Appendix 7. Biological Resources

This appendix includes the following sections:

Appendix 7-1 Special Status Species (Arizona)

Invertebrates

Cheese-weed moth lacewing *(Oliarces clara)*. The cheese-weed moth lacewing is a Neuropteran that is only known from 10 isolated populations in the Colorado River drainage, including southwestern Arizona, southern California, and Clark County, Nevada. This species occurs at elevations from sea level to 328 feet above msl on or near bajadas. It is usually associated with creosotebush since the larvae feed from the roots of this plant, and adults typically gather at the higher topographic features in the area to mate. The Proposed Project route is within the elevation range for this species and the creosotebush is dominant along the route; therefore, suitable habitat for this species is present along the proposed route (AGFD 2003). The two known locations of this species in Arizona are from the Gila Mountains and Telegraph Pass just east of Yuma in southwestern Arizona (BOR, 1997). Although these known locations of this species are approximately 60 miles south of the Proposed Project, suitable habitat for this species is present along the route and few records of this species exist.

Fish

Razorback Sucker *(Xyrauchen texanus)*. The razorback sucker is endemic to the large rivers of the Colorado River Basin from Wyoming to Mexico. It was extirpated from much of its historic range because of the habitat alteration resulting from the construction of numerous dams and the introduction of aggressive non-native fish species. Remnant populations are still present in the upper portion of this species range in the Green, Yampa, Colorado, and San Juan Rivers. In Arizona, razorback suckers historically occurred in the Colorado, San Pedro, Verde, Gila, and Salt Rivers. Though numerous Arizona stocking efforts have taken place in the past 30 years, this species primarily occurs only in Lake Mohave, Lake Mead, Lake Havasu, and adjacent waters below Havasu along the lower Colorado River. The preferred habitat of these fish is slow backwaters of medium- and large-sized rivers with optimum water temperatures of 71 to 77 degrees Fahrenheit. Elevations of suitable habitat include low and intermediate elevations and these fish do not occur in high elevation creeks or rivers (AGFD, 2002). The Proposed Project route is within the known geographical range for this species and aquatic habitats are present along the route; therefore suitable habitat for this species is present along the proposed route. According to the AGFD HDMS, a recorded location of this species occurs within three miles of the Proposed Project, plus designated critical habitat for this species is present along the Colorado River along the Proposed Project route. Thus, since a known location of this species is present along the Proposed Project route and suitable habitat for this species is present, it is highly likely that the razorback sucker is present along the route and within the vicinity along the Colorado River.

Amphibians and Reptiles

Sonoran Desert tortoise *(Gopherus agassizii* [Sonoran population]*)*. The desert tortoise can be found from northern Sinaloa, north to southern Nevada and southwestern Utah, and from south central California, east to southeastern Arizona. The Sonoran population of the desert tortoise includes those tortoises south and east of the Colorado River. Habitat for this species occurs primarily in the hills and rocky mountainous terrain of Sonoran Desertscrub vegetation communities, including Arizona Upland and Lower Colorado River Valley subdivisions. Desert tortoises are typically found along washes and rocky areas, building their shelter sites in rocky areas or in caliche caves along washes. They may also be found in areas where there is creosotebush, since they have been known to burrow under these shrubs. The ele-

vational range of the Sonoran population of the desert tortoise is from 510 to 5,300 feet above msl (AGFD, 2001). The Proposed Project is within the elevation range for this species and desert scrub vegetation are present along the route; therefore, suitable habitat for this species is present along the Proposed Project route. According to the AGFD HDMS, there are numerous recorded locations of the Sonoran desert tortoise within Maricopa and La Paz Counties. Additionally, 11 of these locations occur within three miles of the Proposed Project route and a juvenile tortoise was encountered by biologists while surveying the route. Since these known locations are in very close proximity of the Proposed Project, an individual was observed within the route, and suitable habitat for this species is present, it is highly likely that the Sonoran desert tortoise is present along the route and within the vicinity.

Mojave fringe-toed lizard *(Uma scoparia).* The Mohave fringe-toed lizard occupies habitats with fine sand and dunes, flats, riverbanks, and washes of arid deserts. These areas generally contain low-growing vegetation and are within the creosotebush desert habitat. This species is known to occur in the Mojave Desert in California, southeast to just over the Arizona state line. The elevational range of this species is from 510 to 1,090 feet above msl in Arizona (AGFD, 2003). The Proposed Project is within the elevation range for this species and sandy areas are present along the route; therefore, suitable habitat for this species is present along the Proposed Project route. The closest known locations of this species to the Proposed Project, according to the AGFD HDMS, are (1) several near Parker and Bouse Wash, approximately 25 miles north of the Proposed Project route, and (2) the La Posa Plain, approximately 10 miles south of the Proposed Project route. Since one of these known locations is in close proximity of the Proposed Project and suitable habitat for this species is present, it is likely that the Mohave fringe-toed lizard is present along the route and within the vicinity.

Common chuckwalla *(Sauromalus obesus* [ater]*).* The common chuckwalla is a large herbivorous lizard species that occupies old lava flows, rocky hillsides, and rock outcrops in Sonoran and Mohave Desertscrub. The elevational range of this species is from sea level to 6,000 feet above msl. The geographical range of the chuckwalla is in the Sonoran and Mohave Deserts from southern California, southern Nevada, and western Arizona, to Baja, Mexico (Stebbins, 2003). The Proposed Project is within the elevation range for this species and the rocky areas are present along the proposed route; therefore, suitable habitat for this species is present within the proposed route (AGFD, 2005). The closest known locations of this species to the Proposed Project, according to the AGFD HDMS, are (1) from southwestern Arizona, approximately 70 miles south of the Proposed Project route, and (2) near Gila Bend, Arizona, approximately 25 miles east of the Proposed Project route. Although these known locations of this species are not within the immediate vicinity of the Proposed Project, suitable habitat for this species is present along the route and the species is likely to occur within the vicinity.

Banded Gila monster *(Heloderma suspectum cinctum).* The banded Gila monster is a large, venomous lizard species that is found primarily in northwestern Arizona, but adjacent isolated populations are located in Utah, Nevada, and California. They have also been found in western Arizona within northwest Maricopa County and southwestern Yavapai County. Habitat for the banded Gila monster includes undulating rocky foothills, bajadas, and canyons. However, they can also be found in open, sandy areas. The elevational range of this species is from sea level to 5,000 feet above msl (AGFD, 2002). The Proposed Project is within the elevation range for this species and rocky areas are present along the proposed route; therefore, suitable habitat for this species is present along the route. The closest known locations of this species to the Proposed Project, according to the AGFD HDMS, are (1) from the Livingston Hills within the Kofa NWR, within three miles of the Proposed Project, and (2) near the intersection of I-10 and Highway 60, approximately 10 miles north of the Proposed Project route. Since these known locations are in close proximity of the Proposed Project and suitable habitat for this species is present, it is likely that the banded Gila monster is present along the route and within the vicinity.

Desert rosy boa *(Charina trivirgata gracia)*. The desert rosy boa is only one of two boa species that occur in the U.S. Rosy boas prefer rocky shrublands and deserts habitats. They are also attracted to oases and streams, but do not require permanent water sources (Stebbins, 2003). The elevational range of this species is from sea level to 5,500 feet above msl. The geographical range of the desert rosy boa is from the Mohave Desert and Colorado Desert of central southern California, east to the Basin Ranges of western Arizona (AGFD, 2003). The Proposed Project is within the elevation range for this species and desert areas are present along the proposed route; therefore, suitable habitat for this species is present along the proposed route. The closest known locations of this species to the Proposed Project, according to the AGFD HDMS, are (1) from the Harquahala Mountains, approximately 20 miles north of the Proposed Project route, and (2) in the western portion of the Kofa Mountains within the Kofa NWR, approximately five miles south of the Proposed Project route. Since these known locations are in close proximity of the Proposed Project and suitable habitat for this species is present, it is likely that the desert rosy boa is present along the route and within the vicinity.

Birds

California Brown Pelican *(Pelecanus occidentalis californicus)*. The brown pelican inhabits the Atlantic, Pacific, and Gulf Coasts of North and South America. On the Atlantic Coast, they can be found from Virginia south to the mouth of the Amazon River in Brazil; on the Pacific, they range from central California to south-central Chile and the Galapagos Islands. In the Gulf of Mexico, they are found in Alabama, Louisiana, and Texas. They are rarely seen either inland or far out at sea (Udvardy 1977). According to Sauer et al. (2001), this species does not breed in Arizona, but does occur along lakes and larger rivers in the State during the winter months. Monson and Phillips (1981) state that a few brown pelicans enter the state in summer and fall and seldom stay until winter or even spring. Rosenberg et al. (1991) state that brown pelicans that occur along the lower Colorado River are most often found in areas with deep water, such as areas behind dams, and that they also frequent marinas. Most records have been from the Colorado and Gila River Valleys, but stragglers have been observed at lakes throughout much of the State. Nearly all of the brown pelicans that have been observed in Arizona have been lone immature individuals, which are dispersing from breeding colonies in the Gulf of California, or possibly via the Salton Sea (Rosenberg et al. 1991). Most records have been from the lower Colorado and Gila Rivers, but stragglers have been observed throughout much of the State. The Proposed Project would be within the known geographical range for this species and aquatic habitats are present along the proposed route; therefore, suitable habitat for this species is present along the Proposed Project route. Thus, since suitable habitat for this species is present, it is highly likely that the California brown pelican is present along the route and within the vicinity along the Colorado River.

Western burrowing owl *(Athene cunicularia hypugea)*. The western burrowing owl is a small, ground-dwelling owl that inhabits open areas such as grasslands, pastures, coastal dunes, desertscrub, and the edges of agricultural fields. They also inhabit golf courses, airports, cemeteries, vacant lots, and road embankments, wherever there is sufficient friable soil for a nesting burrow. The presence of a nesting burrow, such as that of a badger, prairie dog, ground squirrel, or other animal, seems to be the critical requirement for this species. This species occurs statewide in Arizona at elevations ranging from 650 to 6,140 feet above msl (AGFD, 2001). The Proposed Project is within the elevation range for this species and areas with suitable burrows are present along the route; therefore, suitable habitat for this species is present within the proposed route. The closest known locations of this species to the Proposed Project, according to the AGFD HDMS, are (1) near the Cibola NWR, approximately 10 miles south of the Proposed Project route, and (2) in southern Phoenix, approximately 60 miles east of the Proposed Project route. Since one of these known locations is in close proximity of the Proposed Project and suitable habitat for this species is present, it is highly likely that the western burrowing owl is present along the route and within the vicinity.

Clark's grebe *(Aechmophorus clarkii)*. The Clark's grebe is a waterfowl species known to occur from Washington to Wyoming, south to California, Arizona, New Mexico, and Mexico. In Arizona, they are found year-round along the Colorado River in La Paz and Mohave Counties. The Clark's grebe inhabits marshes, lakes, and bays. The elevational range for this species is from 440 to 480 feet above msl (AGFD, 2003). The Proposed Project is within the elevation range for this species and aquatic habitats are present along the route; therefore, suitable habitat for this species is present along the Proposed Project route. The closest known location of this species to the Proposed Project, according to the AGFD HDMS, is at the confluence of the Bill Williams and Colorado River, approximately 45 miles north of the Proposed Project route. Since this known location is in close proximity of the Proposed Project and suitable habitat for this species is present, it is possible that the Clarke's grebe could be present along the route and within the vicinity of the Colorado River.

Snowy egret *(Egretta thula)*. The snowy egret is a medium-sized heron known to occur in Arizona along the lower Colorado River, in west-central Maricopa County along the Gila River, along the Salt River in Gila County, and along the Hassayampa River. This species inhabits marshes, lakes, ponds, lagoons, mangroves, and shallow coastal habitats. The elevational range for the snowy egret in Arizona is from 100 to 1,950 feet above msl (AGFD, 2002). The Proposed Project is within the elevational range for this species and aquatic habitats are present along the route; therefore, suitable habitat for this species is present along the Proposed Project route. The closest known location of this species to the Proposed Project, according to the AGFD HDMS, is from the Colorado River near Yuma, approximately 45 miles south of the Proposed Project route. Since this known location is in close proximity of the Proposed Project and suitable habitat for this species is present, it is possible that the snowy egret could be present along the route and within the vicinity of the Colorado River.

Great egret *(Ardea alba)*. The great egret is a medium-sized heron known to occur in Arizona along the Colorado River and in south central Arizona, including Maricopa, La Paz, Pinal, and Yuma Counties. This species inhabits marshes, swampy woods, tidal estuaries, lagoons, mangroves, streams, lakes, rivers, ponds, and sometimes fields and meadows. The elevational range for the snowy egret in Arizona is from 100 to 1,500 feet above msl (AGFD, 2002). The Proposed Project is within the elevational range for this species and aquatic habitats are present along the route; therefore, suitable habitat for this species is present along the Proposed Project route. The closest known locations of this species to the Proposed Project alignment, according to the AGFD HDMS, are (1) near Gila Bend, approximately 25 miles east of the Proposed Project route, and (2) near Ehrenberg, approximately five miles south of the Proposed Project route. Since these known locations are in close proximity of the Proposed Project and suitable habitat for this species is present, it is possible that the great egret could be present along the route and within the vicinity of the Colorado River.

Osprey *(Pandion haliaetus)*. The osprey is a large raptor that can be found worldwide, but is normally a transient in Arizona. However, records have been made of this species breeding in the White Mountains and along the Mogollon Rim of Arizona. They are usually found in association with large lakes or rivers, since their primary food source is fish. The elevational range for the osprey in Arizona is from 800 to 8,300 feet above msl (AGFD, 2002). The Proposed Project is within the elevational range for this species and aquatic habitats are present along the route; therefore, suitable migrational habitat for this species is present within the Proposed Project alignment. According to the AGFD HDMS, no records for this species are near the Proposed Project; however, an individual was observed by the biologists during field reconnaissance foraging near the CAP canal and the Big Horn Mountains. Since an individual of this species was observed along the Proposed Project route and suitable habitat for this species is present, it is highly likely that the osprey is present along the route and within the vicinity.

Mammals

Cave myotis *(Myotis velifer)*. The cave myotis is an opportunistic feeder that is primarily found in desertscrub of creosotebush, brittlebush, paloverde, and cacti. Their roost sites include mineshafts, caves, tunnels, bridges, and occasionally buildings. The typical elevational range of this species is from 300 to 5,000 feet above msl. The cave myotis can be found in the southwestern half of Arizona and immediately adjacent parts of California, Nevada, New Mexico, and northern third of Sonora, Mexico. In Arizona, this species is primarily found south of the Mogollon Plateau (AGFD, 2002). The Proposed Project is within the elevation range for this species and desertscrub are present along the route; therefore, suitable habitat for this species is present along the Proposed Project route. The closest known locations of this species to the Proposed Project, according to the AGFD HDMS, are (1) near the Harcuvar Mountains, approximately eight miles north of the Proposed Project route, and (2) near the Sand Tank Mountains, approximately 25 miles east of the Proposed Project route. Since one of these known locations is in close proximity of the Proposed Project and suitable habitat for this species is present, it is likely that the cave myotis is present along the route and within the vicinity.

Pocketed free-tailed bat *(Nyctinomops femorosaccus)*. The pocketed free-tailed bat is an insectivore that is primarily found in arid lower elevation deserts near cliffs and rugged, rocky outcrops. Their roost sites are usually in rock crevices, but they may occasionally use human-built structures. The elevational range of this species is from 190 to 7,520 feet above msl. The geographical range of the pocketed free-tailed bat is the southwestern U.S. including southern California, south-central Arizona, southwestern Texas, and central Mexico. In Arizona, this species is found from Lake Mead southward of the Mogollon Rim. The pocketed free-tailed bat is a fairly common resident of Arizona (AGFD, 2003). The Proposed Project is within the elevation range for this species and arid desert areas with rocky outcrops are present along the route; therefore, suitable habitat for this species is present along the Proposed Project route. The closest known locations of this species to the Proposed Project, according to the AGFD HDMS, are (1) near Wickenburg, approximately 35 miles north of the Proposed Project route, and (2) near the Imperial Dam, approximately 38 miles east of the Proposed Project route. Since these known locations are within the same counties as the Proposed Project and suitable habitat for this species is present, it is likely that the pocketed free-tailed bat is present along the route and within the vicinity.

Big free-tailed bat *(Nyctinomops macrotis)*. The big free-tailed bat is a large bat species that mainly inhabits rugged, rocky country and riparian areas; however, they are also known to utilize buildings, caves, and occasionally in holes in trees for roosting sites. The geographic range of the big free-tailed bat is from northern South America and the Caribbean Islands, northward into the western U.S. In Arizona, they can occur statewide; however, they are most likely absent from the Mogollon Plateau. The elevational range of this species is from 1,810 to 8,475 feet above msl (AGFD, 2003). The Proposed Project is within the elevation range for this species and riparian and rocky areas are present along the route; therefore, suitable habitat for this species is present along the Proposed Project route. Since very few records for this species are known from Maricopa or La Paz Counties, no recorded locations are known for this species near the Proposed Project. However, suitable habitat for this species is present, and it is possible that the big free-tailed bat is present along the route and within the vicinity.

California leaf-nosed bat *(Macrotus californicus)*. The California leaf-nosed bat is an insectivore that is primarily found in Sonoran and Mohave Desertscrub, but they have also been found, less frequently, in Chihuahuan and Great Basin Desertscrub. The range of the California leaf-nosed bat is southern California, southern Nevada, southwestern Arizona, and south to Baja, Mexico. In Arizona, this species is primarily found south of the Mogollon Rim, but documentations have been made from northwestern Mohave County and southeastern Arizona. Their roost sites include mines, caves, and rock shelters.

The elevational range of this species is from 160 to 3,980 feet above msl (AGFD, 2001). The Proposed Project is within the elevation range for this species and desert scrub vegetation are present along the route; therefore, suitable habitat for this species is present along the Proposed Project route. According to the AGFD HDMS, there are numerous recorded locations of the California leaf-nosed bat within Maricopa and La Paz Counties. One of these locations occurs within three miles of the Proposed Project route. Since many of these known locations are in very close proximity of the Proposed Project and suitable habitat for this species is present, it is highly likely that the California leaf-nosed bat is present along the Proposed Project route and within the vicinity.

Appendix 7-2 Special Status Species (California)

Plant Communities

Active Desert Dunes are essentially barren expanses of actively moving sand, the size and shape of which are dependent upon abiotic factors, such as winds and disturbance, rather than by stabilizing vegetation. The dunes may intergrade with stabilized and partially stabilized desert dunes. This community occurs within a creosote bush scrub matrix, but the dunes are the defining feature for this community. Perennial shrub species are sparse but may include creosote bush, four-wing saltbush, California croton, sandpaper plant, and indigo bush. Most of the active desert dunes in the project area occur in the CCRA-DEV and DEV-EBB segments and are under protected status in the Coachella Valley Preserve. Active dunes also occur in the Snow Creek/ Windy Point area, at the east end of Indio Hills, and west of Dillon Road and north of I-10.

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 a consistent cover of vegetation. The total cover of vegetation increases as the dunes become more progressively stabilized. Stabilization varies based on input of sand, rainfall (which influences vegetation cover), and other factors. Common plant species in this community include creosote bush, four-wing saltbush, California croton, and indigo bush. Stabilized and Partially Stabilized Desert Sand Fields are similar to active dunes except that these desert sand accumulations lack dune formations that are stabilized by vegetation. Most of the stabilized and partially stabilized dunes and sand fields are located in the Willow Hole area in the CCRA-DEV segment.

Active Desert Sand Fields are areas of active sand movement, with little or no vegetation. In these areas, the accumulated sand is not deep enough to form classic formations that characterize dune systems. These areas may be characterized by hummocks of sand forming behind individual shrubs or clumps of vegetation. Vegetation varies from a sparse cover of widely scattered shrubs and annual wildlife flowers to denser shrub cover. Common plant species in this community include creosote bush, four-wing saltbush, and indigo bush. Most of the active desert sand fields are located in the CCRA-DEV and DEV-EBB segments in the Willow Hole, Edom Hill, Thousand Palms, and Whitewater Floodplain areas.

Mesquite Hummocks are composed of large clumps of low-growing honey mesquite shrubs. The shrubs may form hummocks over sand dunes or they may occur on level terrain at the margins of palm oases for example. These hummocks are typically associated with high soil moisture and they are often associated with faults or springs. Mesquite Hummocks are located in the CCRA-DEV segment along the southern base of the Indio Hills in association with the San Andreas Fault, on the Thousand Palms Preserve, and in the vicinity of Willow Hole. It also occurs at one location in the DEV-EBB segment south of Cabazon. Mesquite Bosque is an open to fairly dense, drought deciduous streamside thorn forest dominated by screwbean mesquite (*Prosopis pubescens*) with open, park-like interiors maintained by frequent flooding or fire. This community typically occurs in dry washes and the understory is sparse. This community is found only in the Dos Palmas area in the CCRA-DEV segment.

Riversidean Alluvial Fan Sage Scrub, which was described above in Section D.2-2, is comprised of drought-deciduous and perennial shrubs and scalebroom is generally regarded as an indicator of this plant community. This plant community is scattered in washes and on alluvial soils along the proposed ROW in segments BN-BM, CL-STC, and SBJ-VS.

Riversidean Sage Scrub is the most xeric expression of Coastal Sage Scrub south of Point Conception. Typical stands are fairly open and dominated by California sagebrush, California buckwheat, and red

brome each attaining at least 20 percent cover. It typically occurs on xeric sites such as steep slopes, severely drained soils, or clays that release stored soil moisture only slowly. This community intergrades at slightly higher elevations with several southern Californian chaparral communities. Riversidean sage scrub is found along the coastal base of the Transverse and Peninsular ranges from central Los Angeles County to the Mexican frontier.

Southern Willow Scrub is a dense, broad-leaved, winter-deciduous riparian thicket dominated by several willow species, with scattered individuals of cottonwood (*Populus fremontii*) and sycamore (*Platanus racemosa*). Most stands are too dense to allow much understory development. This community typically occurs on loose, sandy or fine gravelly alluvium deposited near stream channels during flood flows. Southern willow scrub was formerly extensive along the major rivers of coastal southern California, but now its distribution has been reduced by urban expansion, flood control, and channel "improvements."

Southern Arroyo Willow Riparian Forest consists of streamside vegetation dominated by arroyo willow (*S. lasiolepis*) that often forms dense thickets. This community is characterized by a continuous canopy up to 10 meters (34 feet), with typically sparse to non-existent shrub and herb layer (Sawyer and Keeler-Wolf, 1995). These riparian forests are seasonally flooded but water is present year-round. This community occurs in the DEV-EBB segment near Snow Canyon, southeast of Snow Canyon, and Wood Canyon in the Cabazon and Santa Rosa and San Jacinto Mountains areas.

Sonoran Cottonwood–Willow Riparian Forest consists of a winter-deciduous, broad-leaved streamside forest dominated by Fremont cottonwood with a dense understory of willows. The site characteristics include deep, well-watered, loamy alluvial soils along the near-channel floodplains of perennial desert rivers. This community was formerly extensive along the lower Colorado River, but has now been virtually eliminated by flood control projects, agriculture, or by Tamarisk invasion. It occurs in the CCRA-DEV and DEV-EBB segments in Stubbe, Cottonwood, White Water, Mission, Big Morongo, and Chino Canyons, in Dry Morongo Creek, in scattered locations in the Whitewater River channel, on the Thousand Palms Reserve, and in the Santa Rosa and San Jacinto Mountains National Monument.

