moss	--/--/2.2	Sonoran desert scrub.	Low potential , distribution very limited, no records within study areas.
<i>Sidothea emarginata</i> White-margined oxytheca	--/--/1B.3	Chaparral, lower montane coniferous forest, pinyon and juniper woodland.	Low potential , distribution very limited, no records within study areas.
<i>Stemodia durantifolia</i> Purple stemodia	--/--/2.1	Mesic sandy soils in Sonoran desertscrub, 180-300 meters.	Low potential , no suitable habitat and no records within study areas.
<i>Thelypteris puberula var. sonorensis</i> Sonoran maiden fern	--/--/2.2	Meadows and seeps.	Low potential , no suitable habitat within study areas.
<i>Xylorhiza cognate</i> Mecca-aster	--/--/1B.2	Sonoran desert scrub (Indio and Mecca Hills areas), 20-260 meters.	Low potential , no suitable habitat. No records within study areas.
Invertebrates			
<i>Calileptoneta oasa</i> Andreas Canyon leptonetid spider	--/--	Found only in Andreas Canyon, Palm Springs, Riverside County.	Absent , suitable habitat is not present for this species.
<i>Dinacoma caseyi</i> Casey's June beetle	FCE/--	Sandy soils.	Low potential , no recent records for this species in the project vicinity.
<i>Macrobaenetes valgum</i> Coachella Valley giant sand-treader cricket	FSC/--	Shifting sands, less than 350 meters, restricted to the Coachella Valley.	Moderate potential , suitable habitat for this species along the proposed Farrell-Garnet and 220 kV loop-in alignments, and the Alternative 2 and 3 alignments (CVAG, 2007).

TABLE 4.4-1 (Continued)
SPECIAL-STATUS PLANTS AND ANIMALS WITH POTENTIAL TO OCCUR
WITHIN OR IN THE VICINITY OF THE PROJECT SITES

Scientific Name Common Name	Listing Status (USFWS/ CDFG/CNPS)	Habitat Requirements	Occurrence and/or Potential Occurrence in Study Areas
Invertebrates (cont.)			
<i>Oliarces clara</i> Cheeseweed owlfly (cheeseweed moth lacewing)	--/--	Larvae feed on creosote bush roots.	Low potential , no records for this species in study areas.
<i>Stenopelmatus cahuilensis</i> Coachella Valley Jerusalem cricket	FSC/--	Shifting sands, less than 350 meters, restricted to the Coachella Valley.	Moderate potential , no records exist for the study area, suitable habitat is present.
Fish			
<i>Cyprinodon macularius</i> Desert pupfish	FE/CE	Desert ponds and other waters in temperatures to 45 degrees Celsius.	Absent , no permanent water in the study areas.
Reptiles			
<i>Crotalus ruber ruber</i> Northern red-diamond rattlesnake	--/CSC	Chaparral, woodland, grassland and desert areas Riverside, Orange, and San Diego Counties to eastern slopes of mountains. Rocky areas and dense vegetation, needs rodent burrows, cracks in rocks or surface cover objects.	Low potential , habitat limited, records exist west the study areas closer to mountains.
<i>Gopherus agassizii</i> Desert tortoise	FT/CT	Desert alluvial fans, washes, canyon bottoms, hillsides, and other steep terrain. Occurs along the northern, eastern, and western rim of the Coachella Valley in the foothills.	Low potential . Occurs along the periphery of Coachella Valley, but no records for this species in the study areas (CDFG, 2009). EPG conducted protocol-level surveys for the desert tortoise in the Farrell-Garnet and Mirage-Santa Rosa study areas in 2006. They did not observe any live tortoises or sign of desert tortoises, and concluded that the alignment provides poor habitat for this species (EPG, 2006c).
<i>Phrynosoma mcallii</i> Flat-tailed horned lizard	--/CSC	Sand flats and sand dunes, concreted silt and gravel substrates.	Moderate potential , historic records exist for Coachella Valley and the Farrell-Garnet study area at Gene Autry Trail, but no observations since the mid-1990s (CVAG, 2007). There is potential habitat for this species in both study areas, particularly along the proposed loop-in alignment (CVAG, 2007).
<i>Uma inornata</i> Coachella Valley fringe-toed lizard	FT/CE	Endemic to fine, shifting sands in the Coachella Valley.	Present . Documented on proposed Farrell-Garnet alignment and the Alternative 2 alignment (SCE and TRC, 2009b and 2009c). USFWS-designated critical habitat is present in the northeast portion of the Mirage-Santa Rosa area, where the 220 kV loop-in is proposed.
Amphibians			
<i>Rana draytonii</i> California red-legged frog	FT/CSC	Lowlands and foothills in or near permanent sources of water. Shrubby or emergent riparian vegetation required for cover. Dispersal habitat includes upland woodland or grassland with burrows or debris for cover.	Absent . No suitable habitat for this species in the project site. Nearest CNDDDB record is historical, and the population was extirpated (CDFG, 2009).

TABLE 4.4-1 (Continued)
SPECIAL-STATUS PLANTS AND ANIMALS WITH POTENTIAL TO OCCUR
WITHIN OR IN THE VICINITY OF THE PROJECT SITES

Scientific Name Common Name	Listing Status (USFWS/ CDFG/CNPS)	Habitat Requirements	Occurrence and/or Potential Occurrence in Study Areas
Amphibians (cont.)			
<i>Rana muscosa</i> Sierra Madre yellow-legged frog	FE/CSC	In or near high mountain rivers, riverbanks, meadow streams, isolated pools, and lake borders in the Sierra Nevada and rocky stream courses in the mountains of southern CA.	Low potential. No suitable habitat for this species in the project site.
Birds			
<i>Aquila chrysaetos</i> Golden eagle	--/CSC, CFP	Remote open hilly and montane areas.	Low potential, no records exist for the study area.
<i>Athene cunicularia</i> Burrowing owl	--/CSC	Open dry annual or perennial grasslands, deserts and scrublands with low-growing vegetation. Subterranean nests in abandoned ground squirrel burrows.	Present, documented on proposed Farrell-Garnet alignment, west of Gene Autry Trail at Salvia Road, in 2006 (SCE, 2008). Several recent CNDDDB records for this species in the project vicinity (CDFG, 2009).
<i>Buteo regalis</i> Ferruginous hawk	--/WL (wintering)	Prairie, grassland desert and forest habitats, usually nests along streams or steep slopes in tall tree snags.	Present, non-nesting, documented on proposed Farrell-Garnet alignment, Dec. 2006.
<i>Cypseloides niger</i> Black swift	--/CSC	Nests on steep, rocky cliffs, often near water bodies; forages over nearly any terrain with insect prey. Present May-September.	Low, no recent observations or records within the study areas (CDFG, 2009).
<i>Falco mexicanus</i> Prairie falcon	--/WL (nesting)	Arid, open grasslands or scrub vegetation. Nests on cliffs.	Low, This species was documented on proposed Farrell-Garnet alignment in December 2006, and there are several CNDDDB records for this species in project vicinity (CDFG, 2009). However, suitable nesting habitat is not present for this species along proposed or alternative subtransmission alignments, or where substation modifications are proposed.
<i>Lanius ludovicianus</i> Loggerhead shrike	--/CSC (nesting)	Open habitats, needs perches to hunt from and dense shrubs for nesting.	Present, Documented on proposed Farrell-Garnet and Mirage-Santa Rosa alignments (SCE, 2008).
<i>Poliioptila melanura</i> Black-tailed gnatcatcher	--/--	Nests primarily in wooded desert habitat or desert wash habitat with mesquite, paloverde, ironwood, and acacia.	Low potential, limited habitat, no recent CNDDDB records (CDFG, 2009).
<i>Toxostoma bendirei</i> Bendire's thrasher	--/CSC	Desert grasslands and agricultural edges.	Low potential, limited habitat, no records within study areas.
<i>Toxostoma lecontei</i> Le Conte's thrasher	--/CSC	Sparsely vegetated desert flats, dunes, alluvial fans, or gently rolling hills having a high proportion of one or more species of saltbush and/or cylindrical cholla cactus. Also occupies other desert habitats with similar structural profiles but lacking saltbush/shadscale or cholla cactus.	Moderate potential, historic records in the project vicinity (CDFG, 2009), but not documented during recent surveys, and intolerant of disturbance. CVMSHCP considers portions of the Farrell-Garnet and Mirage-Santa Rosa study areas to be suitable habitat for this species (CVAG, 2007).
<i>Vireo bellii pusillus</i> Least Bell's vireo	FE/CE	Riparian woodland habitats along the riverine systems of southern California, primarily in San Diego, Santa Barbara, and Riverside Counties. Prefers a dense shrub cover 1 – 2 meters for nesting, and a dense, stratified canopy for foraging.	Low potential, limited habitat and no recent CNDDDB records in the study areas (CDFG, 2009).

TABLE 4.4-1 (Continued)
SPECIAL-STATUS PLANTS AND ANIMALS WITH POTENTIAL TO OCCUR
WITHIN OR IN THE VICINITY OF THE PROJECT SITES

Scientific Name Common Name	Listing Status (USFWS/ CDFG/CNPS)	Habitat Requirements	Occurrence and/or Potential Occurrence in Study Areas
Mammals			
<i>Chaetodipus fallax fallax</i> Northwestern San Diego pocket mouse	--/CSC	Inhabits sandy open areas in coastal sage scrub, sage scrub/grassland, and chaparral communities. Often associated with rocks or coarse gravel.	Low potential , limited habitat, no records within study areas.
<i>Chaetodipus fallax pallidus</i> Pallid San Diego pocket mouse	--/CSC	Sandy herbaceous areas associated with rocks or gravel, including desert wash, desert scrub, succulent scrub, and pinyon-juniper habitats.	Low potential , limited habitat in the study area. 2001 CNDDDB record is approximately 1.5 miles west of the Alternative 3 alignment, in Palm Springs (CDFG, 2009).
<i>Dipodomys merriami collinus</i> Earthquake Merriam's kangaroo rat	--/--	Sage scrub, chaparral, and non-native grassland. Needs sandy loam substrates to dig burrows.	Low potential , limited habitat for this species, and no recent CNDDDB records in the study areas (CDFG, 2009).
<i>Lasiurus xanthinus</i> Western yellow bat	--/CSC	Roost in trees, such as palm trees. Forage over water bodies. Though primarily in Mexico and Central America, their range extends into the southern portions of California.	Low potential , limited habitat for this species in the study areas.
<i>Neotoma lepida intermedia</i> San Diego desert woodrat	--/CSC	Coastal scrub of southern California, San Diego to San Luis Obispo Counties. Moderate to dense canopies preferred, abundant in areas with rock outcrops and rocky cliffs and slopes.	Low potential , limited habitat. 1995 CNDDDB record for this species, approximately 0.1 mile east of the Alternative 3 alignment (CDFG, 2009).
<i>Nyctinomops femorosaccus</i> Pocketed free-tailed bat	--/CSC	Pine-juniper woodlands, desert scrub, palm oasis, desert wash.	Low potential , limited habitat, no records within study areas.
<i>Nyctinomops macrotis</i> Big free-tailed bat	--/CSC	Rugged, rocky habitats in arid landscapes. Roosts primarily in rock crevices in cliff situations, but can also be found in buildings, caves, and tree cavities.	Low potential , may occasionally forage in study areas, but no suitable roosting habitat.
<i>Ovis canadensis nelsoni</i> DPS Peninsular bighorn sheep	FE/CT	Canyon bottoms, alluvial fans, and mountain slopes at the east-facing, lower elevations of the Peninsular Ranges.	Low potential , no suitable habitat in the study areas. 1984 CNDDDB record of this DPS approximately 1.5 miles west of the proposed Farrell-Garnet study area (CDFG, 2009), but this species is unlikely to move out of the mountains and through development, to the unsuitable habitat within the study areas.
<i>Perognathus longimembris bangsi</i> Palm Springs pocket mouse	--/CSC	Level to gently sloping topography, sparse to moderate vegetative cover, and loosely packed or sandy soils.	High potential , suitable habitat is present for this species in the Farrell-Garnet and Mirage-Santa Rosa study areas; this species was recently trapped in the Farrell-Garnet study area (CVAG, 2007).
<i>Phrynosoma blainvillii</i> Coast horned lizard	--/CSC	Open sandy washes, flood plains. Also found in valley-foothill hardwood, conifer and riparian habitats, pine-cypress, juniper, and annual grassland habitats.	Low potential , limited habitat. The nearest CNDDDB record is approximately 5 miles west of the Garnet Substation, from 1967 (CDFG, 2009).
<i>Spermophilus tereticaudus chlorus</i> Palm Springs round-tailed ground squirrel	FCE/CSC	Coachella Valley endemic, desert succulent scrub, desert wash, alkali scrub. Typically associated with sand fields and dune formations, but does not require active blow-sand areas.	High potential , 1954 CNDDDB record along the Alternative 5 alignment (CDFG, 2009). Suitable habitat for this species is present in both study areas (CVAG, 2007).

TABLE 4.4-1 (Continued)
SPECIAL-STATUS PLANTS AND ANIMALS WITH POTENTIAL TO OCCUR
WITHIN OR IN THE VICINITY OF THE PROJECT SITES

Scientific Name Common Name	Listing Status (USFWS/ CDFG/CNPS)	Habitat Requirements	Occurrence and/or Potential Occurrence in Study Areas
Mammals (cont.)			
<i>Taxidea taxus</i> American badger	--/CSC	Drier, open stages of most shrub, forest and herbaceous habitats with friable soils. Preys on burrowing rodents.	Low potential , limited habitat, no records within study areas.

STATUS CODES:

Federal (USFWS)

FE = Federally Endangered
 FCE = Federal Candidate Endangered
 FT = Federally Threatened
 FSC = Former Federal Species of Concern

State (CDFG)

CE = California Endangered
 WL = Watch List
 CT = California Threatened
 CFP = California Fully Protected
 CSC = California Species of Special Concern

CNPS

1B = plants rare, threatened, or endangered in the states and elsewhere
 1B.1 = seriously threatened in California
 1B.2 = rare, threatened, or endangered in California and elsewhere; fairly threatened in California
 2 = plants rare, threatened, or endangered in the state, but common elsewhere
 2.2 = rare, threatened, or endangered in California, not elsewhere; fairly threatened in California
 2.3 = rare, threatened, or endangered in California, not elsewhere; not very threatened in California

Table 4.4-1 (CNPS list 1B designation) have documented occurrences in the vicinity of the project (CDFG, 2009), but none were documented within the bounds of the study areas during May 2009 special-status plant surveys (SCE and TRC, 2009a), nor is the potential for occurrence deemed to be moderate or high, due to the lack of suitable habitat.

Coachella Valley Milkvetch. The Coachella Valley (CV) milkvetch is a federally endangered species. This variety is a winter annual or short-lived perennial that typically blooms February through May. CV milkvetch typically grows in loose wind-blown (Aeolian) or alluvial sands on dunes or flats (USFWS, 1998), and is generally limited to elevations from sea level to 350 meters. This variety prefers disturbed margins of sandy washes and non-cohesive sandy soils, and is restricted to the Coachella Valley primarily between Indio and Cabazon, within Riverside County. Threats to the survival of this variety include development, off-highway vehicles, road widening, and nonnative plants such as Saharan mustard (*Brassica tournefortii*) and Mediterranean grass (*Schizmus barbatus*).

In 2004, the USFWS proposed critical habitat for the CV milkvetch species north of I-10, in the vicinity of the study areas (Federal Register, 2004). However in 2005 they removed the entire proposed habitat from critical habitat designation, because habitat with essential features for this species is located in areas to be conserved and managed by the CVMSHCP, or within areas

conserved within the Coachella Valley Preserve System under the Coachella Valley fringe-toed HCP (Federal Register, 2005).

TRC Solutions, Inc. observed approximately 267 CV milkvetch plants along the proposed Farrell-Garnet 115 kV subtransmission line alignment in 2009 south of the UPRR, and has indicated that there is a low to moderate potential for this species to occur in the 0.8-mile stretch of alignment north of the UPRR (SCE and TRC, 2009a and 2009b). EPG, Inc. also observed the CV milkvetch in this area during their 2006 surveys for this species (EPG, 2006a). This species could occur in the area of the line reconfiguration at Varner Road and Date Palm Drive, as there is a 2005 record for the CV milkvetch along Varner Road that includes the Date Palm Drive and Varner Road intersection. This species has only a low potential to occur where new roads are proposed in the Farrell-Garnet study area (i.e., an access road to the new 0.8-mile ROW section of the Farrell-Garnet alignment, and a paved driveway along the northeast corner of the Farrell substation), due to a lack of suitable habitat.

This species is unlikely to occur along the proposed Mirage-Santa Rosa 115 kV alignment and the proposed 220 kV loop-in alignment. The presence of herbaceous plants, combined with the residential development to the west of these areas, cuts off the Aeolian sands and drastically reduces suitable habitat for the CV milkvetch. While there are historic records of this species near this study area, EPG did not observe the CV milkvetch during their 2006 surveys for this species along the Mirage-Santa Rosa 115 kV alignment and the 220 kV loop-in alignment, and concluded that habitat for the CV milkvetch is no longer present there (EPG, 2006a). There is a 1993 record for the CV milkvetch at the southeast corner of the Portola and Gerald Ford Drive where a subtransmission line reconfiguration is proposed, and a 1985 record for this species stretching along Bob Hope Drive, down to the proposed Bob Hope and Dinah Shore Drive subtransmission line reconfiguration location. Both of these subtransmission line reconfiguration locations are now developed or composed of graded or cleared habitat, and there is only a low potential for this species to occur here.

In 2009, TRC observed six CV milkvetch individuals along the surveyed portion of the Alternative 2 alignment, during focused rare plant surveys for this species (SCE and TRC, 2009a). TRC identified all of Alternative 6 and Alternative 7 as high potential habitat for the CV milkvetch, except where it traverses through urban areas (i.e., along Vista Chino beyond the first 0.5 mile) (SCE and TRC, 2009b).

Special Status Animals with Potential to Occur

Special-status animals with the potential to occur in the biological resources study areas are listed in Table 4.4-1. Of these animals, only one federally threatened/endangered species has a moderate or high potential for occurrence in the project site - the Coachella Valley fringe-toed lizard (*Uma inornata*).

Animals that are not threatened/endangered, but are nevertheless considered special-status species and have a moderate or high potential to occur in the study areas, include flat-tailed horned lizard (*Phrynosoma mcalli*), burrowing owl (*Athene cunicularia*), Le Conte's thrasher (*Toxostoma*

lecontei), ferruginous hawk (*Buteo regalis*), loggerhead shrike (*Lanius ludovicianus*), Palm Springs pocket mouse (*Perognathus longimembris bangsi*), and Palm Springs round-tailed ground squirrel (also sometimes referred to as the Coachella Valley round-tailed ground squirrel) (*Spermophilus tereticaudus chlorus*). These species are described briefly below.

Coachella Valley Fringe-Toed Lizard. Coachella Valley (CV) fringe-toed lizard was listed as federally threatened in 1980 (USFWS, 1980), and California endangered in 1980 (CDFG, 2009). It is a small reptile that inhabits sparse desert scrub, alkali scrub, and desert wash habitats (Zeiner et al., 1990b) in Coachella Valley.

Several specialized features allow CV fringe-toed lizard to survive in a loose-sand environment, such as the large scales that line the fringe of their toes from which their name is derived, a shovel-shaped head which allows for quick burrowing, and elongated scales that cover the ears which keep out wind-blown sand. The CV fringe-toed lizard hibernates during winter and is most active during the spring and summer when air temperatures increase. When air temperatures are at their highest, the fringe-toed lizard escapes the heat by burrowing underground and restricts its active time to mornings and evenings.

CV fringe-toed lizard populations have declined for a variety of reasons, including loss of habitat (sand sources), habitat conversion, agriculture, exotic plant invasion, and other development projects within the Coachella Valley.

TRC biologists observed three CV fringe-toed lizards along the proposed Farrell-Garnet 115 kV subtransmission line alignment in 2009, in partially stabilized desert dunes and Sonoran creosote bush scrub just south of the UPRR, along both sides of the Gene Autry Trail (SCE and TRC, 2009c). EPG biologists also observed CV fringe-toed lizards in this portion of the Farrell-Garnet alignment, within 60 feet of the Gene Autry Trail (EPG, 2006b). The Farrell-Garnet alignment north of the UPRR lacks characteristics preferred by this species.

EPG conducted CV fringe-toed lizard surveys along the Mirage-Santa Rosa 115 kV subtransmission line and Devers-Coachella Valley 220 kV Loop-In in 2006, and concluded that there was not suitable habitat for this species there (EPG, 2006b). Suitable habitat occurred here at one time, but the introduction of herbaceous plants and the residential development to the west of the Mirage-Santa Rosa 115 kV and the Devers-Coachella 200 kV loop-in alignments cut off the Aeolian sands, which drastically reduced habitat for this species.

