Appendix E.

Special-Status Plant Species Accounts

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Federal or State Endangered or Threatened Plants

Braunton's Milk-vetch (*Astragalus brauntonii*). Federal Listing Status: Endangered; State Listing Status: None; CNPS List 1B.1. Braunton's milk-vetch is a perennial herb in the pea family (Fabaceae) that blooms from February to June. This plant occurs in chaparral, coastal scrub, closed-cone coniferous forests, and valley and foothill grasslands in areas underlain with sandstone bedrock or sandstone-derived soils with carbonate layers (USDA 1995, CNPS 2007). Fire and disturbance play key roles in the establishment of this species, and it typically appears for 2 to 3 years following burning (Skinner 1991). Braunton's milk-vetch occurs below 2,100 feet elevation in the foothills bordering the Los Angeles Basin, including Los Angeles, Orange, Riverside, and Ventura counties. It is threatened by development and alteration of natural fire regimes (CNPS 2007).

No individuals or populations of Braunton's milk-vetch were observed during reconnaissance-level surveys, but it is known from several restricted occurrences within Los Angeles, Riverside, and Orange counties. CNDDB (2007) records occur within the Azusa and Mount Wilson USGS quadrangles, as well as quadrangles that are adjacent to the proposed project, such as Hollywood and Black Star Canyon. Three populations are known to occur within 5 miles of the proposed project, 2 in the Mount Wilson quadrangle and one in the Azusa quadrangle. There is one historical occurrence of this species near the proposed project in the foothills between Segments 7 and 11 (south of Clamshell Canyon and north of the City of Monrovia, just outside of the ANF; CNDDB 2007). This species is considered by CNPS (2007) to be seriously endangered within California.

Northern Region: This species is considered absent from the proposed project north of the ANF. Although suitable habitat may be present, the species is not known from this region. This species is recorded only from the foothills surrounding the Los Angeles Basin.

Central Region: This species may occur in the southern portions of Segments 6 and 11 within the ANF, and dormant seed banks of this species may exist in unburned chaparral and scrub habitats. Suitable habitats may include recently burned or disturbed sites within Chamise Chaparral, Scrub Oak Chaparral, Interior Live Oak Scrub, Coastal Sage Scrub, Mixed Chaparral, and California Annual Grassland.

Southern Region: This species may occur outside of the urban areas of Segments 7, 8, and 11 south of the ANF. There is an extant population of this species between Segment 7 and 11 north of Monrovia, just south of the ANF boundary. Suitable habitats may include recently burned or disturbed sites within Coastal Sage Scrub, Mixed Chaparral, Interior Live Oak Scrub, and California Annual Grassland.

Nevin's Barberry (*Berberis nevinii*). Federal Listing Status: Endangered; State Listing Status: Endangered; CNPS List 1B.1. Nevin's barberry is a rhizomatous evergreen shrub in the barberry family (Berberidaceae) that blooms from March to April. The current distributional extent of the species ranges from the foothills of the San Gabriel Mountains of Los Angeles County to the foothills of the

Peninsular Ranges of southwestern Riverside County (Service 1998) at elevations of 900 to 2,000 feet. This species occurs on coarse soils and is predominately found in chaparral, but also occurs in cismontane woodland, coastal scrub, and riparian scrub on gravelly wash margins along alluvial scrub. There are fewer than 30 scattered natural occurrences in addition to several introduced horticultural plantings (CNPS 2007). There is some confusion concerning native versus introduced occurrences, as this species has been cultivated for many years. The total number of native individuals remaining is estimated to range from 500 to 1,000 plants (Service 1998).

No individuals or populations of Nevin's barberry were observed during reconnaissance-level surveys. There are at least 19 CNDDB (2007) occurrences of Nevin's barberry in Los Angeles County, although these are limited to Lopez Canyon and San Francisquito Canyon, away from the proposed project. One of the largest known populations of Nevin's Barberry occurs on the ANF in San Francisquito Creek (Service 1998). Other historical occurrences include populations in Pasadena and in Big Tujunga wash near the city of San Fernando.