Southern Coast Live Oak Riparian Forest is an open to locally dense evergreen riparian woodland dominated by coast live oaks. This community type appears to be richer in herbs and poorer in understory shrubs than other riparian communities. It typically occurs in bottomlands and outer floodplains along larger streams, on fine-grained, rich alluvium. Southern coast live oak riparian forest is found in some canyons and valleys of coastal southern California.

Southern Sycamore-Alder Riparian Forest consists of a tall, open, broad-leaved, winter-deciduous streamside woodland community dominated by sycamore and white alder (*Alnus rhombifolia*). Stands of these trees rarely form a closed canopy forest. This community is located in the DEV-EBB and BN-BM segments in various canyons in the San Jacinto and San Bernardino Mountains. It typically occurs along rocky streambeds that are subject to occasional high intensity flooding.

Desert Fan Palm Oasis Woodland is composed of open to dense groves dominated by fan palm (*Washingtonia filifera*). The understory is sparse, especially in alkaline areas or in dense groves where the ground is covered by fallen fronds. This community is restricted to areas with available water. Washes along the San Andreas fault, where emergent underground water is present, or where exposed strata or other geologic features produce permanent water, are the locations of many of these oases. This community has a scattered distribution in all segments of the Proposed Project between the Colorado River and the east border of the City of Banning.

Sensitive Plants

Coachella Valley milkvetch (*Astragalus lentiginosus* var. *coachellae*) is a federally endangered species and is covered under the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP), CNPS List 1B annual/perennial herb historically known to occur in Sonoran desert scrub at elevations ranging from 40 to 655 meters (131 to 2,149 feet) amsl. This species is known to occur in the Coachella Valley and has been found in the ROW.

Nevin's barberry (*Berberis nevinii*) is a State and federally endangered species, a covered species under the WRMSHCP, and a CNPS List 1B evergreen shrub historically known to occur in chaparral, coastal scrub, cismontane woodland, and riparian scrub (sandy or gravelly) at elevations ranging from 295 to 825 meters (968 to 2,707 feet) amsl. This species has a high potential to occur along portions of the ROW where suitable chaparral, coastal sage scrub, and riparian scrub habitats are present. This species is known to occur within two to three miles of the ROW.

Mojave tarplant (*Deinandra mohavensis*) is a State endangered species, a covered species under the WRMSHCP, and a CNPS List 1B annual herb historically found in chaparral, coastal scrub, and mesic riparian scrub habitats at elevations ranging from 640 to 1,600 meters (2,100 to 5,249 feet) amsl. Suitable habitat is present in portions of the ROW and this species is known to occur in areas adjacent to the ROW. This species has a high potential to occur.

Slender-horned spineflower (*Dodecahema leptoceras*) is a State and federally listed endangered species, a covered species under the WRMSHCP, and a CNPS List 1B annual herb historically found in sandy soils in association with coastal scrub, chaparral, and cismontane woodlands at elevations ranging from 200 to 760 meters (656 to 2,493 feet) amsl. Prigge, et al., (1993) found that the ideal habitat appears to be a terrace or bench that receives overbank deposits every 50 to 100 years. This species has a high potential to occur in the western end of the project area because it is known to occur in the floodplain of the Santa Ana River.

Munz's onion (*Allium munzii*) is a State and federally endangered species, a covered species under the WRMSHCP, and a CNPS List 1B bulbiferous herb historically known to occur in chaparral, cismontane woodland, coastal scrub, pinyon and juniper woodland, valley and foothill grassland (mesic, clay) at elevations ranging from 300 to 1,070 meters (984 to 3,510 feet) amsl. Suitable chaparral and coastal sage scrub habitat exists for this species and it has a moderate potential to occur.

San Diego ambrosia (*Ambrosia pumila*) is a federally endangered species, a covered species under the WRMSHCP, a Bureau of Land Management (BLM) sensitive species, and a CNPS List 1B rhizomatous herb historically known to occur in chaparral, coastal scrub, valley and foothill grassland, and vernal pools (often in disturbed areas) at elevations ranging from 20 to 415 meters (66 to 1,362 feet) amsl. Suitable chaparral and coastal sage scrub habitat exists for this species and it has a moderate potential to occur.

San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*) is a federally endangered species, a covered species under the WRMSHCP, and a CNPS List 1B annual herb historically known to occur in playas, valley and foothill grasslands (mesic), and vernal pools (alkaline) at elevations ranging from 380 to 500 meters (1,247 to 1,640 feet) amsl. This species has a moderate potential to occur because suitable habitat is present and the Project Area is within the elevational range of this species. This species is known to occur approximately five miles south of the Proposed Project.

Santa Ana River woollystar (*Eriastrum densifolium* ssp. *sanctorium*) is a State and federally endangered species, and a CNPS List 1B perennial herb historically found in chaparral and coastal scrub communities (sandy or gravelly alluvial fans) at elevations ranging from 150 to 610 meters (492 to 2,001 feet) amsl. This species has a moderate potential to occur in the western end of the project area. It is known to occur approximately 10 miles west of the Vista Substation.

Gambel's water cress (*Rorippa gambelii*) is a federally endangered and State threatened species, and a CNPS List 1B rhizomatous herb historically found in marshes and swamps (freshwater or brackish) at elevations ranging from 5 to 330 meters (16 to 1,082 feet) amsl. This species is known to occur within one mile of the western portion of the ROW. Therefore, this species has a moderate potential to occur.

Triple-ribbed milkvetch (*Astragalus tricarinatus*) is a federally endangered species, a covered species under the CVMSHCP, and a CNPS List 1B perennial herb historically known to occur in Joshua tree woodlands and Sonoran desert scrub (sandy or gravelly) at elevations ranging from 450 to 1,190 meters (1,476 to 3,904 feet) amsl. This species has a low potential to occur because the project area is below the elevational range of this species.

Thread-leaved brodiaea (*Brodiaea filifolia*) is a federally threatened and State endangered species, and a CNPS List 1B perennial bulbiferous herb historically known to occur in chaparral, cismontane woodland, coastal scrub, playas, valley and foothill grasslands, and vernal pools at elevations ranging from 25 to 860 meters (82 to 2,821 feet) amsl. This species, which is known to occur approximately 10 miles southeast of the ROW, has a low potential to occur in those areas where chaparral and coastal sage scrub occurs.

Spreading navarretia (*Navarretia fossalis*) is a federally threatened species, a covered species under the WRMSHCP, and a CNPS List 1B annual herb historically found in chenopod scrub, marshes and swamps (assorted shallow freshwater), playas, and vernal pools at elevations ranging from 30 to 1,300 meters (98 to 4,265 feet) amsl. This species only has a low potential to occur in portions of the project area because only marginally suitable habitat occurs.

California Orcutt grass (*Orcuttia californica*) is a State and federally endangered species, a covered species under the WRMSHCP, and a CNPS List 1B annual herb historically found in vernal pools at elevations ranging from 15 to 660 meters (49 to 2,165 feet) amsl. This species only has a low potential to occur in a portion of the project area because much of the suitable habitat for this species is now presumed to have been developed.

Parish's checkerbloom (*Sidalcea hickmanii* ssp. *parishii*) is a federal candidate for listing, a State rare species, and a CNPS List 1B perennial herb historically found in chaparral, cismontane woodland, and lower montane coniferous forest habitats at elevations ranging from 1,000 to 2,135 meters (3,280 to 7,004 feet) amsl. Even though suitable habitat exists in a portion of the ROW, this species has a low potential to occur because the ROW is at the lower elevational limit in which this species is known to occur. The closest known occurrence is approximately 10 miles north of the ROW.

Chaparral sand-verbena (*Abronia villosa* var. *aurita*) is a CNPS List 1B annual herb historically found in chaparral, coastal scrub, and sandy desert dunes at elevations ranging from 80 to 1,600 meters (262 to 5,249 feet) above mean sea level (amsl). Chaparral sand-verbena has a moderate potential to occur because chaparral and sandy desert dunes occur along the proposed ROW from the BN-BM segment to the SBJ-SBS segment, and this species is known to occur seven miles south of the Proposed Project.

Angel trumpets (*Acleisanthes longiflora*) is a CNPS List 2 perennial herb historically known to occur in Sonoran desert scrub (generally on limestone) at elevations ranging from 90 to 95 meters (295 to 312 feet) amsl. Angel trumpets have a moderate potential to occur because Sonoran desert scrub occurs along the ROW from the COR-MS segment to the CCRA-DEV segment and this species is known to occur nine miles north of the Proposed Project in the City of Blythe along Highway 95.

Yucaipa onion (*Allium marvinii*) is Western Riverside Multiple Species Habitat Conservation Plan (WR-MSHCP) listed and a CNPS List 1B bulbiferous herb historically known to occur in openings of chaparral at elevations ranging from 760 to 1,065 meters (2,493 to 3,494 feet) amsl. Yucaipa onion has a high potential to occur because suitable chaparral habitat and elevation requirements are present along the ROW from the BN and BM segment to the SBJ-SBS segment, and this species is known to occur 0.25 miles south and four miles north of the Proposed Project.

Desert sand-parsely (*Ammoselinum giganteum*) is a CNPS List 2 annual herb historically known to occur in Sonoran desert scrub at 400 meters (1,312 feet) amsl. Desert sand-parsely has a high potential to occur because Sonoran desert scrub occurs along the ROW from the COR-MS segment to the CCRA-DEV segment, and this species is known to occur at Hayfield Dry Lake, which is located within five miles of the Proposed Project.

Harwood's milkvetch (*Astragalus insularis* var. *harwoodii*) is a CNPS List 2 annual herb historically known to occur in desert dunes and Mojavean desert scrub (sandy or gravelly) at elevations ranging from 0 to 710 meters (0 to 2,329 feet) amsl. Harwood's milkvetch has a high potential to occur along the COR-MS and MS-CCRA segments because of suitable habitat and elevation requirements occur along the ROW, and this species is known to occur within three miles of the Proposed Project.

Jaeger's milkvetch (*Astragalus pachypus* var. *jaegeri*) is a WR-MSHCP listed, CNPS List 1B shrub historically known to occur in chaparral, cismontane woodlands, coastal scrub, and valley and foothill grasslands (sandy or rocky) at elevations ranging from 365 to 915 meters (1,197 to 3,002 feet) amsl. Jaeger's milkvetch has a high potential to occur along the BN-BM and DEV-EBB segments because suitable chaparral habitat and elevation requirements occur along the ROW in these areas, and this species is known to occur at the northwest foothills of the San Jacinto Mountains, approximately five miles south of the Proposed Project.

Parish's brittlescale (*Atriplex parishii*) is a WR-MSHCP listed, CNPS List 1B annual herb historically known to occur in chenopod scrub, playas, and vernal pools at elevations ranging from 25 to 1,900 meters (82 to 6,234 feet) amsl. Parish's brittlescale has a moderate potential to occur along the CCRA-DEV and DEV-EBB segments because suitable habitat and elevation requirements are present along the ROW in these areas, and this species is known to occur within five miles of the Proposed Project.

Ayenia (*Ayenia compacta*) is a CNPS List 2 perennial herb historically known to occur in Mojavean desert scrub and Sonoran desert scrub at elevations ranging from 150 to 1,095 meters (492 to 3,593 feet) amsl. Ayenia has a high potential to occur along the MS-CCRA segment because suitable habitat and elevation requirements occur along the ROW in this area, and this species is known to occur approximately 5 miles south of the proposed alignment.

Plummer's mariposa lily (*Calochortus plummerae*) is a WR-MSHCP listed, CNPS List 1B bulbiferous herb historically found in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and in valley and foothill grasslands in rocky and granitic material, at elevations ranging from 100 to 1,700 meters (328 to 5,577 feet) amsl. Plummer's mariposa lily has a high potential to occur

along the BN-BM and CL-STC segments because suitable chaparral habitat and elevation requirements occur along the ROW in these areas, and this species is known to occur 0.5 miles north of the ROW at Cherry Valley and I-10.

Crucifixion thorn (*Castella emoryi*) is a CNPS List 2 deciduous shrub historically found in Mojavean desert scrub, playas, and Sonoran desert scrub (gravelly) at elevations ranging from 90 to 670 meters (295 to 2,198 feet) amsl. Crucifixion thorn has a high potential to occur along the MS-CCRA segment because suitable habitat and elevation requirements occur along the ROW in this area, and this species is known to occur at the northwest end of Hayfield Lake, approximately three miles north of the Proposed Project.

Smooth tarplant (*Centromadia pungens* ssp. *laevis*) is a WR-MSHCP listed, CNPS List 1B annual herb historically found in chenopod scrub, meadows and seeps, playas, riparian woodlands, and alkaline sites in valley and foothill grasslands at elevations ranging from 0 to 480 meters (0 to 1,575 feet) amsl. Smooth tarplant has a moderate potential to occur in the CLSTC, SBJ-VS, and SBJ-SBS segments because water in these segments may act as a seep, creating suitable habitat. However, more recent occurrences do not occur within five miles of the site and were observed in Lytle Creek and San Timoteo Canyon. The closest known occurrence is from approximately 4.3 miles southwest of the site and was collected in 1948.

Abram's spurge (*Chamaesyce abramsiana*) is a CNPS List 2 annual herb historically found in Mojavean desert scrub and sandy Sonoran desert scrub habitat at elevations ranging from 5 meters below mean sea level (bmsl) to 915 meters amsl (16 feet bmsl to 3,002 feet amsl). Abram's spurge has a moderate potential to occur in the MS-CCRA segment because suitable habitat and elevation requirements occur along the ROW in this area.

Arizona spurge (*Chamaesyce arizonica*) is a CNPS List 2 perennial herb historically found in Sonoran desert scrub at elevations ranging from 50 to 300 meters (164 to 984 feet) amsl. Arizona spurge has a high potential to occur along the CCRA-DEV segment because suitable habitat and elevation requirements occur along the ROW in this area, and this species is known to occur on the eastern side of Edom Hill and three miles north of the Town of Thousand Palms.

Flat-seeded spurge (*Chamaesyce playtsperma*) is a BLM sensitive species and a CNPS List 1B annual herb historically found in desert dunes and Sonoran desert scrub at elevations ranging from 65 to 100 meters (213 to 328 feet) amsl. Flat-seeded spurge has a high potential to occur along the CCRA-DEV segment because suitable habitat and elevation requirements occur along the ROW in this area, and this species is known to occur one mile south of the Town of Thousand Palms, within five miles of the Proposed Project.

Parry's spineflower (*Chorizanthe parryi* var. *parryi*) is a WR-MSHCP listed, CNPS List 3 annual herb historically found in chaparral and the sandy or rocky openings of coastal scrub communities at elevations ranging from 40 to 1,705 meters (131 to 5,594 feet) amsl. Parry's spineflower has a high potential to occur along the CCRA-DEV, DEV-EBB, and BN-BM segments because suitable chaparral habitat and elevation requirements occur along the ROW in these areas, and this species is known to occur along the ROW, as well as several other locations within two to three miles of the ROW.

White-bracted spineflower (*Chorizanthe xanti* var. *leucotheca*) is a CNPS List 1B annual herb historically found in Mojavean desert scrub and pinyon and juniper woodlands at elevations ranging from 300 to 1,200 meters (984 to 3,937 feet) amsl. This species has a high potential to occur along the CCRA-DEV,

DEV-EBB, and BN-BM segments because suitable habitat and elevation requirements occur along the ROW in these areas, and this species is known to have several occurrences within five miles of the Proposed Project.

Las Animas colubrina (*Colubrina californica*) is a CNPS List 2 deciduous shrub historically found in Mojavean desert scrub and Sonoran desert scrub at elevations ranging from 10 to 1,000 meters (33 to 3,281 feet) amsl. This species has a moderate potential to occur along the COR-MS and MS-CCRA segments because suitable habitat and elevation requirements occur along the ROW in these areas, and this species is known to occur 10 miles north of the Proposed Project on the southwest McCoy Mountains.

Glandular ditaxis (*Ditaxis claryana*) is a CNPS List 2 perennial herb historically found in Mojavean desert scrub and Sonoran desert scrub at elevations ranging from 0 to 465 meters (0 to 1,526 feet) amsl. This species has a high potential to occur along the MS-CCRA segment because suitable habitat and elevation requirements occur along the ROW in this area, and this species is known to occur within one mile of the Proposed Project, nine miles southeast of the intersection of Highway 177 and I-10 cross in Desert Center.

California ditaxis (*Ditaxis serrata* var. *californica*) is a CNPS List 3 perennial herb historically found in Sonoran desert scrub at elevations ranging from 30 to 1,000 meters (98 to 3,281 feet) amsl. This species has a moderate potential to occur along the CCRA-DEV segment because suitable habitat and elevation requirements occur along the ROW in this area, and this species is known to occur 15 miles south of the Proposed Project.

Many-stemmed dudleya (*Dudleya multicaulis*) is a WR-MSHCP listed, a BLM sensitive species, and a CNPS List 1B perennial herb historically known to occur in chaparral, coastal scrub, and valley and foothill grasslands (often clay) at elevations ranging from 15 to 790 meters (50 to 2,600 feet) amsl. This species has a moderate potential to occur along the CL-STC, SBJ-VS, and SBJ-SBS segments because suitable habitat and elevation requirements occur along the ROW in this area, and this species is known to occur 10 miles west of Vista Substation.

Round-leaved filaree (*Erodium macrophyllum*) is a WR-MSHCP listed, CNPS List 2 annual herb historically found in cismontane woodlands and valley and foothill grasslands (clay) at elevations ranging from 15 to 1,200 meters (50 to 3,937 feet) amsl. This species has a moderate potential to occur along the CL-STC, SBJ-VS, and SBJ-SBS segments because suitable habitat and elevation requirements occur along the ROW in these areas, and this species is known to occur in the vicinity of the ROW northwest of the City of Redlands.

Foxtail cactus (*Escobaria alversonii*) is a federal species of concern and a CNPS List 4 stem succulent historically found in Mojavean desert scrub and usually in the sandy or rocky (granitic) soils of the Sonoran desert scrub community at elevations ranging from 75 to 1,525 meters (246 to 5,003 feet) amsl. This species has a high potential to occur along the CCRA-DEV and COR-MS segments because suitable habitat and elevation requirements occur and this species is known to occur along the ROW in the MS-CCRA segment.

Cliff spurge (*Euphorbia misera*) is a CNPS List 2 shrub historically found in coastal bluff scrub, coastal scrub, and Mojavean desert scrub at elevations ranging from 10 to 500 meters (33 to 1,640 feet) amsl. This species has a high potential to occur along the DEV-EBB and CCRA-DEV segments because suitable habitat and elevation requirements occur along the ROW in these areas, and this species is known to occur on a bluff overlooking I-10 on Whitewater Hill, one mile northwest of the Highway 62 and I-10 interchange.

Little San Bernardino Mountains gilia (*Gilia maculatus*) is a CV-MSHCP listed, a BLM sensitive species, and a CNPS List 1B annual herb historically known to occur in desert dunes, Joshua tree "woodland," Mohavean desert scrub, and Sonoran desert scrub (sandy) at elevations ranging from 195 to 2,075 meters (639 to 6,807 feet) amsl. This species has a high potential to occur along the DEV-EBB and CCRA-DEV segments because suitable habitat and elevation requirements occur along the ROW in these areas, and this species is known to occur 6 miles north of the Highway 62 and I-10 interchange.

Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*) is a CNPS List 1B annual herb historically known to occur in chaparral and coastal scrub at elevations ranging from 0 to 885 meters (0 to 2,900 feet) amsl. This species has a moderate potential to occur along the CL-STC, SBJ-VS, and SBJ-SBS segments because suitable habitat and elevation requirements occur along the ROW in these areas.

Ocellated Humboldt lily (*Lilium humboldtii* spp. *ocellatum*) is a WR-MSHCP listed, CNPS List 4 bulbiferous herb historically known to occur in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and riparian woodland at elevations ranging from 30 to 1,800 meters (98 to 5,905 feet) amsl. This species has a moderate potential to occur along the DEV-EBB, BN-BM, CL-STC, SBJ-VS, and SBJ-SBS segments because suitable habitat and elevation requirements occur along the ROW in these areas.

Parish's desert-thorn (*Lycium parishii*) is a CNPS List 2 shrub historically known to occur in coastal scrub and the Sonoran desert scrub at elevations ranging from 305 to 1000 meters (1,000 to 3,280 feet) amsl. This species has a high potential to occur along the SBJ-VS, SBJ-SBS, and MS-CCRA segments because suitable habitat and elevation requirements occur along the ROW in these areas, and this species is known to occur five miles south of the City of Grand Terrace along Highway 60.

Spearleaf (*Matelea parvifolia*) is a CNPS List 2 perennial herb historically found in the Mohavean desert scrub and Sonoran desert scrub at elevations ranging from 440 to 1,095 meters (1,443 to 3,592 feet) amsl. This species has a moderate potential to occur along the MS-CCRA segment because suitable habitat and elevation requirements occur along the ROW in this area, and this species is known to occur seven miles north of Proposed Project.

Creamy blazing star (*Mentzelia tridentata*) is a CNPS List 1B annual herb historically found in the Mohavean desert scrub at elevations ranging from 700 to 1,160 meters (2,296 to 3,805 feet) amsl. This species has a high potential to occur along the CCRA-DEV segment because suitable habitat and elevation requirements occur along the ROW in this area, and this species is known to occur three miles southeast of the City of Indio.

Hall's monardella (*Monardella macrantha* ssp. *hallii*) is a CNPS List 1B rhizomatous herb historically found in the Broadleafed upland forest, within chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grasslands at elevations ranging from 730 to 2,195 meters (2,395 to 7,201 feet) amsl. This species has a high potential to occur along the CL-STC and BN-BM segments because suitable habitat and elevation requirements occur along the ROW in this area, and this species is known to occur five miles north of the City of Yucaipa

California muhly (*Muhlenbergia californica*) is a WR-MSHCP listed, CNPS List 4 rhizomatous herb historically found in chaparral, coastal scrub, lower montane coniferous forest, meadow, steambanks and seeps at elevations ranging from 100 to 2,000 meters (328 to 6,561 feet) amsl. This species has a moderate potential to occur along the DEV-EBB segment; and between the CL-STCand SBJ-SBS segments because suitable habitat and elevation requirements occur along the ROW in these areas. The dis-

tribution of this species is not well known (CNPS List 4); therefore the chaparral habitat that occurs between the Devers and Vista Substations has a moderate potential to have California muhly.

Little mousetail (*Myosurus minimus* ssp. *apus*) is a federal species of concern, WR-MSHCP listed, CNPS List 3 annual herb historically found in valley and foothill grasslands and vernal pool (alkaline) at elevations ranging from 20 to 640 meters (65 to 2,099 feet) amsl. This species has a moderate potential to occur along the CL-STC, SBJ-VS, and SBJ-SBS segments because suitable habitat and elevation requirements occur along the ROW in these areas, and this species is known to occur within western Riverside County, specifically the Riverside East quadrant.

Slender woolly-heads (*Nemacaulis denudata* var. *gracilis*) is a CNPS List 2 annual herb historically found in coastal dunes, desert dunes, and in the Sonoran desert scrub habitat at elevations ranging from 50 meters bmsl to 400 meters amsl (164 feet bsml to 1,312 feet amsl). This species has a high potential to occur along the CCRA-DEV and DEV-EBB segments because suitable habitat and elevation requirements occur along the ROW in these areas, and this species is known to occur six miles west of the City of Indio and in the immediate vicinity of the ROW in San Gorgonio Pass from Whitewater Canyon eastward to DVS.