The Alternative 2 alignment crosses through CV fringe-toed lizard habitat. In 2009, TRC conducted focused surveys for CV fringe-toed lizard in the area just south of UPRR, which was determined to have habitat characteristics suitable for this species, and found one individual (SCE and TRC, 2009c).

The Alternative 3 alignment has potential CV fringe-toed lizard habitat in the stabilized and partially stabilized sand dunes on either side of Indian Canyon Drive. Alternatives 6 and 7 have potential CV fringe-toed lizard habitat in the sparse patches of Aeolian sands that occur in the 0.5-mile section immediately east of the Farrell Substation, along Vista Chino; and in the

900-foot stretch of stabilized and partially stabilized sand dunes that is present from the riser pole at Date Palm Avenue north to I-10.

Flat-tailed Horned Lizard. Flat-tailed horned lizard is a California species of special concern. It is found in low-elevation desert with extremely high temperatures and low rainfall and humidity, and is often associated with sand flats and sand dunes, although it is rare on more active dunes. The most common perennial plants associated with their habitat include creosote bush and white bursage. The Coachella Valley is the northern end of this species' range.

This species occurs in less disturbed areas in the Whitewater Floodplain Preserve in the Farrell-Garnet study area, and southeast of the Mirage Substation (CVAG, 2007). It is negatively correlated with urban edges and within 500 feet of roads (Barrows et al., 2006), although Gene Autry Trail and Indian Canyon Drive are not considered as significant barriers for this species (CVAG, 2007). This species was not detected during CV fringe-toed lizard surveys (EPG, 2006b; SCE and TRC, 2009c). There is a 1966 record for the flat-tailed horned lizard along Alternatives 6 and 7, east of Whitewater Wash and along a two-mile stretch of Vista Chino (CDFG, 2009), although there is a low potential that this species still occurs here as this area is currently developed and lacks suitable habitat. The proposed loop-in alignment borders the western edge of what the CVMSHCP considers Core Habitat for the flat-tailed horned lizard, although there are no known locations of this species here (CVAG, 2007) and the alignment in general offers poor quality habitat for this species.

Due to the proximity of most of the proposed and alternative alignments to roads, and the lack of detection during recent lizard surveys, there is not a high potential for this species to be present in the vicinity of the alignments. However, the Alternative 2 alignment crosses through the Whitewater Floodplain Preserve, where this species is known to occur, and the proposed Farrell-Garnet 115 kV subtransmission line and proposed Devers-Coachella Valley 220 kV Loop-In alignments provide close to suitable habitat for this species. Thus, there is moderate potential for this species to occur along any of these three alignments.

Palm Springs Round-Tailed Ground Squirrel. The Palm Springs round-tailed squirrel is a federal candidate endangered species, and a California species of special concern. It is typically associated with sand fields and dune formations, although it does not require active blow sand areas. This species seems to prefer areas where hummocks of sand accumulate at the base of large shrubs and provide burrow sites and adequate cover, as well as sandy areas within creosote bush and alkali sink scrub. The CVMSHCP considers portions of the Whitewater Floodplain Conservation Area, Willow Hole Conservation Area, and Thousand Palms Conservation Area to be "Core Habitat"¹ for this species. The Palm Springs round-tailed ground squirrel is known to occur in the northern portion of the Whitewater Floodplain Preserve, which is south of the UPRR in the Farrell-Garnet study area (CVAG, 2007), and most undeveloped sand dunes and sand fields in the study area provide suitable habitat for this species. There is a moderate potential for this species to be impacted by the proposed Farrell-Garnet alignment, and Alternatives 2, 3, 6, and 7.

¹ "Core Habitat" is defined by the CVMSHCP as areas of unfragmented habitat with intact ecological processes large enough for a self-sustaining population of the species (CVAG, 2007).

Habitat is less suitable for this species in the Mirage-Santa Rosa study area. There is a 1954 Palm Springs round-tail ground squirrel CNDDDB record approximately 0.5 mile west of the Devers-Coachella Valley 220 kV Loop-In (CDFG, 2009), but it is unlikely that such occurrences still exists at this location, as most of the Mirage-Santa Rosa study area is highly disturbed. Because of this high amount of disturbance, there is only a low potential for this species to occur along the proposed Mirage-Santa Rosa alignment, the proposed Devers-Coachella Valley loop-in alignment, or the Alternative 5 alignment.

Burrowing Owl. Burrowing owls are a California species of special concern. They are relatively small, semi-colonial owls that are residents of open dry grasslands and barren areas. They breed and roost in burrows excavated by ground squirrels and other small mammals. Where the number and availability of natural burrows is limited, owls may occupy human-made burrows such as drainage culverts, cavities under piles of rubble, discarded pipe, and other tunnel-like structures (Zeiner et al., 1990a). Burrowing owls hunt from perches and are opportunistic feeders, consuming arthropods, small mammals (e.g., meadow voles), birds, amphibians, and reptiles.

This species was observed near the proposed Farrell-Garnet 115 kV subtransmission line alignment during EPG's 2006 biological surveys, and there are several CNDDDB nesting burrowing owl records within the vicinity of the Proposed Project, including a 2003 and 2007 record in the Farrell-Garnet study area (CDFG, 2009). There is suitable habitat for this species along undeveloped portions of Alternatives 2, 3, 6, 7. However, no burrowing owls or potential burrows were documented in the Mirage-Santa Rosa study area, and there is only a low potential for this species to occur along the Mirage-Santa Rosa subtransmission line, the Devers-Coachella Valley 220 kV Loop-In, or the Alternative 5 alignments.

Ferruginous Hawk. The ferruginous hawk is a California Watch List species. It is an uncommon winter resident and migrant at lower elevations and open grasslands in the Modoc Plateau, Central Valley, and Coast Ranges, and a fairly common winter resident of grasslands and agricultural areas in southwestern California. There are no breeding records for this species in California. Ferruginous hawks mostly eat lagomorphs, ground squirrels, and mice but may also take birds, reptiles, and amphibians.

This species was observed along the Alternative 2 alignment. There is a moderate potential for this species to winter along all of the Proposed Project subtransmission and transmission line alignments as well as the alternative alignments.

Le Conte's Thrasher. Le Conte's thrasher is a California species of special concern. It is an uncommon resident of the deserts of the American southwest and northwestern Mexico. This species typically inhabits sparsely vegetated desert flats, dunes, alluvial fans, or gently rolling hills that have a high proportion of one or more species of saltbush (*Atriplex* spp.) and/or cylindrical cholla cactus (*Opuntia* spp.), or other desert habitats with similar structural profiles. In its typical habitat, shrubs are well scattered with contiguous or closed cover usually less than 45 feet in any direction. Substrates are typically sandy and rarely composed of a large proportion of rock or of deep silty clays. The habitat requires accumulated leaf litter under most plants, as diurnal cover for most arthropod prey. This species is intolerant of disturbance.

There are CNDDDB records for this species nesting in the project vicinity within the last 20 years (CDFG, 2009). There is moderate potential nesting habitat for this species along all of the Proposed Project and alternative alignments.

Loggerhead Shrike. The loggerhead shrike is a California species of special concern. This species is a common resident and winter visitor in lowlands and foothills throughout California. It prefers open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches. The species rarely occurs in heavily urbanized areas, but is often found in open cropland.

Several loggerhead shrikes were noted along the proposed Farrell-Garnet subtransmission line alignment, on Salvia Road between Garnet Substation and Gene Autry Trail, as well as along the proposed Mirage-Santa Rosa 115 kV subtransmission line alignment. Nesting habitat for loggerhead shrikes is present in the large tamarisk trees bordering the UPRR tracks.

Along the Alternative 2 alignment, one non-nesting loggerhead shrike was documented during reconnaissance-level surveys in December 2006, and there is potential nesting habitat for this species in the tamarisk trees bordering the UPRR tracks along this alignment. This species could also occur along the other alternative alignments for the project.

Palm Springs Pocket Mouse. The Palm Springs pocket mouse is one of seven subspecies of *Perognathus longimembris*, and is a California species of special concern. Their habitat generally has gently sloping topography, sparse to moderate vegetative cover, and loosely packed or sandy soils.

Historic records exist for the Palm Springs pocket mouse west of Gene Autry Trail and south of I-10, as well as near Date Palm Drive. This species was trapped in the Whitewater Floodplain Conservation Area and the Willow Hole Conservation Area of the CVMSHCP during 1995 and 1999 trapping surveys, and the CVMSHCP considers the proposed Farrell-Garnet and 220 kV alignments to be within Core Habitat for this species (CVAG, 2007). There is a moderate potential for the Palm Springs pocket mouse to occur along the Proposed Project subtransmission and transmission lines and alternative alignments in the Farrell-Garnet and Mirage-Santa Rosa study areas, particularly in the undeveloped sand dunes, sand fields, and Sonoran creosote bush scrub habitat.

Coachella Valley Sand-Treader Cricket. While the Coachella Valley sand-treader cricket has no formal rarity status, it is nevertheless considered a special-status species. It inhabits active dunes and ephemeral sand fields at the western end of Coachella Valley. Perennial shrubs, including creosote bush, white bursage, honey mesquite, Mormon tea, desert willow, and sandpaper bush, dominate the preferred habitat of this species in windblown environments while stabilized sand areas (such as that found on the Mirage-Santa Rosa 115 kV subtransmission alignment and the Devers-Coachella Valley 220 kV Loop-In) appear to be avoided.

Trapping studies in the active dune area west of Gene Autry Trail at Whitewater Wash found an average of 6.4 individuals per acre (CVAG, 2007). The species has potential to occur along the Farrell-Garnet alignment, and Alternatives 2, 3, 6, and 7.

Regulatory Context

Many biological resources in California are protected and/or regulated by a variety of laws and policies administered by federal, State, and/or local agencies. The following is an overview of the key agencies, regulations, and policies relevant to the Proposed Project and alternatives.

Federal

U.S. Fish and Wildlife Service

The USFWS administers the Federal Endangered Species Act (FESA) (16 U.S. Code [USC] 153 et seq.), the Migratory Bird Treaty Act (MBTA) (16 USC 703–711), and the Bald Eagle Protection Act (16 USC 668).

Federal Endangered Species Act. Under the FESA, the Secretary of the Interior and the Secretary of Commerce have joint authority to list a species as threatened or endangered (16 USC § 1533(c)). Two federal agencies oversee the FESA: the USFWS has jurisdiction over plants, wildlife, and resident fish, while the National Marine Fisheries Service (NMFS) has jurisdiction over anadromous fish and marine fish and mammals. Section 7 of the FESA mandates that federal agencies consult with the USFWS and NMFS to ensure that federal agency actions do not jeopardize the continued existence of a listed species or destroy or adversely modify critical habitat for listed species. The FESA prohibits the “take”² of any fish or wildlife species listed as threatened or endangered, including the destruction of habitat that could hinder species recovery.

Section 10 requires the issuance of an “incidental take” permit before any public or private action may be taken that could take an endangered or threatened species. The permit requires preparation and implementation of a habitat conservation plan (HCP) that would offset the take of individuals that may occur, incidental to implementation of the project, by providing for the protection of the affected species.

Currently there is one approved HCP in Coachella Valley, which includes the study area – the Coachella Valley Multiple-Species Habitat Conservation Plan. This HCP was approved and permitted by the USFWS and CDFG in 2008. However, the Proposed Project is not part of this HCP.

Pursuant to the requirements of the FESA, a federal agency reviewing a project within its jurisdiction must determine whether any federally listed threatened or endangered species may be present in the project area and whether the proposed action will have a potentially significant impact on such species. In addition, the agency is required to determine whether the proposed action is likely to jeopardize the continued existence of any species proposed to be listed under FESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC § 1536(3), (4)). Therefore, project-related impacts to these species or their habitats would be considered significant in this EIR.

² Take is defined as harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, collecting, or attempting to engage in any such conduct.

Critical Habitat. The USFWS designates critical habitat for listed species under FESA. Critical habitat designations are specific areas within the geographic region that are occupied by a listed species, that are determined to be critical to its survival and recovery in accordance with FESA. Federal entities issuing permits or acting as a lead agency must show that their actions do not negatively affect the critical habitat to the extent that it impedes the recovery of the species. Within designated critical habitat, the USFWS protects areas that provide the primary constituent elements (PCEs) for the survival and conservation of the subject listed species. PCEs are the physical and biological functions considered essential to species conservation that require special management considerations or protection.

The Mirage Substation is at a western corner of USFWS-designated critical habitat for the Coachella Valley fringe-toed lizard, and the Devers-Coachella loop-in alignment is within this critical habitat. In addition, both the proposed Mirage-Santa Rosa alignment and the Alternative 5 alignment would follow the western border of this critical habitat, although Alternative 5 less so than the proposed alignment (see Figure 4.4-1).

Protection of Nesting Birds - Migratory Bird Treaty Act. The Migratory Bird Treaty Act (MBTA) (16 United States Code § 703 Supp. I, 1989) generally prohibits the killing, possessing, or trading of migratory birds, bird parts, eggs, and nests, except as provided by the statute.

Bald and Golden Eagle Protection Act. The Bald and Golden Eagle Protection Act, enforced by the USFWS, makes it illegal to import, export, take (which includes molest or disturb), sell, purchase, or barter any bald eagle (*Haliaeetus leucocephalus*) or golden eagle (*Aquila chrysaetos*) or parts thereof.

U.S. Army Corps of Engineers

Clean Water Act, Section 404. The U.S. Army Corps of Engineers (USACE) administers Section 404 of the Clean Water Act (CWA). Section 404 regulates activities in wetlands and “other waters of the United States.” Wetlands are a subset of “waters of the United States” that are defined in the Code of Federal Regulations (CFR) (33 CFR 328.3[a]; 40 CFR 230.3[s]) as:

1. All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide.
2. All interstate waters including interstate wetlands. (Wetlands are defined by the federal government [33 CFR 328.3(b), 1991] as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances support, a prevalence of vegetation typically adapted for life in saturated soil conditions.)
3. All other waters—such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds—the use, degradation, or destruction of which could affect interstate or foreign commerce. This includes any waters with the following current or potential uses:

- That are or could be used by interstate or foreign travelers for recreational or other purposes,
 - From which fish or shellfish are or could be taken and sold in interstate or foreign commerce, or
 - That are used or could be used for industrial purposes by industries in interstate commerce.
4. All impoundments of waters otherwise defined as waters of the United States under the definition.
 5. Tributaries of waters identified in paragraphs (1) through (4).
 6. Territorial seas.
 7. Wetlands next to waters identified in paragraphs (1) through (6).
 8. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding the Clean Water Act jurisdiction remains with the USEPA (328.3[a][8] added 58 CFR 45035, August 25, 1993).

State

California Department of Fish and Game

The CDFG administers a number of laws and programs designed to protect fish and wildlife resources under the Fish and Game Code, such as the California Endangered Species Act (CESA)(FGC Section 2050, et seq.), Fully Protected Species (FGC Section 3511), Native Plant Protection Act (FGC Sections 1900 to 1913), and Lake or Streambed Alteration Agreement Program (FGC Sections 1600 to 1616).

California Endangered Species Act. In 1984, the State of California implemented the CESA, which prohibits the take of State-listed endangered and threatened species; although, habitat destruction is not included in the State's definition of take. Section 2090 requires State agencies to comply with endangered species protection and recovery and to promote conservation of these species. The CDFG administers the act and authorizes take through California Fish and Game Code Section 2081 agreements (except for designated "fully protected species," see below). Unlike its federal counterpart, CESA protections apply to candidate species that have been petitioned for listing.

Regarding listed rare and endangered plant species, CESA defers to the California Native Plant Protection Act (see below).

Fish and Game Code Section 3503 and 3503.5. California Fish and Game Code Section 3503 prohibits the taking and possession of native birds' nests and eggs from all forms of needless take. California Fish and Game Code Section 3503.5 provides that it is unlawful to take, possess, or destroy any birds in the orders 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. For these regulations, resource agencies typically consider “nests” to be active nests (nests with eggs or chicks). Destruction of inactive nests is generally not considered “take.”

Construction activities that result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment and/or reproductive failure are considered a “take” by CDFG, and would constitute a significant project impact.

Native Plant Protection Act. California Fish and Game Code Section 1900–1913, also known as the Native Plant Protection Act, is intended to preserve, protect, and enhance endangered or rare native plants in California. The act directs CDFG to establish criteria for determining what native plants are rare or endangered. Under Section 1901, a species is endangered when its prospects for survival and reproduction are in immediate jeopardy from one or more cause. A species is rare when, although not threatened with immediate extinction, it is in such small numbers throughout its range that it may become endangered. The act also directs the CDFG Commission to adopt regulations governing the taking, possessing, propagation, or sale of any endangered or rare native plant.

Vascular plants that are identified as rare by the 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 CEQA Guidelines Section 15380 and effects to these species are considered “significant” in this EIR. Additionally, plants listed on CNPS List 1A, 1B or 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.

Lake or Streambed Alteration Program. The CDFG regulates activities that would interfere with the natural flow of, or substantially alter, the channel, bed, or bank of a lake, river, or stream. Section 1602 of the California Fish and Game Code requires notification of the CDFG for lake or stream alteration activities. If, after notification is complete, the CDFG determines that the activity may substantially adversely affect an existing fish and wildlife resource, the CDFG has authority to issue a Streambed Alteration Agreement under Section 1603 of the California Fish and Game Code. Requirements to protect the integrity of biological resources and water quality are often conditions of Streambed Alteration Agreements. These may include avoidance or minimization of heavy equipment use within stream zones, limitations on work periods to avoid impacts to wildlife and fisheries resources, and measures to restore degraded sites or compensate for permanent habitat losses.

Species of Special Concern. CDFG maintains lists for candidate-endangered species and candidate-threatened species. California candidate species are afforded the same level of protection as listed species. California also designates species of special concern, which are species of limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. These species do not have the same legal protection as listed species or fully protected species, but may be added to official lists in the future. CDFG intends the species of special concern list to be a management tool for consideration in future land use decisions.

State Water Resources Control Board

Porter Cologne Water Quality Act. The State Water Resources Control Board (SWRCB), through its nine Regional Water Quality Control Boards (RWQCB), regulates waters of the State through the California Clean Water Act (i.e., Porter-Cologne Act). If the USACE determines wetlands or other waters to be isolated waters and not subject to regulation under the federal CWA, the RWQCB may choose to exert jurisdiction over these waters under the Porter-Cologne Act as waters of the State.

CEQA Guidelines Section 15380

Although threatened and endangered species are protected by specific federal and State statutes, CEQA Guidelines Section 15380(b) 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 specific criteria. These criteria have been modeled after the definition of FESA and the section of Fish and Game Code discussing rare or endangered plants or animals. This section was included in the CEQA Guidelines primarily for situations in which a public agency is reviewing a project that may have a significant effect on a candidate species that has not yet been listed by CDFG or USFWS. CEQA provides the ability to protect species from potential project impacts until the respective agencies have the opportunity to designate the species protection.

CEQA also specifies the protection of other locally or regionally significant resources, including natural communities or habitats. Although natural communities do not presently have legal protection, CEQA requires an assessment of such communities and potential project impacts. Natural communities that are identified as sensitive in the CNDDB are considered by CDFG to be significant resources and fall under the CEQA Guidelines for addressing impacts. Local planning documents such as general and area plans often identify natural communities.

Local Policies and Ordinances

The CPUC has preemptive jurisdiction over the construction, maintenance, and operation of public utilities in the State of California, and is not required to comply with these local policies and ordinances, but they should be considered in the *Regulatory Context*. Several local policies and ordinances were considered for this project, including Riverside County General Plan and the Coachella Valley Western Area Plan, city general plans, and the Bureau of Land Management's (BLM's) California Desert Conservation Area Plan.

Riverside County General Plan

The Riverside County General Plan, updated and adopted in October 2003, serves as the blueprint for planning decisions in Riverside County. It sets the foundation for growth and land-use related decisions within Riverside County over a 20-year period. The Riverside County General Plan is comprised of the seven mandatory elements plus the Air Quality Element. The Multipurpose Open Space Element of the General Plan recognizes the importance of open space with scenic, habitat, and recreational values, and outlines policies to protect and preserve natural resources, agriculture, and open space areas. Several biological resource policies in the General Plan defer to the CVMSHCP. The General Plan is also supplemented by 19 detailed area plans covering the County's territory, including the Coachella Valley Western Area Plan. The Coachella Valley Western Area Plan includes the Proposed Project study areas, and is discussed below. The following policies from the Riverside County General Plan would be applicable to the Proposed Project and alternatives (Riverside County, 2003a):

Floodplain and Riparian Area Management Policies

Policy OS 5.1c: Substantially alter floodways or implement other channelization only as a "last resort," and limit the alteration to projects where the primary function is improvement of fish and wildlife habitat.