Northern Region: This species is considered absent from the proposed project north of the ANF. This region lacks suitable habitat and is outside of the known range of the species.

Central Region: This species may occur within the southern half of Segments 6 and 11 in the ANF. The CNDDB (2007) lists 2 extant occurrences of this species within the ANF: Lopez Canyon and San Francisquito Canyon. The range of this species does not extend north of the Mill Creek Summit Divide. Suitable habitats may include gravelly wash margins within Chamise Chaparral, Mixed Chaparral, Scrub Oak Chaparral, Coastal Sage Scrub, Southern Cottonwood Willow Riparian Forest, Southern Coast Live Oak Riparian Forest, Southern Sycamore Alder Riparian Woodland, Southern Willow Scrub, and Southern Arroyo Willow Riparian Forest communities.

Southern Region: This species may occur within the proposed project south of the ANF near Segments 7, 8, and 11. Suitable habitats may include gravelly wash margins within Mixed Chaparral, Coastal Sage Scrub, Southern Cottonwood Willow Riparian Forest, Southern Sycamore Alder Riparian Woodland, Southern Willow Scrub, Southern Coast Live Oak Riparian Forest, and Southern Arroyo Willow Riparian Forest.

Thread-leaved Brodiaea (*Brodiaea filifolia*). Federal Listing Status: Threatened; State Listing Status: Endangered; CNPS List 1B.1. Thread-leaved brodiaea is a perennial bulbiferous herb in the lily family (Liliaceae) that flowers from March to June. It typically occurs in open mesic grasslands within chaparral, cismontane woodland, or coastal scrub communities, and is frequently associated with playas or vernal pools at elevations of 80 to 2,900 feet. This species is known from Los Angeles, Orange, Riverside, San Bernardino, San Diego, and San Luis Obispo counties. The historical range of this species includes the foothills of the San Gabriel and San Bernardino Mountains. Threats to this species include agricultural conversion and development of grassland habitats, along with poor grazing management practices (CNPS 2007).

No individuals or populations of thread-leaved brodiaea were observed during reconnaissance-level surveys. According to the CNDDB (2007), there are no current or historical populations of thread-leaved

brodiaea within 5 miles of the proposed project. However, there are 2 populations that occur above the cities of Glendora and San Dimas, just outside of the ANF boundary. This area has been designated as critical habitat for the thread-leaved brodiaea (Service 2005).

Northern Region: This species is considered absent from the proposed project north of the ANF. This region does not overlap with the known range of the species, which is restricted to the South Coast and Peninsular Range bioregion of California (Hickman 1993). In addition, suitable habitat for this plant is absent from the region.

Central Region: This species is unlikely to occur within the proposed project within the ANF. The closest population of this species occurs greater than 5 miles away from the proposed project. In addition, suitable grassland habitat for this species is not present within any segments within the Central Region. This species is presumed absent from the central and northern portions of Segments 6 and 11 within this region.

Southern Region: This species could potentially occur within the proposed project south of the ANF along Segment 8. Suitable habitats may include Bunchgrass Grassland, California Annual Grassland, and Ruderal Grassland, including small portions of these habitats situated within Coastal Sage Scrub, Mixed Chaparral, Coast Live Oak Woodland, and California Walnut Woodland. This species is unlikely to occur along Segments 7 and 11. The grassland habitats along these segments are marginal and highly disturbed.