Wiggins's cholla (*Opuntia wigginsii*) is a CNPS List 3 stem succulent historically found in Sonoran desert scrub (sandy) habitat at elevations ranging from 30 to 885 meters (98 to 2,903 feet) amsl. This species has a high potential to occur along the COR-MS, MS-CCRA, and CCRA-DEV segments because suitable habitat and elevation requirements occur along the ROW in these areas, and this species is known to occur near the Town of Palo Verde, approximately five miles south of the Proposed Project.

Fish's milkwort (*Polygala cornuta* var. *fishiae*) is a WR-MSHCP listed, CNPS List 4 deciduous shrub historically found in chaparral, cismontane woodland and riparian woodland at elevations ranging from 100 to 1,100 meters (328 to 3,608 feet) amsl. This species has a moderate potential to occur along the DEV-EBB, BN-BM, CL-STC, SBJ-VS, and SBJ-SBS segments because suitable habitat and elevation requirements occur along the ROW in these areas. The distribution of this species is not well known (CNPS List 4), therefore, the chaparral habitat which occur between the Devers and Vista Substations has a moderate potential to have Fish's milkwort.

Engelmann oak (*Quercus engelmannii*) is a WR-MSHCP listed, CNPS List 4 deciduous tree historically found in chaparral, cismontane woodland and riparian woodland, valley and foothill grassland habitat at elevations ranging from 120 to 1,300 meters (393 to 4,265 feet) amsl. This species has a moderate potential to occur along the DEV-EBB, BN-BM, CL-STC, SBJ-VS, and SBJ-SBS segments because suitable habitat and elevation requirements occur along the ROW in these areas. The distribution of this species is not well known (CNPS List 4), therefore, the chaparral habitat which occurs between the Devers and Vista Substations has a moderate potential to have Engelmann oaks.

Parish's gooseberry (*Ribes divaricatum* var. *parishii*) is a CNPS List 1 deciduous shrub historically found in riparian woodland at elevations ranging from 65 to 100 meters (213 to 328 feet) amsl. This species has a moderate potential to occur along the SBJ-VS and SBJ-SBS segments because this species is known to occur within one mile of the SBJ-SBS segment.

Coulter's matilija poppy (*Romneya coulteri*) is a WR-MSHCP listed, CNPS List 4, rhizomatous herb historically found in chaparral and coastal scrub (often in burns) habitat at elevations ranging from 20 to 1,200 meters (65 to 3,937 feet) amsl. This species has a moderate potential to occur along the DEV-EBB, BN-BM, CL-STC, SBJ-VS, and SBJ-SBS segments because suitable habitat and elevation requirements

occur along the ROW in these areas. The distribution of this species is not well known (CNPS List 4), therefore, the chaparral habitat which occurs between the Devers and Vista Substations has a moderate potential to have Coulter's matilija poppy.

Latimer's woodland gilia (*Saltugilia latimeri*) is a CNPS List 1B annual herb historically found in chaparral habitats and Mojavean desert scrub (rocky or sandy) at elevations ranging from 400 to 1,900 meters (1,312 to 6,233 feet) amsl. This species has a moderate potential to occur along the DEV-EBB, CCRA-DEV, MS-CCRA, and COR-MS segments because suitable habitat and elevation requirements occur along the ROW in these areas, and this species is known to occur within 15 miles of the proposed ROW in these segments.

Orocopia sage (*Salvia greatae*) is a CV-MSHCP listed, CNPS List 1B evergreen shrub historically found in Mojavean desert scrub and Sonoran desert scrub habitats at elevations ranging from 40 meters bmsl to 825 meters amsl (131 feet bmsl to 2,706 feet amsl). This species has a high potential to occur along the MS-CCRA and CCRA-DEV segments because suitable habitat and elevation requirements occur along the ROW in these areas, and the closest occurrence of this species near the ROW is known to occur three miles southeast of the Highway 177 and I-10 interchange (near Desert Center).

San Miguel savory (*Satureja chandleri*) is a WR-MSHCP listed, CNPS List 1B perennial herb historically found in chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland (rocky or metavolcanic) habitats at elevations ranging from 120 to 1,075 meters (393 to 3,526 feet) amsl. This species has a moderate potential to occur along the DEV-EBB, BN-BM, CL-STC, SBJ-VS, and SBJ-SBS segments because suitable habitat and elevation requirements occur along the ROW in these areas; however, the proposed route is outside the known range of the species.

Desert spike-moss (*Selaginella eremophilia*) is a CNPS List 2 rhizomatous herb historically found in Sonoran desert scrub (gravelly or rocky) at elevations ranging from 200 to 900 meters (656 to 2,952 feet) amsl. This species has a high potential to occur along the MS-CCRA segment because suitable habitat and elevation requirements occur along the ROW in this area, and this species is known to occur five miles south of the proposed route near Desert Center.

Cove's cassia (*Senna covesii*) is a CNPS List 2 perennial herb historically found in Sonoran desert scrub (sandy) at elevations ranging from 305 to 1,070 meters (1,000 to 3,510 feet) amsl. This species has a high potential to occur along the MS-CCRA segment because suitable habitat and elevation requirements occur along the ROW in this area, and this species is known to occur one mile northwest of the Cottonwood Springs Road and I-10 interchange, within three miles of the Proposed Project.

Purple stemodia (*Stemodia durantifolia*) is a CNPS List 2 perennial herb historically found in Sonoran desert scrub at elevations ranging from 180 to 300 meters (590 to 984 feet) amsl. This species has a moderate potential to occur along the CCRA-DEV and DEV-EBB segments because suitable habitat and elevation requirements occur along the ROW in these areas, and this species is known to occur five miles south of Palm Springs on Murray Hill, approximately 10 miles south of Proposed Project.

San Bernardino aster (*Symphyotrichum defoliatum*) is a CNPS List 1B rhizomatous herb historically found in meadows and seeps, marshes and swamps, coastal scrub, cismontane woodland, lower montane coniferous forest, valley and foothill grassfield near ditches, streams, springs at elevations ranging from 2 to 2,040 meters (6 to 6,692 feet) amsl. This species has a moderate potential to occur along the BN-BM and DEV-EBB segments because grassland habitat and elevation requirements occur along the

ROW in these areas, and this species is known to occur four miles southeast of the City of Banning, approximately five miles south of the Proposed Project.

Mecca-aster (*Xylorhiza cognata*) is a CV-MSHCP listed, CNPS List 1B perennial herb historically found in Sonoran desert scrub habitat at elevations ranging from 20 to 400 meters (65 to 1,312 feet) amsl. This species has a moderate potential to occur along the MS-CCRA and CCRA-DEV segments because suitable habitat and elevation requirements occur along the ROW in these areas, and this species has several occurrences approximately eight miles due east of the Town of Mecca, approximately six miles south of the Proposed Project.

Wildlife

Invertebrates

Vernal Pool Fairy Shrimp (*Branchinecta lynchi*). The vernal pool fairy shrimp is a federally threatened species. It primarily inhabits mud or grass bottomed small ephemeral pools, puddles, and swales in herbaceous, and scrub-shrub wetland habitats. It can also inhabit a number of natural and artificial seasonal wetland habitats, such as alkali pools, ephemeral drainages, stock ponds, roadside ditches, vernal swales, and rock outcrop pools. Regardless of the specific habitat, the wetlands in which this species is found are small and shallow; however, this species occasionally inhabits both large and deep habitats. The vernal pool fairy shrimp is primarily a detritivore, filter feeding in the water column and sifting the accumulated bottom debris and sediments, and also infrequently consuming worms, beetles, and other aquatic invertebrates. This species is threatened by loss of habitat due to both urban and agricultural development.

Coachella Valley giant sand-treader cricket (*Macrobaenetes valgum*). The Coachella Valley giant sand-treader cricket is a covered species in the proposed Coachella Valley Multiple Species Habitat Conservation Plan. This species is therefore considered protected along all portions of the ROW that is within the limits of this habitat conservation area. This cricket occurs exclusively in the active sand hummocks, dunes, and sand fields of the Coachella Valley adjacent to Whitewater River and San Gorgonio River washes. Suitable habitat also occurs within the Whitewater River Floodplain Preserve, the Coachella Valley Preserve, on the main dunes and the Simone dunes. Their preferred habitat is in windblown environments dominated by perennial shrubs including creosote bush, burrobush, honey mesquite, mormon tea, desert willow, and sandpaper bush. This species is threatened by cumulative habitat loss and degradation of the existing habitat as a result of development and the disruption of sand transport processes.

Coachella Valley Jerusalem cricket (*Stenopelmatus cahuilaensis*). The Coachella Valley Jerusalem cricket is covered under the proposed Coachella Valley Multiple Species Habitat Conservation Plan. This species is therefore considered protected along all portions of the ROW that is within the limits of this habitat conservation area. This cricket species is found in sandy to somewhat gravelly sandy soils and is often called an obligate sand species. Its primary habitat is loose wind blown drift sands, and dunes in creosote bush scrub habitats in association with the roots of some members of the sunflower family in the Coachella Valley. This species is mostly threatened by loss of habitat due to urban development and disruption of sand transport. Habitat fragmentation and off-road vehicle use within its habitat also pose major threats to the Coachella Valley Jerusalem cricket.

Fishes

Razorback sucker (*Xyrauchen texanus*). The razorback sucker is a State and federally endangered species. This species is brownish-green on its dorsal surface, a yellow to white-colored belly, and an abrupt bony

hump on its back directly behind the head. This is a long-lived species that can often attain lengths in excess of three feet. This species is adapted to swimming in swift currents, but it also needs quiet water during spawning. Factors threatening this species are predation by non-native species, deterioration of water quality, a non-functioning Colorado River estuary system, and several waterborne parasitic infections.

Amphibians and Reptiles

Desert slender salamander (*Batachoseps major aridus*). The desert slender salamander is a State and federally endangered species. It is often found near permanent sources of water with riparian vegetation such as desert springs and creeks, under limestone slabs, talus rock, crevices in rocks and soil, and beneath decomposing trees. This species is known from two locations in southern California, both populations are very small, and they are restricted to these areas by environmental conditions.

Arroyo toad (*Bufo californicus*). The arroyo toad is a federally endangered and CSC species. The arroyo toad occurs in semi-arid regions including valley-foothill, desert riparian, and desert wash habitat. This species is restricted to shallow, gravelly streams and rivers with sandy banks that typically contain willow, cottonwood, and sycamore riparian vegetation in upland areas. It has very specialized habitat requirements which include low turbidity, absence of predatory fishes, exposed side-bar pool complexes, and stable sandy terraces with dampened banks possessing some emergent vegetation or algal mats. Threats to this species include introduction of exotic species, loss of habitat due to urban development, and hardening of channels and drainages.

Mountain yellow-legged frog (*Rana muscosa*). The mountain yellow-legged frog is a federally endangered, CSC and a FSS species. This species inhabits ponds, dams, lakes, and streams at moderate to high elevations. This species prefers shorelines along open streams and lakes with gently sloping banks which provide areas for basking. In southern California, this species is isolated into three distinct populations in the San Gabriel, San Bernardino, and San Jacinto mountains. This frog is susceptible to the introduction of exotic species, due to the vulnerability of larval forms and their overall long maturation process.

Desert tortoise (*Gopherus agassizii*). The desert tortoise is a State and federally threatened species. It inhabits almost any desert habitat with friable soils suitable for burrow construction and nest building. Tortoises are commonly found in desert scrub, desert wash, Joshua tree, and creosote bush habitats with large annual wildflower blooms. This species is threatened throughout its range by loss of habitat due to development, predation by ravens, and off-road vehicle usage.

Coachella Valley fringe-toed lizard (*Uma inornata*). The Coachella Valley fringe-toed lizard is federally threatened and State endangered species. This species typically inhabits sand dune habitats in the Coachella Valley, Riverside County. It requires fine loose sand for burrowing, and is found interspersed with hardpan areas possessing widely spaced desert shrubs. The major threats for this species include urban development, sand and gravel mining operations, and off-road vehicle usage.

Coast range newt (*Taricha torosa torosa*). The coast range newt is a CSC species. It is a moderately sized dark brown salamander that frequents terrestrial habitats, but requires ponds, reservoirs, and slow-moving streams for breeding purposes. This species was once distributed throughout southern California; however, it is now limited to only a few coastal drainages still possessing adequate vegetative cover and a water source in Los Angeles, Orange, and San Diego Counties. Threats to this species include loss of habitat, and the introduction of exotic species.

Couch's spadefoot (*Scaphiopus couchii*). The Couch's spadefoot is a CSC and BLM sensitive species. This species can vary in color from bright green-yellow to a darker brown-yellow, it has a dark mottling on the dorsal surface with green, brown, or black colorations in addition to the presence of many small wart-like structures. It has a white ventral surface, a diagnostic spade on each of the hind feet, and the vertical pupil. The spadefoot toad is tolerant of dry terrain and is often found in shortgrass prairie habitat, mesquite savannah and creosote bush desert. They remain dormant for 8 to 10 months of the year, only to emerge during the first summer rain storms. Fine sandy substrates are required for the digging of burrows. Couch's spadefoot has one of the most rapid rates of development known; this enables it to take advantage of the short lived pools, puddles, and ponds in this arid environment. Larvae typically hatch in less than one day, and can achieve metamorphosis in seven days. Threats to this species include loss of habitat due to urban development, off-road vehicle use, and prolonged periods of drought.

Western spadefoot (*Spea hammondi*). The western spadefoot is a CSC species, it typically occurs in coastal sage scrub, chaparral, and grasslands, where it may be found in sandy washes, floodplains, and in low lying hills. Temporary breeding pools are a crucial requirement for the spadefoot's continued occupation of an area, adjacent upland habitats consisting of hardwood and oak woodlands are a necessity, providing a burrowing area for adult spadefoot's during the dry season. Threats to this species include loss of habitat due to urban development, and introduction of exotic species.

Colorado River toad (*Bufo alvarius*). The Colorado River toad is a CSC species found along the Colorado River and southern Imperial Valley into Arizona and northern Mexico. This toad is large, and can be olive brown to black with distinctive, large, oval to sausage-shaped glands located on the upper surfaces of all four limbs. The presence of one to four white tubercles formed just posterior to the angle of the mouth is another key diagnostic for this species. The major threats to this species are loss of habitat due to urban and agricultural development, and exploitation for their intoxicating venom.

Southwestern pond turtle (*Clemmys marmorata pallida*). The southwestern pond turtle is a CSC and a FSS species. This species inhabits permanent or nearly permanent bodies of water and portions of streams that have deeper, slow moving water and basking sites. This species is threatened by loss of habitat due to urban development, introduction of exotic species, fragmentation of habitats, and the hardening of channels and drainages.

San Diego horned lizard (*Phrynosoma coronatum blainvillei*). The San Diego coast horned lizard is a CSC and a FSS species. Typically occurring in chaparral, grassland, and scrub habitats with ample numbers of native ant prey, this lizard usually occupies habitats that have open basking areas and loose soil for burrowing. The San Diego coast horned lizard is considered at-risk due to conversion of natural areas to agriculture and development, and the spread of non-native Argentine ants into Southern California (Stebbins, 2003).

Flat-tailed horned lizard (*Phrynosoma mcallii*). The Flat-tailed horned lizard is a CSC and a BLM sensitive species. It typically occurs in desert washes and desert flats in Riverside, San Diego and Imperial Counties. Fine sands are considered a critical habitat element, allowing lizards to burrow in order to avoid temperature extremes. The presence of ants and some vegetative cover are critical habitat elements for this species. Large portions of the range for this species have been lost to inundation during the filling of the Salton Sea, and both urban and agricultural development. The invasion of non-native Argentine ants into southern California has also had some limiting effects on this lizard species.

Colorado Desert fringe-toed lizard (*Uma notata*). The Colorado Desert fringe-toed lizard is a CSC and BLM sensitive species. They typically inhabit sand dune habitats, flats, riverbanks, and washes in the Colorado Desert at elevations from below sea level to 180 meters. It requires fine, loose sand for burrowing in association with creosote bush or other scrubby growth. Its sandy habitats are fragile and have been heavily impacted by off-road vehicle use, and sand stabilization efforts.

Mojave fringe-toed lizard (*Uma scoparia*). The Mojave fringe-toed lizard is a CSC and BLM sensitive species. This species is restricted to dune habitats in the deserts of Los Angeles, Riverside, and San Bernardino Counties. They typically inhabit sand dune habitats or margins of dry lakebeds and washes in the Mojave Desert at elevations from below sea level to 180 meters. This lizard is also susceptible to off-road vehicle use, and sand stabilization efforts.

Belding's orange-throated whiptail (*Aspidoscelis hyperythra beldingi*). The orange-throated whiptail (*Aspidoscelis hyperythra*) is a CSC species. It typically occurs in lower elevation coastal scrub, chaparral, and valley-foothill hardwood habitats. It also prefers washes and other sandy areas with patches of vegetation emerging from rock fields, with an ample invertebrate prey base comprised mostly of termites. Off-road vehicle use poses a major threat to the survival of this species.

Silvery legless lizard (*Anniella pulchra pulchra*). The silvery legless lizard is a CSC and a FSS species. In California, its range extends from Contra Costa County to the Mexican border. This species requires sandy or loose loamy soils under sparse vegetation for burrowing and is strongly associated with soils that contain high moisture content. It has been found in beaches, chaparral, or pine-oak woodland habitat and sycamore, cottonwood, or oaks riparian habitat that grows on stream terraces.

Banded Gila monster (*Heloderma suspectum cinctum*). The banded Gila monster is a CSC and BLM sensitive species. This species is found in arid and semi arid habitats in southeastern California and Arizona. The only venomous lizard in California, the banded Gila monster feeds on small mammals, eggs, lizards, insects and carrion. Populations are threatened by habitat loss, illegal collection, urban development and fast moving vehicles.

Southern rubber boa (*Charina bottae umbratica*). The southern rubber boa is a State threatened species, and FSS species. This species is known from several locations in the San Bernardino Mountains, and San Bernardino and Riverside Counties. The southern rubber boa typically occurs in conifer forests near streams and meadows often seeking cover in rotting logs. This boa is typically found in the vicinity of streams or wet meadows.

Southern rosy boa (*Charina trivirgata*). The southern rosy boa is a BLM sensitive species. This species is widely but sparsely distributed in desert and chaparral habitats with moderate to dense vegetation throughout southern California, south of Los Angeles. In coastal areas it inhabits rocky chaparral-covered hillsides and canyons, while in the desert it is found on scrub flats with good cover and in the mountains. It often seeks refuge under rocks, in boulder piles and along rock outcrops and vertical canyon walls.

San Bernardino ringneck snake (*Diadophis punctatus modestus*). The San Bernardino ringneck snake is a FSS species. This species occurs in open, relatively rocky areas, often in moist areas and near intermittent streams.

San Diego mountain kingsnake (*Lampropeltis zonata pulchra*). The San Diego mountain kingsnake is a CSC species, and is listed as sensitive by the U.S. Forest Service and is covered under the Western Riverside Multiple Species Habitat Conservation Plan. This species is found in shrubland, chaparral and woodland habitats in southern California. The diet of the San Diego mountain kingsnake is comprised

of lizards, eggs, snakes, small mammals and birds. Threats to this species include habitat loss due to urbanization and illegal collection.

Two-striped garter snake (*Thamnophis hammondi*). The two-striped garter snake is a CSC and a FSS species. This highly aquatic species occurs within permanent waters, often along streams with rocky beds and riparian habitat. It is known to occur in coastal California from Salinas to Baja California. Major threats to this species include loss of habitat due to urban development, and off-road vehicle use.

Northern red-diamond rattlesnake (*Crotalus ruber ruber*). The northern red-diamond rattlesnake is a CSC species and is covered under the Western Riverside Multiple Species Habitat Conservation Plan. This species inhabits desert, chaparral and woodland habitats with rocky outcrops. Diet consists of small invertebrates. Populations are threatened by habitat loss due to urban development.

Birds

Peregrine falcon (*Falco peregrinus*). The peregrine falcon is a State endangered species, a fully protected species under CDFG, and a sensitive species under the U.S. Forest Service and is covered under the Western Riverside Multiple Species Habitat Conservation Plan. This species is found in desert, chaparral, woodland and urban environments. Its diet consists of birds, small mammals, lizards, fish and insects. Threats to this species include pesticide use, habitat degradation and loss, occasional shooting, and loss of primary prey.

California black rail (*Laterallus jamaicensis coturniculus*). The California black rail is a State threatened species, a fully protected species by CDFG and a proposed covered species under the Coachella Valley Multiple Species Habitat Conservation Plan. This species is found in various habitats from coastal marshes to freshwater marshes along the lower Colorado River. The diet for this species consists of insects, isopods and seeds of aquatic plants. Threats to this species include loss and degradation of habitat and pesticide use.

Yuma clapper rail (*Rallus longirostris yumanensis*). The Yuma clapper rail is a federally endangered species, a State threatened species, a fully protected species by CDFG, and a proposed covered species under the Coachella Valley Multiple Species Habitat Conservation Plan. This species inhabits freshwater cattail and bulrush marshes along the lower Colorado River and around the Salton Sea. This species nests in salt and brackish marshes, freshwater marshes and mangrove swamps. Its diet consists of aquatic invertebrates, crustaceans, fish, worms, frogs, snails and seeds. Threats to this species include habitat loss and non-native plant invasions.

Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*). The western yellow-billed cuckoo is a federal listing candidate, a State endangered species, listed as sensitive by the U.S. Forest Service, and covered under the Western Riverside Multiple Species Habitat Conservation Plan. This species nests in riparian forests along the broad flood-bottoms of large river systems with willow, cottonwoods blackberry or wild grape bushes.

Elf owl (*Micrathene whitneyi*). The elf owl is a State endangered species. This species is found in desert and woodland habitats, nesting in areas limited to cottonwood–willow and mesquite riparian along the Colorado River. Its diet consists of mostly invertebrates but occasionally lizards, snakes and young kangaroo rats. Threats to the elf owl include habitat loss, predation, parasitism and human disturbance.

Gilded flicker (*Colaptes chrysoides*). The gilded flicker is a State endangered species found in deserts, cottonwood and riparian areas near the Colorado River, requiring standing snags and hollow trees for nesting. Its diet includes insects, fruits, berries and seeds.

Gila woodpecker (*Melanerpes uropygialis*). The Gila woodpecker is a State endangered species that is found in cottonwood trees and other desert riparian areas. This species feeds on insects pecked or probed out of bark, crevices in trees or inside cactus, also feeding on fruits of certain cactus species. Threats to this species include habitat loss and inter-specific competition.

Willow flycatcher (*Empidonax traillii*). The willow flycatcher is a State endangered species and is listed as sensitive by CDFG. This species is found in chaparral and woodland habitats associated with willow and other similar shrubs. Nesting areas are generally near slow-moving streams, standing water or swampy thickets of willow and buttonbush. Diet mostly comprises of insects and berries. Threats to this species include habitat loss and fragmentation, non-native vegetation, brood parasitism and water developments such as stream diversions and channelization.