Policy OS 5.2: If substantial modification to a floodway is proposed, design it to reduce adverse environmental effects to the maximum extent feasible, considering:

- c. wildlife habitat and linkages; and
- f. design (a natural effect, examples could include soft riparian bottoms and gentle bank slopes, wide and shallow floodways, minimization of visible use of concrete, and landscaping with native plants to the maximum extent possible).

Policy OS 5.3: Based upon site, specific study, all development shall be set back from the floodway boundary a distance adequate to address the following issues:

- c. riparian or wetland buffer; and
- d. wildlife movement corridor or linkage.

Policy OS 5.5: New development shall preserve and enhance existing native riparian habitat and prevent obstruction of natural watercourses. Incentives shall be utilized to the maximum extent possible.

Policy OS 5.6: Identify and, to the maximum extent possible, conserve remaining upland habitat areas adjacent to wetland and riparian areas that are critical to the feeding, hibernation, or nesting of wildlife species associated with these wetland and riparian areas.

Wetlands

Policy OS 6.1: During the development review process, ensure compliance with the Clean Water Act's Section 404 in terms of wetlands mitigation policies and policies concerning fill material in jurisdictional wetlands.

Policy OS 6.2: Preserve buffer zones around wetlands where feasible and biologically appropriate.

Forest Resources

Policy OS 8.1: Cooperate with federal and state agencies to achieve the sustainable conservation of forest land as a means of providing open space and protecting natural resources and habitat lands included within the multi-species habitat conservation plans (MSHCPs).

Policy OS 8.2: Support conservation programs to reforest privately held forest lands.

Vegetation

Policy OS 9.1: Update the Vegetation Map for Western Riverside County in consultation with the California Department of Fish and Game's Natural Diversity Data Base, the United States Forest Service, and other knowledgeable agencies. The County shall also provide these agencies with data as needed.

Policy OS 9.2: Expand vegetation mapping to include the eastern portion of the County of Riverside.

Policy OS 9.3: Maintain and conserve superior examples of native trees, natural vegetation, stands of established trees, and other features for ecosystem, aesthetic, and water conservation purposes.

Policy OS 9.4: Conserve the oak tree resources in the County.

Policy OS 9.5: Encourage research and education on the effects of smog and other forms of pollution on human health and on natural vegetation.

Multi-Species Habitat Conservation Plans (MSHCPs)

Policy OS 17.1: Enforce the provisions of applicable MSHCPs, if adopted, when conducting review of development applications.

Policy OS 17.2: Enforce the provisions of applicable MSHCPs, if adopted, when developing transportation or other infrastructure projects that have been designated as covered activities in the applicable MSHCP.

Environmentally Sensitive Lands

Policy OS 18.1: Preserve multi-species habitat resources in the County of Riverside through the enforcement of the provisions of applicable MSHCPs, if adopted.

Policy OS 18.2: Provide incentives to landowners that will encourage the protection of significant resources in the County beyond the preservation and/or conservation required to mitigate project impacts.

Coachella Valley Western Area Plan

One of the primary goals of the Western Coachella Valley Area Plan is to contain and concentrate growth in several strategic unincorporated areas while preserving the rural and open space characteristics of the outlying areas. The Western Coachella Valley Area Plan (WCVAP) provides the following policies that would be applicable to the Proposed Project and alternatives (Riverside County, 2003b):

Light Pollution

WCVAP Policy 15.1: Where outdoor lighting is proposed, require the inclusion of outdoor lighting features that would minimize the effects on the nighttime sky and wildlife habitat areas.

Multipurpose Open Space

WCVAP Policy 19.1: Protect visual and biological resources in the Western Coachella Valley through adherence to General Plan policies found in the Fish and Wildlife Habitat section of the Multipurpose Open Space Element.

Watershed, Floodplains, and Watercourses

WCVAP Policy 20.1: Protect the Whitewater River watershed and habitat, and provide recreational opportunities and flood protection through adherence to policies in the Open Space, Habitat and Natural Resources Preservation section of the General Plan Land Use Element and the Watershed Management section of the General Plan Multipurpose Open Space Element.

Habitat Conservation

WCVAP Policy 21.1: Protect biological resources in the Western Coachella Valley through adherence to General Plan policies found in the Fish and Wildlife Habitat section of the Multipurpose Open Space Element, as well as policies contained in the Coachella Valley Multiple Species Habitat Conservation Plan.

WCVAP Policy 21.2: Require all development activities within fringe-toed lizard habitat areas be compatible with the conservation principles and provisions of the Fringe-toed Lizard Habitat Conservation Plan and the standards of the Multipurpose Open Space Element.

WCVAP Policy 21.3: Preserve the environmentally sensitive alluvial fan areas flowing out of the canyons of the Santa Rosa Mountains.

City of Palm Springs General Plan

The following policies from the City of Palm Springs General Plan would be applicable to the Proposed Project and alternatives (City of Palm Springs, 2007):

Parks and Recreation Policies

Policy RC7.1: Support local and regional efforts to evaluate, acquire, and protect natural habitats for sensitive, threatened, and endangered species occurring in the City and vicinity.

Policy RC4.3: Develop and regulate the use of trails in a manner consistent with regional and tribal habitat conservation plans so that they do not affect sensitive habitats and wildlife.

Policy RC4.5: Recognize the Whitewater River Wash, the Palm Canyon Wash, and the Tahquitz Wash as valuable open spaces and community resources and promote recreational uses and trail and park development in these areas.

Biological Resources Policies

Policy RC7.1: Support local and regional efforts to evaluate, acquire, and protect natural habitats for sensitive, threatened, and endangered species occurring in the City and vicinity.

Policy RC7.3: Support the adoption of the Coachella Valley Multiple Species Habitat Conservation Plan and Agua Caliente Tribal Habitat Conservation Plan.

Policy RC7.4: Coordinate special-status species management with the California Department of Fish and Game, United States Fish and Wildlife Service, researchers, and local jurisdictions to promote consistency, effectiveness, and efficiency of recovery and monitoring activities.

Policy RC7.5: Protect and enhance known wildlife and migratory corridors, including corridors leading into the Santa Rosa Mountains, the San Jacinto Mountains, and along the Whitewater River.

Water Resources Policy

Policy RC9.5: Protect the quality and quantity of water from adverse impacts of development activities so that sufficient water is available to sustain habitats and wildlife.

City of Palm Desert General Plan

The City of Palm Desert General Plan includes the following policies that would be applicable to the Proposed Project and alternatives (City of Palm Desert, 2004):

Biological Resources Policies

Policy 2: The City shall proactively monitor the conversion of open lands to urban uses by reviewing all development proposals on vacant land to determine their potential to adversely impact sensitive plants, animals and habitats, and to assure minimal impacts on habitats and wildlife.

Policy 4: To the greatest extent practical, the City shall encourage and in some instances may require developers to salvage native vegetation occurring on proposed development sites for incorporation into project landscaping or shall transplant viable trees and shrubs to other development sites.

City of Cathedral General Plan

The following policies from the City of Cathedral City General Plan would be applicable to the Proposed Project and alternatives (City of Cathedral City, 2002):

Biological Resources Policies

Policy 2: As part of the development review process, projects shall be evaluated for the project's impacts on existing habitat and wildlife, and for the land's value as viable open space.

Policy 4: Assure that sensitive habitat and wildlife areas, as well as state and federal lands, are appropriately buffered from the built environment.

Policy 5: Promote the protection of biodiversity and proactively encourage an appreciation for the natural environment and biological resources.

Open Space and Conservation Policies

Policy 6: The City shall retain significant areas of natural desert, watercourse and hillside habitat, including migration corridors and wildlife preserves, in order to maintain and enhance the preservation of sensitive biological resources.

City of Rancho Mirage General Plan

The City of Rancho Mirage General Plan includes the following policies and programs that would be applicable to the Proposed Project and alternatives (City of Rancho Mirage, 1997):

Parks and Recreation Policy

Policy 8: Trails shall not encroach upon bighorn sheep lambing areas and shall be designed to minimize impacts to sensitive biological resources.

Biological Resources Policy and Programs

Policy 1: The City shall support and participate in local and regional efforts to evaluate and protect natural habitats, including suitable habitats for rare and endangered species occurring in the City and the vicinity.

Program 1.A. Review and evaluate all development proposals on vacant lands for their impacts on existing habitats and wildlife.

Program 1.B. Maintain an accurate and regularly updated map and information base on sensitive species and habitats in Rancho Mirage and the vicinity.

Program 1.C. Continue to participate in the development and implementation of the Coachella Valley Multiple Species Habitat Conservation Plan and Natural Community Conservation Plan with special emphasis on habitats located in the Edom Hill and Santa Rosa Mountain areas.

Program 1.D. Continue to require new developments to prepare wildlife and plant surveys and implement the requirements of the Coachella Valley Multiple Species Habitat Conservation Plan and Natural Community Conservation Plan.

City of Indian Wells General Plan

The following policies from the City of Indian Wells General Plan would be applicable to the Proposed Project and alternatives (City of Indian Wells, 1996):

Biological Resources Policies

Policy IIIA4.1: Direct development away from areas of sensitive biological habitat, unless effective mitigation measures can be implemented. Prior to the approval of any development proposed in areas of “high ecological sensitivity,” require the applicant to prepare a biological study for the area.

Policy IIIA4.2: Require development proposals to identify significant biological resources and provide mitigation including the use of adequate buffering, selective preservation, the provision of replacement habitat, the used of sensitive site planning techniques and other appropriate measures.

Policy IIIA4.3: Encourage the preservation of areas of riparian vegetation and wildlife habitat along the Whitewater River and Deep Canyon storm channels. Notify the State Department of Fish and Game of any proposed alteration to the floodway riparian habitat.

Policy IIIA4.4: Support the preservation of wildlife preserves in the area including The Living Desert Reserve, the Phillip L. Boyd Deep Canyon Research Center, the State Bighorn Sheep Reserve, and the Fringe-Toes Lizard Preserve.

Policy IIIA4.5: Require development within the Fringe-Toed Lizard Habitat Conservation Plan boundary to pay an approved fee to be used for the purchase of a refuge for this endangered species.

Policy IIIA4.6: Work with State and regional agencies to preserve and enhance significant biological resources on publicly owned lands.

Water Resources Policy

Policy IIIA5.5: Institute floodplain management techniques, when feasible, such as linear parks, golf courses, and/or open space preservation in lieu of channelization, in conjunction with the preservation of habitat areas as stated in Policy IIIA4.3.

BLM's California Desert Conservation Area Plan

The BLM's California Desert Conservation Area (CDCA) Plan was published in 1980 and amended several times, with the most recent amendments occurring in 1994. The CDCA is a 25-million acre expanse of lands in southern California, of which 10 million acres are administered by the BLM. The BLM was required to inventory resources in the CDCA area after the passage of the Federal Land Policy and Management Act (FLPMA) of 1976. This act required the plan to protect public lands in the California Desert while maintaining multiple land use policies, sustained yield of resources, and environmental quality. All other public land use laws applicable to the CDCA were also required to be viewed within the context of the plan's requirements. The overall goal of the plan is to "provide for the use of the public lands, and resources of the California Desert Conservation Area, including economic, educational, scientific, and recreational uses, in a manner which enhances wherever possible—and which does not diminish, on balance—the environmental, cultural, and aesthetic values of the Desert and its productivity" (BLM, 1994). The following goals are relevant to biological resources, and may be applicable to the BLM lands in the Farrell-Garnet study area:

Wildlife

Goal W.1: Avoid, mitigate, or compensate for impacts of conflicting uses on wildlife populations and habitats. Promote wildlife populations through habitat enhancement projects so that balanced ecosystems are maintained and wildlife abundance provides for human enjoyment.

Goal W.2: Develop and implement detailed plans to provide special management for:

- a) Areas which contain rare or unique habitat;
- b) Areas with habitat which is sensitive to conflicting uses;

- c) Areas with habitat which is especially rich in wildlife abundance or diversity; and
- d) Areas which are good representatives of common habitat types. Many areas falling into these categories contain listed species³, which may become the focus of management as indicator⁴ species.

Goal W.3: Manage those wildlife species on the Federal and State lists of threatened and endangered species and their habitats so that the continued existence of each is not jeopardized. Stabilize and, where possible, improve populations through management and recovery plans developed and implemented cooperatively with the U.S. Fish and Wildlife Service and the California Department of Fish and Game.

Goal W.4: Manage those wildlife species officially designated as sensitive by the BLM for California and their habitats so that the potential for Federal or State listing is minimized.

Goal W.5: Include consideration of crucial habitats of sensitive species in all decisions so that impacts are avoided, mitigated, or compensated.

Vegetation

Goal V.1: Maintain the productivity of the vegetative resource while meeting the consumptive needs of wildlife, livestock, wild horses and burros, and man. Provide for such uses under the principles of sustained yield.

Goal V.2: Manage those plant species on the Federal and State lists of threatened and endangered species and their habitats so that the continued existence of each is not jeopardized. Stabilize and, where possible, improve populations through management and recovery plans developed and implemented cooperatively with the U.S. Fish and Wildlife Service and the California Department of Fish and Game.

Goal V.3: Manage those plant species officially designated as sensitive by the BLM for California and their habitats so that the potential for Federal or State listing is minimized. Include consideration of sensitive species habitats in all decisions such that impacts are avoided, mitigated, or compensated.

Goal V.4: Manage unusual plant assemblages (UPAs) so that their continued existence is maintained. In all actions, include consideration of UPA's so that impacts are avoided, mitigated or compensated.

Goal V.5: Manage wetland and riparian areas in the CDCA, with the following specific objectives:

- a) Avoid the long-term and short-term impacts associated with the destruction, loss, or degradation of wetland and riparian areas;
- b) Preserve and enhance the natural and beneficial values of wetland and riparian areas which may include constraining or excluding those uses that cause significant long-term ecological damage;

³ A plant or animal species which is on the U.S. Fish and Wildlife Service list of threatened or endangered species, the California State list of rare, threatened or endangered species, or the BLM California State list of sensitive species.

⁴ Any species which is so closely tied to a vegetative community that its presence indicates the presence of that community and its absence indicates the absence of that community.

- c) Include practical measures to minimize harm in all actions causing adverse impacts on wetlands and riparian areas; and
- d) Retain all wetlands and riparian habitats presently under BLM administration wherever high resource values exist and adverse impacts cannot be mitigated.

Goal V.6: Accomplish the objectives of other resource by altering plant composition, density, and/or cover. Objectives include eliminating harmful or noxious plants, increasing livestock or wildlife forage production, and improving wildlife habitat characteristics. Diversified, native plant communities are favored over monocultures or communities based on non-native species.

Coachella Valley CDAC Plan Amendment

The Coachella Valley Amendment of the CDAC was completed in 2002 to more specifically address land use issues in the Coachella Valley area. Most of the guidance in the CDAC remains implemented, and proposed plans and objectives in the Amendment are largely in addition to goals identified in the CDAC. The Amendment for the Coachella Valley includes four alternatives for amended categories; Alternatives A through C represent options for each plan element ranging from less restrictive (A) to more restrictive (C) land uses. Alternative D is a no-action alternative, which effectively means no change from the CDAC will be implemented. The preferred alternative for all measures is an amalgamation of individual plan elements chosen from Alternatives A through C. Preferred alternatives for relevant plan elements are discussed below. The following overall goal of the Coachella Valley Amendment of the CDAC could be relevant to the Proposed Project and alternatives (BLM, 2002):

Goal 2.1.2 (2): Achieve recovery of listed species, and manage species to avoid future listings.

Land Health Standards Element. The purpose of the Land Health Standards Element is to adopt rangeland health standards developed for livestock grazing in consultation with the California Desert District Advisory Council for use as regional land health standards. These standards apply to all BLM lands and programs, and would be implemented through terms and conditions of permits, leases and other authorizations, actions, resource monitoring, and assessments undertaken in accordance with BLM's land use plans. BLM would seek to incorporate these standards into the multi-jurisdictional monitoring program for the CVMSHCP, and to coordinate with local jurisdictions in monitoring and assessment of land health. These standards may not be used to permanently prohibit allowable uses established by law, regulation or land use plans. Standards for native species and wetland systems are as follows (BLM, 2002):

Standard 2.1.3.3 (2) Native Species. Healthy, productive, and diverse habitats for native species, including special-status species (Federal T&E, Federal proposed, Federal candidates, BLM sensitive, or California State T&E, and CDD UPAs) are maintained in places of natural occurrence. As indicated by:

- a) Photosynthetic and ecological processes continue at levels suitable for the site, season, and precipitation regimes;
- b) Plant vigor, nutrient cycle, and energy flow are maintaining desirable plants and ensuring reproduction and recruitment;

- c) Plant communities are producing litter within acceptable limits;
- d) Age class distribution of plants and animals are sufficient to overcome mortality fluctuations;
- e) Distribution and cover of plant species and their habitats allow for reproduction and recovery from localized catastrophic events;
- f) Alien and noxious plants and wildlife do not exceed acceptable levels;
- g) Appropriate natural disturbances are evident; and
- h) Populations and their habitats are sufficiently distributed to prevent the need for listing special status species.

Standard 2.1.3.3 (3) Riparian/Wetland and Stream Function. Wetland systems associated with subsurface, running, and standing water, function properly and have the ability to recover from major disturbances. Hydrologic conditions are maintained. As indicated by:

- a) Vegetative cover will adequately protect banks, and dissipate energy during peak water flows;
- b) Dominant vegetation is an appropriate mixture of vigorous riparian species;
- c) Recruitment of preferred species is adequate to sustain the plant community;
- d) Stable soils store and release water slowly;
- e) Plant species present indicate soil moisture characteristics are being maintained;
- f) There is minimal cover of invader/shallow-rooted species, and they are not displacing deep-rooted native species;
- g) Maintain shading of stream courses and water sources for riparian dependent species;
- h) Stream is in balance with water and sediment being supplied by the watershed;
- i) Stream channel size and meander is appropriate for soils, geology, and landscape; and
- j) Adequate organic matter (litter and standing dead plant material) is present to protect the site and to replenish soil nutrients through decomposition.

Habitat Conservation Objectives Element. For the purposes of the Coachella Valley CDCA Plan Amendment, the BLM lands were categorized into eight vegetation community types: (1) sand dunes and sand fields, (2) desert scrub communities, (3) chaparral communities, (4) desert alkali scrub communities, (5) marsh communities, (6) dry wash woodland and mesquite communities, (7) riparian communities, and (8) woodland and forest communities. Conservation objectives were established based on the resource needs for each community type. For each of the eight vegetation community types, the habitat conservation objectives would be used to assess compatible uses and to develop appropriate mitigation measures within CVMSHCP conservation areas on BLM-managed lands. Future activities would be required to conform to the habitat conservation objectives established for a particular community type within the CVMSHCP conservation areas. Activities that cannot meet the habitat conservation objectives would be disallowed. New utilities within utility corridors would be designed to avoid impacts to sensitive

plants and endemic species and their habitats. Two of these vegetation community types are present in BLM lands within the Farrell-Garnet study area: sand dunes and sand fields, and desert scrub communities. Habitat conservation objectives for these two vegetation community types are listed below (BLM, 2002).

Sand Dunes and Sand Fields

- a) Conserve at least 99% of extant sand dunes and sand fields.
- b) Avoid stabilization of sand dunes due to adjacent development and spread of non-native species.
- c) Maintain, and enhance where feasible, aeolian (wind blown) and fluvial (water borne) sand transport systems.
- d) Minimize sand compaction to protect CV Jerusalem cricket and giant sand-treader habitat and to minimize crushing of fringe-toed lizards.
- e) Minimize roads within flat-tailed horned lizard habitat which are prone to crushing by vehicles.
- f) Avoid crushing of burrows, especially for burrowing owl, giant sand-treader cricket, Jerusalem cricket and round-tailed ground squirrel.
- g) Avoid disturbance and compaction of sandy habitats associated with CV milk-vetch and avoid crushing of CV milk-vetch plants.
- h) Reduce/control spread of non-native plants like Russian thistle and Saharan mustard; and exotic animals such as non-native ants and brown-headed cowbirds.
- i) Protect *Tiquilia palmeri* sites, host plant for CV grasshopper.
- j) Minimize loss of native vegetation, minimize habitat fragmentation and maintain habitat patch connectivity.
- k) Prohibit uncontrolled household pets on public lands to minimize predation of reptiles, small mammals and birds.

Desert Scrub Communities

- a) Conserve at least 99% of extant desert scrub communities.
- b) Minimize habitat loss and fragmentation in bighorn sheep essential habitat.
- c) Suppress fire in Sonoran scrub communities to maintain bighorn sheep and desert tortoise habitat.
- d) Exclude bighorn sheep from urban areas /provide alternative water sources.
- e) Prohibit artificial illumination of mountain slopes on public lands.
- f) Prohibit use of pesticides harmful to wildlife.
- g) Maintain, and enhance where feasible, aeolian (wind blown) and fluvial (water borne) sand transport systems.
- h) Avoid disturbance and compaction of sandy habitats associated with CV giant sand-treader cricket, and CV milk-vetch.
- i) Avoid crushing of sensitive plant and animal species.
- j) Protect *Tiquilia palmeri* sites, host plant for CV grasshopper.

- k) Avoid disturbance to existing /potential Casey's June beetle habitat.
- l) Reduce/control spread of non-native plants like Russian thistle, Saharan mustard, and to the extent feasible, exotic annual grasses and forbs to protect desert tortoise forage species.
- m) Reduce/control spread of exotic animals such as non-native ants and brown-headed cowbirds.
- n) Avoid overgrazing, soil compaction and erosion caused by domestic animals to protect desert tortoise forage species.
- o) Minimize poaching, crushing and illegal collection of desert tortoise.
- p) Avoid crushing of burrows, especially for burrowing owl, sand-treader cricket, desert tortoise, and Palm Springs round-tailed ground squirrel.
- q) Rehabilitate disturbed areas with native vegetation only.
- r) Minimize loss of native vegetation, minimize habitat fragmentation and maintain habitat patch connectivity.
- s) Prohibit uncontrolled household pets on public lands to minimize predation of reptiles, small mammals and birds.

Communication Sites and Utilities Element. The Communication Sites and Utilities Element states that proposed utilities within designated utility corridors and within conservation areas may be considered, consistent with the habitat conservation objectives. Proposed utilities would be designed or mitigation measures imposed to ensure new utilities within conservation areas avoid impacts to sensitive plants, endemic species, and their habitats (BLM, 2002).

Coachella Valley Fringe-toed Lizard Habitat Conservation Plan

In 1985, The Nature Conservancy wrote the Coachella Valley Fringe-Toed Lizard Habitat Conservation Plan (CVFTL HCP). This HCP established three preserves to protect this reptile, near Thousand Palms, in the Whitewater River floodplain, and on Edom Hill. A mitigation fee area was established and was drawn to include all existing and former habitat. Fees collected were used to acquire and manage lands in the three reserves (The Nature Conservancy, 1985). This HCP was subsumed by the CVMSHCP in 2008 (see below).

Of the three preserves established under this HCP, the Whitewater Floodplain Preserve occurs south of the UPRR tracks, east of Indian Canyon Drive, west of Gene Autry Trail, and north of Whitewater River Canal, and consists of 1,230 acres of BLM and Coachella Valley Water District land. This Whitewater Floodplain Preserve overlaps with portions of the Farrell-Garnet study area, and specifically with portions of the Alternative 2 alignment.

The Coachella Valley Multiple Species Habitat Conservation Plan

The Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) was developed for the Coachella Valley Association of Governments to guide growth and development in the Coachella Valley over a 75-year period. This plan protects 240,000 acres of open space and 27 species, and aims to preserve a system of natural areas and maintain or restore viable populations of the species included therein. Provisions in the plan allow for take permits from the

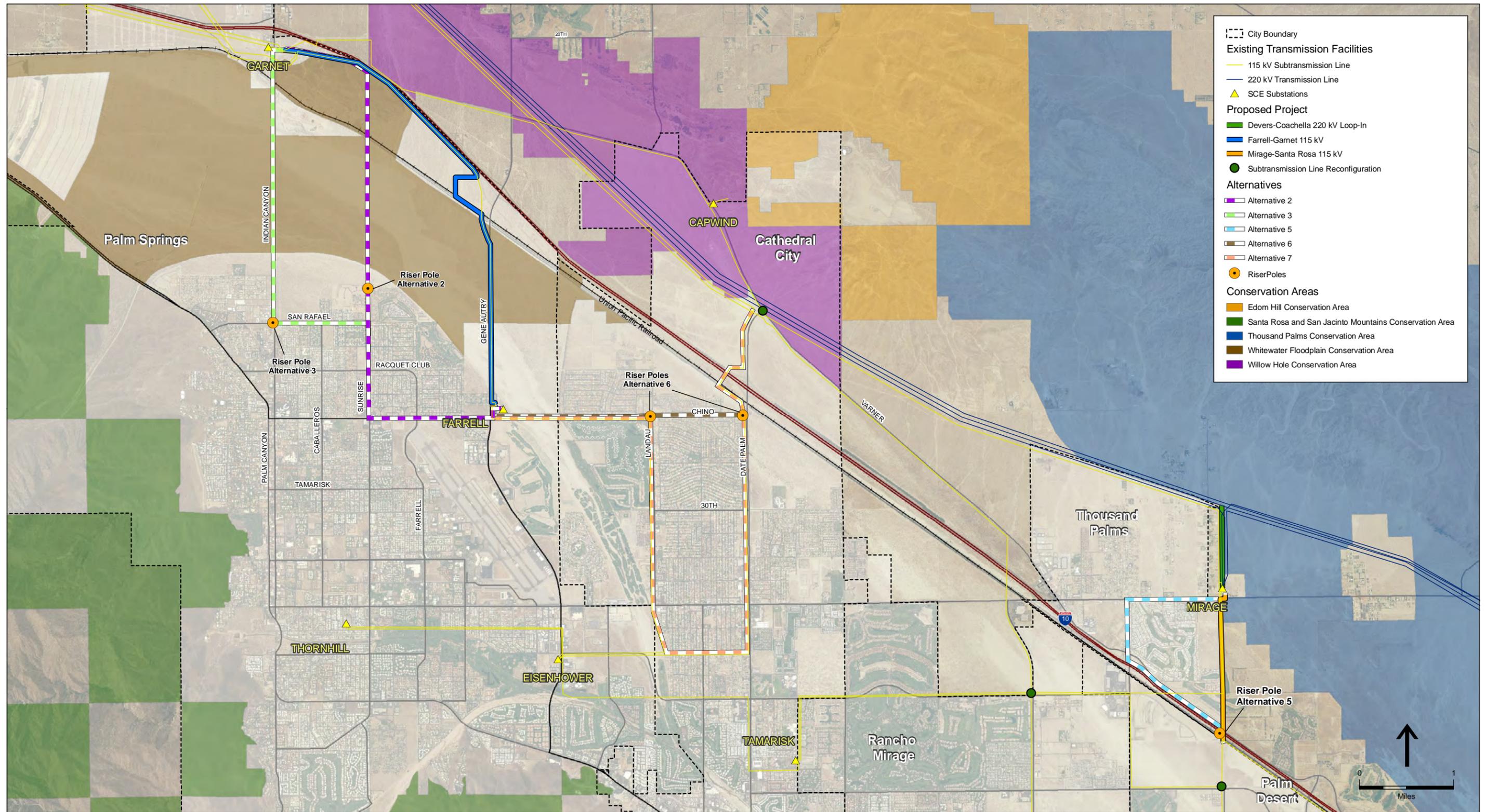
USFWS (Section 10(a)(1)(A) and 10(a)(1)(B)) and the CDFG (Natural Community Conservation Plan) to be obtained for currently listed species and non-listed species that may be listed in the future. The CDFG issued the Natural Community Conservation Plan (NCCP) Permit for the CVMSHCP on September 9, 2008, and the USFWS issued the final permit for the CVMSHCP on October 1, 2008. The proposed Devers-Mirage 115 kV Subtransmission System Split Project is within three CVMSHCP-designated conservation areas – the Whitewater Floodplain Conservation Area, Thousand Palms Conservation Area, and Willow Hole Conservation Area – although this project is not a participant of the CVMSHCP.

Whitewater Floodplain Conservation Area. This conservation area encompasses portions of the Whitewater River floodplain south of I-10 eastward to the existing Whitewater Floodplain Preserve, established by the CVFTL HCP, and now part of the CVMSHCP. See Figure 4.4-3 for an illustration of the Whitewater Floodplain Conservation Area relative to the Proposed Project and alternative alignments and sites. The Whitewater Floodplain Conservation Area contains a total of approximately 7,400 acres. It contains Core Habitat for the CV milkvetch, CV giant sand-treader cricket, CV fringe-toed lizard, Palm Springs round-tailed ground squirrel, and Palm Springs pocket mouse. The proposed Farrell-Garnet 115 kV subtransmission line, Alternative 2, and Alternative 3 alignments all cross through this conservation area.

Willow Hole Conservation Area. This conservation area includes the portions of the Mission Creek flood control channel and Morongo Wash south of the City of Desert Hot Springs; the Mission Creek and Morongo Wash sand depositional areas and aeolian sand transport areas, generally from Mission Creek on the west to Flattop Mountain on the east; and blowsand habitat areas along the San Andreas Fault and at Stebbins' Dune south of Varner Road and west of Date Palm Drive. See Figure 4.4-3 for an illustration of the Willow Hole Conservation Area relative to the Proposed Project and alternative alignments and sites. The Willow Hole Conservation Area contains a total of approximately 5,600 acres, and Core Habitat for the CV milkvetch, CV fringe-toed lizard, Palm Springs round-tailed ground squirrel, and Palm Springs pocket mouse. Alternatives 6 and 7, and the reconfiguration of the subtransmission line at Varner Road and Date Palm Drive are all along the southern boundary of the Willow Hole Conservation Area.

Thousand Palms Conservation Area. This conservation area includes approximately 25,900 acres, composed of the CVFTL Preserve (created under the CVFTL HCP) and the sand source/transport area to the west of it, emanating from Indio Hills. See Figure 4.4-3 for an illustration of the Thousand Palms Conservation Area relative to the Proposed Project and alternative alignments and sites. The Thousand Palms Conservation Area contains Core Habitat for the CV milkvetch, CV giant sand-treader cricket, CV fringe-toed lizard, flat-tailed horned lizard, Palm Springs round-tailed ground squirrel, and Palm Springs pocket mouse. The proposed Devers-Coachella Valley 220 kV Loop-In alignment lies within the western boundary of this conservation area.

Species Conservation Objectives. Each species protected within the HCP has its own set of species conservation objectives. For most species these objectives are similar in that they identify the conservation area where the species is present, and the objectives that apply to that area.



SOURCE: SCE, 2008; CVAG, 2007

Devers-Mirage 115 kV Subtransmission System Split Project . 207059

Figure 4.4-3
Coachella Valley Multiple Species Habitat Conservation Plan Areas

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Table 4.4-2 below summarizes how each objective applies to species that would be potentially affected by the Proposed Project and alternatives, and each of the objectives is paraphrased below.

Objective 1. Ensure conservation of Core or Riparian Habitat within the Conservation Areas.

Objective 1b. Ensure that Coachella Valley Water District will establish permanent riparian habitat, including at least 44 acres of Sonoran cottonwood-willow riparian forest in the Coachella Valley Stormwater Channel and Delta Conservation Area, to replace the habitat that is periodically altered by flood control maintenance activities. This habitat will provide for the conservation of the riparian birds covered by the CVMSHCP.

Objective 2. Conserve Other Conserved Habitat through adherence to other Conservation Objectives (for another species, a natural community, Essential Ecological Process area, Biological Corridor, or Linkage area) in the Conservation Areas.

Objective 3. Ensure protection of Essential Ecological Process areas through Conservation Area Conservation Objectives for Essential Ecological Processes.

Objective 4. Protect Biological Corridors and Linkages through Conservation Area Conservation Objectives for Biological Corridors and Linkages.

Objective 5a. Implement biological monitoring and Adaptive Management actions to ensure self-sustaining populations within each Core Habitat.

Objective 5b. Establish at least two additional self-sustaining populations of the species, if feasible, in previously occupied habitat.

Objective 6. Implement Management and Monitoring Programs to ensure self-sustaining populations within each Core Habitat area.

Natural Community Conservation Objectives. The CVMSHCP established three objectives for conserving and managing occurrences of natural communities in the conservation areas:

Objective 1. Ensure Conservation of this natural community within the Conservation Area.

Objective 2. Ensure protection of Essential Ecological Process areas through Conservation Area Conservation Objectives for Essential Ecological Processes.

Objective 3. Implement biological monitoring and Adaptive Management actions to ensure Conservation of this natural community.

Table 4.4-3 below summarizes which natural community these objectives apply to, as well as which conservation area contains these natural communities.

**TABLE 4.4-2
 SPECIES CONSERVATION OBJECTIVES BY SPECIES**

Species	Conservation Areas Where Species or Potential Habitat is Present	Applicable Objective(s) for Species							
		1a	1b	2	3	4	5a	5b	6
Coachella Valley milkvetch	Whitewater Floodplain, Willow Hole, Thousand Palms	X		X	X	X	X		
Triple-ribbed milkvetch	Whitewater Floodplain	X		X	X	X	X		
Coachella Valley giant sand-treader cricket	Whitewater Floodplain, Willow Hole, Thousand Palms	X		X	X	X	X		
Coachella Valley Jerusalem cricket	Whitewater Floodplain, Willow Hole, Thousand Palms	X		X	X	X	X	X	
Coachella Valley fringe-toed lizard	Whitewater Floodplain, Willow Hole, Thousand Palms	X		X	X	X	X		
Desert tortoise	Whitewater Floodplain, Willow Hole	X		X		X	X		
Flat-tailed horned lizard	Whitewater Floodplain, Willow Hole, Thousand Palms	X		X	X	X	X	X	
Burrowing owl	Whitewater Floodplain, Willow Hole, Thousand Palms	X		X	X	X			X
Crissal thrasher	Willow Hole, Thousand Palms	X		X	X	X	X		
Le Conte's thrasher	Whitewater Floodplain, Willow Hole, Thousand Palms	X					X		
Least Bell's vireo	Willow Hole, Thousand Palms	X	X		X	X			
Yellow warbler	Willow Hole, Thousand Palms	X	X		X	X			
Yellow-breasted chat	Willow Hole, Thousand Palms	X	X		X	X			
Summer tanager	Willow Hole, Thousand Palms	X	X		X	X			
Southwestern willow flycatcher	Willow Hole, Thousand Palms	X	X		X	X			
Palm Springs round-tailed ground squirrel	Whitewater Floodplain, Willow Hole, Thousand Palms	X		X	X	X	X		
Palm Springs pocket mouse	Whitewater Floodplain, Willow Hole, Thousand Palms	X		X	X	X	X		

SOURCE: CVAG, 2007.

**TABLE 4.4-3
 NATURAL COMMUNITIES PROTECTED AT EACH CONSERVATION AREA**

Natural Community	Conservation Areas Where Present
Active desert dunes	Thousand Palms
Stabilized and partially stabilized desert dunes	Willow Hole
Active desert sand fields	Whitewater Floodplain, Willow Hole, Thousand Palms
Ephemeral desert sand fields	Whitewater Floodplain, Willow Hole
Stabilized and partially stabilized desert sand Fields	Whitewater Floodplain, Willow Hole
Stabilized shielded desert sand fields	Whitewater Floodplain
Mesquite hummocks	Willow Hole, Thousand Palms
Sonoran creosote bush scrub	Whitewater Floodplain, Willow Hole, Thousand Palms
Sonoran mixed woody and succulent scrub	Whitewater Floodplain, Willow Hole, Thousand Palms
Sonoran cottonwood-willow riparian forest	Thousand Palms
Desert saltbush scrub	Willow Hole
Desert dry wash woodland	Thousand Palms

SOURCE: CVAG, 2007.

4.4.2 Significance Criteria

Based on Section 15065 and Appendix G of the CEQA Guidelines, the project would result in a significant impact on the environment if it would:

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS (including List 1A, 1B, and 2 plant species of the CNPS Inventory);
- b) Have a substantial adverse impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the CDFG or USFWS;
- c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, other approved local, regional, or state habitat conservation plan.

CEQA Section 15380 provides that a plant or animal species may be treated as “Rare or Endangered” even if not on one of the official lists if, for example, it is likely to become endangered in the foreseeable future. As species of plants and animals become restricted in range and limited in population numbers, species may become listed or candidates for listing as Endangered or Threatened and become recognized under CEQA as a significant resource.

In conducting the following impact analysis, three principal components of the CEQA Guidelines outlined above were considered:

- Magnitude of the impact (e.g., substantial/not substantial);
- Uniqueness of the affected resource (i.e., rarity of the resource); and
- Susceptibility of the affected resource to perturbation (i.e., sensitivity of the resource).

The evaluation of the significance of the following impacts considered the interrelationship of these three components. For example, a relatively small magnitude impact to a State or federally listed species would be considered significant because the species is very rare and is believed to be very susceptible to disturbance. Conversely, a natural community such as California annual grassland is not necessarily rare or sensitive to disturbance. Therefore, a much larger magnitude of impact would be required to result in a significant impact.

4.4.3 Applicant Proposed Measures

SCE has proposed the following APMs to be implemented as part of the Proposed Project.

APM BIO-1. Preconstruction Surveys. Preconstruction biological clearance surveys will be performed to minimize impacts to special-status plant and wildlife.

APM BIO-2. Minimize Vegetation Impacts. Every effort will be made to minimize vegetation removal and permanent loss at construction sites. If necessary, native vegetation will be flagged for avoidance.

APM BIO-3. Avoid Impacts to State and Federal Jurisdiction Wetlands. Construction crews will avoid impacting the streambeds and banks of streams along the route to the extent possible. If necessary, a Streambed Alteration Agreement (SAA) will be secured from the CDFG. Impacts will be mitigated based on the terms of the SAA. No streams with flowing waters capable of supporting special-status species will be expected to be impacted by the project.

APM BIO-4. BMPs. Crews will be directed to use Best Management Practices (BMPs) where applicable. These measures will be identified prior to construction and incorporated into the construction operations.

APM BIO-5. Biological Monitors. Biological monitors will be assigned to the project in areas of sensitive biological resource. The monitors will be responsible for ensuring that impacts to special status species, native vegetation, wildlife habitat, or unique resources will be avoided to the fullest extent possible. Where appropriate, monitors will flag the boundaries of areas where activities need to be restricted in order to protect native plants and wildlife or special status species. Those restricted areas will be monitored to ensure their protection during construction.

APM BIO-6. Worker Environmental Awareness Program. A Worker Environmental Awareness Program (WEAP) will be prepared. All construction crews and contractors will be required to participate in WEAP training prior to starting work on the project. The WEAP training will include a review of the special status species and other sensitive resources that could exist in the project area, the locations of sensitive biological resources and their legal status and protections, and measures to be implemented for avoidance of these sensitive resources. A record of all trained personnel will be maintained.

APM BIO-7. Avoid Impacts to Active Nests. SCE will conduct project-wide raptor surveys and remove trees, if necessary, outside of the nesting season (nesting season is usually February 1 to August 31). If a tree or pole containing a raptor nest must be removed during nesting season, or if work is scheduled to take place in close proximity to an active nest on an existing transmission tower or pole, SCE will coordinate with the CDFG and USFWS and obtain written verification prior to moving the nest.

APM BIO-8.⁵ Avian Protection. All transmission and subtransmission towers and poles will be designed to be raptor-safe in accordance with the Suggested Practices for Raptor Protection on Power Lines: the State of the Art in 2006 (Avian Power Line Interaction Committee, 2006).

⁵ APM BIO-8 was identified as BIO-9 in the PEA.

APM BIO-9.⁶ Coachella Valley Milkvetch. Surveys for Coachella Valley milkvetch will be performed within 1 year prior to construction, between February and early May, during the plant's growing and flowering season. GPS coordinates of plant locations will be recorded with high precision (to within 1 meter) and stored in an electronic database. Plants will be marked conspicuously with pin flags and avoided during construction to the greatest extent possible. Following the completion of construction, areas compacted during temporary construction activities (e.g., lay-down areas, pulling sites) will be scarified, if deemed necessary, to enhance germination of this species.

A compensation fee for habitat loss shall be paid to BLM or a land conservation organization, as approved by the USFWS, for acquisition of replacement habitat. The agreed-upon fee amount will be \$5,000 (not to exceed \$7,246) per acre for the three acres of temporary impacts (\$15,000 total). In addition, there will also be a one-time fee of 15 percent, in the amount of \$2,250 (not to exceed \$3,261) to cover overhead costs associated with habitat acquisition. Total compensation funds will not exceed \$25,000 without the written concurrence of SCE, BLM, and the USFWS. These actions shall be coordinated with the BLM or a land conservation agency and approved by the USFWS. Funds shall be paid prior to beginning the Proposed Project and will mitigate both direct/indirect impacts of construction and operations and management.