Southwestern willow flycatcher (*Empidonax traillii extimus*). The southwestern willow flycatcher is a State and federally endangered species, and is also covered by both the Western Riverside and Coachella Valley Multiple Species Habitat Conservation Plans. This subspecies is a summer resident that nests within extensive thickets of low, dense willows on the edges of wet meadows, ponds, backwaters, and creeks. Threats to this species include habitat loss and degradation and pesticide use.

Least Bell's vireo (*Vireo bellii pusillus*). Least Bell's vireo is a State and federally endangered species, and is covered under both the Western Riverside and Coachella Valley Multiple Species Habitat Conservation Plans. This species is a summer resident of California, nesting in low riparian habitat in close proximity to water or dry river bottoms. Nests are constructed along the margins of bushes or on twigs projecting into pathways. Threats to this species include habitat loss/degradation and nest parasitism.

Coastal California gnatcatcher (*Polioptila californica californica*). The coastal California gnatcatcher is a federally threatened species, a CSC species, and is covered under the Western Riverside Multiple Species Habitat Conservation Plan. This species is found in shrubland and chaparral habitats, specifically the coastal sage scrub plant community. The diet of coastal California gnatcatchers consists primarily of invertebrates. Threats to this species include urban development and brood parasitism.

White-faced ibis (*Plegadis chihi*). The white-faced ibis is a CSC species and is covered under the Western Riverside Multiple Species Habitat Conservation Plan. This species is found in shallow, freshwater marshes and nests in dense tule thickets near areas of shallow water for foraging. It generally feeds on crustaceans, amphibians, insects and worms. Populations of this species are threatened by pesticide contamination in breeding areas and limited number of breeding areas.

Cooper's hawk (*Accipiter cooperii*). The Cooper's hawk is a CSC species and is covered under the Western Riverside Multiple Species Conservation Plan. This species nests in open woodland and riparian areas with mostly deciduous trees. The Cooper's hawk feeds on small to medium-sized birds, small mammals, reptiles and amphibians. This species is threatened by pesticide use and loss of habitat.

Golden eagle (*Aquila chrysaetos*). The golden eagle is a CSC species, and is fully protected under CDFG, listed as a sensitive species by BLM, and covered under the Western Riverside Multiple Species Habitat Conservation Plan. This species is found in rolling foothills, mountain areas, sage-juniper flats and deserts. Nests are constructed in cliffs or large trees in open areas. Threats to this species include power-line electrocution, poison intended for large mammals, occasional shootings and habitat loss.

Ferruginous hawk (*Buteo regalis*). The ferruginous hawk is a CSC and BLM sensitive species and is covered under Western Riverside Multiple Species Habitat Conservation Plan. This species inhabits prairie, grassland, desert and forest habitats and nests along streams or steep slopes. The ferruginous hawk feeds on primarily mammals, but will also eat other vertebrates and occasionally insects. Threats to this species include habitat loss, human disturbance and brood parasites.

Swainson's hawk (*Buteo swainsoni*). The Swainson's hawk is a State threatened species, and is listed as a sensitive species by the U.S. Forest Service and protected under the Western Riverside Multiple Species Habitat Conservation Plan. This species inhabits cropland, desert, grassland, savanna and mixed woodland habitats. Threats to this species include expansion of cropland not conducive to foraging, development, pesticide use and reduced prey populations.

Northern harrier (*Circus cyaneus*). The northern harrier is a CSC species and is covered under the Western Riverside Multiple Species Habitat Conservation Plan. This species nests on the ground or on stumps or posts in meadows, marshes, grasslands and cultivated fields. Its diet includes small mammals, birds, reptiles, amphibians, large insects and occasionally carrion. Threats to this species include habitat loss and pesticide use.

White-tailed kite (*Elanus leucurus*). The white-tailed kite is a fully protected species by CDFG and is covered under the Western Riverside Multiple Species Habitat Conservation Plan. This species is a permanent resident in California, inhabiting savanna, open woodland, marshes and cultivated fields. White-tailed kites feed almost exclusively on voles, mice and occasionally pocket gophers.

Prairie falcon (*Falco mexicanus*). The prairie falcon is a CSC species and is covered under the Western Riverside Multiple Species Habitat Conservation Plan. This species inhabits dry, open terrain with breeding sites located on cliffs. It opportunistically feeds on mammals, birds and reptiles. Threats to this species include pesticide use, habitat loss, parasites and grazing.

Mountain plover (*Charadrius montanus*). The mountain plover is a CSC species and is covered under the Western Riverside Multiple Species Habitat Conservation Plan. This species can be found in desert, cropland and grassland habitats and feeds on primarily insects. Threats to this species include habitat loss, farming equipment and urban development.

Short-eared owl (*Asio flammeus*). The short-eared owl is a CSC species and is found in cropland, grassland and savanna habitats. Its nests are located in slight depressions on the ground near water. Diet of short-eared owls include small mammals, small birds and insects. Threats to this species include habitat loss and predators.

Long-eared owl (*Asio otus*). The long-eared owl is a CSC species found in forest, desert oasis, chaparral and woodland habitats. Its nests are located in abandoned raptor nests or in tree cavities, but rarely on the ground. The diet for this species consists of small mammals.

Burrowing owl (*Athene cunicularia*). The burrowing owl is a CSC and BLM sensitive species and is covered under both the Western Riverside and Coachella Valley Multiple Species Habitat Conservation Plans. Burrowing owls historically occurred throughout much of California; however, many former populations have vanished. The burrowing owl is a yearlong resident in California that inhabits open habitats, primarily grasslands and deserts. Some overwintering burrowing owls also occur in California, but do not stay and breed during the spring and summer seasons like their resident counterparts. Burrowing owls require a burrow for roosting and nesting cover. Although burrowing owls usually nest in aban-

doned ground squirrel burrows, they will also use other small mammal burrows, pipes, culverts, and nest boxes, particularly where burrows are scarce (Zeiner et al., 1990).

Brown-crested flycatcher (*Myiarchus tyrannulus*). The brown-crested flycatcher is a CSC species found in desert riparian habitat along the Colorado River and other desert riparian areas northwest to the City of Victorville, California. Riparian thickets, trees snags and shrubs are required within these habitats for foraging perches, nesting cavities and cover. The brown-crested flycatcher's diet includes mainly beetles and other flying insects.

Vermillion flycatcher (*Pyrocephalus rubinus*). The vermillion flycatcher is a CSC species found in desert, cropland, savanna, chaparral and woodland habitats. Its diet is mainly comprised of insects caught by flycatching and from ground surface. Threats to this species include destruction of breeding habitat and cowbird parasitism.

Loggerhead shrike (*Lanius ludovicianus*). The loggerhead shrike is a CSC species and is covered under the Western Riverside Multiple Species Habitat Conservation Plan. This species is found in cropland, desert, grassland, savanna and chaparral habitats. It builds its nests in small shrubs or trees. Diet for this species consists of invertebrates, small lizards, frogs, birds and rodents and occasionally scavenges. Threats to this species include pesticide use, predation, loss of breeding habitat, human disturbance and nest predation.

Gray vireo (*Vireo vicinior*). The gray vireo is a CSC and BLM sensitive species and is covered under the Western Riverside and Coachella Valley Multiple Species Habitat Conservation Plans. This species is found in desert, shrubland, and woodland habitats, nesting in a shrub or tree 0.5 to 2 meters tall. Diet consists only of insects. Threats to this species include habitat loss, brood parasitism and grazing.

California horned lark (*Eremophila alpestris actia*). The California horned lark is a CSC species and is covered under the Western Riverside Multiple Species Habitat Conservation Plan. Horned larks frequent grasslands and other open habitats with low, sparse vegetation. Its diet consists of mainly seeds and insects. Threats to this species include habitat loss and degradation.

Coastal cactus wren (*Campylorhnchus brunneicapillus sandiegensis*). The coastal cactus wren is a CSC species, and is listed a sensitive by the U.S. Forest Service. This species occurs in coastal sage scrub with tall *Opuntia* cactus for nesting and roosting. Its diet primarily consists of insects, spiders and sometimes small lizards, however in the fall and winter, fruit from *Opuntia* species supplements its diet. Threats to this species include habitat loss due to development.

Bendire's thrasher (*Toxostoma bendirei*). Bendire's thrasher is a CSC and BLM sensitive species. This species is found in cropland, desert, grassland and woodland habitats with fairly large shrubs or cacti and open ground. Bendire's thrasher feeds on arthropods but will also eat fruit and some vegetation. Threats to this species mostly consist of habitat loss.

Crissal thrasher (*Toxostoma crissale*). The Crissale thrasher is a CSC species and is proposed as a covered species under the Coachella Valley Multiple Species Habitat Conservation Plan. It can be found in desert and shrubland/chaparral habitats and nests in low trees or shrubs. Its diet consists of insects, berries and occasionally small lizards.

LeConte's thrasher (*Toxostoma lecontei*). LeConte's thrasher is a CSC and BLM sensitive species and is proposed as a covered species under the Coachella Valley Multiple Species Habitat Conservation Plan.

LeConte's thrasher is found in desert scrub habitats associated with creosote bush scrub. This species feeds on insects, berries and seeds. Threats include development, grazing and feral animals.

Yellow warbler (*Dendroica petechia brewsteri*). The yellow warbler is a CSC species and is covered under the Western Riverside and Coachella Valley Multiple Species Habitat Conservation Plans. This species is a summer resident of California, inhabiting riparian areas and nesting in willows, cottonwoods, aspens and other trees. Threats to the yellow warbler include habitat loss and brood parasitism by cowbirds.

Sonoran yellow warbler (*Dendroica petechia sonorana*). The Sonoran yellow warbler is a CSC species and is a summer resident of the Colorado River Valley. This species inhabits riparian areas and nests in cottonwoods, willows, aspens and other trees. Threats to this species include nest brood parasitism and habitat loss.

Yellow-breasted chat (*Icteria virens*). The yellow-breasted chat is a CSC species and is covered under the Western Riverside and Coachella Valley Multiple Species Habitat Conservation Plans. This species occurs as a summer resident and requires dense willow riparian thickets and other brushy tangles for nesting. These areas typically have a thick understory of willow, blackberry and wild grape. Populations of this species are threatened by habitat loss and nest parasitism.

Summer tanager (*Piranga rubra*). The summer tanager is a CSC species and is proposed to be covered under the Coachella Valley Multiple Species Habitat Conservation Plan. This species is found in forest, chaparral and woodland habitats with cottonwood and willows. Summer tanagers feed on insects, small fruits and spiders.

Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*). The southern California rufous-crowned sparrow is a CSC species and is covered under the Western Riverside Multiple Species Habitat Conservation Plan. This species nests and feeds on steep, dry, herbage-covered hillsides with scattered shrubs and rock outcrops throughout southern California. It feeds on insects and seeds of grasses and forbes.

Bell's sage sparrow (*Amphispiza bellii bellii*). Bells' sage sparrow is a CSC species and is covered under the Western Riverside Multiple Species Habitat Conservation Plan. This species is found in chaparral habitats throughout California dominated by chamise and/or California sagebrush. Bell's sage sparrow feeds on insects, spiders and seeds.

Tri-colored blackbird (*Agelaius tricolor*). The tri-colored blackbird is a CSC and BLM sensitive species and is covered under the Western Riverside Multiple Species Conservation Habitat Plan. The species occurs in wetland areas near open water that is typically protected by a perimeter of reeds and other tall wetland plants. The tri-colored blackbird is a highly colonial nesting species. Diet of this species consists of insects, seeds and grains. Threats to this species include habitat loss and non-native vegetation growth.

Mammals

Palm Springs round-tailed ground squirrel (*Spermophilus tereticaudus chlorus*). The Palm Springs round-tailed ground squirrel is a federal candidate for listing, a CSC species, and is proposed as a covered species under the Coachella Valley Multiple Species Habitat Conservation Plan. This species is found in desert, sand dune and playa habitats in the Coachella Valley. The Palm Springs round-tailed ground

squirrel feeds mostly on green vegetation and seeds. Populations are threatened by habitat loss and habitat fragmentation.

San Bernardino kangaroo rat (*Dipodomys merriami parvus*). The San Bernardino kangaroo rat is a federally endangered species, a CSC species and covered under the Western Riverside Multiple Species Habitat Conservation Plan. This species is found in shrubland and chaparral habitats in San Bernardino County. Its diet is comprised exclusively of seeds and threats to this species include habitat loss/degradation, human disturbance and urban development.

Stephen's kangaroo rat (*Dipodomys stephensi*). Stephen's kangaroo rat is a federally listed endangered, State listed threatened species, and is covered under the Western Riverside Multiple Species Habitat Conservation Plan. Found only in the San Jacinto Valley and directly adjacent areas, this species inhabits slightly disturbed grassland and chaparral habitats. Its diet is comprised of seeds and grains and threats include habitat loss, development and certain non-native grass species.

Peninsular bighorn sheep (*Ovis Canadensis nelsoni [cremnobates]*). The Peninsular bighorn sheep is federally endangered species, State threatened species, is fully protected by CDFG and is proposed to be covered under the Coachella Valley Multiple Species Habitat Conservation Plan. This species occurs in steep walled canyons and ridges bisected by sandy or rocky washes close to a permanent water source. Peninsular bighorn sheep are threatened by habitat loss/degradation, predation, disease and presence of domestic livestock.

Mexican long-tongued bat (*Choeronyctris mexicana*). The Mexican long-tongued bat is a CSC species and is found in desert, forest, grassland, savanna, chaparral and woodland habitats, as well as roosting in caves, abandoned mines, rock fissures and occasionally buildings. Diet for this species includes fruit juices, pollens and nectars. Threats to the Mexican long-tongued bat include human disturbance, loss of food resources and renewed mining.

California leaf-nosed bat (*Macrotus californicus*). The California leaf-nosed bat is a CSC species that is found in desert riparian, desert wash, desert scrub, alkali scrub and palm oasis habitats. Roosts are located in caves, old buildings and abandoned mines. Diet for this species consists of large insects, insect larvae and fruit. Populations are threatened by roost disturbance such as mine closures.

Pallid bat (*Antrozous pallidus*). The pallid bat is a CSC, BLM and U.S. Forest Service sensitive species. This species inhabits woodland, chaparral, grassland and desert habitats, roosting in rock crevices or buildings. The pallid bat feeds exclusively on arthropods.

Townsend's big-eared bat (*Corynorhinus townsendii*). Townsend's big-eared bat is a CSC, BLM and U.S. Forest Service sensitive species. This species is found in forests, chaparral and grassland habitats and roosts in caves, tree cavities and buildings. It feeds primarily on insects and is threatened by habitat loss, vandalism, human disturbance and pesticide use.

Spotted bat (*Euderma maculatum*). The spotted bat is a CSC and BLM sensitive species. This species is found in various habitats from desert to montane coniferous stands and roosts in caves, cliff crevices and cracks, and canyons. The diet of the spotted bat includes moths and beetles. Threats to this species include habitat destruction and pesticide use.

Western yellow bat (*Lasiurus xanthinus*). The western yellow bat is a species that is proposed to be covered under the Coachella Valley Multiple Species Habitat Conservation Plan. This species is found

in forest, urban and woodland environments, roosting in trees with preference for palms. Diet for the western yellow bat consists of invertebrates.

Western small-footed myotis (*Myotis ciliolabrum*). The western small-footed myotis is a BLM sensitive species and is found in woodland, shrubland and grassland habitats. Its roosts are located in rock crevices, caves, tunnels, under boulders, in buildings and beneath loose bark. Diet for this species consists of a variety of small insects. Populations of this species are threatened by killing, human disturbance, habitat loss and contaminant poisoning.

Long-eared myotis (*Myotis evotis*). The long-eared myotis is a BLM sensitive species and is found mainly in forested areas, although will inhabit grassland, shrubland and woodland areas. Its diet is comprised primarily of insects and it will forage for its prey over water or among trees. Threats to the long-eared myotis include human disturbance to maternity colonies, hibernacula and roosts and habitat loss.

Myotis occultus (*Arizona myotis*). The Arizona myotis is a CSC species and inhabits the lowlands and mountain ranges around the Colorado River. This species is also found throughout the southwestern United States and south into Mexico. Roosting areas are found in tree hollows, rock crevices and under bridges. The largest threat to this species is habitat loss.

Fringed myotis (*Myotis thysanodes*). The fringed myotis is a BLM sensitive species and occurs in desert, grassland and woodland habitats at elevations between 1,000 to 2,150 meters amsl. This species feeds primarily on beetles and other insects. Populations of this species are threatened by human disturbance, habitat and roost degradation/loss, pesticide use and destruction/disturbance of water sources.

Cave myotis (*Myotis velifer*). The cave myotis is a CSC and BLM sensitive species that inhabits deserts and grasslands within a few miles of a permanent water source. The diet of the cave myotis includes insects, depending on season and habitat. Population decreases can be due to habitat loss and disturbance to nurseries.

Yuma myotis (*Myotis yumanensis*). The Yuma myotis is a CSC species and can be found in desert, forest, grassland and woodland habitats closely associated with water. Insects are the main diet component of this species. Threats to this species include human disturbance and habitat loss.

Western mastiff bat (*Eumops perotis californicus*). The western mastiff is a CSC and BLM sensitive species. This species occurs in arid and semi-arid rocky habitats and roosts in rock crevices and shallow caves. The diet of the western mastiff bat is exclusively comprised of insects.

Pocketed free-tailed bat (*Nyctinomops femorosaccus*). The pocketed free-tailed bat is a CSC species and is found in habitats with rugged canyons, rock outcroppings and high cliffs in southern California, southwestern Arizona and Mexico. This species feeds exclusively on insects. Population declines of this species may be attributed to pesticide use, human disturbance and habitat loss.

Big free-tailed bat (*Nyctinomops macrotis*). The big free-tailed bat is a CSC species and is associated with rocky areas and rugged terrain below 1,800 meters amsl. Roost sites are found in rock crevices, buildings, tree cavities and cliffs. Its diet is mainly comprised of insects, mostly large moths. Populations of this species are threatened by grazing, pesticide use and human disturbance.

San Diego black-tailed jackrabbit (*Lepus californicus bennettii*). The San Diego black-tailed jackrabbit is a CSC species and is covered under the Western Riverside Multiple Species Habitat Conservation

Plan. This species is found in cropland, desert, grassland and savanna habitats. This species feeds on grasses, forbs, buds, bark and plant leaves, and its populations are threatened by habitat loss.

Dulzura pocket mouse (*Chaetodipus californicus femoralis*). The Dulzura pocket mouse is a CSC species that is found in shrubland and chaparral habitats with friable soil for burrowing. Its diet is exclusively comprised of seeds and populations are threatened by habitat loss and fragmentation.

Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*). The northwestern San Diego pocket mouse is a CSC species and is covered under the Western Riverside Multiple Species Habitat Conservation Plan. This species is found in desert, shrubland and chaparral habitats with sandy soils for burrowing. The northwestern San Diego pocket mouse feeds on seeds and has a storage system in the burrow for excess seeds.

Pallid San Diego pocket mouse (*Chaetodipus fallax pallidus*). The pallid San Diego pocket mouse is a CSC species and is found in sandy, herbaceous areas occurring in desert wash, desert scrub and desert succulent scrub habitats. The pallid San Diego pocket mouse feeds on seeds and has a storage system in the burrow for excess seeds.

San Bernardino white-eared pocket mouse (*Perognathus alticolus alticolus*). The San Bernardino white-eared pocket mouse is a CSC species and is listed as sensitive by the U.S. Forest Service. This species is found in old field, shrubland and woodland habitats in San Bernardino County. Its diet is comprised of seeds and grains and threats to its populations include habitat loss and development.

Palm Springs pocket mouse (*Perognathus longimembris bangsi*). The Palm Springs pocket mouse is a CSC species and is proposed to be covered under the Coachella Valley Multiple Species Habitat Conservation Plan. This species is found in desert, grassland and chaparral habitats with soft soils for burrowing. The Palm Springs pocket mouse primarily feeds on seeds and vegetation. Threats to this species include habitat loss and development.

Los Angeles pocket mouse (*Perognathus longimembris brevinasus*). The Los Angeles pocket mouse is a CSC species, and is listed as sensitive by the U.S. Forest Service and is covered under the Western Riverside Multiple Species Habitat Conservation plan. This species is found in desert, grassland and chaparral habitats with soft soils for burrowing. The Los Angeles pocket mouse primarily feeds on seeds and vegetation. Threats to this species include habitat loss and development.

San Diego desert woodrat (*Neotoma lepida intermedia*). The San Diego desert woodrat is a CSC species and is covered under the Western Riverside Multiple Species Habitat Conservation plan. Found in sagebrush scrub and chaparral habitats, this species feeds on fruits, seeds and vegetation.

Southern grasshopper mouse (*Onychomys torridus ramona*). The southern grasshopper mouse is a CSC species and is found in desert, chaparral and grassland habitats. The diet of this species consists of insects, small vertebrates, seeds and some vegetation.

Colorado River cotton rat (*Sigmodon arizonae plenus*). The Colorado River cotton rat is a CSC species and occurs in cropland, grassland and desert habitats near the Colorado River. This species feeds on green vegetation and some insects, but unlike other rodents, cotton rats do not store food.

American badger (*Taxidea taxus*). The American badger is a CSC species and can be found in arid and semi-arid environments throughout much of the United States. This species primarily feeds on

small rodents and occasionally lizards, snakes, scorpions and insects. Populations are threatened by habitat loss/degradation, intentional killing and declines in food supply.

Yuma mountain lion (*Puma concolor browni*). The Yuma mountain lion is a CSC species and occurs in mixed woodland, desert and chaparral habitats in the Colorado River Valley. Ungulates, other mammals and some large lizards comprise the diet of the Yuma mountain lion. This species is threatened by loss of and degradation of habitat.

Nelson's bighorn sheep (*Ovis Canadensis nelsoni*). The Nelson's bighorn sheep is a BLM and U.S. Forest Service sensitive species. This species is found in desert habitats with open, rocky steep areas close to available water and herbaceous vegetation. The Nelson's bighorn sheep feeds on vegetation and probably requires a mineral lick during the breeding season. This species is threatened by habitat loss/ degradation, predation, disease and presence of domestic livestock.