APM BIO-10.⁷ Coachella Valley Fringe-toed Lizard. Coachella Valley fringe-toed lizards are restricted to isolated deposits of loose windblown sand associated with hummocks west and east of Gene Autry Trail (where the road crosses the UPRR tracks). The Farrell-Garnet easement in this area encompasses approximately 3.35 acres of potential habitat, of which approximately 1.0 acre was occupied by fringe-toed lizards in June 2006. While active, Coachella Valley fringe-toed lizards flee readily from danger and threats and will be inclined to move as construction activities begin. All construction work within Coachella Valley fringe-toed lizard habitat will be performed during the lizards' active season. Determination of the active season will be based on temperatures being consistently above 80 degrees Fahrenheit and the observation of activity at a nearby reference population. The active season is typically between May and September. Specific protections that SCE will implement for the Coachella Valley fringe-toed lizard are summarized as such:

1. Protocol-level surveys will be conducted within 1 year of construction activities to determine presence or absence of Coachella Valley fringe-toed lizards.
2. All construction areas in Coachella Valley fringe-toed lizard habitat will be fenced and completely enclosed to keep the lizards from entering active work areas. Fencing will include fences leading up to and encircling the specific subtransmission poles where work will be performed and along the western edge of Gene Autry Trail, north along the overpass (to prevent lizards from entering the road). Silt fencing will be used and buried to a depth of 8 to 12 inches. The access end of the enclosed area shall be kept closed except to allow immediate access to equipment and personnel. An area between the existing tamarisk trees (bordering the UPRR tracks) and the northernmost pole south of the railroad tracks will remain unfenced to allow fringe-toed lizards to move back and forth.
3. Qualified biologists shall conduct clearance surveys within the enclosed construction sites. Parallel transects spaced 20 feet apart will be performed within 48 hours before the initiation of construction. Surveys shall provide 100-percent coverage of the

⁶ APM BIO-9 was identified as BIO MIT-1 in the PEA.

⁷ APM BIO-10 was identified as BIO MIT-2 in the PEA.

entire enclosed construction area. The area underneath shrubs and surrounding large rocks and boulders will be gently raked to expose hidden lizards. Surveys will be repeated and construction not allowed to begin until two consecutive surveys fail to reveal fringe-toed lizards.

4. A biological monitor will oversee all construction activities within Fringe-toed Lizard habitat. The monitor will have in their possession a federal 10(a)(1)(A) permit and associated Memorandum of Understanding (MOU) from CDFG. When a Coachella Valley fringe-toed lizard is found during surveys, the exclusionary fencing will be opened or lifted, and the lizard will be encouraged to run through the opening to the outside of the work area, after which the fencing will be closed again. Capture of fringe-toed lizards will be allowed by net, noose, or by hand only if a lizard is not moving out of the fenced project area through encouragement or of its own volition. A new pair of latex or synthetic gloves will be used for each lizard handled.
5. If any Coachella Valley fringe-toed lizards are captured as above, they will be released immediately to the west of the project footprint (to a distance of up to 500 feet outside the enclosed area, away from any active roadways) in loose sand contiguous with the area at which construction is occurring. The immediate area will be searched for snakes, and if found, a different microsite will be found. Fringe-toed lizards will be released in the shade of a shrub. No lizards will be in captivity or in transport for longer than 10 minutes after their initial capture within an enclosed construction area. Lizards will be transported in clean, white, plastic 5-gallon buckets.
6. All movement of construction vehicles outside of the ROW will be restricted to predesignated access, contractor-acquired access, or public roads.
7. If road stabilization is required for the temporary access roads, the materials used for stabilization will consist of temporary, easily removable material (e.g., mats laid down on sand, rather than gravel).
8. The real limits of construction within the ROW will be predetermined, with activity restricted to and confined within those limits. No paint or permanent discoloring agents will be applied to rocks or vegetation to indicate survey or construction activity limits.
9. Construction and maintenance vehicles will not exceed a speed of 10 miles per hour in Coachella Valley fringe-toed lizard habitat.
10. To the extent possible, construction operations within habitat for the Coachella Valley fringe-toed lizard shall occur when the air temperatures 1 inch above the ground in the shade are between 96 degrees and 112 degrees Fahrenheit, preferably between April 1 and October 30, contingent upon activity being observed at a nearby reference population. However, if protocol-level clearance surveys have been performed within 48 hours prior to construction, work may proceed (with a biological monitor present) outside of these parameters (e.g., construction during the evening hours).
11. Any spoils will be stockpiled in previously disturbed areas that have been examined for the presence of Coachella Valley fringe-toed lizards by a qualified biologist. Those areas will be fenced and cleared of lizards prior to use as in steps 1 through 5 above.

12. Existing sand-retaining lattice fences in the ROW will be repaired or replaced.
13. After construction, compacted soils will be scarified and seeded with twinbugs (*Dicoria canescens*) in low density.
14. Clearance surveys will be repeated if more than 72 hours elapse between work sessions, if any portion of a fence is removed or blown down, or if measurable rainfall occurs.

APM BIO-11.⁸ Burrowing Owl. During and prior to breeding season, preconstruction surveys will be performed in all work areas to identify areas where burrowing owls or potential burrows exist. Previously documented burrows will be revisited. Potential burrows will be searched to determine occupancy, and if vacant, will be collapsed outside of nesting season. In collaboration with CDFG and the accepted relocation strategy, occupied burrows, if any, will be fitted with exclusionary devices that allow exit, but not re-entrance, of a burrowing owl into a burrow outside of nesting season. If active burrows are located during nesting season, construction within 450 feet of the burrow will be delayed until the young have fledged.

4.4.4 Biological Resources Impacts and Mitigation Measures

Approach to Analysis

This section identifies potential impacts to the biological resources that would result under the Proposed Project, while Section 4.4.5, below, identifies potential impacts that would result under the alternatives. For both sections, the impact analysis focuses on foreseeable changes to the baseline conditions in the context of the significance criteria presented above and restated below for ease of reference. This analysis includes an evaluation of the potential direct and indirect effects of the Proposed Project and alternatives. Definitions and examples of these effects within the context of biological resources are provided below.

- **Direct Effects.** Direct or primary effects are those effects that are caused by the project and occur at the same time and place (CEQA Guideline Section 15358). Examples of these types of effects to biological resources include incidental take during construction, elimination of suitable habitat due to project construction, and degradation of habitats due to construction related activities.
- **Indirect Effects.** Indirect or secondary effects are those effects that are caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable (CEQA Guideline Section 15358). Examples of these types of effects to biological resources include the discharge of sediment or chemicals that adversely affect water quality downstream of the project site, an increase in human activity during project operations, and potential growth-inducement effects.
- **Cumulative Impacts.** Cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts (CEQA Guideline Section 15355). These include the effects of future projects that are reasonably certain to occur within the area of the Proposed Project, and which may cumulatively increase the magnitude of effects described previously.

⁸ APM BIO-11 was identified as BIO MIT-3 in the PEA.

Examples of these types of effects to biological resources include the effects of a cumulative loss of habitat for a special status species due to other planned projects in the area.

The Proposed Project subtransmission and transmission lines would have the potential to have direct and indirect effect on terrestrial biological resources in the region. These potential effects include construction-related disturbance to wetlands (i.e., Whitewater Wash), loss of sensitive natural communities, and impacts to special-status plant and wildlife species and their habitat. Mitigation measures were developed to reduce the level of significance of potential impacts. Mitigation measures focused first on minimization and avoidance of biological resources where possible. Where impacts could not be avoided, compensation for potential impacts is proposed.

The proposed substation modifications at the Devers, Eisenhower, Farrell, Garnet, Thornhill, Mirage, Concho, Indian Wells, Santa Rosa, and Tamarisk substations consist solely of electrical system and safety upgrades in developed habitat (except where a driveway is proposed on the east side of Farrell Substation, in undeveloped and highly disturbed habitat with one ornamental shrub), and the associated construction, operation, and maintenance activities would have no impact with respect to biological resources.

The impacts and mitigations below are organized to respond to the broad impact significance categories as defined in CEQA Guidelines (14 Cal. Code Regs. Sec. 15064).

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS (including List 1A, 1B, and 2 plant species of the CNPS Inventory).

Several special-status species are present in the Farrell-Garnet and Mirage-Santa Rosa study areas. The greatest potential for impacts to special-status species would occur as a result of construction activities associated with the proposed Farrell-Garnet 115 kV subtransmission line because the proposed alignment for this line has less disturbed habitat and more known occurrences of the CV milkvetch and CV fringe-toed lizard, and is within the CVMSHCP's Whitewater Floodplain Conservation Area. While most of the poles associated with the proposed Farrell-Garnet 115 kV subtransmission line would be installed within existing ROW, a portion of the line would deviate from the existing SCE ROW north of the UPRR for approximately 0.8 mile, and a new road would be constructed to access this portion of the alignment. In addition, a new access road would be constructed along the east side of the Farrell Substation.

Development west of the Mirage-Santa Rosa study area has reduced Aeolian sands in all but approximately 100 feet of the northern portion of the proposed Mirage-Santa Rosa 115 kV alignment, making most of the Devers-Coachella Valley 220 kV Loop-In and Mirage-Santa Rosa 115 kV alignments low quality habitat for most sand-endemic species. In addition, the proposed 220 kV loop-in would be built within a long-existing and frequently maintained utility corridor, where habitat is currently degraded and has a low potential for listed species.

Construction

Impact 4.4-1: Construction activities could result in adverse impacts to Coachella Valley milkvetch. *Less than significant with mitigation (Class II)*

Coachella Valley (CV) milkvetch is known to occur in the Farrell-Garnet study area – primarily in the disturbed roadside within 60 feet of Gene Autry Trail. There are currently subtransmission lines and an established ROW that is periodically disturbed in areas where suitable habitat is present for the CV milkvetch along the proposed Farrell-Garnet alignment (within 60 feet of Gene Autry Trail, south of the UPRR). Removal of eight wood poles in this stretch of the alignment would temporarily impact approximately 0.48 acre, and installation of nine new poles would permanently impact approximately 0.54 acre of CV milkvetch habitat. These estimates are based on an assumed 0.06 acres of disturbance for each structure.

CV milkvetch was observed in 2005 along Varner Road near the proposed subtransmission line reconfiguration at Date Palm Drive and Varner Road (CDFG, 2009). Although this location is predominantly composed of ruderal species, there is still potential for this species to occur.

There are also several CNDDDB records for this species within the Mirage-Santa Rosa study area (CDFG, 2009), although there is less suitable habitat for this species due to the lack of Aeolian sands. There is a 1993 CNDDDB record for CV milkvetch at the location of the proposed subtransmission line reconfiguration at Portola and Gerald Ford Drive (CDFG, 2009), and a 1985 record for CV milkvetch along Bob Hope Drive where the Bob Hope and Dinah Shore Drive reconfiguration is proposed. Although both of these locations are currently predominantly composed of ruderal species, there is still potential for the CV milkvetch to occur.

Direct impacts could occur if construction activities associated with the Proposed Project crush this species, or disturb its habitat by compacting or excavating the soil where it grows. However, since proposed construction activities would occur from April to October, when the CV milkvetch, a winter annual or semi-perennial, will have already flowered and gone to seed. Therefore, reproductive output for the year would not be affected.

Indirect impacts could occur if non-native species such as Russian thistle and Saharan mustard are introduced into CV milkvetch habitat through construction activities, and the introduced species outcompete the CV milkvetch for habitat. However, the CV milkvetch seems to prefer disturbed soils (SCE, 2007), and thus construction activities could actually improve habitat in the project area for this species.

Implementation of APM BIO-1 (Preconstruction Surveys), APM BIO-2 (Minimize Vegetation Impacts), APM BIO-5 (Biological Monitors), and APM BIO-6 (Worker Environmental Awareness Program) would help mitigate impacts to the CV milkvetch. With the additional implementation of Mitigation Measure 4.4-1, which supersedes APM BIO-9 (Coachella Valley Milkvetch), as well as any additional measures required by the USFWS, the Proposed Project would result in less than significant impacts to the CV milkvetch.

Mitigation Measure 4.4-1: Coachella Valley Milkvetch. Surveys for Coachella Valley milkvetch shall be performed within one year prior to construction, between February and early May, during the plant's growing and flowering season. GPS coordinates of plant locations shall be recorded with high precision (to within one meter), stored in an electronic database, and submitted to the USFWS and the CNDDDB within one year of the survey. Plants shall be marked conspicuously with pin flags and avoided during construction to the greatest extent possible. Following the completion of construction, areas compacted during temporary construction activities (e.g., lay-down areas, pulling sites) shall be scarified, if deemed necessary, to enhance germination of this species.

Temporary and permanent impacts to habitat for the CV milkvetch shall be compensated for through conservation of suitable habitat for this species. The calculated replacement for habitat loss for the CV milkvetch shall be based on a ratio of 3:1 (compensation to impact) per acre for temporary impacts and 9:1 for permanent impacts, for an estimated total of 6 acres. Ratios reflect the limited habitat and low populations of this species across its range, and the loss of habitat available for this species in the project area. The replacement habitat shall be within the Whitewater Floodplain Conservation Area of the CVMSHCP. Total compensation funds shall include the costs of acquisition and long-term management, and shall be paid prior to the start of project operations. This replacement habitat shall mitigate for both direct and indirect impacts of construction and operations/management on this species, as well as the CV fringe-toed lizard (see Mitigation Measure 4.4-2, below), Palm Springs pocket mouse, Palm Springs round-tailed ground squirrel, CV giant sand-treader cricket, and Le Conte's thrasher.

Significance after Mitigation: Less than Significant.

Impact 4.4-2: Construction activities could result in adverse impacts to Coachella Valley fringe-toed lizard and flat-tailed horned lizard. *Less than significant with mitigation* (Class II)

The Coachella Valley (CV) fringe-toed lizard occurs in the Farrell-Garnet study area along the proposed Farrell-Garnet 115 kV subtransmission line alignment south of the UPRR, on the east and west sides of Gene Autry Trail. The Farrell-Garnet alignment in this area encompasses approximately 3.35 acres of potential habitat, of which approximately 1.0 acre was occupied by fringe-toed lizards during EPG protocol-level surveys in 2006. In this area of potential habitat, there are currently subtransmission lines, poles, access roads, and an established ROW that is periodically disturbed. Thus, replacing poles and using existing roads would not cause additional obstruction of natural sand transport, which would potentially reduce CV fringe-toed lizard habitat quality. However, removal of eight wood poles in this stretch of the alignment would temporarily impact approximately 0.48 acres, and installation of nine new poles would permanently impact approximately 0.54 acres of CV fringe-toed lizard habitat, assuming that 0.06 acres of habitat would be impacted per structure.

The Devers-Coachella Valley 220 kV Loop-In would permanently impact approximately 8.75 acres of USFWS-designated critical habitat for the CV fringe-toed lizard and would

temporarily impact approximately 9.1 acres through the addition of nine lattice-steel towers (LSTs) and the widening of existing access and spur roads. New temporary laydown and pulling areas would be required for construction, resulting in approximately 5.5 acres that would be temporarily affected. To reduce temporary impacts, the areas would be scarified and allowed to return to natural conditions after the completion of work. Although the proposed loop-in alignment passes through critical habitat for the CV fringe-toed lizard, constituent habitat components (e.g., Aeolian sand) are not present along the alignment and this species was not detected along this alignment during EPG's 2006 surveys; thus, the potential for actual impacts to this species is considered low (EPG, 2006b).

CV fringe-toed lizards could be directly impacted by the Proposed Project if they are crushed by construction equipment, particularly if they are in torpor (i.e. if they are hibernating in cold temperatures, or aestivating in hot temperatures) and cannot flee from the equipment. They could also be impacted if they become trapped in holes that are excavated for power poles, if they become stressed from project construction noise or vibration, or if there is temporary or permanent loss of habitat where access roads are constructed, where poles are installed, at wire-pulling and wire splicing sites, or at construction and staging yards. Indirect impacts could occur if non-native plant species are introduced into the area by construction workers and equipment.

The flat-tailed horned lizard could also occur in the project area. Although not observed during 2006 or 2009 focused surveys for the Coachella Valley fringe-toed lizard (SCE and TRC, 2009b and 2009c), at which time this species would have been identifiable, there is a 1995 record of this species near the Gene Autry Trail (CDFG, 2009). The CVMSHCP considers the area where the proposed Farrell-Garnet 115 kV subtransmission is proposed to be moderately suitable habitat, and the area where the loop-in is proposed to be suitable habitat (CVAG, 2007).

Implementation of APM BIO-1 (Preconstruction Surveys), APM BIO-2 (Minimize Vegetation Impacts), APM BIO-5 (Biological Monitors), and APM BIO-6 (Worker Environmental Awareness Program), would help mitigate potential impacts to the CV fringe-toed lizard and flat-tailed horned lizard during construction activities. Implementation of Mitigation Measure 4.4-2, below, supersedes measure APM BIO-10 (Coachella Valley Fringe-toed Lizard), and would also reduce impacts on CV fringe-toed lizard and flat-tailed horned lizard. Together, these measures would reduce potential adverse effects on these species during construction activities, to a less-than-significant level.

Mitigation Measure 4.4-2: Coachella Valley fringe-toed lizard and flat-tailed horned lizard. Construction work within Coachella Valley fringe-toed lizard habitat shall adhere to the following measures:

- As determined at the time of construction, depending upon existing habitat conditions and the results of the protocol-level surveys for the CV fringe-toed lizard, a survey for this species according to the approved USFWS and CDFG Coachella Valley fringe-toed lizard survey protocol shall be conducted to determine presence or absence of Coachella Valley fringe-toed lizards, within 48 hours of erecting an Environmental Sensitive Area (ESA) exclusion fence.

- ESA exclusion fences shall enclose all construction areas in fringe-toed lizard habitat. The location of these fences shall be based on existing conditions and the results of protocol-level surveys for this species, and a map indicating the proposed location of these fences shall be submitted to the USFWS for approval, prior to erecting them. At a minimum, ESA fences shall be erected along the proposed Farrell-Garnet alignment, on both sides of the Gene Autry Trail south of the UPRR. Fences shall be erected after one pre-construction survey (described in the previous bullet) is conducted, and shall be maintained to keep the Coachella Valley fringe-toed lizards from entering active work areas. Silt fencing shall be buried to a depth of eight to 12 inches. A second pre-construction survey within the ESA shall be conducted to remove any remaining fringe-toed lizards from the construction footprint. Generally, ESA fencing is anticipated to be erected along the Farrell-Garnet alignment.
- SCE and/or its construction contractors shall retain and have available, the services of a CPUC authorized biologist who shall perform the duties of the biological monitor. The biological monitor shall be required to conduct a pre-construction survey of the project site and any associated staging areas; provide employee WEAP training (see APM BIO-6 [Worker Environmental Awareness Program], above); monitor the temporary ESA fence installation; and perform construction monitoring. The construction monitor shall ensure that the contractor maintains the integrity of the biological fencing during the entire construction duration. The authorized biologist shall have previous experience handling fringe-toed lizards. The authorized biologist shall submit a protocol for capture and release of Coachella Valley fringe-toed lizards prior to initiating survey methods. Capture of Coachella Valley fringe-toed lizards and flat-tailed horned lizards shall be allowed by net, noose, or by hand. A new pair of latex or synthetic gloves shall be used for each lizard handled.
- If any Coachella Valley fringe-toed lizards or flat-tailed horned lizards are captured, they shall be released immediately in a mapped area approved by the USFWS prior to the pre-construction survey. The release area shall be searched for snakes, and if found, a different location shall be found. Lizards shall be released in the shade of a shrub. No lizards shall be in captivity or in transport for longer than 10 minutes after their initial capture within an enclosed construction area. Lizards shall be transported in clean, white, plastic five-gallon buckets.
- All movement of construction vehicles outside of the ROW shall be restricted to pre-designated access or public roads. Access sites along Gene Autry Trail and in the Coachella Valley fringe-toed lizard critical habitat shall be designated on the ESA fencing map and approved by the USFWS, prior to construction.
- If road stabilization is required for the temporary access roads, the materials used for stabilization shall consist of temporary, easily removable material (e.g. mats laid down on sand, rather than gravel). No gravel shall be dumped on the ROW in fringe-toed lizard habitat.
- The real limits of construction within the ROW shall be predetermined, with activity restricted to and confined within those limits and placed on a map, submitted to the USFWS for their approval prior to construction. No paint or permanent discoloring agents shall be applied to rocks or vegetation to indicate survey or construction activity limits.

- Construction and maintenance vehicles shall not exceed a speed of 10 miles per hour in Coachella Valley fringe-toed lizard habitat (on the access roads and road shoulders along the Gene Autry Trail roadway, and in designated Coachella Valley fringe-toed lizard critical habitat).
- Construction operations within occupied Coachella Valley fringe-toed lizard habitat shall occur when this species is typically active, which is when the air temperatures one inch above the ground in the shade are between 96 degrees and 112 degrees Fahrenheit, preferably between April 1 and October 30, contingent upon activity being observed at a nearby reference population. Work may occur during the evening hours and outside the active season (when the temperatures are cooler and the electrical demand is lower), if the necessary clearance surveys are conducted during the appropriate temperatures, the silt fencing is maintained, and no Coachella Valley fringe-toed lizards have entered the project area.
- Spoils shall be stockpiled in previously disturbed areas that have been examined for the presence of Coachella Valley fringe-toed lizards and flat-tailed horned lizards by the authorized biologist. Stockpile placement sites shall be mapped on the ESA fencing map and submitted to the USFWS for approval prior to beginning construction.
- Existing sand-retaining lattice fences in the ROW shall be repaired or replaced.
- At least one month prior to construction, a vegetation restoration plan shall be submitted to the USFWS for approval in the areas of occupied Coachella Valley fringe-toed lizard habitat (generally, on the east and west side of the Gene Autry roadway). Each plant that is destroyed due to construction in the ROW along the east and west side of Gene Autry Trail roadway shall be replaced and monitored for at least ten years, or other period of time approved by the USFWS, to ensure at least 60 percent replacement of the impacted Coachella Valley fringe-toed lizard habitat.
- Clearance surveys shall be repeated if more than 72 hours elapse between work sessions, if any portion of a fence is removed or blown down, or if measurable rainfall occurs.
- Temporary and permanent impacts to CV fringe-toed lizard habitat shall be mitigated through conservation of suitable habitat for this species. The calculated replacement for habitat loss for this species shall be based on a ratio of 3:1 (compensation to impact) per acre for temporary impacts and 9:1 for permanent impacts, for an estimated total of 6 acres. Ratios reflect the limited habitat and low populations of this species across its range, and include both the loss of habitat use by the species, and the adverse effect of raptor predation caused by the new raptor perch availability at the new poles. The replacement habitat shall be within the Whitewater Floodplain Conservation Area of the CVMSHCP. Total compensation funds shall include the costs of acquisition and long-term management, and shall be paid prior to the start of Proposed Project operations. This replacement habitat shall mitigate for both direct and indirect impacts of construction and operations/management on this species, as well as the Palm Springs pocket mouse, Palm Springs round-tailed ground squirrel, CV giant sand-treader cricket, Le Conte's thrasher, flat-tailed horned lizard, and CV milkvetch (habitat conserved through this measure may be the same as that conserved through Mitigation Measure 4.4-1 for the CV milkvetch).

Significance after Mitigation: Less than Significant.

Impact 4.4-3: Construction activities could result in adverse impacts to Palm Springs round-tailed ground squirrel and Palm Springs pocket mouse. *Less than significant with mitigation (Class II)*

As discussed in the setting above, there is potential for the Palm Springs round-tailed ground squirrel and the Palm Springs pocket mouse to be present in the project area. If present, these species could be directly impacted if they are crushed by construction equipment or if their burrow is collapsed while they are inside. Furthermore, impacts may occur if there is a loss of habitat due to clearing and grading activities for access roads, ROW, pole and tower pads, and staging areas. Implementation of APM BIO-1 (Pre-Construction Surveys), APM BIO-2 (Minimize Vegetation Impacts), APM BIO-4 (BMPs), APM BIO-5 (Biological Monitors), APM BIO-6 (Worker Environmental Awareness Program), and Mitigation Measure 4.4-1, which calls for the replacement habitat for impacts to CV milkvetch habitat, would reduce potential impacts on this species. These measures, in addition to Mitigation Measure 4.4-3 for the Palm Springs round-tailed ground squirrel, would reduce impacts on these two species to a less-than-significant level.

Mitigation Measure 4.4-3: Palm Springs round-tailed ground squirrel colonies. SCE and/or its contractors shall flag and avoid all known Palm Springs round-tailed ground squirrel burrow colonies within the area of impact. To the extent feasible, ground squirrel colonies of unknown species within the project alignment shall also be avoided.

Significance after Mitigation: Less than Significant.

Impact 4.4-4: Construction activities could result in adverse impacts to Coachella Valley giant sand-treader cricket. *Less than significant with mitigation (Class II)*

The Coachella Valley giant sand-treader cricket could be present in the project area. If present, this species could be directly impacted if it is crushed by construction equipment, or if there is a loss of habitat due to clearing and grading activities for access roads, ROW, tower pads, and staging areas. Surveys and avoidance for this species would be difficult. Implementation of APM BIO-1 (Pre-Construction Surveys), APM BIO-2 (Minimize Vegetation Impacts), APM BIO-4 (BMPs), APM BIO-5 (Biological Monitors), APM BIO-6 (Worker Environmental Awareness Program), and the replacement habitat for impacts to CV milkvetch and CV fringe-toed lizard habitat described above in Mitigation Measures 4.4-1 and 4.4-2 would reduce potential impacts on this species to a less-than-significant level.

Mitigation Measure: Implement Mitigation Measures 4.4-1 and 4.4-2.

Significance after Mitigation: Less than Significant.

Impact 4.4-5: Construction activities may impact protected native, nesting birds. *Less than significant with mitigation* (Class II)

Several native bird species are known to occur in the project areas; including special-status species such as ferruginous hawk, loggerhead shrike, and burrowing owl (impacts specifically for the burrowing owl are discussed under Impact 4.4-6). Construction activities associated with the Proposed Project, including installation and removal of poles/towers, grading, preparation of temporary work areas, and operation of heavy equipment could disturb wintering birds and nesting birds, and cause nest site abandonment and/or reproductive failure through an increase in noise, human presence, and/or removal of habitat. Implementation of APM BIO-1 (Pre-Construction Surveys), APM BIO-7 (Avoid Impacts to Active Nests), and Mitigation Measure 4.4-5, below, are consistent with the CVMSHCP's *Required Avoidance, Minimization, and Mitigation Measures*, and would reduce potential impacts to nesting birds to a less-than-significant level.

Mitigation Measure 4.4-5: Nesting native birds. SCE and/or its contractors shall implement the following measures to avoid impacts on nesting raptors and other protected birds for activities that are scheduled during the breeding season (February 1 through August 31):

- No more than two weeks before construction within each new construction area, a qualified wildlife biologist shall conduct preconstruction surveys of all potential nesting habitat within 500 feet of construction sites where access is available.
- If active nests are not identified, no further action is necessary. If active nests are identified during preconstruction surveys, a no-disturbance buffer shall be created around active raptor nests and nests of other special-status birds during the breeding season, or until it is determined that all young have fledged. Typical buffers are 500 feet for raptors and Le Conte's thrasher, and 250 feet for other nesting birds (e.g., waterfowl, and passerine birds). The size of these buffer zones and types of construction activities that are allowed in these areas could be further modified during construction in coordination with CDFG, and shall be based on existing noise and disturbance levels in the project area.

Significance after Mitigation: Less than Significant.

Impact 4.4-6: Construction activities could result in direct and indirect impacts on burrowing owl. *Less than significant with mitigation* (Class II)

Burrowing owls are present within the Farrell-Garnet study area, and could occur in the Mirage-Santa Rosa study area. If present, the burrowing owl could be directly impacted if they are injured or killed from construction equipment, or if there is a loss of habitat due to clearing and grading

activities for access roads, ROW, tower pads, and staging areas. This species could be indirectly impacted if construction-related noise and activity, such as installation and removal of poles/towers, grading, preparation of temporary work areas, and operation of heavy equipment, disturbs nesting owls and causes nest failure. In addition, this species could be indirectly impacted if the proposed poles/towers and conductor lines result in increased raptor perches, and the raptors then predate on the burrowing owls.

Implementation of APM BIO-1 (Preconstruction Surveys), APM BIO-2 (Minimize Vegetation Impacts), APM BIO-5 (Biological Monitors), and APM BIO-6 (Worker Environmental Awareness Program) would help reduce adverse impacts to this species. These measures and Mitigation Measure 4.4-6, which supersedes APM BIO-11 (Burrowing Owl), and which is consistent with the CVMSHCP's *Required Avoidance, Minimization, and Mitigation Measures* for burrowing owls, would reduce potential impacts on burrowing owls to a less-than-significant level.

Mitigation Measure 4.4-6: Burrowing owl. No more than two weeks before beginning construction, a survey for burrows and burrowing owls shall be conducted by a qualified biologist within 500 feet of the project (access permitting), where suitable habitat is present. The survey shall conform to the protocol described by the California Burrowing Owl Consortium (1995), which includes up to four surveys on different dates if there are suitable burrows present. If unoccupied burrows are found within the survey area, they shall be collapsed outside of nesting season.

If occupied owl burrows are found within the survey area, a determination shall be made by a qualified biologist, in consultation with the CDFG, as to whether or not work will affect the occupied burrows or disrupt reproductive behavior.

- If it is determined that construction will not affect occupied burrows or disrupt breeding behavior, construction shall proceed without any restriction or mitigation measures.
- If it is determined that construction will affect occupied burrows during the non-breeding season (August through February), the subject owls shall be passively relocated from the occupied burrow(s) according to a plan approved by the CDFG. The plan shall include installation of one-way doors in occupied burrows at least 48 hours before the burrows are excavated, and shall provide for the owl's relocation to nearby lands that possess available nesting habitat.
- If it is determined that construction will physically affect occupied burrows or disrupt reproductive behavior during the nesting season (March through July), then avoidance is the only mitigation available. Construction shall be delayed within 250 feet of occupied burrows until it is determined that the subject owls are not nesting or until a qualified biologist determines that juvenile owls are self-sufficient or are no longer using the natal burrow as their primary source of shelter.

Significance after Mitigation: Less than Significant.

Operations

Impact 4.4-7: Operation of new subtransmission and transmission lines could impact raptors as a result of electrocution or collision. *Less than significant* (Class III)

Poles, towers, and power lines pose a danger to raptors as a result of electrocution and collision hazards, and are a recognized source of raptor mortality. Power line electrocution is the result of two interacting factors: raptor behavior and pole design. Raptors are opportunistically attracted to power lines because they provide perch sites for hunting, resting, feeding, for territorial defense, or as nesting structures. Many standard designs of electrical industry hardware place conductors and groundwires close enough together that raptors can touch them simultaneously with their wings or other body parts, causing electrocution. Raptors and other birds may also collide with power lines, which can be difficult for birds to detect for various reasons such as during night flight or during inclement weather conditions.

The type and magnitude of such impacts, and strategies to avoid conflicts between birds and new transmission lines have been well described by the Edison Electric Institute's Avian Power Line Interaction Committee (APLIC). The APLIC (2006) characterizes potential impacts as follows:

“Birds are generally electrocuted by transmission lines due to environmental factors such as topography, vegetation, available prey and other, behavioral or biological factors influence avian use of power poles and inadequate separation between energized conductors or energized conductors and grounded hardware can provide two points of contact.

Raptors and other large birds are opportunistic and may use power poles for a number of purposes, such as nest sites, high points from which to defend territories, and perches from which to hunt. Some structures are preferred by birds because they provide considerable elevation above the surrounding terrain, thereby offering a wide field of view. Electrocution can occur when a bird completes an electric circuit by simultaneously touching two energized parts or an energized part and a grounded part of electrical equipment. Most electrocutions occur on medium-voltage distribution lines (4-34.5 kV), in which the spacing between conductors may be small enough to be bridged by birds. Poles with energized hardware, such as transformers, can be especially hazardous, even to small birds, as they contain numerous, closely-spaced energized parts.

“Avian-safe” structures are those that provide adequate clearances to accommodate a large bird between energized and/or grounded parts. Consequently, 60 inches of horizontal separation, which can accommodate the wrist-to-wrist distance of an eagle (which is approximately 54 inches), is used as the standard for raptor protection. Likewise, vertical separation of at least 48 inches can accommodate the height of an eagle from its feet to the top of its head (which is approximately 31 inches). Because dry feathers act as insulation, contact must be made between fleshy parts, such as the wrists, feet, or other skin, for electrocution to occur. In spite of the best efforts to minimize avian electrocutions, some degree of mortality may always occur due to influences that cannot be controlled, e.g. weather.”

Implementation of APM BIO-8 (Avian Protection), above, would reduce impacts on raptors as a result of electrocution or collision to a less-than-significant level.

Mitigation: None required.

Impact 4.4-8: New subtransmission and transmission line poles/towers could be used as perches by predatory birds, which could result in increased predation on special-status species in the project area. *Less than significant with mitigation* (Class II)

Avian predators, particularly raptors, are attracted to utility lines poles and towers, because they provide perches with increased visibility of the surrounding area. Adding perches to the project areas could increase the ability of avian predators to exploit the habitat, generating negative effects on prey populations (Hawlena and Bouskila, 2006) such as CV fringe-toed lizard, flat-tailed horned lizard, and Palm Springs pocket mouse. This effect would be particularly significant where new towers and transmission line conductors are introduced or increased in special-status species habitat (e.g., the proposed Farrell-Garnet subtransmission line along the Gene Autry Trail).

There are currently wood poles along most of the Proposed Project subtransmission line alignments, but the Proposed Project would replace several wood poles with larger tubular steel poles (TSPs) and light-weight steel poles (LWS), and also increase the number of subtransmission line poles and transmission line towers/poles in the project area (a net increase of four towers and one TSP would result along the Devers-Coachella Valley 220 kV Loop-In alignment, 21 new poles along the proposed Farrell-Garnet 115 kV subtransmission line alignment (including two new poles at Eisenhower Substation), and 26 new poles along the proposed Mirage-Santa Rosa 115 kV subtransmission line alignment (including new poles at the reconfiguration locations). Subtransmission lines would also be introduced where they don't currently occur, in a 0.8-mile stretch of the proposed Farrell-Garnet alignment line north of the UPRR. This increase in poles, and the replacement of existing poles with larger poles, could result in an increase in predation on special-status species, which would be a significant impact. Implementation of Mitigation Measures 4.4-1 above and 4.4-8, below, would reduce the impacts from potential increases in predation on special-status species that could occur as a result of increased predatory birds in the project area, to a less-than-significant level.

Mitigation Measure 4.4-8: Anti-perching device. Anti-perching devices shall be placed on the new subtransmission line poles and new transmission line towers and poles.

Significance after Mitigation: Less than Significant.

b) Have a substantial adverse impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the CDFG or USFWS.

Impact 4.4-9: Construction and operation activities could impact active sand fields along the Farrell-Garnet 115 kV subtransmission line alignment. *Less than significant with mitigation (Class II)*

“Active sand fields” are a sensitive natural community that are present along portions of the proposed Farrell-Garnet subtransmission line alignment, south of the UPRR and east of Gene Autry Trail. Each new tower installed in the active sand fields would permanently impact approximately 0.06 acre of habitat, and this community would be temporarily impacted as a result of access to the ROW, removal of existing wood poles, and installation of new poles. Impacts would be reduced to less than significant through implementation of APM BIO-2 (Minimize Vegetation Impacts), Mitigation Measure 4.4-1, which requires replacement of impacted habitat along this portion of the Farrell-Garnet alignment, and Mitigation Measure 4.4-2, which requires a vegetation restoration plan for disturbed vegetation along the Gene Autry Trail (although active sand fields are sparsely vegetated). These measures would reduce construction impacts to active sand fields to a less-than-significant level.

The proposed Farrell-Garnet alignment follows existing SCE infrastructure where active sand fields are present, so no new subtransmission line ROW would be introduced into this habitat. The new TSP and LWS power poles would be slightly larger than the existing wood poles along this alignment, but would not significantly alter the movement of wind-blown sand that occurs in its natural state. Therefore, operational impacts would be less than significant.

Mitigation Measure: Implement Mitigation Measures 4.4-1 and 4.4-2.

Significance after Mitigation: Less than Significant.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

Construction

Impact 4.4-10: Construction activities could impact jurisdictional waters of the United States and waters of the State, including drainages and seasonal wetlands. *Less than significant with mitigation (Class II)*

The proposed Farrell-Garnet alignment would cross through Whitewater Wash (also called Whitewater River), which is a wetland as defined by Section 404 of the Clean Water Act. A wetland delineation would be required to verify the extent of USACE jurisdiction, and whether or not Whitewater Wash would be impacted by the Proposed Project. Any direct or indirect impacts

to this feature would require permits from the USACE, RWQCB, and CDFG. These permits are likely to include provisions for avoiding sensitive resources, seasonal restrictions, and restoration of disturbed habitat. Implementation of APM BIO-3 (Avoid Impacts to State and Federal Jurisdiction Wetlands) and Mitigation Measures 4.4-10, below, would reduce impacts to jurisdictional wetlands to a less-than-significant level.

Mitigation Measure 4.4-10: Wetlands. SCE and/or its construction contractors shall perform a wetland delineation and incorporate the results into the final design of subtransmission lines and access roads. The project shall be modified to minimize disturbance of Whitewater Wash, whenever feasible. In the event of any project changes that involve ground disturbance outside of the boundary of the existing wetland delineation, a new wetland delineation shall be performed.

Where jurisdictional wetlands and other waters cannot be avoided, to offset temporary and permanent impacts that occur as a result of the project, mitigation shall be provided through the following mechanisms:

- Purchase or dedication of land to provide wetland preservation, restoration, or creation. If restoration is available and feasible, then a mitigation replacement ratio of at least 2:1 shall be used. If a wetland needs to be created, at least a 3:1 ratio shall be implemented to offset losses. Where practical and feasible, onsite mitigation shall be implemented.
- A wetland mitigation and monitoring plan shall be developed by a qualified biologist or wetland scientist in coordination with CDFG, USFWS, USACE, and/or RWQCB that details mitigation and monitoring obligations for temporary and permanent impacts to wetlands and other waters as a result of construction activities. The plan shall quantify the total acreage lost, describe mitigation ratios for lost habitat, annual success criteria, mitigation sites, monitoring and reporting requirements, and site specific plans to compensate for wetland losses resulting from the project. The mitigation and monitoring plan shall be submitted to the appropriate regulatory agencies for approval. The plan and documentation of such agency approval shall be submitted to the CPUC prior to construction.

Significance after Mitigation: Less than Significant.

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

Construction

There are no major wildlife movement corridors through the study areas, although Whitewater Wash is occasionally used by wildlife for travel. The project's construction phases would not significantly interfere with the movement of any migratory fish or wildlife species, obstruct established wildlife movement corridors, or impede the use of native wildlife nursery sites (No Impact).

Operations

Impact 4.4-11: Operation of new subtransmission and transmission lines could interfere with movement of migratory birds or wildlife. *Less than significant (Class III)*

During the operational phase, ground facilities, including power poles/towers, access roads, and substation upgrades would not create a barrier to wildlife movement or interfere with established wildlife corridors or nursery sites. However, the presence of new subtransmission and transmission lines bring the potential to increase electrocution and collision hazards to resident and migratory birds. While there are currently subtransmission and transmission lines in the project area, the Proposed Project would introduce new lines along a 0.8-mile section of the proposed Farrell-Garnet alignment, between the I-10 freeway and the UPRR. Impacts to resident and migratory birds from interactions with power lines, principally by electrocution, are discussed under Impact 4.4-7 above, and would be less than significant with APM BIO-8 (Avian Protection). Therefore, Proposed Project impacts to wildlife movement or on wildlife nursery sites would be minimal and are considered to be less than significant.

Mitigation: None required.

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

Several city and Riverside County general plans, and BLM's California Desert Conservation Area Plan (including the Amendment for the Coachella Valley) cover portions of the Proposed Project alignments and sites. The CPUC has preemptive jurisdiction over the construction, maintenance, and operation of public utilities in the State of California, and this project is not required to comply with these local policies and ordinances. Nevertheless, the project would not conflict with the policies and objectives that are directed towards minimizing/avoiding impacts to biological resources; therefore, no impact would occur (No Impact).

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

Impact 4.4-12: The Proposed Project could conflict with provisions set forth in the Coachella Valley Multi-Species Conservation Plan. *Less than significant with mitigation (Class II)*

The proposed Farrell-Garnet alignment overlaps with the Whitewater Floodplain Conservation Area, the proposed loop-in alignment falls within the Thousand Palms Conservation Area, and the proposed subtransmission line reconfiguration site at Date Palm Drive and Varner Road is at the southern boundary of the Willow Hole Conservation Area; all of these conservation areas are

part of the CVMSHCP. The Proposed Project would not introduce any subtransmission or transmission lines or substations where they do not already occur, except for the approximately 0.8-mile section of the proposed Farrell-Garnet alignment immediately north of the UPRR, which would be outside of the Whitewater Floodplain Conservation Area.

While this project is not part of the CVMSHCP, the applicable APMs and mitigation measures described in this EIR section (i.e., APM BIO-1 through BIO-8, and Mitigation Measures 4.4-1 through 4.4-10) are at least as strict as the Avoidance, Minimization, and Mitigation Measures described in Section 4.4 of the HCP. Furthermore, these measures would not conflict with the Conservation Objectives for the Whitewater Floodplain Conservation Area and would cover the same special-status species that are covered in the HCP. Impacts would therefore be less than significant with mitigation incorporated.

Mitigation Measures: Implement Mitigation Measures 4.4-1, 4.4-2, 4.4-3, 4.4-5, 4.4-6, 4.4-8, and 4.4-10.

Significance after Mitigation: Less than Significant.

4.4.5 Cumulative Impacts

The geographical context includes urban and open space land uses in the Coachella Valley that support common and sensitive biological resources.