Appendix 7-3 Sensitive Plants with a Low Potential to Occur

Appendix 7-3 Sensitive Plants Species With A Low Potential to Occur Along the Proposed Project				
Scientific Name **Common Name**	**Status**	**Flower-ing Period**	**Habitat**	**Potential to Occur / transmission line segment**
Acanthomintha ilicifolia San Diego thornmint	Fed: THR Ca: END CNPS: 1B R-E-D: 2-3-2 BLM: None	Apr – Jun	Chaparral; Coastal scrub; Valley and foothill grassland; Vernal pools/clay	Unlikely
Antennaria marginata white-margined everlasting	Fed: None Ca: None CNPS: 2 R-E-D: 3-1-1 BLM: None	May-Aug	Lower and Upper montane coniferous forest; Dry woods	Unlikely
Antirrhinum cyathiferum Deep Canyon snapdragon	Fed: None Ca: None CNPS: 2 R-E-D: 3-1-1 BLM: None	Feb - Apr	Sonoran desert scrub	Low/CCRA-DVS
Arabis breweri* var. *pecuniaria San Bernardino rock cress	Fed: None Ca: None CNPS: 1B R-E-D: 3-2-3 BLM: None	Mar - Aug	Subalpine coniferous forest	Unlikely
Arabis johnstonii Johnston's rock cress	Fed: None Ca: None CNPS: 1B R-E-D: 3-2-3 BLM: None	Feb – Jun	(WR) Chaparral; Lower montane coniferous forest/often on eroded clay	Unlikely
Arabis pulchra* var. *munciensis Darwin rock cress	Fed: None Ca: None CNPS: 2 R-E-D: 3-1-1 BLM: None	Apr	Chenopod scrub; Mojavean desert scrub (on limestone)	Unlikely
Arctostaphylos otayensis Otay manzanita	Fed: None Ca: None CNPS: 1B R-E-D: 3-2-3 BLM: SS	Jan – Apr	Chaparral; Cismontane woodland/metavolcanic	Unlikely
Arenaria lanuginosa* ssp. *saxosa rock sandwort	Fed: None Ca: None CNPS: 2 R-E-D: 3-1-1 BLM: None	Jul - Aug	Subalpine coniferous forest; Upper montane coniferous forest; mesic, sandy areas	Unlikely

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Scientific Name **Common Name**	**Status**	**Flower-ing Period**	**Habitat**	**Potential to Occur / transmission line segment**
Arenaria paludicola marsh sandwort	Fed: END Ca: END CNPS: 1B R-E-D: 3-3-2 BLM: None	May - Aug	Bogs and fens; Marshes and swamps (freshwater)	Unlikely; presumed extant
Arenaria ursina Big Bear Valley sandwort	Fed: THR Ca: None CNPS: 1B R-E-D: 2-2-2 BLM: None	May - Aug	Pebble (Pavement) plain; Pinyon and juniper woodland (mesic, rocky sites)	Unlikely
Astragalus brauntonii Braunton's milk-vetch	Fed: END Ca: None CNPS: 1B R-E-D: 3-3-3 BLM: None	Feb – Jul	Closed-cone coniferous forest; Chaparral; Coastal scrub; Valley and foothill grassland/recent burns or disturbed areas, usually carbonate	Unlikely
Astragalus deanei Dean's milk-vetch	Fed: None Ca: None CNPS: 1B R-E-D: 3-3-3 BLM: SS	Feb – May	Chaparral; Coastal scrub; Riparian forest	Unlikely
Astragalus douglasii* var. *perstrictus Jacumba milk-vetch	Fed: None Ca: None CNPS: 1B R-E-D: 2-2-2 BLM: SS	Apr – Jun	Chaparral; Cismontane woodland; Valley and foothill grassland/rocky	Unlikely
Astragalus oocarpus San Diego milk-vetch	Fed: None Ca: None CNPS: 1B R-E-D: 3-2-3 BLM: SS	May - Aug	Chaparral (openings); Cismontane woodland	Unlikely
Astragalus tricarinatus triple-ribbed milk-vetch	Fed: END Ca: None CNPS: 1B R-E-D: 3-2-3 BLM: None	Feb - May	(CV) Joshua tree "woodland"; Sonoran desert scrub (with creosote and encelia)	Low/CCRA – DVS; DVS - EBB
Atriplex serenana* var. *davidsonii Davidson's saltscale	Fed: None Ca: None CNPS: 1B R-E-D: 3-2-2 BLM: None	Apr – Oct	(WR) Coastal bluff scrub; coastal scrub/alkaline	Unlikely
Baccharis vanessae Encinitas baccharis	Fed: THR Ca: END CNPS: 1B R-E-D: 2-3-3 BLM: None	Aug – Nov	Chaparral (maritime); Cismontane woodland/sandstone	Unlikely

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Scientific Name **Common Name**	**Status**	**Flowering Period**	**Habitat**	**Potential to Occur / transmission line segment**
Botrychium crenulatum scalloped moonwort	Fed: None Ca: None CNPS: 2 R-E-D: 2-2-1 BLM: None	Jun - Sep	Bogs and fens; Lower montane coniferous forest; Meadows and seeps; Marshes and swamps (freshwater)	Unlikely
Brodiaea filifolia thread-leaved brodiaea	Fed: THR Ca: END CNPS: 1B R-E-D: 3-3-3 BLM: None	Mar - Jun	(WR) Chaparral (openings); Cismontane woodland; Coastal scrub; Playas; Valley and foothill grassland; Vernal pools (clay soils)	Low/CL – STC; SBJ – VS
Brodiaea orcuttii Orcutt's brodiaea	Fed: None Ca: None CNPS: 1B R-E-D: 1-3-2 BLM: SS	May – Jul	(WR) Closed-cone coniferous forest; Chaparral; Cismontane woodland; Meadows and seeps; Valley and foothill grassland; Vernal pools (mesic, clay, sometimes serpentinite)	Unlikely
Calochortus dunnii Dunn's mariposa lily	Fed: None Ca: Rare CNPS: 1B R-E-D: 2-2-2 BLM: None	Apr – Jun	Closed-cone coniferous forest; Chaparral/gabbroic or metavolcanic, rocky	Unlikely
Calochortus palmeri* var. *munzii Munz's mariposa lily	Fed: None Ca: None CNPS: 1B R-E-D: 3-2-3 BLM: None	Jun - Jul	(WR) Chaparral; Lower montane coniferous forest	Low/DVS – EBB; BN and BM
Calochortus palmeri* var. *palmeri Palmer's mariposa lily	Fed: SC Ca: None CNPS: 1B R-E-D: 2-2-3 BLM: None	May - Jul	(WR) Chaparral; Lower montane coniferous forest; Meadows and seeps	Unlikely
Carex comosa bristly sedge	Fed: None Ca: None CNPS: 2 R-E-D: 3-3-1 BLM: None	May - Sep	Coastal prairie; Marshes and swamps (lake margins); Valley and foothill grassland	Unlikely
Castilleja gleasonii Mt. Gleason Indian paintbrush	Fed: None Ca: Rare CNPS: 1B R-E-D: 3-2-3 BLM: None	May – Jun	Lower montane coniferous forests; Pinyon and juniper woodlands (granitic)	Unlikely

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Sensitive Plants Species With A Low Potential to Occur Along the Proposed Project

Scientific Name **Common Name**	**Status**	**Flower-ing Period**	**Habitat**	**Potential to Occur / transmission line segment**
Castilleja lasiorhyncha San Bernardino Mountains owl's-clover	Fed: None Ca: None CNPS: 1B R-E-D: 2-2-3 BLM: None	May - Aug	Chaparral; Meadows and seeps; Pebble (Pavement) plain; Upper montane coniferous forest	Unlikely
Ceanothus cyaneus Lakeside ceanothus	Fed: None Ca: None CNPS: 1B R-E-D: 3-2-2 BLM: SS	Apr – Jun	Closed-cone coniferous forest; Chaparral	Unlikely
Ceanothus ophiochilus Vail Lake ceanothus	Fed: THR Ca: END CNPS: 1B R-E-D: 3-3-3 BLM: None	Feb - Mar	(WR) Chaparral (gabbroic or pyroxenite-rich outcrops)	Unlikely
Chorizanthe orcuttiana Orcutt spineflower	Fed: END Ca: END CNPS: 1B R-E-D: 3-3-3 BLM: None	Mar – May	Chaparral (maritime); Closed-cone coniferous forest; Coastal scrub/sandy openings	Unlikely
Cordylanthus maritimus **ssp. *maritimus*** salt marsh bird's beak	Fed: END Ca: END CNPS: 1B R-E-D: 2-2-2 BLM: None	May – Oct	Coastal dunes; Marshes and swamps (coastal salt)	Unlikely
Cryptantha ganderi Gander's cryptantha	Fed: None Ca: None CNPS: 1B R-E-D: 3-3-2 BLM: SS	Feb – May	Desert dunes; Sonoran desert scrub (sandy)	Unlikely
Cupressus forbesii Tecate cypress	Fed: None Ca: None CNPS: 1B R-E-D: 3-3-2 BLM: SS	N/A	Closed-cone coniferous forest; Chaparral	Low/CL and STC; SBJ – VS
Deinandra conjugens Otay tarplant	Fed: THR Ca: END CNPS: 1B R-E-D: 3-3-2 BLM: None	May – Jun	Coastal scrub; Valley and foothill grassland/clay	Unlikely
Deinandra floribunda Tecate tarplant	Fed: None Ca: None CNPS: 1B R-E-D: 2-2-2 BLM: SS	Aug – Oct	Chaparral; Coastal scrub	Unlikely

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Scientific Name **Common Name**	**Status**	**Flowering Period**	**Habitat**	**Potential to Occur / transmission line segment**
Deinandra minthornii Santa Suzana tarplant	Fed: None Ca: Rare CNPS: 1B R-E-D: 2-2-3 BLM: SS	Jul - Nov	Chaparral; Coastal scrub	Unlikely
Delphinium hesperium **ssp. *cuyamaceae*** Cuyamaca larkspur	Fed: None Ca: Rare CNPS: 1B R-E-D: 2-2-3 BLM: None	Jun – Jul	Lower montane coniferous forest; Meadows and seeps/mesic	Unlikely
Dithyrea maritima beach spectaclepod	Fed: None Ca: THR CNPS: 1B R-E-D: 3-3-2 BLM: None	Mar – May	Coastal dunes; Coastal scrub	Unlikely
Dudleya cymosa **ssp. *marcescens*** marcescent dudleya	Fed: THR Ca: Rare CNPS: 1B R-E-D: 3-2-3 BLM: None	Apr –Jun	Chaparral (volcanic)	Unlikely
Dudleya variegata variegated dudleya	Fed: None Ca: None CNPS: 1B R-E-D: 2-2-2 BLM: SS	May – Jun	Chaparral; Cismontane woodland; Coastal scrub; Valley and foothill grassland; Vernal pools/clay	Unlikely
Erigeron parishii Parish's daisy	Fed: THR Ca: None CNPS: 1B R-E-D: 2-3-3 BLM: None	May – Jun	Mojavean desert scrub; Pinyon and juniper woodland/usually carbonate	Unlikely
Eriogonum kennedyi **var. *alpigenum*** southern alpine buckwheat	Fed: None Ca: None CNPS: 1B R-E-D: 2-1-3 BLM: None	Jul - Sep	Alpine boulder and rock field; Subalpine coniferous forest (granitic, gravelly)	Unlikely
Eryngium aristulatum **var. *parishii*** San Diego button-celery	Fed: END Ca: END CNPS: 1B R-E-D: 2-3-2 BLM: None	Apr - Jun	(WR) Coastal scrub; Valley and foothill grassland; Vernal pools (mesic)	Unlikely
Fremontodendron mexicanum Mexican flannelbush	Fed: END Ca: Rare CNPS: 1B R-E-D: 3-3-2 BLM: None	Mar – Jun	Closed-cone coniferous forest; Chaparral; Cismontane woodland/gabbroic, metavolcanic, or serpentinite	Unlikely

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Scientific Name **Common Name**	**Status**	**Flower-ing Period**	**Habitat**	**Potential to Occur / transmission line segment**
Galium angustifolium* ssp. *jacinticum San Jacinto Mountains bedstraw	Fed: None Ca: None CNPS: 1B R-E-D: 3-1-3 BLM: None	Jun – Aug	(WR) Lower montane coniferous forest	Unlikely
Galium grande San Gabriel bedstraw	Fed: None Ca: None CNPS: 1B R-E-D: 3-1-3 BLM: SS	Jan – Jul	Broadleafed upland forest; Chaparral; Cismontane woodland; Lower montane coniferous forest	Unlikely
Gentiana fremontii moss gentian	Fed: None Ca: None CNPS: 2 R-E-D: 3-1-1 BLM: None	Jun - Aug	Meadows and seeps; Upper montane coniferous forest	Unlikely
Gilia leptantha* ssp. *leptantha San Bernardino gilia	Fed: None Ca: None CNPS: 1B R-E-D: 2-1-3 BLM: None	Jun - Aug	Lower montane coniferous forest sandy or gravelly)	Unlikely
Hazardia orcuttii Orcutt's hazardia	Fed: None Ca: THR CNPS: 1B R-E-D: 3-3-2 BLM: SS	Aug – Oct	Chaparral (maritime); Coastal scrub/often clay	Unlikely
Helianthus nuttallii* ssp. *parishii Los Angeles sunflower	Fed: None Ca: None CNPS: 1A R-E-D: -- BLM: None	Aug - Oct	Marshes and swamps (coastal salt and freshwater)	Unlikely; Presumed extinct in California
Heuchera hirsutissima shaggy-haired alumroot	Fed: None Ca: None CNPS: 1B R-E-D: 3-1-3 BLM: None	May - Jul	Subalpine coniferous forest; Upper montane coniferous forest (rocky)	Unlikely
Heuchera parishii Parish's alumroot	Fed: None Ca: None CNPS: 1B R-E-D: 2-1-3 BLM: None	Jun - Aug	Alpine boulder and rock field; Lower montane coniferous forest; Subalpine coniferous forest; Upper montane coniferous forest	Unlikely
Holocarpha virgata* ssp. *elongate graceful tarplant	Fed: None Ca: None CNPS: 4 R-E-D: 1-2-3 BLM: None	Jul - Nov	(WR) Chaparral; Cismontane woodland; Coastal scrub; Valley and foothill grassland	Low/SBJ – VS

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Sensitive Plants Species With A Low Potential to Occur Along the Proposed Project

Scientific Name **Common Name**	**Status**	**Flowering Period**	**Habitat**	**Potential to Occur / transmission line segment**
Hordeum intercedens vernal barley	Fed: None Ca: None CNPS: 3 R-E-D: ?-2-2 BLM: None	Mar – Jun	(WR) Coastal dunes; Coastal scrub; Valley and foothill grassland (saline flats and depressions); Vernal pools	Unlikely
Horkelia cuneata **ssp. *puberla*** mesa horkelia	Fed: None Ca: None CNPS: 1B R-E-D: 2-1-3 BLM: None	Feb - Sep	Chaparral; Cismontane woodland; Coastal scrub/sandy or gravelly	Low/DVS – EBB; BN and BM; CL and STC; SBJ – VS
Hulsea vestita **ssp. *pygmaea*** pygmy hulsea	Fed: None Ca: None CNPS: 1B R-E-D: 2-1-3 BLM: None	Jun – Oct	Alpine boulder and rock field; Subalpine coniferous forest/granitic, gravelly	Unlikely
Ivesia callida Tahquitz ivesia	Fed: None Ca: Rare CNPS: 1B R-E-D: 3-1-3 BLM: None	Jul - Sep	Upper montane coniferous forest (granitic, rocky)	Unlikely
Lasthenia glabrata **ssp. *coulteri*** Coulter's goldfields	Fed: None Ca: None CNPS: 1B R-E-D: 2-3-2 BLM: None	Feb - Jun	(WR) Marshes and swamps; (coastal salt); Playas; Vernal pools	Low/DVS – EBB; BN and BM; CL and STC; SBJ – VS; SBJ - SBS
Lepechinia cardiophylla heart-leaved pitcher sage	Fed: None Ca: None CNPS: 1B R-E-D: 3-2-2 BLM: None	Apr – Jul	(WR) Closed-cone coniferous forest; Chaparral; Cismontane woodland	Unlikely
Lepechinia ganderi Gander's pitcher sage	Fed: None Ca: None CNPS: 1B R-E-D: 3-1-2 BLM: SS	Jun – Jul	Closed-cone coniferous forest; Chaparral; Coastal scrub; Valley and foothill grassland/gabbroic or metavolcanic	Unlikely
Lilium parryi lemon lily	Fed: None Ca: None CNPS: 1B R-E-D: 2-2-2 BLM: None	Jul - Aug	(WR) Lower montane coniferous forest; Meadows and seeps; Riparian forest; Upper montane coniferous forest (mesic)	Unlikely

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Scientific Name **Common Name**	**Status**	**Flower-ing Period**	**Habitat**	**Potential to Occur / transmission line segment**
Limnanthes gracilis* var. *parishii Parish's meadowfoam	Fed: SC Ca: END CNPS: 1B R-E-D: 2-2-3 BLM: None	Apr - Jun	(WR) Lower montane coniferous forest; Meadows and seeps; Vernal pools (vernally mesic	Unlikely
Linanthus jaegeri San Jacinto prickly phlox	Fed: None Ca: None CNPS: 1B R-E-D: 2-2-3 BLM: None	Jul - Sep	Subalpine coniferous forest; Upper montane coniferous forest (granitic, rocky)	Unlikely
Linanthus orcuttii Orcutt's linanthus	Fed: None Ca: None CNPS: 1B R-E-D: 2-1-2 BLM: SS	May – Jun	(WR) Chaparral; Lower montane coniferous forest; Pinyon and juniper woodland/openings	Unlikely
Lupinus excubitus* var. *medius Mountain Springs bush lupine	Fed: None Ca: None CNPS: 1B R-E-D: 2-1-2 BLM: SS	Mar – May	Pinyon and juniper woodland; Sonoran desert scrub	Unlikely
Malacothamnus parishii Parish's bush mallow	Fed: None Ca: None CNPS: 1A R-E-D: -- BLM: None	Jun - Jul	Chaparral; Coastal scrub	Unlikely, presumed extinct in California
Monardella pringlei Pringle's monardella	Fed: None Ca: None CNPS: 1A R-E-D: -- BLM: None	May - Jun	Coastal scrub (sandy)	Unlikely, presumed extinct in California
Monardella robisonii Robison's monardella	Fed: None Ca: None CNPS: 1B R-E-D: 2-1-3 BLM: SS	Feb - Oct	(CV*) Pinyon and juniper woodland	Unlikely
Muilla clevelandii San Diego goldenstar	Fed: None Ca: None CNPS: 1B R-E-D: 2-3-2 BLM: SS	Apr – May	Chaparral; Coastal scrub; Valley and foothill grassland; Vernal pools/clay	Unlikely
Nama stenocarpum mud nama	Fed: None Ca: None CNPS: 2 R-E-D: 3-2-1 BLM: None	Jan – Jul	(WR) Marshes and swamps (lake margins, riverbanks)	Unlikely

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Scientific Name **Common Name**	**Status**	**Flowering Period**	**Habitat**	**Potential to Occur / transmission line segment**
Navarretia fossalis spreading navarretia	Fed: THR Ca: None CNPS: 1B R-E-D: 2-3-2 BLM: None	Apr – Jun	(WR) Chenopod scrub; Marshes and swamps (assorted shallow freshwater); Playas; Vernal pools	Low/BN and BM; CL and STC; SBJ – VS; SBJ - SBS
Navarretia prostrata prostrate navarretia	Fed: SC Ca: None CNPS: 1B R-E-D: 2-3-3 BLM: None	Apr – Jul	(WR) Coastal scrub; Meadows and seeps; Valley and foothill grassland (alkaline); Vernal pools/mesic	Unlikely
Nolina interrata Dehesa nolina	Fed: None Ca: END CNPS: 1B R-E-D: 3-3-2 BLM: None	Jun - Jul	Chaparral (gabbroic, metavolcanic, or serpentinite)	Unlikely
Opuntia munzii Munz's cholla	Fed: None Ca: None CNPS: 1B R-E-D: 3-1-3 BLM: SS	May	Sonoran desert scrub (sandy or gravelly)	Unlikely
Orcuttia californica California Orcutt grass	Fed: END Ca: END CNPS: 1B R-E-D: 3-3-2 BLM: None	Apr – Aug	(WR) Vernal pools	Low/DVS – EBB; BN and BM; CL and STC; SBJ – VS; SBJ - SBS
Oreonana vestita woolly mountain-parsely	Fed: None Ca: None CNPS: 1B R-E-D: 2-1-3 BLM: None	May – Sep	Lower montane coniferous forest; Subalpine coniferous forest; Upper montane coniferous forest (gravel or talus)	Unlikely
Oxytropis oreophila* var. *oreophila mountain oxytrope	Fed: None Ca: None CNPS: 2 R-E-D: 3-1-1 BLM: None	Jun - Sep	Alpine boulder and rock field; Subalpine coniferous forest (gravelly or rocky)	Unlikely
Parnassia cirrata fringed grass-of-parnassus	Fed: None Ca: None CNPS: 1B R-E-D: 2-1-3 BLM: None	Aug – Sep	Lower montane coniferous forest; Upper montane coniferous forest (mesic)	Unlikely
Phacelia stellaris Brand's phacelia	Fed: None Ca: None CNPS: 1B R-E-D: 3-3-2 BLM: None	Mar - Jun	(WR) Coastal dunes; coastal scrub	Unlikely

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Scientific Name **Common Name**	**Status**	**Flowering Period**	**Habitat**	**Potential to Occur / transmission line segment**
Pogogyne nudiuscula Otay mesa mint	Fed: END Ca: END CNPS: 1B R-E-D: 3-3-2 BLM: None	May – Jul	Vernal pools	Unlikely
Polygala acanthoclada thorny milkwort	Fed: None Ca: None CNPS: 2 R-E-D: 2-1-1 BLM: None	May - Aug	Chenopod scrub; Joshua tree "woodland"; Pinyon and juniper woodland	Low/MS – CCRA; CCRA - DVS
Ribes canthariforme Moreno currant	Fed: None Ca: None CNPS: 1B R-E-D: 3-1-3 BLM: None	Feb – Apr	Chaparral	Unlikely
Senecio aphanactis rayless ragwort	Fed: None Ca: None CNPS: 2 R-E-D: 3-2-1 BLM: None	Jan - Apr	Chaparral; Cismontane woodland; Coastal scrub (alkaline)	Low/SBJ – VS; SBJ - SBS
Senecio ganderi Gander's ragwort	Fed: None Ca: Rare CNPS: 1B R-E-D: 3-2-3 BLM: None	Apr – May	Chaparral (burns, gabbroic outcrops)	Unlikely
Sibaropsis hammittii Hammitt's clay-cress	Fed: None Ca: None CNPS: 1B R-E-D: 3-2-3 BLM: None	Mar – Apr	(WR) Chaparral (openings); Valley and foothill grassland/clay	Unlikely
Sidalcea hickmanii **spp.** ***parishii*** Parish's checkerbloom	Fed: FC Ca: RARE CNPS: 1B R-E-D: 3-2-3 BLM: None	Jun - Aug	Chaparral; Cismontane woodland; Lower montane coniferous forest	Low/BN and BM; CL and STC
Sildalcea neomexicana Salt Spring checkerbloom	Fed: None Ca: None CNPS: 2 R-E-D: 2-2-1 BLM: None	Mar - Jun	Chaparral; Coastal scrub; Lower montane coniferous forest; Mojavean desert scrub; Playas (alkaline, mesic)	Low/BN and BM; CL and STC; SBJ – VS; SBJ - SBS
Sphenopholis obtusata prairie wedge grass	Fed: None Ca: None CNPS: 2 R-E-D: 2-2-1 BLM: None	Apr - Jul	Cismontane woodland; Meadows and seeps	Unlikely

Appendix 7-3
Sensitive Plants Species With A Low Potential to Occur Along the Proposed Project

Scientific Name **Common Name**	**Status**	**Flowering Period**	**Habitat**	**Potential to Occur / transmission line segment**
Stylocline sonorensis mesquite neststraw	Fed: None Ca: None CNPS: 1A R-E-D: -- BLM: None	Apr	Sonoran desert scrub (sandy)	Unlikely, presumed extinct in California
Taraxacum californicum California dandelion	Fed: END Ca: None CNPS: 1B R-E-D: 3-2-3 BLM: None	May - Aug	Meadows and seeps (mesic)	Unlikely
Tetracoccus dioicus Parry's tetracoccus	Fed: None Ca: None CNPS: 1B R-E-D: 3-2-2 BLM: SS	Apr – May	Chaparral; Coastal scrub	Unlikely
Trichocoronis wrightii* var. *wrightii Wright's trichocoronis	Fed: None Ca: None CNPS: 2 R-E-D: 3-3-1 BLM: None	May - Sep	(WR) Meadows and seeps; Marshes and swamps; Riparian forest; Vernal pools (alkaline)	Low/CL and STC
Trichostema austromontanum* ssp. *compactum Hidden Lake bluecurls	Fed: THR Ca: None CNPS: 1B R-E-D: 3-3-3 BLM: None	Jul - Sep	Upper montane coniferous forest (seasonally submerged lake margins)	Unlikely

Federal Designations (Federal Endangered Species Act, USFWS) END: federal-listed, endangered THR: federal-listed, threatened FC: federal candidate for listing SC: federal species of concern	State designations: (California Endangered Species Act, CDFG) END: state-listed, endangered THR: state-listed, threatened RARE: state-listed rare

California Native Plant Society (CNPS) designations: (Note: According to CNPS [Skinner and Pavlik 1994], plants on Lists 1B and 2 meet definitions for listing as threatened or endangered under Section 1901, Chapter 10 of the California Fish and Game Code. This interpretation is inconsistent with other definitions. See text.)

1A: Plants presumed extinct in California
1B: Plants rare and endangered in California and throughout their range.
2: Plants rare, threatened or endangered in California but more commons elsewhere in their range.
3: Plants about which we need more information; a review list.
4: Plants of limited distribution; a watch list.

CNPS R-E-D Code Rarity: Endangerment:	1: Rare, but found in sufficient numbers and distributed widely enough that the potential for extinction or extirpation is low at this time. 2. Occurrence confined to several populations or one extended population.. 3: Occurrence limited to one or a few highly restricted populations, or present in such small numbers that it is seldom reported.

Distribution:	1: Not endangered. 2: Endangered in a portion of its range. 3: Endangered throughout its range. 1: More or less widespread outside California. 2: Rare outside California. 3: Endemic to California (i.e., does not occur outside California).
Bureau of Land Management (BLM): SS: Sensitive species	
(CV): Covered in the Coachella Valley Multiple Species Habitat Conservation Plan (CV*): Not covered, but was considered in the Coachella Valley Multiple Species Habitat Conservation Plan (WR): Covered in the Western Riverside Multiple Species Habitat Conservation Plan	
Source: California Natural Diversity Data Base (CNDDB), California Native Plant Society Electronic Inventory (CNPSEI) 7.5 minute quadrangles.	

Appendix 7-4 Sensitive Plant Species Accounts

San Diego thorn-mint *(Acanthomintha ilicifolia)* is a federally-listed threatened, state-listed endangered, Bureau of Land Management- (BLM-) listed sensitive, CNPS List 1B annual herb historically known to occur in chaparral, coastal scrub, valley and foothill grassland, and vernal pools/clay at elevations ranging from 10 to 950 meters (33 – 3,117 feet) amsl. The range of this species is in San Diego County and Baja California. Therefore, although suitable habitat exists for this species in the proposed alignment, it is not likely to occur.

White-margined everlasting *(Antennaria marginata)* is a CNPS List 2 stoloniferous herb historically known to occur in lower and upper montane coniferous forests at elevations ranging from 2,120 to 3,330 meters (6,955 – 10,925 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Deep Canyon snapdragon *(Antirrhinum cyathiferum)* is a CNPS List 2 annual herb historically known to occur in Sonoran desert scrub at elevations ranging from 0 to 800 meters (0 – 2,625 feet) amsl. Deep Canyon snapdragon has a low potential to occur because Sonoran desert scrub occurs along the ROW from CCRA – DVS and this species is known to occur south of Palm Desert in Deep Canyon wash, approximately 10 miles south of the proposed alignment.

San Bernardino rock cress *(Arabis breweri* var. *pecuniaria)* is a CNPS List 1B perennial herb historically known to occur in subalpine coniferous forests at elevations ranging from 2,700 to 3,200 meters (8,858 – 10,499 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Johnston's rock cress *(Arabis johnstonii)* is a CNPS List 1B perennial herb historically known to occur in chaparral and lower montane coniferous forests (often on eroded clay) at elevations ranging from 1,350 to 2,150 meters (4,429 – 7,054 feet) amsl. This species is known from fewer than ten occurrences in the southern San Jacinto Mountains. Although there is suitable habitat present along the ROW, the elevation requirements for this species are not met, making it unlikely to occur.

Darwin rock cress *(Arabis pulchra* var. *munciensis)* is a CNPS List 2 perennial herb historically known to occur in chenopod scrub and Mojavean desert scrub (on limestone) at elevations ranging from 1,100 to 2,075 meters (3,609 – 6,808 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Otay manzanita *(Arctostaphylos otayensis)* is a BLM-listed sensitive, CNPS List 1B evergreen shrub historically known to occur in chaparral and cismontane woodlands (metavolcanic) at elevations ranging from 275 to 1,700 meters (902 – 5,577 feet) amsl. The range of this species is in San Diego County. Therefore, although suitable habitat exists for this species in the proposed alignment, it is not likely to occur.

Rock sandwort (*Arenaria lanuginosa* ssp. *saxosa)* is a CNPS List 2 perennial herb historically known to occur in subalpine coniferous forests and upper montane coniferous forests (sandy) at elevations ranging from 1,800 to 2,600 meters (5,905 – 8,530 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Marsh sandwort (*Arenaria paludicola*) is a federally-listed endangered, state-listed endangered, CNPS List 1B stoloniferous herb historically found in marshes, swamps, and bogs at elevations ranging from 3 to 170 meters (10 – 558 feet) amsl. The marsh sandwort was known to occur in the immediate vicinity (within 3 miles) of the SBJ – VS and SBJ – SBS sections of the proposed alignment. However, that population is now presumed extinct due to lack of suitable habitat and is therefore not likely to occur.

Big Bear Valley sandwort *(Arenaria ursina)* is a federally-listed threatened, CNPS List 1B perennial herb historically known to occur in pebble plain and pinyon and juniper woodland (mesic, rocky) at elevations ranging from 1,800 to 2,900 meters (5,905 – 9,514 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Also, this species is known only to occur in the vicinity of Big Bear and Baldwin Lake in the San Bernardino Mountains. Therefore, this species is not likely to occur.

Braunton's milk-vetch *(Astragalus brauntonii)* a federally-listed endangered, CNPS List 1B perennial herb historically known to occur in closed-cone coniferous forests, chaparral, coastal scrub, and valley and foothill grasslands (in recently burned or disturbed areas) at elevations ranging from 4 to 640 meters (13 – 2,100 feet) amsl. The range of this species is in Los Angeles, Orange, and Ventura Counties. Therefore, although suitable habitat exists for this species in the proposed alignment, it is not likely to occur.

Dean's milk-vetch *(Astragalus deanei)* is a BLM-listed sensitive, CNPS List 1B perennial herb historically known to occur in chaparral, coastal scrub, and riparian forests at elevations ranging from 75 to 670 meters (246 – 2,198 feet) amsl. The range of this species is in San Diego County. Therefore, although suitable habitat exists for this species in the proposed alignment, it is not likely to occur.

Jacumba milk-vetch *(Astragalus douglasii* var. *perstrictus)* is a BLM-listed sensitive, CNPS List 1B perennial herb historically known to occur in chaparral, cismontane woodlands, and valley and foothill grasslands (rocky) at elevations ranging from 900 to 1,370 meters (2,953 – 4,495 feet) amsl. The range of this species is in San Diego Imperial Counties and Baja California. Therefore, although suitable habitat exists for this species in the proposed alignment, it is not likely to occur.

San Diego milk-vetch *(Astragalus oocarpus)* is a BLM-listed sensitive, CNPS List 1B perennial herb historically known to occur in openings of chaparral and cismontane woodlands at elevations ranging from 305 to 1,500 meters (1,000 – 4,921 feet) amsl. The range of this species is in San Diego County. Therefore, although suitable habitat exists for this species in the proposed alignment, it is not likely to occur.

Triple-ribbed milk-vetch *(Astragalus tricarinatus)* is a federally-listed endangered, CV-MSHCP-listed, CNPS List 1B perennial herb historically known to occur in Joshua tree woodlands and Sonoran desert scrub (sandy or gravelly) at elevations ranging from 450 to 1,190 meters (1,476 – 3,904 feet) amsl. Triple-ribbed milk-vetch has a low potential to occur along the CCRA – DVS and DVS – EBB segments because marginal habitat exists for the species and the highest elevation of the ROW is slightly below the lowest recorded elevation for this species.

Davidson's saltscale (*Atriplex serenana* var. *davidsonii*) is a WR-MSHCP-listed, CNPS 1B annual herb historically found in coastal bluff scrub and alkaline coastal scrub at elevations ranging from 10 to

200 meters (30 – 656 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Encinitas baccharis (Baccharis vanessae) is a federally-listed threatened, state-listed endangered, CNPS List 1B deciduous shrub historically known to occur in maritime chaparral and cismontane woodland (sandstone) at elevations ranging from 60 to 720 meters (197 – 2,362 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Scalloped moonwort *(Botrychium crenulatum)* is a CNPS List 2 rhizomatous herb historically known to occur in lower montane coniferous forests, meadows and seeps, freshwater swamps and swamps, and bogs at elevations ranging from 1,500 to 3,280 meters (4,921 – 10,761 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Thread-leaved brodiaea (*Brodiaea filifolia*) is a federally-listed threatened, state-listed endangered, CNPS List 1B perennial bulbiferous herb historically known to occur in chaparral, cismontane woodland, coastal scrub, playas, valley and foothill grasslands, and vernal pools at elevations ranging from 25 – 860 meters (82 – 2,821 feet) amsl. Thread-leaved brodiaea has a low potential to occur along CL – STC, SBJ – VS, and SBJ – SBS because chaparral habitat and elevation requirements are present along the ROW, and this species is known to occur 10 miles southeast of Grand Terrance.

Orcutt's brodiaea *(Brodiaea orcuttii)* is a WR-MSHCP-listed, BLM-listed sensitive, CNPS List 1B bulbiferous herb historically known to occur in closed-cone coniferous forests, chaparral, cismontane woodlands, meadows and seeps, valley and foothill grasslands, vernal pools (clay, sometimes serpentinite) at elevations ranging from 30 to 1,615 meters (98 – 5,300 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Dunn's mariposa lily *(Calochortus dunnii)* is a state-listed rare, CNPS List 1B bulbiferous herb historically known to occur in closed-cone coniferous forests and rocky chaparral at elevations ranging from 380 to 1,830 meters (1,247 – 6,004 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Munz's mariposa lily *(Calochortus palmeri* var. *munzii)* is a WR-MSHCP-listed, CNPS List 1B bulbiferous herb historically known to occur in chaparral and lower montane coniferous forests at elevations ranging from 1,200 to 2,200 meters (3,937 – 7,218 feet) amsl. Although suitable chaparral habitat occurs from DVS westward to SBJ – VS, Munz's mariposa lily has a low potential to occur because the range of the species occurs more than 15 miles south of the proposed alignment.

Palmer's mariposa lily *(Calochortus palmeri* var. *palmeri)* is a CNPS List 1B bulbiferous herb historically known to occur in chaparral, lower montane coniferous forests, and meadows and seeps (mesic) at elevations ranging from 1,000 to 2,390 meters (3,281 – 7,841 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Bristly sedge (*Carex comosa*) is a CNPS List 2 rhizomatous herb historically found in coastal prairie communities, marshes, swamps, and valley and foothill grasslands at elevations ranging from 0 to 625

meters (0 – 2,051 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. The record of this species in San Bernardino is now presumed extirpated. Therefore, this species is not likely to occur.

Mt. Gleason Indian paintbrush *(Castilleja gleasonii)* is a state-listed rare, CNPS List 1B perennial herb hemiparasitic historically found in lower montane coniferous forests and pinyon and juniper woodlands at elevations ranging from 1,160 to 2,170 meters (3,806 – 7,119 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

San Bernardino Mountains owl's clover (*Castilleja lasiorhyncha*) is a CNPS List 1B annual hemiparisitic herb historically found in chaparral, meadows and seeps, pebble plains, and mesic sites in upper montane coniferous forests at elevations ranging from 1,300 – 2,390 meters (4,265 – 7,841 feet) amsl. San Bernardino Mountains owl's clover has no potential to occur along the ROW because the elevation along the ROW directly south of the known location of the species is approximately 1,300 feet below the lowest recorded elevation for this species; therefore, this species not likely to occur.

Lakeside ceanothus *(Ceanothus cyaneus)* is a BLM-listed sensitive, CNPS List 1B evergreen shrub historically found in closed-cone coniferous forests and chaparral at elevations ranging from 235 to 755 meters (771 – 2,477 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Vail Lake ceanothus *(Ceanothus ophiochilus)* is a federally-listed threatened, state-listed endangered, WR-MSHCP-listed, CNPS List 1B evergreen shrub historically found in chaparral (pyroxenite-rich outcrops) at elevations ranging from 580 to 1,065 meters (1,903 – 3,494 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Orcutt's spineflower *(Chorizanthe orcuttiana)* is a federally-listed endangered, state-listed endangered, CNPS List 1B annual herb historically found in chaparral, closed-cone coniferous forests, and sandy openings in the coastal scrub communities at elevations ranging from 3 to 125 meters (10 – 410 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Long-spined spineflower *(Chorizanthe polygonoides* var. *longispina)* is a WR-MSHCP-listed, CNPS List 1B annual herb historically found in chaparral, coastal scrub, meadows and seeps, and often in the clay soils in valley and foothill grasslands at elevations ranging from 30 to 1,450 meters (98 – 4,757 feet) amsl. This species has a low potential to occur along the DVS – EBB; BN and BM; and CL and STC segments because suitable habitat and elevation requirements occur along the ROW and this species is known to occur 12 miles southwest of the ROW.

Salt marsh bird's-beak (*Cordylanthus maritimus ssp. maritimus*) is federally-listed endangered, state-listed endangered, CNPS List 1B annual herb hemiparasitic historically found in coastal dunes, marshes, and swamps at elevations ranging from 0 – 30 meters (0 – 98 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Gander's cryptantha *(Cryptantha ganderi)* is a BLM-listed sensitive, CNPS List 1B annual herb historically found in desert dunes and Sonoran desert scrub at elevations ranging from 160 to 400 meters (525 – 1,312 feet) amsl. This species is known to occur in San Diego County, Arizona, Baja California, and Sonora-Mexico only. Therefore, although suitable habitat exists for this species in the proposed alignment, it is not likely to occur.

Tecate cypress *(Cupressus forbesii)* is a BLM-listed sensitive, CNPS List 1B evergreen tree historically found in closed-cone coniferous forests and chaparral communities at elevations ranging from 255 to 1,500 meters (837 – 4,921 feet) amsl. This species has a low potential to occur from CL and STC; SBJ – VS; and SBJ – SBS because suitable chaparral habitat and elevation requirements occur along the ROW and the closest known record of Tecate cypress to the ROW occurs along the western and southern border of Riverside County.

Otay tarplant *(Deinandra conjugens)* is a federally-listed threatened, state-listed endangered, CNPS List 1B annual herb historically found in coastal scrub and valley and foothill grasslands (clay) at elevations ranging from 25 to 300 meters (82 – 984 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Tecate tarplant *(Deinandra floribunda)* is a CNPS List 1B annual herb historically found in chaparral and coastal scrub at elevations ranging from 70 to 1,220 meters (230 – 4,003 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Santa Suzana tarplant *(Deinandra minthornii)* is a state-listed rare, BLM-listed sensitive, CNPS List 1B deciduous shrub historically found in chaparral and rocky coastal scrub communities at elevations ranging from 280 to 760 meters (919 – 2,493 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Cuyamaca larkspur *(Delphinium hesperium* ssp. *cuyamacae)* is a state-listed rare, CNPS List 1B perennial herb historically found in lower montane coniferous forests and mesic meadows and seeps at elevations ranging from 1,220 to 1,630 meters (4,003 – 5,348 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Beach spectaclepod *(Dithyrea maritima)* is a state-listed threatened, CNPS List 1B rhizomatous herb historically found in coastal dunes and sandy coastal scrub communities at elevations ranging from 3 to 50 meters (10 – 164 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Marcescent dudleya *(Dudleya cymosa* ssp. *marcescens)* is a federally-listed threatened, state-listed rare, CNPS List 1B perennial herb historically found in volcanic chaparral habitats at elevations ranging from 150 to 520 meters (492 – 1,706 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Variegated dudleya *(Dudleya variegata)* is a CNPS List 1B perennial herb historically found in chaparral, cismontane woodlands, coastal scrub, valley and foothill grasslands, and vernal pools (clay) at elevations ranging from 3 to 580 meters (10 – 1,903 feet) amsl. The range of this species is in San

Diego County and Baja California. Therefore, although suitable habitat exists for this species in the proposed alignment, it is not likely to occur.

Parish's daisy *(Erigeron parishii)* is a federally-listed threatened, CNPS List 1B perennial herb historically found in Mojavean desert scrub and pinyon and juniper woodlands (usually carbonate) at elevations ranging from 800 to 2,000 meters (2,625 – 6,562 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Southern alpine buckwheat *(Eriogonum kennedyi* var. *alpigenum)* is a CNPS List 1B perennial herb historically found in alpine boulder and rock fields and in granitic or gravelly subalpine coniferous forests at elevations ranging from 2,600 to 3,500 meters (8,530 – 11,483 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

San Diego button-celery *(Eryngium aristulatum* var. *parishii)* is a federally-listed endangered, state-listed endangered, WR-MSHCP-listed, CNPS List 1B annual/perennial herb historically found in coastal scrub, valley and foothill grasslands, and mesic vernal pools at elevations ranging from 20 to 620 meters (66 – 2,034 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Mexican flannelbush *(Fremontodendron mexicanum)* is a federally-listed endangered, state-listed rare, CNPS List 1B evergreen shrub historically found in closed-cone coniferous forest, chaparral, and cismontane woodlands (serpentite) at elevations ranging from 10 to 490 meters (33 – 1,608 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

San Jacinto Mountains bedstraw *(Galium angustifolium* ssp. *jacinticum)* is a WR-MSHCP-listed, CNPS List 1B perennial herb historically found in lower montane coniferous forests at elevations ranging from 1,350 to 2,100 meters (4,429 – 6,890 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

California bedstraw (*Galium californicum* ssp. *primum*) is a WR-MSHCP-listed, BLM-listed sensitive, CNPS List 1B perennial herb that is historically found in chaparral communities and lower montane coniferous forests with granitic and sandy soils at elevations ranging from 1,350 to 1,700 meters (4,429 – 5,577 feet) amsl. This species has a low potential to occur along the SBJ – VS and SBJ – SBS segments because suitable habitat occurs along the ROW and this species is known to occur within 1 mile of the proposed alignment.

San Gabriel bedstraw (*Galium grande*) is a BLM-listed sensitive, CNPS List 1B deciduous shrub historically found in broad-leaved upland forests, chaparral, cismontane woodland, and lower montane coniferous forests at elevations ranging from 425 – 1,500 meters (1,400 – 5,000 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Moss gentian *(Gentiana fremontii*) is a CNPS List 2 annual herb historically found in mesic meadows and seeps and upper montane coniferous forests at elevations ranging from 2,400 to 2,700 meters (7,874 – 8,858 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

San Bernardino gilia *(Gilia leptantha* ssp. *leptantha)* is a CNPS List 1B annual herb historically found in lower montane coniferous forests at elevations ranging from 1,500 to 2,560 meters (4,921 – 8,400 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur. This species is known only to occur in the San Bernardino Mountains.

Orcutt's hazardia *(Hazardia orcuttii)* is a state-listed threatened, BLM-listed sensitive, CNPS List 1B evergreen shrub historically found in maritime chaparral and coastal scrub (often clay) at elevations ranging from 80 to 85 meters (262 – 279 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Los Angeles sunflower (*Helianthus nuttallii* ssp. *parishii*) is a CNPS List 1A rhizomatous herb historically found in coastal and freshwater marshes and swamps at elevations ranging from 10 – 1,675 meters (30 – 5,500 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Shaggy-haired alumroot *(Heuchera hirsutissima)* is a CNPS List 1B rhizomatous herb historically found in subalpine coniferous forests and rocky upper montane coniferous forests at elevations ranging from 1,520 to 3,500 meters (4,987 – 11,483 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Parish's alumroot *(Heuchera parishii)* is a CNPS List 1B rhizomatous herb historically found in alpine boulder and rock fields, lower montane coniferous forests, subalpine coniferous forests, and rocky upper montane coniferous forests at elevations ranging from 1,500 to 3,800 meters (4,921 – 12,467 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Graceful tarplant *(Holocarpha virgata* ssp. *elongata)* is a WR-MSHCP-listed, CNPS List 4 annual herb historically found in chaparral, cismontane woodlands, coastal scrub, and valley and foothill grasslands at elevations ranging from 60 to 1,100 meters (200 – 3,609 feet) amsl. This species has a low potential to occur along the DVS – EBB; BN and BM; CL and STC; SBJ – VS; SBJ – SBS segments because suitable habitat and elevation requirements occur along the ROW.

Vernal barley *(Hordeum intercedens)* is a WR-MSHCP-listed, CNPS List 3 annual herb historically found in coastal dunes, coastal scrub, saline flats and depressions in valley and foothill grasslands, and vernal pools at elevations ranging from 5 to 1,000 meters (16 – 3,281 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Mesa horkelia (*Horkelia cuneata* ssp. *puberla*) is a CNPS List 1B perennial herb historically found in chaparral, cismontane woodland, and coastal scrub in sandy and gravelly soils at elevations ranging from 70 to 810 meters (230 – 2,657 feet) amsl. This species has a low potential to occur along the DVS – EBB; BN and BM; CL and STC; SBJ – VS; SBJ – SBS segments because suitable habitat and elevation requirements occur along the ROW.

Pygmy hulsea *(Hulsea vestita* ssp. *pygmaea)* is a CNPS List 1B perennial herb historically found in alpine boulder and rock fields and subalpine coniferous forests in granitic or gravelly soils at elevations

ranging from 2,835 to 3,900 meters (9,301 – 12,795 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Tahquitz ivesia *(Ivesia callida)* is a state-listed rare, CNPS List 1B perennial herb historically found in upper montane coniferous forests in granitic or rocky soils at elevations ranging from 2,410 to 2,450 meters (7,907 – 8,038 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Southern California black walnut *(Juglans californica)* is a WR-MSHCP-listed, CNPS List 4 deciduous tree historically found in chaparral, cismontane woodlands, and alluvial coastal scrub at elevations ranging from 50 to 900 meters (164 – 2,953 feet) amsl. This species has a low potential to occur along the DVS – EBB; BN and BM; CL and STC; SBJ – VS; SBJ – SBS segments because suitable habitat and elevation requirements occur along the ROW.

Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*) is a WR-MSHCP-listed, CNPS List 1B annual herb historically found in coastal salt marshes and swamps, playas, and vernal pools at elevations ranging from 0 – 1,220 meters (0 – 4,002 feet) amsl. This species has a low potential to occur along the DVS – EBB; BN and BM; CL and STC; SBJ – VS; SBJ – SBS segments because marginal habitat exists for the species and although ponding on site is likely due to compaction of the soils during transmission line construction, there is a low potential for this area to act as a seasonal wetland and to support this species. The habitat along the ROW was deemed marginal because almost all historic habitat appears to be developed or urbanized.