Construction of the Proposed Project could result in both temporary and permanent impacts on special-status species (i.e., CV fringe-toed lizard, burrowing owl, Le Conte's thrasher, ferruginous hawk, loggerhead shrike, Palm Springs pocket mouse, and Palm Springs round-tailed ground squirrel), and their habitats. It is anticipated that ongoing and future development projects as described in Section 3.6, *Cumulative Projects*, would contribute to the incremental loss of undeveloped natural lands that provide habitat for these special-status species. Many development activities in the Coachella Valley would be guided by the recently adopted CVMSHCP. The CVMSHCP aims to guide growth in a way that would not result in cumulatively significant impacts on special-status species, through special-status species minimization measures, conservation planning, and establishing preserves in biologically rich areas. Past, present, and reasonably foreseeable projects, whether they are part of the CVMSHCP or not, are required to comply with federal and State regulations protecting special-status species through implementation of mitigation measures during construction. Activities associated with the construction of the Proposed Project would cause relatively minor loss of undeveloped Sonoran creosote bush scrub, stabilized and partially stabilized desert dunes, and active sand fields in the area; most of these losses would be associated with the footprint of individual transmission towers/poles and access roads that would traverse native habitat. Therefore, implementation of APM BIO-1 through APM BIO-11 and Mitigation Measures 4.4-1 through 4.4-10, which require SCE to conduct surveys and to avoid, minimize, and mitigate for potential impacts to special-

status species and their habitat, would reduce the cumulative contribution of the Proposed Project to less than significant (Class II).

Construction of the Proposed Project could impact active sand fields, a sensitive natural community, and Whitewater Wash, which is a jurisdictional water of the United States. It is anticipated that ongoing and future development projects as described in Section 3.6, *Cumulative Projects*, would contribute to impacts to such features. As with special-status species, past, present and reasonably foreseeable projects are required to comply with federal and State regulations protecting sensitive natural communities and jurisdictional waters.

The proposed Farrell-Garnet subtransmission line would cross through active sand fields and Whitewater Wash; therefore, it is expected that there would be temporary and/or permanent impacts to both of these features. The Proposed Project's impact in combination with other projects could contribute to a cumulatively significant impact on sensitive natural communities and jurisdictional waters of the United States. Implementation of APM BIO-2 (Minimize Vegetation Impacts), and Mitigation Measures 4.4.1 and 4.4.2 would require SCE to minimize impacts to existing vegetation (although Active Sand Fields contain little vegetation cover) and replace lost habitat. Implementation of APM BIO-3 (Avoid Impacts to State and Federal Jurisdiction Wetlands), and Mitigation Measures 4.4-10 would require SCE to avoid jurisdictional waters to the extent possible, to perform a wetland delineation and have it verified by the USACE. Additionally, SCE would be required to avoid, minimize or mitigate potential impacts. As noted above, it is anticipated that impacts from construction of the Proposed Project to sensitive natural communities and jurisdictional waters would be avoided or minimal; therefore, in combination with other projects as described in Section 3.6, *Cumulative Projects*, the Proposed Project would not contribute to a cumulatively significant impact on sensitive natural communities or jurisdictional waters of the United States or waters of the State (Class II).

4.4.6 Alternatives

No Project Alternative

For the purposes of this analysis, the No Project Alternative includes the following two assumptions: 1) the project would not be implemented and the existing conditions in the study area would not be changed; and 2) a new transmission line and/or additional power generation would be constructed in or near the study area to supply power to the Electrical Needs Area. Given the highly speculative nature of the No Project Alternative assumptions, this analysis is qualitative.

Construction of new infrastructure under the No Project Alternative would likely result in similar impacts to those which would occur from construction of the Proposed Project. Depending on the location of new facilities, construction activities would have the potential to impact special status species that may occur in the study area. Such species include CV milkvetch, the CV fringe-toed lizard, the flat-tailed horned lizard, the Palm Springs round-tailed ground squirrel, burrowing

owls, ferruginous hawk, Le Conte's thrasher, loggerhead shrike, the palm springs pocket mouse, and the Coachella Valley sand-treader cricket. Implementation of applicable APMs and Mitigation Measures identified for the Proposed Project would help reduce potential impacts to special status species; however, depending on the location of facilities impacts would potentially be significant.

If the No Project Alternative would include construction of transmission facilities within active desert dunes and sand fields, impacts may occur. However, it is likely that, as with the Proposed Project, impacts from the No Project Alternative would be mitigable through implementation of APM BIO-2 and Mitigation Measures 4.4-1 and 4.4-2.

If the No Project Alternative would include construction of transmission facilities through Whitewater Wash, it would have the potential to impact jurisdictional waters of the United States. Whitewater Wash is under the jurisdiction of the USACE, RWQCB, and CDFG. However, depending upon the extent of the impact, it is likely that impacts to Whitewater Wash would be reduced to less than significant through implementation of APM BIO-3 (Avoid Impacts to State and Federal Jurisdiction Wetlands), and Mitigation Measures 4.4-10.

Alternative 2

Compared to the Proposed Project, Alternative 2 would have fewer impacts on biological resources both directly and indirectly. Alternative 2 would be placed underground for approximately three miles, which would result in more construction-related ground disturbance through the developed portion of this alignment, but less operational impacts on special-status species compared to the proposed Farrell-Garnet subtransmission line (i.e., less potential for collision or electrocution of raptors, and less potential perching sites for predatory birds that could prey on special-status species). The Alternative 2 and proposed Farrell-Garnet alignments would traverse through potential habitat for the same special-status species, although Alternative 2 would have lower quality habitat for most of these species than the proposed Farrell-Garnet alignment. Specifically, TRC observed both the CV milkvetch and the CV fringe-toed lizard along this alignment in 2009, although in lower densities than along the proposed Farrell-Garnet alignment (SCE and TRC, 2009a, 2009b, and 2009c). Similar to the proposed Farrell-Garnet alignment, the Alternative 2 alignment would also cross through Whitewater Wash, which is a jurisdictional wetland, and would traverse through the Whitewater Floodplain Conservation Area, which is part of the CVMSHCP.

Special-Status Plants and Wildlife

The Alternative 2 alignment has known and potential occurrences for the same special-status species as the proposed Farrell-Garnet alignment. Specifically, there are known occurrences of CV milkvetch and CV fringe-toed lizard, and potential habitat for burrowing owls, Palm Springs pocket mouse, flat-tailed horned lizard, Palm Springs round-tailed ground squirrel, CV giant sand-treader cricket, and Le Conte's thrasher. In addition, loggerhead shrikes were observed

along this alignment, and could nest within or near the Alternative 2 alignment. Construction-related impacts to these species would be considered significant prior to mitigation.

Implementation of APM BIO-1 (Preconstruction Surveys), APM BIO-2 (Minimize Vegetation Impacts), APM BIO-5 (Biological Monitors), and APM BIO-6 (Worker Environmental Awareness Program) would generally reduce impacts to special-status species along the Alternative 2 alignment.

TRC conducted botanical surveys in 2009, and observed six CV milkvetch individuals along the Alternative 2 alignment. This is significantly less than the 267 individuals observed along the proposed Farrell-Garnet subtransmission line alignment; nevertheless impacts to these individuals would still be significant prior to mitigation. If present, this species could be directly or indirectly affected by the construction associated with Alternative 2. Implementation of APM BIO-9 (Coachella Valley Milkvetch) and Mitigation Measure 4.4-1, as well as the general special-status species mitigation measures listed above, would reduce impacts to this species to a less-than-significant level (Class II).

TRC conducted focused surveys for CV fringe-toed lizard along the Alternative 2 alignment in 2009, and found one individual (SCE and TRC, 2009c). In addition, the Alternative 2 alignment crosses through the Whitewater Floodplain Preserve, where flat-tailed horned lizards were observed (CVAG, 2007). Impacts to these species during the construction activities associated with Alternative 2, such as injury or mortality, would be significant. The implementation of Mitigation Measure 4.4-2, as well as the general special-status species mitigation measures listed above, would reduce impacts to the CV fringe-toed lizard as well as the flat-tailed horned lizard, to a less-than-significant level (Class II).

There is a 2007 CNDDDB record for a burrowing owl burrow approximately 0.3 mile east of the Alternative 2 alignment (CDFG, 2009), and others could occur in the area. Construction associated with Alternative 2 could result in direct mortality of this species, temporary habitat loss, or stress from construction noise or activity that leads to nest failure. The implementation of Mitigation Measure 4.4-6, in addition to the general special-status species mitigation measures listed above, would reduce impacts on burrowing owls to less than significant (Class II).

Several special-status birds have been observed near the Alternative 2 alignment, including ferruginous hawk, prairie falcon, and loggerhead shrike. These or other native bird species that are protected under the federal Migratory Bird Treaty Act and/or California Fish and Game Code Section 3503 and 3503.5, could be directly or indirectly impacted through activities such as grading and preparation of work areas, operation of heavy equipment, installation and removal of poles, and conductor installation. These impacts would be reduced to less than significant through implementation of APM BIO-7 (Avoid Impacts to Active Nests), as well as Mitigation Measure 4.4-5 (Class II).

Similar to the Proposed Project, operation of the new subtransmission lines that would be associated with Alternative 2 could potentially result in raptor electrocution or collision. The implementation

of APM BIO-8, (Avian Protection), which requires compliance with avian protection standards on powerlines, would ensure that impacts would be less than significant (Class III).

Similar to the Proposed Project, subtransmission line poles along Alternative 2 could result in an increase in perching structures for predatory birds, which could consequently result in increased predation on special-status species in the area, particularly where poles are placed in undeveloped areas. However, approximately three miles of the line would be placed underground for Alternative 2, so there would be less overall perching structures for predatory birds in the area. With less perching structures, there would be less potential for adverse affects on special-status wildlife (such as the CV fringe-toed lizard) during the operational phase of the alternative compared to the Proposed Project. Nevertheless, any increased predation on special-status species as a result of the alternative would be significant. Implementation of Mitigation Measure 4.4-8, (Anti-perching device) would reduce this potential impact on special-status species to a less-than-significant level (Class II).

Sensitive Natural Communities

Alternative 2 would not be expected to impact any sensitive natural communities, unlike the proposed Farrell-Garnet line, which would impact active desert dunes and sand fields habitat. Therefore this alternative would result in no impact (No Impact).

Wetlands

The Alternative 2 alignment would cross through Whitewater Wash, similar to the Proposed Project, although Alternative 2 would cross through a greater extent of Whitewater Wash than the proposed Farrell-Garnet alignment. Whitewater Wash is under the jurisdiction of the USACE, RWQCB, and CDFG. Impacts to Whitewater Wash would be reduced to less than significant through implementation of APM BIO-3 (Avoid Impacts to State and Federal Jurisdiction Wetlands), and Mitigation Measures 4.4-10 (Class II).

Wildlife Corridor and Nursery Sites

Construction activities under Alternative 2 would not adversely affect wildlife corridors or nursery sites. During the operational phase, ground facilities, including power poles and access roads, would not create a barrier to wildlife movement or interfere with established wildlife corridors or nursery sites. The presence of new transmission lines brings the potential to increase electrocution and collision hazards to resident and migratory birds, but these impacts would be less than significant with implementation of APM BIO-8 (Avian Protection). Therefore, impacts to wildlife movement or wildlife nursery sites would be expected to be less than significant under Alternative 2 (Class III).

Local Policies and Ordinances

Alternative 2, like the Proposed Project, would not conflict with any local policies and ordinances (No Impact).

HCPs

The Alternative 2 alignment, like the proposed Farrell-Garnet alignment, would traverse through a portion of the CVMSHCP's Whitewater Floodplain Conservation Area. The CVMSHCP considers the area that the Alternative 2 alignment traverses to be Core Habitat for the CV fringe-toed lizard, Palm Springs pocket mouse, Palm Springs round-tailed ground squirrel, CV milkvetch, CV giant sand-treader cricket, and Le Conte's thrasher. The APMs and mitigation measures described in this EIR section (i.e., APM BIO-1 through BIO-11, and Mitigation Measures 4.4-1 through 4.4-10) are at least as strict as the Avoidance, Minimization, and Mitigation Measures described in Section 4.4 of the HCP, do not conflict with the Conservation Objectives for the Whitewater Floodplain Conservation Area, and cover the same special-status species that are covered in the HCP. Thus, conflicts would be less than significant with mitigation (Class II).

Alternative 3

Alternative 3 would have less overall impacts on biological resources than the proposed Farrell-Garnet subtransmission line. Alternative 3 would be longer in length than the proposed Farrell-Garnet subtransmission line and would include an underground component; therefore, this alternative would result in greater ground disturbance. However, much of the alignment goes through an urban area that lacks suitable habitat for most special-status species, and the undeveloped portion of the alignment crosses through lower quality habitat for most special-status species; therefore, this alternative would result in fewer potential impacts on special-status plants and wildlife. Like the proposed Farrell-Garnet alignment, Alternative 3 would also impact Whitewater Wash, which is a jurisdictional feature, and this alternative is within the CVMSHCP's Whitewater Floodplain Conservation Area. These potentially significant biological impacts are discussed below.

Special-Status Plants and Wildlife

The first portion of the Alternative 3 alignment would be placed underground through an urban area, which is generally unsuitable habitat for special-status species. Alternative 3 would then turn west on San Rafael Road, where it would transition to an above-ground line, and head north on Indian Canyon Drive to Garnet Substation. This section of the alignment would primarily traverse undeveloped and unpopulated desert land along an existing SCE ROW, which has potential for the same special-status species to occur as the proposed Farrell-Garnet alignment (i.e., CV fringe-toed lizard, Palm Springs pocket mouse, flat-tailed horned lizard, Palm Springs round-tailed ground squirrel, CV giant sand-treader cricket, burrowing owl, prairie falcon, loggerhead shrike, and Le Conte's thrasher). Construction-related impacts to these species would be considered significant prior to mitigation. Implementation of APM BIO-1 (Preconstruction Surveys), APM BIO-2 (Minimize Vegetation Impacts), APM BIO-5 (Biological Monitors), and APM BIO-6 (Worker Environmental Awareness Program) would generally reduce impacts to special-status species along Alternative 3.

TRC conducted focused rare plant surveys for CV milkvetch in 2009, but did not observe this species along the Alternative 3 alignment. However, there are several 2005 and 2006 CNDDDB records for this species along the Alternative 3 alignment (CDFG, 2009), and there is suitable habitat for this species in the undeveloped portions of this alignment. If present, this species could be directly or indirectly affected by the construction, operation, and maintenance associated with the alternative. Implementation of APM BIO-9 (Coachella Valley Milkvetch) and Mitigation Measure 4.4-1, as well as the general special-status species mitigation measures listed above, would reduce impacts to CV milkvetch to a less-than-significant level (Class II).

TRC conducted a habitat assessment for CV fringe-toed lizard along Alternative 3 in 2009, and did not observe this species. Nevertheless, there are 1975 CNDDDB records of this species along this alignment (CDFG, 2009), and recent records for this species along Alternative 2, one mile to the east (SCE and TRC, 2009c); suitable habitat is present for this species along Alternative 3. If present, CV fringe-toed lizard could be directly or indirectly affected by the construction, operation, and maintenance associated with the alternative. Implementation of Mitigation Measure 4.4-2, as well as the general special-status species mitigation measures listed above, would reduce impacts to this species as well as the flat-tailed horned lizard, to a less than significant level (Class II).

There is a 2007 CNDDDB record for a burrowing owl approximately 1.3 miles east of the Alternative 3 alignment (CDFG, 2009), and others could occur in the area. Construction associated with Alternative 3 could result in direct mortality of this species, temporary habitat loss, or stress from construction noise or activity that leads to nest failure. The implementation of Mitigation Measure 4.4-6, in addition to the general special-status species mitigation measures listed above would reduce impacts on burrowing owls to a less-than-significant level (Class II).

No nesting special-status birds were observed along the Alternative 3 alignment, but several special-status birds occur nearby, including ferruginous hawk, prairie falcon, and loggerhead shrike. These or other native bird species that are protected under the federal Migratory Bird Treaty Act and/or California Fish and Game Code Section 3503 and 3503.5, could be directly or indirectly impacted through construction activities associated with Alternative 3 such as grading and preparation of work areas, operation of heavy equipment, installation and removal of poles, and conductor installation. These impacts would be reduced to less than significant through implementation of APM BIO-7 (Avoid Impacts to Active Nests), as well as Mitigation Measure 4.4-5 (Class II).

Similar to the Proposed Project, the new transmission lines associated with Alternative 3 could potentially result in raptor electrocution or collision during operations. However, Alternative 3 would have less potential operational impacts on raptors, because only three miles of Alternative 3 would be above-ground, while 5.8 miles of the proposed Farrell-Garnet line would be above-ground. Implementation of APM BIO-8 (Avian Protection), which requires compliance with avian protection standards on powerlines, would reduce this potential impact to less than significant (Class II).

Similar to the Proposed Project, transmission line poles along the Alternative 3 alignment could result in an increase in perching structures for predatory birds, which could consequently result in increased predation on special-status species in the area, particularly where poles are placed in undeveloped areas (i.e., along Indian Canyon Drive). However, Alternative 3 would provide less potential perches than the proposed Farrell-Garnet line, because only three miles of Alternative 3 would be above-ground, while 5.8 miles of the proposed Farrell-Garnet line would be above-ground. With less perching structures, there would be less potential for adverse affects on special-status wildlife (such as the CV fringe-toed lizard) during the operation phase of the alternative, compared with the Proposed Project. Nevertheless, any increased predation on special-status species as a result of Alternative 3 would be significant. Implementation of Mitigation Measure 4.4-8 (Anti-perching device) would reduce this potential impact on special-status species to a less-than-significant level (Class II).

Sensitive Natural Communities

Alternative 3 is not expected to impact any sensitive natural communities, unlike the proposed Farrell-Garnet line, which would impact active desert dunes and sand field habitat. Therefore this alternative would result in no impact (No Impact).

Wetlands

Alternative 3 would cross through a greater extent of Whitewater Wash than the proposed Farrell-Garnet subtransmission line. The Whitewater Wash is under the jurisdiction of the USACE, RWQCB, and CDFG. Impacts to Whitewater Wash would be reduce to less than significant, through implementation of APM BIO-3 (Avoid Impacts to State and Federal Jurisdiction Wetlands), and Mitigation Measures 4.4-10 (Class II).

Wildlife Corridor and Nursery Sites

Construction activities for Alternative 3 would not adversely affect wildlife corridors or nursery sites. During the operational phase, ground facilities, including power poles and access roads, would not create a barrier to wildlife movement or interfere with established wildlife corridors or nursery sites. The presence of new subtransmission lines would bring the potential to increase electrocution and collision hazards to resident and migratory birds, but these impacts would be reduced through implementation of APM BIO-8 (Avian Protection). Therefore, no impacts to wildlife movement or wildlife nursery sites are expected as a result of Alternative 3 (No Impact).

Local Policies and Ordinances

Alternative 3, like the Proposed Project, would not conflict with any local policies and ordinances (No Impact).

HCPs

Alternative 3, like the proposed Farrell-Garnet alignment, would traverse through a portion of the CVMSHCP's Whitewater Floodplain Conservation Area. The CVMSHCP considers the area that the Alternative 3 alignment traverses to be Core Habitat for the CV fringe-toed lizard, Palm Springs

pocket mouse, Palm Springs round-tailed ground squirrel, CV milkvetch, CV sand-treader cricket, and Le Conte's thrasher. The mitigation measures described in this EIR section (i.e., APM BIO-1 through BIO-11, and Mitigation Measures 4.4-1 through 4.4-10) are at least as strict as the Avoidance, Minimization, and Mitigation Measures described in Section 4.4 of the HCP, do not conflict with the Conservation Objectives for the Whitewater Floodplain Conservation Area, and cover the same special-status species that are covered in the HCP. Thus, conflicts would be less than significant with mitigation (Class II).

Alternative 5

Compared to the proposed Mirage-Santa Rosa subtransmission line, construction and operations of Alternative 5 would have fewer impacts on biological resources both directly and indirectly through habitat modification. Alternative 5 would be approximately 3.1 miles long, which would be approximately twice the length of the proposed Mirage-Santa Rosa line; therefore, a greater area would be impacted by construction activities. Furthermore, Alternative 5 would be predominantly underground, and thus would result in greater ground disturbance compared to the proposed Mirage-Santa Rosa 115 kV subtransmission line during construction activities. However, with almost no overhead lines there would be fewer impacts on special-status species during the operational phase of the alternative, because there would be less potential for raptor collision or electrocution from overhead lines, and less potential perching sites for predatory birds that could prey on special-status species. Most of this alignment is through paved streets bordered by ornamental trees in an urban environment, which provides poor quality habitat for most special-status species. However, there is a 2005 CNDDDB record of CV milkvetch at the intersection of Monterey Avenue and Varner Road (CDFG, 2009).