Heart-leaved pitcher sage *(Lepechinia cardiophylla)* is a WR-MSHCP-listed, CNPS List 1B shrub historically found in closed-cone coniferous forests, chaparral, and cismontane woodlands at elevations ranging from 520 to 1,370 meters (1,706 – 4,495 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Gander's pitcher sage (*Lepechinia ganderi*) is a BLM-listed sensitive, CNPS List 1B shrub historically found in closed-cone coniferous forests, chaparral, coastal scrub, valleys and foothills grasslands at elevations ranging from 305 to 1,005 meters (1,000 – 3,297 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Lemon lily (*Lilium parryi*) is a WR-MSHCP-listed, CNPS List 1B bulbiferous herb historically known to occur in upper and lower montane coniferous forests, meadows and seeps, riparian forest at elevations ranging from 1,220 to 2,745 meters (4,002 – 9,005 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Parish's meadowfoam (*Limnanthes gracilis* ssp. *parishii*) is a federally-listed species of concern, state-listed endangered, WR-MSHCP-listed, CNPS List 1B annual herb historically found in lower montane coniferous forests, meadows and seeps, and vernal pools at elevations ranging from 600 to 2,000 meters (1,968 – 6,561 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

San Jacinto prickly phlox (*Linanthus jaegeri*) is a CNPS List 1B perennial herb historically known to occur in subalpine coniferous forests, upper montane coniferous forests (granitic, rocky) at elevations

ranging from 2,195 to 3,050 meters (7,201 – 10,006 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Orcutt's linanthus (*Linanthus orcuttii*) is a BLM-listed sensitive, CNPS List 1B annual herb historically known to occur in chaparral, lower montane coniferous forest, pinyon and juniper woodland (openings) at elevations ranging from 915 to 2,145 meters (3,001 – 7,037 feet) amsl. This species is not known to occur in Riverside County. Therefore, although suitable habitat exists for this species in the proposed alignment, it is not likely to occur.

Mountain Springs bush lupine (*Lupinus excubitus* var *medius*) is a BLM-listed sensitive, CNPS List 1B shrub historically found in pinyon and juniper woodland and the Sonoran desert scrub at elevations ranging from 425 to 1,370 meters (1,394 – 4,494 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Parish's bush mallow (*Malacothamnus parishii*) is a CNPS List 1A deciduous shrub historically found in chaparral and coastal scrub at elevations ranging from 305 to 455 meters (1,000 – 1,492 feet) amsl. This species is unlikely to occur because this species is presumed to be extinct in California.

Pringle's monardella (*Monardella pringlei)* is a CNPS List 1A annual herb historically known to exist in coastal scrub at elevations ranging from 300 to 400 meters (984 – 1,312 feet) amsl. This species is unlikely to occur because the habitat along the ROW is not suitable for this species and it is presumed to be extinct.

Robinson's monardella (*Monardella robisonii*) is a BLM-listed sensitive, CNPS List 1B rhizomatous herb historically found in pinyon and juniper woodland at elevations ranging from 610 to 1,500 meters (2,001 – 4,921 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

San Diego golden star (*Muilla clevelandii)* is a BLM-listed sensitive, CNPS List 1B bulbiferous herb historically found in chaparral, coastal scrub, valley, foothill grasslands, and vernal pools (clay) at elevations ranging from 50 to 465 meters (164 – 1,525 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Mud nama (*Nama stenocarpum)* is a WR-MSHCP-listed, CNPS List 2 annual/perennial herb historically known to exist in marshes and swamps at elevations ranging from 5 to 500 meters (16 – 1,640 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Spreading navarretia (*Navarretia fossalis*) is a federally-listed threatened, WR-MSHCP-listed, CNPS List 1B annual herb historically found in chenopod scrub, marshes and swamps (assorted shallow freshwater), playas, and vernal pools at elevations ranging from 30 to 1,300 meters (98 – 4,265 feet) amsl. This species has a low potential to occur along the BN and BM; CL and STC; SBJ – VS; and SBJ – SBS segments because marginal habitat and elevation requirements occur along the ROW. The habitat along the ROW was deemed marginal because almost all historic habitat appears to be developed or urbanized.

Prostrate navarretia (*Navarettia prostrata*) is a federally-listed species of concern, WR-MSHCP-listed, CNPS List 1B annual herb historically found in coastal scrub, meadows and sleeps, valley and

foothill grasslands, and vernal pools at elevations ranging from 15 to 700 meters (49 – 2,296 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Dehesa nolina (*Nolina interrata*) is a state-listed endangered, CNPS List 1B perennial herb historically found in chaparral (metavolcanic) habitats at elevations ranging from 185 to 855 meters (606 – 2,805 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Munz's cholla (*Opuntia munzii*) is a BLM-listed sensitive, CNPS List 1B stem succulent historically found in Sonoran desert scrub (sandy or gravelly) habitat at elevations ranging from 150 to 600 meters (492 – 1,968 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

California Orcutt grass (*Orcuttia californica*) is a federally-listed endangered, state-listed endangered, WR-MSHCP-listed, CNPS List 1B annual herb historically found in vernal pools at elevations ranging from 15 to 660 meters (49 – 2,165 feet) amsl. This species has a low potential to occur along the DVS – EBB; BN and BM; CL and STC; SBJ – VS; and SBJ – SBS segments because historically suitable habitat is now presumed to have been developed or urbanized.

Wooly mountain-parsley (*Oreonana vestita*) is a CNPS List 1B perennial herb historically found in lower montane coniferous forests, subalpune coniferous forests, and upper montane coniferous forests (gravel) at elevations ranging from 1,615 to 3,500 meters (5,298 – 11,482 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Mountain oxytrope (*Oxytropis oreophila* var. *oreophila*) is a CNPS List 2 perennial herb historically found in alpine boulder and rock field habitats and subalpine coniferous forests (gravelly or rocky) at elevations ranging from 3,400 to 3,800 meters (11,154 – 12,437 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Fringed grass-of-parnassus (*Parnassia cirrata*) is a CNPS List 1B perennial herb historically found in lower and upper montane coniferous forests at elevations ranging from 2,135 to 3,000 meters (7004 – 9,842 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Brand's phacelia (*Phacelia stellaris*) is a WR-MSHCP-listed, CNPS List 1B annual herb historically found in coastal dunes and coastal scrub at elevations ranging from 1 to 400 meters (3 – 1,312 feet) amsl. This species is known to occur in Los Angeles and San Diego Counties and Baja California. Therefore, although suitable habitat exists for this species in the proposed alignment, it is not likely to occur.

Otay Mesa mint (*Pogogyne nudiuscula*) is a federally-listed endangered, state-listed endangered, CNPS List 1B annual herb historically found in vernal pools at elevations ranging from 90 to 250 meters (295 – 820 feet) amsl. The range of this species is in San Diego County and Baja California. Therefore, this species is not likely to occur.

Thorny milkwort (*Polygala acanthoclada*) is a CNPS List 2 shrub historically found in chenopod scrub, Joshua tree "woodland," and pinyon and juniper woodland at elevations ranging from 760 to 2,285 meters (2,493 – 7,496 feet) amsl. This species has a low potential to occur along the CCRA – DVS and MS – CCRA segments because suitable habitat occurs along the ROW but the highest elevation of the ROW is slightly below the lowest recorded elevation for this species. This species is known to occur in the Eagle Mountains, 1.5 miles north of Cottonwood Springs.

Moreno currant (*Ribes canthariforme)* is a BLM-listed sensitive, CNPS List 1B, deciduous shrub historically found in chaparral habitat at elevations ranging from 340 to 1,200 meters (1,115 – 3,937 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Rayless ragwort (*Senecio aphanactis*) is a CNPS List 2 annual herb historically found in chaparral, cismontane woodland and coastal scrub habitats (alkaline) at elevations ranging from 15 to 800 meters (49 – 2,624 feet) amsl. This species has a low potential to occur along the ROW because suitable habitat and elevation requirements occur along the ROW, however, the proposed alignment is outside of the range of this species.

Gander's ragwort (*Senecio ganderi*) is a state-listed rare, CNPS List 1B perennial herb historically found in chaparral (burns) at elevations ranging from 400 to 1,200 meters (1,312 – 3,937 feet) amsl. This species is known to occur in southwestern Riverside County and San Diego County. Although there is suitable habitat along the ROW, the proposed alignment is outside of the range of this species.

Hammitt's clay-cress (*Sibaropsis hammittii*) is a WR-MSHCP-listed, CNPS List 1B annual herb historically found in chaparral (openings), valley and foothill grassland (clay) at elevations ranging from 720 to 1,065 meters (2,362 – 3,494 feet) amsl. This species is known to occur in southwestern Riverside County and San Diego County. Although there is suitable habitat along the ROW, the proposed alignment is outside of the range of this species.

Parish's checkerbloom (*Sidalcea hickmanii* ssp. *parishii*) is a federal candidate for listing, state-listed rare, CNPS List 1B perennial herb historically found in chaparral, cismontane woodland, and lower montane coniferous forest habitats at elevations ranging from 1,000 to 2,135 meters (3,280 – 7,004 feet) amsl. This species has a low potential to occur along the BN and BM and CL and STC segments because chaparral habitat occurs along the ROW 10 miles directly south of a known occurrence, and the highest elevation of the ROW at this point is approximately 1,000 feet below the lowest recorded elevation for this species.

Salt spring checkerbloom (*Sidalcea neomexicana*) is a CNPS List 2 perennial herb historically found in chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, and playas (alkaline) at elevations ranging from 15 to 1,530 meters (49 – 5,019 feet) amsl. This species has a low potential to occur along the BN and BM; CL and STC; SBJ – VS; and SBJ – SBS segments because marginal habitat and elevation requirements occur along the ROW. The habitat along the ROW was deemed marginal because almost all historic habitat appears to be developed or urbanized. The occurrence 3 miles north of the I-215 and I-10 interchange is presumed extant.

Prairie wedge grass (*Sphenopholis obtusata*) is a CNPS List 2 perennial herb historically found in cismontane woodland, meadows and seeps at elevations ranging from 300 to 2,000 meters (984 – 6,561 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Mesquite neststraw (*Stylocline sonorensis*) is a CNPS List 1A annual herb historically found in Sonoran desert scrub at an elevation of 425 meters (1,394 feet) amsl. This species is unlikely to because this plant is presumed to be extinct due to development activities.

California dandelion (*Taraxacum californicum*) is a federally-listed endangered, CNPS List 1B perennial herb historically found in meadows and seeps at elevations ranging from 1,620 to 2,800 meters (5,314 – 9,186) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Parry's tetracoccus (*Tetracoccus dioicus*) is a BLM-listed sensitive, CNPS List 1B deciduous shrub historically found in chaparral and coastal scrub habitats at elevations ranging from 165 to 1,000 meters (541 – 3,280 feet) amsl. This species is known in Orange, southwestern Riverside, San Diego Counties and Baja California. Although there is suitable habitat along the ROW, the proposed alignment is outside of the range of this species.

Sonoran maiden fern (*Thelypteris puberula* var. *sonorensis*) is a CNPS List 2 rhizomatous herb historically found in meadows and seeps (streams) at elevations ranging from 50 to 610 meters (164 – 2,001 feet) amsl. This species has a low potential to occur in DVS – EBB and CCRA – DVS segments along the ROW because there is a known occurrence 9 miles south of North Palm Springs, approximately 11 miles south of the proposed alignment.

Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*) is a WR-MSHCP-listed, CNPS List 2 annual herb historically found in meadows and seeps, marshes and swamps, riparian forest, and alkaline vernal pools at elevations ranging from 5 to 435 meters (16 – 1,427 feet) amsl. This species has a low potential to occur in the CL and STC segments along the ROW because there is a known occurrence 8 miles southwest of the town of Calimesa, approximately 7 miles south of the proposed alignment.

Hidden Lake bluecurls *(Trichostema austromontanum* ssp. *compactum)* is a federally-threatened, CNPS List 1B annual herb historically found in upper montane coniferous forests (seasonally in submerged lake margins) at elevations ranging from 2,400 to 2,680 meters (7,874 – 8,793 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Otay manzanita *(Arctostaphylos otayensis)* is a BLM-listed sensitive, CNPS List 1B evergreen shrub historically known to occur in chaparral and cismontane woodlands (metavolcanic) at elevations ranging from 275 to 1,700 meters (902 – 5,577 feet) amsl. The range of this species is in San Diego County. Therefore, although suitable habitat exists for this species in the proposed alignment, it is not likely to occur.

Dean's milk-vetch *(Astragalus deanei)* is a BLM-listed sensitive, CNPS List 1B perennial herb historically known to occur in chaparral, coastal scrub, and riparian forests at elevations ranging from 75 to 670 meters (246 – 2,198 feet) amsl. The range of this species is in San Diego County. Therefore, although suitable habitat exists for this species in the proposed alignment, it is not likely to occur.

Jacumba milk-vetch *(Astragalus douglasii* var. *perstrictus)* is a BLM-listed sensitive, CNPS List 1B perennial herb historically known to occur in chaparral, cismontane woodlands, and valley and foothill

grasslands (rocky) at elevations ranging from 900 to 1,370 meters (2,953 – 4,495 feet) amsl. The range of this species is in San Diego Imperial Counties and Baja California. Therefore, although suitable habitat exists for this species in the proposed alignment, it is not likely to occur.

San Diego milk-vetch *(Astragalus oocarpus)* is a BLM-listed sensitive, CNPS List 1B perennial herb historically known to occur in openings of chaparral and cismontane woodlands at elevations ranging from 305 to 1,500 meters (1,000 – 4,921 feet) amsl. The range of this species is in San Diego County. Therefore, although suitable habitat exists for this species in the proposed alignment, it is not likely to occur.

Orcutt's brodiaea *(Brodiaea orcuttii)* is a WR-MSHCP-listed, BLM-listed sensitive, CNPS List 1B bulbiferous herb historically known to occur in closed-cone coniferous forests, chaparral, cismontane woodlands, meadows and seeps, valley and foothill grasslands, vernal pools (clay, sometimes serpentinite) at elevations ranging from 30 to 1,615 meters (98 – 5,300 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Lakeside ceanothus *(Ceanothus cyaneus)* is a BLM-listed sensitive, CNPS List 1B evergreen shrub historically found in closed-cone coniferous forests and chaparral at elevations ranging from 235 to 755 meters (771 – 2,477 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Gander's cryptantha *(Cryptantha ganderi)* is a BLM-listed sensitive, CNPS List 1B annual herb historically found in desert dunes and Sonoran desert scrub at elevations ranging from 160 to 400 meters (525 – 1,312 feet) amsl. This species is known to occur in San Diego County, Arizona, Baja California, and Sonora-Mexico only. Therefore, although suitable habitat exists for this species in the proposed alignment, it is not likely to occur.

San Gabriel bedstraw (*Galium grande*) is a BLM-listed sensitive, CNPS List 1B deciduous shrub historically found in broad-leaved upland forests, chaparral, cismontane woodland, and lower montane coniferous forests at elevations ranging from 425 – 1,500 meters (1,400 – 5,000 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Orcutt's hazardia *(Hazardia orcuttii)* is a state-listed threatened, BLM-listed sensitive, CNPS List 1B evergreen shrub historically found in maritime chaparral and coastal scrub (often clay) at elevations ranging from 80 to 85 meters (262 – 279 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Gander's pitcher sage (*Lepechinia ganderi*) is a BLM-listed sensitive, CNPS List 1B shrub historically found in closed-cone coniferous forests, chaparral, coastal scrub, valleys and foothills grasslands at elevations ranging from 305 to 1,005 meters (1,000 – 3,297 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Orcutt's linanthus (*Linanthus orcuttii*) is a BLM-listed sensitive, CNPS List 1B annual herb historically known to occur in chaparral, lower montane coniferous forest, pinyon and juniper woodland (openings) at elevations ranging from 915 to 2,145 meters (3,001 – 7,037 feet) amsl. This species is not known to occur in Riverside County. Therefore, although suitable habitat exists for this species in the proposed alignment, it is not likely to occur.

Mountain Springs bush lupine (*Lupinus excubitus* var *medius*) is a BLM-listed sensitive, CNPS List 1B shrub historically found in pinyon and juniper woodland and the Sonoran desert scrub at elevations ranging from 425 to 1,370 meters (1,394 – 4,494 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Robinson's monardella (*Monardella robisonii*) is a BLM-listed sensitive, CNPS List 1B rhizomatous herb historically found in pinyon and juniper woodland at elevations ranging from 610 to 1,500 meters (2,001 – 4,921 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

San Diego golden star (*Muilla clevelandii)* is a BLM-listed sensitive, CNPS List 1B bulbiferous herb historically found in chaparral, coastal scrub, valley, foothill grasslands, and vernal pools (clay) at elevations ranging from 50 to 465 meters (164 – 1,525 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Munz's cholla (*Opuntia munzii*) is a BLM-listed sensitive, CNPS List 1B stem succulent historically found in Sonoran desert scrub (sandy or gravelly) habitat at elevations ranging from 150 to 600 meters (492 – 1,968 feet) amsl. The environmental conditions associated with this species do not occur along the ROW. Therefore, this species is not likely to occur.

Parry's tetracoccus (*Tetracoccus dioicus*) is a BLM-listed sensitive, CNPS List 1B deciduous shrub historically found in chaparral and coastal scrub habitats at elevations ranging from 165 to 1,000 meters (541 – 3,280 feet) amsl. This species is known in Orange, southwestern Riverside, San Diego Counties and Baja California. Although there is suitable habitat along the ROW, the proposed alignment is outside of the range of this species.

Appendix 7-5 Wildlife Species with a Low Potential to Occur

DEVERS PALO VERDE 2 WILDLIFE SPECIES WITH A LOW POTENTIAL TO OCCUR ALONG THE PROPOSED PROJECT			
Scientific Name Common Name	Status	Potential to Occur/ Transmission Line Segment	**Habitat**
INVERTEBRATES			
CRUSTACEA			
Branchinecta lynchi **vernal pool fairy shrimp**	Fed: THR Ca: none BLM: none FS: none	Low	(WR) Inhabits small ephemeral pools and puddles in herbaceous wetland and scrub-shrub wetland habitats.
Streptocephalus woottoni **Riverside fairy shrimp**	Fed: END Ca: none BLM: none FS: none	Unlikely	(WR) Found in vernal pools and other seasonal water-holding depressions.
INSECTA			
Euphydryas editha quino **Quino checkerspot butterfly**	Fed: END Ca: none BLM: none FS: none	Unlikely	(WR) Inhabits shrubland and chaparral habitats in host plants *Plantago erecta* and *Plantago hookeriana californica*.
Rhaphiomidas terminatus abdominalus **Delhi sands flower-loving fly**	Fed: END Ca: none BLM: none FS: none	Unlikely	(WR) Found in fine, sandy soils in southwestern San Bernardino and Northwestern Riverside Counties.
FISH			
CYPRINIDAE (minnows and carp)			
Gilia orcutti arroyo chub	Fed: none Ca: CSC BLM: none FS: S	Unlikely	(WR) Found in the Los Angeles Basin in streams with mud or sand bottoms.
***Rhinichthys osculus* ssp. 3** Santa Ana speckled dace	Fed: none Ca: CSC BLM: none FS: S	Unlikely	Lives in permanent flowing streams in the San Gabriel and Santa Ana Rivers.
CATOSTOMIDAE (suckers)			
Catostomus santaanae Santa Ana Sucker	Fed: THR Ca: CSC BLM: none FS: S	Unlikely	(WR) Found in sand-rubble-boulder bottom streams in Los Angeles Basin south coastal streams.
CYPRINODONTIDAE (killfishes)			
Cyprinodon macularis desert pupfish	Fed: END Ca: END BLM: none FS: none	Unlikely	(CV) Lives in desert ponds, marshes, streams and springs in southern California.
GASTEROSTEIDAE (sticklebacks)			
Gasterosteus aculeatus williamsoni Unarmored threespine stickleback	Fed: END Ca: END/FP BLM: none FS: S	Unlikely	Found in southern California streams that are slow moving and clear, including Shay Creek in San Bernardino County.
AMPHIBIANS			

DEVERS PALO VERDE 2 WILDLIFE SPECIES WITH A LOW POTENTIAL TO OCCUR ALONG THE PROPOSED PROJECT			
Scientific Name Common Name	Status	Potential to Occur/ Transmission Line Segment	**Habitat**
PLETHODONTIDAE (lungless salamanders)			
Ensatina eschscholtzii klauberi large-blotched salamander	Fed: None Ca: CSC BLM: None FS: S	Unlikely	Found in the San Bernardino and San Jacinto Mountain ranges in moist areas.
RANIDAE (frogs)			
Rana aurora draytonii California red-legged frog	Fed: THR Ca: CSC BLM: none FS: none	Unlikely	(WR) Found in areas in or near permanent water sources with dense riparian vegetation.
REPTILES			
EMYDIDAE (box and water turtles)			
Clemmys marmorata pallida southwestern pond turtle	Fed: none Ca: CSC BLM: SS FS: S	Low	(WR) Inhabits permanent or nearly permanent bodies of water below 6000' with basking sites.
COLUBRIDAE (egg-laying snakes)			
Diadophis punctatus modestus San Bernardino ringneck snake	Fed: none Ca: none BLM: none FS: S	Low	Found in open, rocky areas in moist microhabitats near intermittent streams.
Lampropeltis zonata parvirubra San Bernardino mountain kingsnake	Fed: none Ca: CSC BLM: none FS: S	Unlikely	(WR) Found in a variety of montane habitats in the San Bernardino Mountains.
Lampropeltis zonata pulchra San Diego mountain kingsnake	Fed: none Ca: CSC BLM: none FS: S	Low	(WR) Found in a variety of habitats including chaparral, coniferous forest and riparian woodland at elevations ranging from 1,500 to 8,000 feet (457 to 2,440 meters) amsl.
BIRDS			
GAVIIDAE(loons)			
Gavia immer **common loon**	Fed: none Ca: CSC BLM: none FS: none	Unlikely*	Nests in forested and open lakes and rivers.
PHALACROCORACIDAE (cormorants)			
Phalacrocorax auritus **double-crested cormorant (rookery site)**	Fed: none Ca: CSC BLM: none FS: none	Unlikely*	(WR) Found in lakes, ponds, rivers, coastal bays and other large bodies of water.
ARDEIDAE (herons, egrets and bitterns)			
Ixobrychius exilis hesperis **western least bittern (nesting)**	Fed: FSC Ca: CSC BLM: none FS: none	Unlikely*	Found in freshwater marshes and occasionally in brackish marshes.

DEVERS PALO VERDE 2 WILDLIFE SPECIES WITH A LOW POTENTIAL TO OCCUR ALONG THE PROPOSED PROJECT			
Scientific Name Common Name	Status	Potential to Occur/ Transmission Line Segment	**Habitat**
Accipiter gentilis **northern goshawk (nesting)**	Fed: none Ca: CSC BLM: none FS: S	Unlikely	(WR) Nests and breeds in deciduous, coniferous and mixed forest habitats in southern California.
Accipiter striatus **sharp-shinned hawk (nesting)**	Fed: none Ca: CSC BLM: none FS: none	Unlikely*	(WR) A winter resident of southern California, found in forest and open woodland habitats.
Buteo swainsoni **Swainson's hawk**	Fed: none Ca: THR BLM: none FS: S	Low	(WR) Found in deserts, savanna, open pine-oak woodland and cultivated lands.
Circus cyaneus **northern harrier**	Fed: none Ca: CSC BLM: none FS: none	Low	(WR) Found in open areas near marshes, fields and prairies.
Haliaeetus leucocephalus bald eagle	Fed: THR/FPD Ca: END/FP BLM: none FS: none	Unlikely*	(WR) Inhabits forest and woodland habitats with close proximity to coastal areas, lakes, rivers and other large bodies of water.
Pandion haliaetus **osprey (nesting)**	Fed: none Ca: CSC BLM: none FS: none	Unlikely	(WR) Nests along rivers, lakes, seacoasts and other large bodies of water in forest habitats.
FALCONIDAE (falcons)			
Falco columbarius **merlin (wintering)**	Fed: none Ca: CSC BLM: none FS: none	Low	(WR) Inhabits marshes, deserts, open woodlands, fields and coastal lakes and lagons.
CHARADRIIDAE (plovers and relatives)			
Charadrius alexandrinus nivosus **western snowy plover**	Fed: THR Ca: CSC BLM: none FS: none	Unlikely	Found on beaches and dry mud or salt flats around rivers, ponds, and lakes.
LARIDAE (gulls and terns)			
Sterna caspia **Caspian tern (nesting colony)**	Fed: none Ca: CSC BLM: none FS: none	Unlikely*	Found on the pebbly or sandy shores of large lakes and rivers.
Sterna nilotica **gull-billed tern**	Fed: none Ca: CSC BLM: none FS: none	Unlikely	Found in salt marshes and fields. Winters at the Salton Sea.
STRIGIDAE (owls)			
Asio flammeus **short-eared owl (nesting)**	Fed: none Ca: CSC BLM: none FS: none	Low	Found in open prairies, grasslands, dunes and freshwater and saltwater marshes.

DEVERS PALO VERDE 2 WILDLIFE SPECIES WITH A LOW POTENTIAL TO OCCUR ALONG THE PROPOSED PROJECT			
Scientific Name Common Name	Status	Potential to Occur/ Transmission Line Segment	**Habitat**
Strix occidentalis occidentalis **California spotted owl**	Fed: none Ca: CSC BLM: SS FS: S	Unlikely	(WR) Inhabits forest habitats usually in close proximity to a water source.
APODIDAE (swifts)			
Chaetura vauxi **Vaux's swift**	Fed: none Ca: CSC BLM: none FS: none	Unlikely*	Migratory in southern California; inhabits woodland habitats and areas near rivers and lakes.
Cypseloides niger **black swift**	Fed: none Ca: CSC BLM: none FS: none	Unlikely	(WR) Found on cliffs adjacent to or behind waterfalls in the San Bernardino and San Jacinto Mountains.
VIREONIDAE (vireos)			
Vireo vicinior gray vireo (nesting)	Fed: none Ca: CSC BLM: SS FS: none	Low	(CV) Nests in desert, chaparral, and woodland communities in California and Arizona.
ALAUDIDAE (larks)			
Progne subis **purple martin (nesting)**	Fed: none Ca: CSC BLM: none FS: none	Unlikely	(WR) Inhabits woodland and low elevation coniferous forests; nests in old woodpecker cavities.
TROGLODYTIDAE (wrens)			
Campylorhynchus brunneicapillus sandiegensis **coastal cactus wren**	Fed: none Ca: CSC BLM: none FS: S	Low	(WR) Inhabits coastal sage scrub habitats at elevations below 3,000 feet amsl.
EMBERIZIDAE (sparrows, buntings, warblers and relatives)			
Junco hyemalis caniceps **gray-headed junco**	Fed: none Ca: CSC BLM: none FS: none	Unlikely	Nests in openings and edges of coniferous forests. Can be found in parks, roadsides and gardens in the winter.
ICTERIDAE (blackbirds)			
Agelaius tricolor **tri-colored blackbird (nesting colony)**	Fed: none Ca: CSC BLM: SS FS: none	Low	(WR) A highly colonial species. Occurs in wetlands with reeds for nesting.
MAMMALS			
PHYLLOSTOMIDAE (leaf-nosed bats)			
Choeronycteris mexicana **Mexican long-tongued bat**	Fed: none Ca: CSC BLM: none FS: none	Low	Found in desert, forest, grassland and woodland habitats. Roosts in caves, rock fissures and mines.
VESPERTILIONIDAE (evening bats)			
Myotis ciliolabrum **western small-footed myotis**	Fed: none Ca: none BLM: SS FS: none	Low	Roosts in mines, caves, rock piles, buildings and other crevices.

DEVERS PALO VERDE 2
WILDLIFE SPECIES WITH A LOW POTENTIAL TO OCCUR ALONG THE PROPOSED PROJECT

Scientific Name Common Name	Status	Potential to Occur/ Transmission Line Segment	**Habitat**
Myotis evotis **long-eared myotis**	Fed: none Ca: none BLM: SS FS: none	Low	Found in thinly forested areas with access to buildings, trees and caves for roosting.
SCIURIDAE (squirrels and relatives)			
Glaucomys sabrinus californicus **San Bernardino flying squirrel**	Fed: none Ca: CSC BLM: none FS: S	Unlikely	(WR) Found only in the San Bernardino Mountains in Jeffery pine/white fir mixed forests.
MURIDAE (mice, rats and voles)			
Sigmodon hispidus eremicus **Yuma cotton rat**	Fed: none Ca: CSC BLM: none FS: none	Unlikely*	Found in moist areas with tall grasses, sedges and weeds.

Federal Designations (Federal Endangered Species Act, USFWS)

END: **federally-listed, endangered**
THR: **federally-listed, threatened**
FC: **federal candidate species**
FSC: federal species of concern
FPD: federal proposed for delisting
DL: federally-delisted

State designations: (California Endangered Species Act, CDFG)

END: state-listed, endangered
THR: state-listed, threatened
CSC: **California special concern species**
FP: **DFG fully protected species**

Other Designations

SS: Bureau of Land Management sensitive species
S: U.S. Forest Service sensitive species

MSHCP Designations

CV: Proposed covered species under Coachella Valley Multiple Species Habitat Conservation Plan
WR: Species covered under Western Riverside County Multiple Species Habitat Conservation Plan

Appendix 7-6 Sensitive Wildlife Species Accounts

Invertebrates

Vernal pool fairy shrimp *(Branchinecta lynchi)***.** The vernal pool fairy shrimp is listed as threatened by the federal government. It primarily inhabits mud or grass bottomed small ephemeral pools, puddles, and swales in herbaceous, and scrub-shrub wetland habitats. They can also inhabit a number of natural and artificial seasonal wetland habitats, such as alkali pools, ephemeral drainages, stock ponds, roadside ditches, vernal swales, and rock outcrop pools. Whatever the habitat, the wetlands in which this species is found are small and shallow; however this species occasionally inhabits both large and deep habitats. The vernal pool fairy shrimp is primarily a detritivore, filter feeding in the water column and sifting the accumulated bottom debris and sediments, also infrequently consuming worms, beetles, and other aquatic invertebrates. This species is threatened by loss of habitat due to both urban and agricultural development.

Riverside fairy shrimp *(Streptocephalus woottoni)*. The Riverside fairy shrimp is listed as endangered by the federal government. It is primarily found in vernal pools and other seasonal water-holding depressions possessing minimal perennial vegetation along the pool perimeters. They can often be taken from clear or turbid waters containing loose emergent vegetation. The Riverside fairy shrimp is considered to be a "warm water species" because it begins to appear in the pools later on in the season than other fairy shrimp species. This species is threatened by loss of habitat due to both urban and agricultural development.

Quino checkerspot butterfly *(Euphydryas editha quino)*. The Quino checkerspot butterfly is listed as endangered by the federal government. It is a medium sized butterfly with a wingspan of 3 cm; the wings are a patchwork of brown, red and yellow spots. The quino checkerspot was once widespread throughout the coastal sage scrub areas of southern California and northern Baja California. Populations have been on a decline and are limited to a few remaining populations in Riverside and San Diego Counties. It inhabits shrubland and chaparral habitats possessing the specific host plants (*Plantago erecta*), and (*Plantago hookeriana californica*). The main threat to this species is a loss of habitat and required host plant species throughout its range, as a result of both urban and agricultural development

Delhi sands flower-loving fly *(Rhaphiomidas terminatus abdominalus)***.** The Delhi sands flower-loving fly is listed as endangered by the federal government. This species is only found in areas possessing Delhi Sands formation in southwestern San Bernardino & northwestern Riverside counties. This fly requires fine, sandy soils, often with wholly or partly consolidated dunes and sparse vegetation comprised of *Eriogonum fasciculatum*, *Dicorea canescens*, *Lessingia glandulifera*, *Heterotheca grandiflora*, and *Croton californicus*. This species is mostly threatened by habitat loss due to urban and agricultural development and the invasion of sands by invasive exotic weed species.

Fish

Arroyo chub (*Gila orcutti*). The arroyo chub is a California special concern species (CSC), and a Forest Service sensitive species (FSS). It is a relatively small chunky minnow that can be found in

slow-moving mud or sand bottomed sections of coastal streams throughout the Los Angeles Basin and several other southern California counties. This species has gray-olive green backs, white bellies, a large eye, and a relatively small terminally positioned mouth. They feed primarily on aquatic vegetation and the associated invertebrates. Male arroyo chub develop tubercles on their pectoral fins during the breeding season. The primary threats for this species are a loss of habitat, diminishing water quality, presence of predatory exotic species, and the hardening of channel banks and bottoms throughout most of its historic range.

Santa Ana speckled dace (*Rhinichthys osculus ssp.3*). The Santa Ana speckled dace is a CSC, and an FSS species. This species requires permanent flowing streams with shallow cobble and gravel bottomed riffles, with summer water temperatures of 17-20°C. They are commonly found in streams inhabited by other native fishes (rainbow trout and Santa Ana sucker), in areas possessing overhanging riparian plant and a canopy layer comprised of sycamores, alders, and sedges. Viable habitat areas typically possess some aquatic vegetation and a well developed algae layer on substrate. This species is primarily threatened by loss of habitat, diminishing water quality, presence of predatory exotic species, streambed alterations and channel hardening throughout its range.

Santa Ana sucker (*Catostomus santaanae*). The Santa Ana sucker is listed as threatened by the federal government; it is also a CSC, and an FSS species. This fish is endemic to small and medium sized permanent streams throughout the Los Angeles Basin and portions of Riverside and Orange Counties. Substrates in these streams can vary from sandy, to rock rubble, and even boulder-bottomed, provided that relatively clear cool water and a good benthic algae cover are present. Primary threats to this species include the presence of predatory exotic species, deteriorating water quality, increased water turbidity and siltation, and in some areas off-road vehicle use in their habitat.

Desert pupfish (*Cyprinodon macularis*). The desert pupfish is listed as endangered by both the federal government, and the state of California. These fish inhabit desert ponds, marshes, streams and springs in deserts of southern California. They have the ability to withstand extreme environmental conditions, salinities often range from 0 - 68 ppt, and water temperatures can vary from 9 - 45 ° C, with dissolved oxygen levels dropping as low as 0.1 ppm. The major threats for this species include loss of habitat, and the introduction of exotic species.

Unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni*). The unarmored threespine stickleback is listed as endangered by the state and federal governments, it is an FSS, and a state fully protected (FP) and endangered species. They are small, laterally compressed, scaleless fish with a very narrow caudal peduncle, three dorsal spines, and silvery sides often with dark mottling. Habitat requirements include clear, slow-flowing streams with sand or mud substrate, water temperatures less than 24°C, and abundant aquatic vegetation. They often occur in deeper pools with slow currents or, in stronger currents, behind obstructions. The lack of turbidity is main criteria necessary for the survival of the stickleback. Major threats include the hardening of channels and drainages, encroachment by urban development, introduction of exotic species, and loss of water supplies due to groundwater pumping.

Amphibians and Reptiles

Large-blotched salamander (*Ensantina eschscholtzii klauberi*). The large-blotched salamander is a CSC, and an FSS. This salamander is fully terrestrial and has a stout body with relatively long legs; they have smooth skin with a black ground color and orange, yellowish, or pink blotches. They are a

long lived species reaching ages of 14-16 years. This salamander is typically found in deciduous and evergreen forests, under rotting logs, bark, or rocks.

California red-legged frog (*Rana aurora draytonii*). The California red-legged frog is listed as threatened by the federal government and is also a CSC species. This species occurs near permanent sources of deep water with dense, shrubby, or emergent riparian vegetation. Artificial stockponds on agricultural and grazing lands can also provide a permanent water source for this species. The California red-legged frog is threatened by the introduction of exotic species, and the loss of habitat due to urban and agricultural development.

Southwestern pond turtle (*Clemmys marmorata pallida*). The southwestern pond turtle is a CSC and a FSS species. This species inhabits permanent or nearly permanent bodies of water and portions of streams that have deeper, slow moving water and basking sites. This species is threatened by loss of habitat due to urban development, introduction of exotic species, fragmentation of habitats, and the hardening of channels and drainages.

San Bernardino ringneck snake (*Diadophis punctatus modestus*). The San Bernardino ringneck snake is a FSS species. This species occurs in open, relatively rocky areas, often in moist areas and near intermittent streams.

San Bernardino mountain kingsnake (*Lampropeltis zonata parvirubra*). The San Bernardino Mountain kingsnake is a CSC, and a FSS species. This species occurs in well illuminated canyons with rocky outcrops or rocky talus in close proximity to bigcone spruce, canyon chaparral species, black oak, cedar, and several species of pine at higher elevations.

San Diego mountain kingsnake (*Lampropeltis zonata pulchra*). The San Diego mountain kingsnake is a CSC species listed as sensitive by the U.S. Forest Service and is covered under the Western Riverside Multiple Species Habitat Conservation Plan. This species is found in shrubland, chaparral and woodland habitats in southern California. Diet of the San Diego mountain kingsnake is comprised of lizards, eggs, snakes, small mammals and birds. Threats to this species include habitat loss due to urbanization and illegal collection.

Birds

Bald eagle (*Haliaeetus leucocephalus*). The bald eagle is a federally-listed threatened species proposed for delisting, state-listed endangered speces, fully protected by CDFG and covered under the Western Riverside Multiple Species Habitat Conservation Plan. This species inhabits forest and woodland habitats in close proximity to large bodies of water for foraging. Bald eagles need standing snags and hollow trees to nest in due to their large wingspan. Diet includes fish, waterfowl, shore birds, mammals and occasionally carrion. Threats to this species include habitat loss, pesticide use, occasional shooting, decreasing food supply and human disturbance.

Swainson's hawk (*Buteo swainsoni*). The Swainson's hawk is a state-listed threatened species, listed as a sensitive species by the U.S. Forest Service and protected under the Western Riverside Multiple Species Habitat Conservation Plan. This species inhabits cropland, desert, grassland, savanna and mixed woodland habitats. Threats to this species include expansion of cropland not conducive to foraging, development, pesticide use and reduced prey populations.

Western snowy plover (*Charadrius alexandrinus nivosus*). The western snowy plover is a federally-listed threatened and a CSC species. This species inhabits beaches, dry mud or salt flats, sandy shores of rivers, lakes and ponds. Diet consists of crustaceans, insects and other small invertebrates. Threats to this species include habitat loss, human disturbance, introduction of non-native grasses and introduced predators.

Common loon (*Gavia immer*). The common loon is a CSC species. This species is a migratory shore bird found in herbaceous wetland and riparian habitats throughout California. As a visual predator, water clarity is important to the success of this species, although research has shown that they are capable of adapting to areas with turbid water. Common loon populations are threatened by oil spills in coastal areas and habitat loss/degradation.

Double-crested cormorant (*Phalacrocorax auritus*). The double-crested cormorant is a CSC species and covered under the Western Riverside Multiple Habitat Conservation Plan. This species inhabits forested woodland and riparian areas with immediate access to water. As an opportunistic feeder, the double-crested cormorant feeds on schooling fishes, aquatic invertebrates and some small vertebrates other than fishes. This species typically forages approximately within 20 km of the roost site.

Western least bittern (*Ixobrychius exilis hesperis*). The western least bittern is a federal species of concern and a CSC species. This species occurs throughout southern California and southwestern Arizona in freshwater and brackish marshes. The western least bittern feed on fish, aquatic invertebrates, amphibians and small mammals. Populations are threatened by habitat loss/degradation, dredging, stream diversions, wildfires, grazing and flood control.

Northern goshawk (*Accipiter gentilis*). The northern goshawk is a CSC species, considered sensitive by the U.S. Forest Service and covered under the Western Riverside Multiple Species Conservation Plan. This species typically nests in old-growth or mature forests consisting of deciduous and/or coniferous trees. This opportunistic hunter feeds on a variety of vertebrates and insects. Threats include timber harvesting and habitat degradation.

Sharp-shinned hawk (*Accipiter striatus*). The sharp-shinned hawk is a CSC species and covered under the Western Riverside Multiple Species Conservation Plan. This species inhabits forest and open woodland habitats, feeding on small to medium-sized birds and other small vertebrates. Threats to this species include development, logging and pesticide use.

Northern harrier (*Circus cyaneus*). The northern harrier is a CSC species and covered under the Western Riverside Multiple Species Habitat Conservation Plan. This species nests on the ground or on stumps or posts in meadows, marshes, grasslands and cultivated fields. Diet includes small mammals, birds, reptiles, amphibians, large insects and occasionally carrion. Threats include habitat loss and pesticide use.

Osprey (*Pandion haliaetus*). The osprey is a CSC species and covered under the Western Riverside Multiple Species Habitat Conservation Plan. This species inhabits cliffs, forested wetland and riparian areas with standing snags and hollow trees and with close access to large bodies of water. Diet consists of almost exclusively fishes. Threats include pesticide use, occasional shooting and power-line electrocution.

Merlin (*Falco columbarius*). The merlin is a CSC species and is covered under the Western Riverside Multiple Species Habitat Conservation Plan. This species inhabits desert, cropland, forest, savanna, woodland and grassland habitats throughout the United States. Diet consists of birds, large insects, mammals, reptiles and toads. Threats to this species include pesticide use and habitat loss.

Caspian tern (*Sterna capsia*). The Caspian tern is a CSC species and is found on the pebbly or sandy shores of large lakes and rivers. The diet for this species is comprised mostly of fish, but has also been known to feed on eggs of gulls and other terns. Threats include disturbance and development of nesting habitats.

Gull-billed tern (*Sterna nilotica*). The gull-billed tern is a CSC species found in salt marshes, salt field, freshwater marshes and along rivers and lakes. This species feeds on small invertebrates and vertebrates including eggs and young of other birds. Threats include habitat loss, predation, environmental contamination and human disturbance.

Short-eared owl (*Asio flammeus*). The short-eared owl is a CSC species and is found in cropland, grassland and savanna habitats. Nests are located in slight depressions on the ground near water. Diet of short-eared owls includes small mammals, small birds and insects. Threats include habitat loss and predators.

California spotted owl (*Strix occidentalis occidentalis*). The California spotted owl is a CSC species, listed sensitive by both BLM and U.S. Forest Service and covered under the Western Riverside Multiple Species Habitat Conservation Plan. This species is found in forest habitats with a diverse amount of tree species. The California spotted owl nests on broken tree tops, cliff ledges or in natural tree cavities. Diet consists of small mammals.

Vaux's swift (*Chaetura vauxi*). Vaux's swift is a CSC species and is a migratory bird in southern California. It occurs in forest habitats and is also found in urban environments. Nesting sites are located in large-diameter hollow trees, chimneys or large stumps. Diet for this species consists of small flying insects. Threats include logging and possibly pesticide use.

Black swift (*Cypseloides niger*). The black swift is a CSC species and is covered under the Western Riverside Multiple Species Habitat Conservation Plan. This species is found in the San Bernardino and San Jacinto Mountains on cliffs adjacent to or behind waterfalls with surrounding habitat consisting of coniferous forest and mixed chaparral.

Gray vireo (*Vireo vicinior*). The gray vireo is a CSC species, listed as sensitive by BLM, and is covered under the Western Riverside and Coachella Valley Multiple Species Habitat Conservation Plans. This species is found in desert, shrubland, and woodland habitats, nesting in a shrub or tree 0.5 to 2 meters tall. Diet consists only of insects. Threats to this species include habitat loss, brood parasitism and grazing.

Purple martin (*Progne subis*). The purple martin is a CSC species and is covered under the Western Riverside Multiple Species Habitat Conservation Plan. This species is found in cropland, desert, grassland, savanna, shrubland and woodland habitats. Diet consists of insects; mostly caught in mid-air.

Coastal cactus wren (*Campylorhnchus brunneicapillus sandiegensis*). The coastal cactus wren is a CSC species, listed a sensitive by the U.S. Forest Service. This species occurs in coastal sage scrub with tall *Opuntia* cactus for nesting and roosting. Diet primarily consists of insects, spiders and sometimes small lizards. In the fall and winter, fruit from *Opuntia* species supplements the diet. Threats to this species include habitat loss due to development.

Gray-headed junco (*Junco hymenalis caniceps*). The gray-headed junco is a CSC species and occurs in forest, woodland and chaparral habitats. Nests are constructed on the ground concealed by ground vegetation, logs, tree roots or rocks. This species feeds on seeds throughout the year and consumes insects during the breeding season.

Tri-colored blackbird (*Agelaius tricolor*). The tri-colored blackbird is a CSC species, listed as sensitive by BLM and is covered under the Western Riverside Multiple Species Conservation Habitat Plan. The species occurs in wetland areas near open water that is typically surrounded by reeds and other tall wetland plants. This is a highly colonial nesting species. Diet of this species consists of insects, seeds and grains. Threats include habitat loss and non-native vegetation growth.

Mammals

Mexican long-tongued bat (*Choeronyctris mexicana*). The Mexican long-tongued bat is a CSC species and is found in desert, forest, grassland, savanna, chaparral and woodland habitats, roosting in caves, abandoned mines, rock fissures and occasionally buildings. Diet for this species includes fruit juices, pollens and nectars. Threats to the Mexican long-tongued bat include human disturbance, loss of food resources and renewed mining.

Western small-footed myotis (*Myotis ciliolabrum*). The western small-footed myotis is a species listed as sensitive by BLM and is found in woodland, shrubland and grassland habitats. Roosts are located in rock crevices, caves, tunnels, under boulders, in buildings and beneath loose bark. Diet for this species consists of a variety of small insects. Populations are threatened by killing, human disturbance, habitat loss and contaminant poisoning.

Long-eared myotis (*Myotis evotis*). The long-eared myotis is a species listed as sensitive by BLM and is found mainly in forested areas, although will inhabit grassland, shrubland and woodland areas. Diet is comprised primarily of insects and will forage for its prey over water or among trees. Threats to the long-eared myotis include human disturbance to maternity colonies, hibernacula and roosts and habitat loss.

San Bernardino flying squirrel (*Glaucomys sabrinus californicus*). The San Bernardino flying squirrel is a CSC species, listed a sensitive by the U.S. Forest Service and is covered under the Western Riverside Multiple Species Habitat Conservation Plan. This species is found in forests with standing snags and hollow trees in the San Bernardino Mountains. Diet for the San Bernardino flying squirrel includes invertebrates, fruits and seeds. Populations are threatened by habitat loss.

Yuma cotton rat (*Sigmodon hispidus eremicus*). The Yuma cotton rat is a CSC species and is found in grassland and hardwood woodland habitats near the Colorado River. This species mainly feeds on vegetation but will occasionally consume small vertebrates and insects. This species has not been sighted in California since the early 1900's.