Special-Status Plants and Wildlife

Compared with the proposed Mirage-Santa Rosa alignment, there would be fewer impacts on special-status species along the Alternative 5 alignment. Most of Alternative 5 would go through paved streets bordered by ornamental tree plantings, which is unsuitable habitat for most special-status species. The potential for special-status species along the Alternative 5 alignment is lower than it is along the proposed Mirage-Santa Rosa alignment, because the Mirage-Santa Rosa alignment is closer to undeveloped habitat and CV fringe-toed lizard critical habitat than the Alternative 5 alignment.

Implementation of APM BIO-1 (Preconstruction Surveys), APM BIO-2 (Minimize Vegetation Impacts), APM BIO-5 (Biological Monitors), and APM BIO-6 (Worker Environmental Awareness Program) would generally reduce impacts to special-status species along the Alternative 5 alignment.

There is a 2005 CNDDDB record for CV milkvetch at the intersection of Monterey Avenue and Varner Road (CDFG, 2009). Alternative 5 would be predominantly confined to roads, and therefore, there is only a low potential for the CV milkvetch to be impacted by this alternative.

Nevertheless, any impacts to this species during the alternative's construction, operation, or maintenance would be significant; impacts would be reduced to a less than significant level through implementation of APM BIO-9 (Coachella Valley Milkvetch) and Mitigation Measure 4.4-1, as well as the general special-status species mitigation measures listed above (Class II).

There is a low likelihood that CV fringe-toed lizard is present in the vicinity of the Alternative 5 alignment, because this alternative is predominantly confined to roads, and is located in an urban environment. Nevertheless, there are historic records for this species along the Alternative 5 alignment (CDFG, 2009), and it is close enough to suitable habitat for this species (there are several recent records for the CV fringe-toed lizard within five miles of this alternative on the north, east, and south sides), that potential impacts on the CV fringe-toed lizard cannot be ruled out. However, implementation of Mitigation Measure 4.4-2, as well as the general special-status species mitigation measures listed above, would reduce impacts to this species as well as the flat-tailed horned lizard, to a less-than-significant level (Class II).

There is a 2007 CNDDDB record for a burrowing owl approximately two miles east of the Alternative 5 alignment, and a 2006 record approximately two miles west (CDFG, 2009). While the Alternative 5 alignment does not provide suitable habitat for burrowing owls, this species could be close enough to the alternative to be adversely affected. Construction associated with Alternative 5 could result in direct mortality of this species, temporary habitat loss, or stress from construction noise or activity that leads to nest failure. The implementation of Mitigation Measure 4.4-6, in addition to the general special-status species mitigation measures listed above would reduce impacts on burrowing owls to a less-than-significant level (Class II).

Similar to the proposed Mirage-Santa Rosa alignment, Alternative 5 could impact special-status bird species such as loggerhead shrike, and ferruginous hawk, or other native bird species that are protected under the federal Migratory Bird Treaty Act and/or California Fish and Game Code Section 3503 and 3503.5. Construction activities associated with Alternative 5, such as grading and preparation of work areas, operation of heavy equipment, installation conduit and cables, could result in indirect impacts on existing populations of, and habitat for, these protected birds. These impacts would be reduced to less than significant through implementation of Mitigation Measure APM BIO-7 (Avoid Impacts to Active Nests), as well as Mitigation Measure 4.4-5 (Class II).

Unlike the Proposed Project, which would result in the construct of the Mirage-Santa Rosa subtransmission line above-ground, potential impacts of overhead transmission lines resulting in bird electrocution or collision would be less than significant, because most of Alternative 5 would be installed underground. Similarly, potential impacts of predatory birds perching on transmission lines and preying on special-status species would be less than significant (Class III).

Sensitive Natural Communities

Alternative 5, like the proposed Mirage-Santa Rosa 115 kV subtransmission line, would not impact any sensitive natural communities (No Impact).

Wetlands

Alternative 5, like the proposed Mirage-Santa Rosa 115 kV subtransmission line, would not impact any wetlands (No Impact).

Wildlife Corridor and Nursery Sites

Similar to the Proposed Project, construction and operation activities for Alternative 5 would not adversely affect wildlife corridors or nursery sites.

During the operational phase, Alternative 5 would not create a barrier to wildlife movement or interfere with established wildlife corridors or nursery sites. The majority of the Alternative 5 would be underground; however, there would be overhead subtransmission lines in the vicinity of I-10, which would bring the potential to increase electrocution and collision hazards to resident and migratory birds, but these impacts would be reduced through implementation of APM BIO-8 (Avian Protection). Therefore, impacts to wildlife movement or wildlife nursery sites would be less than significant under Alternative 5 (Class III).

Local Policies and Ordinances

Alternative 5, like the proposed Mirage-Santa Rosa subtransmission line, would not conflict with any local policies and ordinances (No Impact).

HCPs

Alternative 5, like the proposed Mirage-Santa Rosa subtransmission line, would not be within any CVMSHCP Conservation Area, and in general would provide poor quality habitat for the species covered by this HCP. Alternative 5 would not conflict with the CVMSHCP or any other HCP (No Impact).

Alternative 6

Compared to the proposed Farrell-Garnet subtransmission line, Alternative 6 would have substantially less impacts on biological resources. The Alternative 6 alignment would be approximately 4.2 miles, which would be shorter than the proposed 5.8-mile Farrell-Garnet line; thus, this alternative would result in less ground disturbance. Alternative 6 would follow existing subtransmission lines except for a one mile segment along Vista Chino, which would be installed underground through an urban area. The same special-status species that could be present along the proposed Farrell-Garnet 115 kV subtransmission line could be present along the Alternative 6 alignment, although there is less suitable habitat for special-status species compared to along the proposed Farrell-Garnet alignment (SCE and TRC, 2009a, 2009b, and 2009c). Construction of both Alternative 6 and the proposed Farrell-Garnet subtransmission line could impact Whitewater Wash, which is a wetland as defined by the Clean Water Act.

Special-Status Plants and Wildlife

Construction activities within the Alternative 6 alignment would have the potential to impact the same special-status species as within the proposed Farrell-Garnet alignment. Specifically, where the Alternative 6 alignment crosses Whitewater Wash for 0.5 mile and for the 900-foot-long section south of I-10, there is potential habitat for the Palm Springs pocket mouse, flat-tailed horned lizard, Palm Springs round-tailed ground squirrel, CV giant sand-treader cricket, burrowing owl, prairie falcon, loggerhead shrike, and Le Conte's thrasher. Construction-related project impacts to these species would be considered significant prior to mitigation. Implementation of APM BIO-1 (Preconstruction Surveys), APM BIO-2 (Minimize Vegetation Impacts), APM BIO-5 (Biological Monitors), and APM BIO-6 (Worker Environmental Awareness Program) would generally reduce impacts to special-status species along the Alternative 6 alignment.

Similar to the proposed Farrell-Garnet alignment, construction along the Alternative 6 alignment would have the potential to impact the CV milkvetch. TRC biologists observed this species in Whitewater Wash on either side of Vista Chino, and TRC's habitat assessment for this alternative identified the entire alignment to have a high potential for this species, except where it traverses through urban areas (e.g., along Vista Chino after the first 0.5-mile section of the alignment) (SCE and TRC, 2009b). This species could be adversely affected through the alternative's construction activities. Implementation of APM BIO-9 (Coachella Valley Milkvetch) and Mitigation Measure 4.4-1, as well as the general special-status species mitigation measures listed above, would reduce impacts to CV milkvetch to a less-than-significant level (Class II).

Similar to the proposed Farrell-Garnet alignment, construction along the Alternative 6 alignment would have the potential to impact the CV fringe-toed lizard and flat-tailed horned lizard. TRC conducted a habitat assessment for CV fringe-toed lizard along the Alternative 6 alignment in 2009. They did not observe this species, but identified the 0.5-mile section of Sonoran creosote bush scrub immediately east of the Farrell Substation (in Whitewater Wash) as having a moderate potential for this species, and the 900-foot stretch that traverses stabilized and partially stabilized sand dune habitat just south of I-10 as high quality habitat for this species (SCE and TRC, 2009b). There are several historic records for this species along this alignment (CDFG, 2009), and recent records for this species along the proposed Farrell-Garnet alignment, less than two miles northwest (SCE and TRC, 2009c). In addition, there is also a 1972 record for the flat-tailed horned lizard along the Alternative 6 alignment, east of Whitewater Wash and along a two-mile stretch of Vista Chino (CDFG, 2009), although there is a low potential that this species still occurs here because this area is currently developed and lacks suitable habitat. Direct or indirect impacts to these lizard species during construction activities would be significant prior to mitigation. The implementation of Mitigation Measure 4.4-2, as well as the general special-status species mitigation measures listed above, would reduce impacts to the CV fringe-toed lizard as well as the flat-tailed horned lizard, to a less-than-significant level (Class II).

Construction in both the Alternative 6 and the proposed Farrell-Garnet alignments would have the potential to impact burrowing owls in the undeveloped habitat along the alignments (CDFG, 2009). Construction associated with Alternative 6 could result in direct mortality of this species, temporary habitat loss, or stress from construction noise or activity that leads to nest failure. The

implementation of Mitigation Measure 4.4-6, in addition to the general special-status species mitigation measures listed above would reduce impacts on burrowing owls to a less-than-significant level (Class II).

Similar to the proposed Farrell-Garnet alignment, there is the potential for special-status birds or native birds protected by the federal Migratory Bird Treaty Act and/or California Fish and Game Code Section 3503 and 3503.5 to nest along or near the Alternative 6 alignment. Construction activities associated with Alternative 6, such as grading and preparation of work areas, operation of heavy equipment, installation and removal of poles, and conductor installation, could result in direct or indirect impacts on existing populations of, and habitat for, these protected birds. These impacts would be reduced to less than significant through implementation of Mitigation Measure APM BIO-7 (Avoid Impacts to Active Nests), as well as Mitigation Measure 4.4-5 (Class II).

Similar to the Proposed Project, the new overhead transmission lines that would be associated with Alternative 6 could potentially result in raptor electrocution or collision during operations. Approximately 3.2 miles of the Alternative 6 subtransmission line would be above-ground, although no new above-ground powerlines would be introduced into areas where they don't already occur. Implementation of APM BIO-8 (Avian Protection), which requires compliance with avian protection standards on powerlines, would reduce this potential impact to less than significant (Class II).

Similar to the Proposed Project, transmission line poles along approximately 3.2 miles of the Alternative 6 alignment could potentially increase perching structures for predatory birds, which could consequently result in increased predation on special-status species in the area, particularly where poles are placed in undeveloped habitat. Implementation of Mitigation Measure 4.4-8 (Anti-perching device) would reduce this potentially significant impact on special-status species to a less than significant level (Class II).

Sensitive Natural Communities

No sensitive natural communities are present along the Alternative 6 alignment; there would be no impact (No Impact).

Wetlands

The first 0.5 mile of the Alternative 6 alignment would cross Whitewater Wash, which is a wetland as defined by the Clean Water Act. Similar to the proposed Farrell-Garnet 115 kV subtransmission line, construction activities associated with Alternative 6 would have temporary or permanent impacts on this feature. This significant impact would be reduced to less than significant through implementation of APM BIO-3 (Avoid Impacts to State and Federal Jurisdiction Wetlands), and Mitigation Measures 4.4-10 (Class II).

Wildlife Corridor and Nursery Sites

Construction activities for Alternative 6 would not adversely affect wildlife corridors or nursery sites. During the operational phase, ground facilities, including power poles and access roads,

would not create a barrier to wildlife movement or interfere with established wildlife corridors or nursery sites. The presence of new transmission lines brings the potential to increase electrocution and collision hazards to resident and migratory birds, but these impacts would be reduced through implementation of APM BIO-8 (Avian Protection). Therefore, impacts to wildlife movement or wildlife nursery sites would be less than significant under Alternative 6 (No Impact).

Local Policies and Ordinances

Alternative 6, like the proposed Farrell-Garnet 115 kV subtransmission line, would not conflict with any local policies and ordinances (No Impact).

HCPs

The Alternative 6 alignment would end at the southern edge of the CVMSHCP's Willow Hole Conservation Area, near Varner Road and Date Palm Road. This corner of the Willow Hole Conservation Area is considered Core Habitat for the CV milkvetch, Palm Springs pocket mouse, Palm Springs round-tailed ground squirrel, CV fringe-toed lizard, and Le Conte's thrasher (CVAG, 2007). The APMs and mitigation measures described in this EIR section (i.e., APM BIO-1 through BIO-11, and Mitigation Measures 4.4-1 through 4.4-10) are at least as strict as the Avoidance, Minimization, and Mitigation Measures described in Section 4.4 of the HCP, do not conflict with the Conservation Objectives for the Whitewater Floodplain Conservation Area, and cover the same special-status species that are covered in the HCP. Thus, conflicts would be less than significant with mitigation (Class II).

Alternative 7

Compared to the proposed Farrell-Garnet 115 kV subtransmission line, Alternative 7 would have substantially less impacts on biological resources. This alternative is similar to Alternative 6, except that instead of going underground for one mile along Vista Chino, it would head south continuing overhead on Landau Boulevard, east on 33rd Street, and north on Date Palm Avenue. Alternative 7 would be approximately 9.3 miles and would be entirely above-ground, following pre-existing power lines. Alternative 7 has the potential to impact the same species as those that are present in the proposed Farrell-Garnet subtransmission line alignment, although there is less suitable habitat for special-status species along this alternative alignment. Both Alternative 7 and the proposed Farrell-Garnet line could have temporary or permanent impacts on Whitewater Wash, a jurisdictional wetland, during construction activities.

Special-Status Plants and Wildlife

Construction within the Alternative 7 alignment would have the potential for the same special-status species as along the proposed Farrell-Garnet alignment. Specifically, there are known occurrences of CV milk-vetch along the alignment (CDFG, 2009), historic occurrences for the CV fringe-toed lizard (CDFG, 2009), and potential for the Palm Springs pocket mouse, flat-tailed horned lizard, Palm Springs round-tailed ground squirrel, CV giant sand-treader cricket,

burrowing owl, prairie falcon, loggerhead shrike, and Le Conte's thrasher. Construction-related project impacts to these species would be considered significant prior to mitigation. Implementation of APM BIO-1 (Preconstruction Surveys), APM BIO-2 (Minimize Vegetation Impacts), APM BIO-5 (Biological Monitors), and APM BIO-6 (Worker Environmental Awareness Program) would generally reduce impacts to special-status species along the Alternative 7 alignment.

Similar to the proposed Farrell-Garnet subtransmission line, Alternative 7 would have the potential to impact the CV milkvetch. This species was observed in Whitewater Wash on both sides of Vista Chino along the 0.5-mile section of the Alternative 7 alignment east of the Farrell Substation, and TRC's habitat assessment for this alternative identified the entire alignment to have a high potential for this species, except where it traverses through urban areas (e.g., along Vista Chino after the first 0.5-mile section) (SCE and TRC, 2009b). Implementation of APM BIO-9 (Coachella Valley Milkvetch) and Mitigation Measure 4.4-1, as well as the general special-status species mitigation measures listed above, would reduce impacts to CV milkvetch to a less-than-significant level (Class II).

Similar to the proposed Farrell-Garnet subtransmission line, Alternative 7 would have the potential to impact the CV fringe-toed lizard and flat-tailed horned lizard, although a greater expanse of suitable habitat is present along the proposed Farrell-Garnet alignment than along the Alternative 7 alignment. TRC conducted a habitat assessment for CV fringe-toed lizard along the Alternative 7 alignment in 2009. They did not observe this species, but identified the 0.5-mile section of Sonoran creosote bush scrub immediately east of the Farrell Substation as having a moderate potential for this species, and the 900-foot stretch that traverses stabilized and partially stabilized sand dune habitat just south of I-10 as high quality habitat for this species (SCE and TRC, 2009b). There are several historic records for this species along this alignment (CDFG, 2009), and recent records for this species along the proposed Farrell-Garnet line alignment, less than two miles northwest (SCE and TRC, 2009c). There is also a 1972 record for the flat-tailed horned lizard along the Alternative 7 alignment, east of Whitewater Wash and along a two-mile stretch of Vista Chino (CDFG, 2009), although there is a low potential that this species still occurs here because this area is currently developed and lacks suitable habitat. Direct and indirect impacts of these two lizard species as a result of construction activities would be significant. The implementation of Mitigation Measure 4.4-2, as well as the general special-status species mitigation measures listed above, would reduce impacts to the CV fringe-toed lizard as well as the flat-tailed horned lizard, to a less-than-significant level (Class II).

Construction of both Alternative 7 and the proposed Farrell-Garnet subtransmission line would have the potential to impact burrowing owls. There is potential for this species to occur in undeveloped habitat along this alternative alignment (CDFG, 2009), and construction associated with Alternative 7 could result in direct mortality of this species, temporary habitat loss, or stress from construction noise or activity that leads to nest failure. The implementation of Mitigation Measure 4.4-6, in addition to the general special-status species mitigation measures listed above, would reduce impacts on burrowing owls to less than significant (Class II).

Similar to the proposed Farrell-Garnet alignment, there is the potential for special-status birds or native birds protected by the federal Migratory Bird Treaty Act and/or California Fish and Game Code Section 3503 and 3503.5 to nest along or near the Alternative 7 alignment. Construction activities associated with Alternative 7, such as grading and preparation of work areas, operation of heavy equipment, installation and removal of poles, and conductor installation, could result in direct or indirect impacts on existing populations of, and habitat for, these protected birds. These impacts would be reduced to less than significant through implementation of APM BIO-7 (Avoid Impacts to Active Nests), as well as Mitigation Measure 4.4-5 (Class II).

Similar to the proposed Farrell-Garnet line, the new transmission lines associated with Alternative 7 would potentially result in raptor electrocution or collision during operations. All 9.3 miles of the Alternative 7 subtransmission line would be above-ground, although no new above-ground lines would be introduced into areas where they do not already occur. Implementation of APM BIO-8 (Avian Protection), which requires compliance with avian protection standards on power lines, would reduce this potential impact to less than significant (Class II).

Similar to the proposed Farrell-Garnet line, transmission line poles along 9.3 miles of the Alternative 7 alignment could potentially increase perching structures for predatory birds, which could consequently result in increased predation on special-status species in the area, particularly where poles are placed in undeveloped areas (i.e., in the Sonoran creosote bush scrub immediately east of the Farrell Substation, in the stabilized and partially stabilized sand dunes immediately south of I-10, and in the Sonoran creosote bush scrub north of I-10). Implementation of Mitigation Measure 4.4-8 (Anti-perching device) would reduce this potentially significant impact on special-status species to a less-than-significant level (Class II).

Sensitive Communities

No sensitive natural communities are present along the Alternative 7 alignment, so there would be no impact (No Impact).

Wetlands

The first 0.5 mile of the Alternative 7 alignment crosses Whitewater Wash, which is a wetland as defined by the Clean Water Act. Similar to the proposed Farrell-Garnet 115 subtransmission line, construction activities associated with Alternative 7 would have temporary or permanent impacts on this feature. This significant impact would be reduced to less than significant through implementation of APM BIO-3 (Avoid Impacts to State and Federal Jurisdiction Wetlands), and Mitigation Measures 4.4-10 (Class II).

Wildlife Corridor and Nursery Sites

Construction activities under Alternative 7 would not adversely affect wildlife corridors or nursery sites. During the operational phase, ground facilities, including poles and access roads, would not create a barrier to wildlife movement or interfere with established wildlife corridors or nursery sites. The presence of new subtransmission lines brings the potential to increase electrocution and collision hazards to resident and migratory birds, but these impacts would be reduced through

implementation of APM BIO-8 (Avian Protection). Therefore, impacts to wildlife movement or wildlife nursery sites would be expected to be less than significant under Alternative 7 (Class III).

Local Policies and Ordinances

Alternative 7, like the proposed Farrell-Garnet 115 subtransmission line, would not conflict with any local policies and ordinances (No Impact).

HCPs

The Alternative 7 alignment would end at the southern edge of the CVMSHCP's Willow Hole Conservation Area, near Varner Road and Date Palm Road. This corner of the Willow Hole Conservation Area is considered Core Habitat for the CV milkvetch, Palm Springs pocket mouse, Palm Springs round-tailed ground squirrel, CV fringe-toed lizard, and Le Conte's thrasher (CVAG, 2007). The mitigation measures described in this EIR section (i.e., APM BIO-1 through BIO-11, and Mitigation Measures 4.4-1 – 4.4-10) are at least as strict as the Avoidance, Minimization, and Mitigation Measures described in Section 4.4 of the HCP, do not conflict with the Conservation Objectives for the Whitewater Floodplain Conservation Area, and cover the same special-status species that are covered in the HCP. Thus, conflicts would be less than significant with mitigation (Class II).

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