Catalina mariposa lily (*Calochortus catalinae*). Federal Listing Status: None; State Listing Status: None; CNPS List 4.2. Catalina mariposa lily, a California endemic, is a perennial bulb in the lily family (Liliaceae) that blooms from March to June, although it can occasionally bloom as early as February. This plant occurs in chaparral, cismontane woodland, and valley and foothill grasslands in heavy soil in grasslands and shrublands (USDA 1995, CNPS 2007). Catalina mariposa lily occurs at 49 to 2,297 ft elevation in the foothills bordering the Los Angeles Basin, including Los Angeles, Orange, Santa Barbara, San Bernardino, San Diego, San Luis Obispo, and Ventura counties and on Santa Catalina Island, Santa Cruz Island, and Santa Rosa Island. It is threatened by development (CNPS 2007).

Catalina mariposa lily was observed during the 2008 focused surveys within the Chino Hills State Park alternative and it is known from several occurrences within Southern California. There are no CNDDB (2007) records within the project site, although rare plant surveys conducted at Chino Hills State Park in 2001 documented the species. This species is considered by CNPS (2007) to be fairly endangered within California.

Northern Region: This species is considered absent from the proposed project alignment north of the ANF. This region is not in the known range of the species as it is recorded only from areas south of here.

Central Region: This species is considered absent from the proposed project alignment north of the ANF. This region is not in the known range of the species.

Southern Region: This species was observed within the Chino Hills State Park alternative within Segment 8.

Mt. Gleason Indian Paintbrush (*Castilleja gleasonii*). Federal Listing: None; State Listing: Rare; CNPS List 1B.2. Forest Service Sensitive. Mt. Gleason Indian paintbrush is a perennial hemiparasitic herb in the figwort family (Scrophulariaceae) that blooms from May to June. This species grows in rocky places within lower montane coniferous forest and pinyon and juniper woodland communities at elevations of 3800 to 7,120 feet (CNPS 2007). However, the Consortium of California Herbaria (2007) reports occurrences down to elevations of 2,700 feet. It forms parasitic associations with big sagebrush (*Artemisia tridentata* ssp. *tridentata*), buckwheat (*Eriogonum* spp.), and other native species (Mistretta and Brown 1987 in SCE 2007). Mt. Gleason Indian paintbrush is endemic to the San Gabriel Mountains of Los Angeles County. Threats to this species include recreational activities such as fuel wood harvesting, off-highway vehicle activities, and close proximity to trails and campgrounds (CNPS 2007).

No individuals or populations of Mt. Gleason Indian paintbrush were observed during reconnaissance-level surveys. CNDDB (2007) records indicate that at least 9 known occurrences are found within 5 miles of the proposed project. These populations occur within the Acton, Pacifico Mountain, Chilao Flat, and Condor Peak USGS quadrangles.

Northern Region: This species is considered absent from the proposed project north of the ANF. This region does not overlap with the known range of the species, which is endemic to the central portions of the San Gabriel Mountains. Suitable habitat for this plant is absent from this region.

Central Region: This species may occur along Segments 6 and 11 within the ANF. There are several recorded populations of this species within 5 miles of the proposed project in the vicinity of Lightning Point Group Camp and Horse Flat Campground. Suitable habitats may include rocky places within Bigcone Douglas Fir-Canyon Live Oak Forest, Coulter Pine Forest, Mojave Juniper Woodland and Scrub, and Mojave Pinyon Woodland.

Southern Region: This species is considered absent from the proposed project south of the ANF. This region lacks suitable habitat and is outside of the known range of the species.

San Fernando Valley Spineflower (*Chorizanthe parryi* var. *fernandina*). Federal Listing Status: Candidate; State Listing Status: Endangered; CNPS List 1B.1. Forest Service Sensitive. San Fernando Valley spineflower is a low growing annual herb in the buckwheat family (Polygonaceae) that generally flowers from April to June. It occurs on sandy soils in coastal scrub communities between 490 and 4,000 feet. The historical range of this plant is restricted to Los Angeles, Ventura, and Orange counties. It was considered extinct until it was rediscovered in 1999. It is threatened by development and non-native plants (CNPS 2007).

No individuals or populations of San Fernando Valley spineflower were observed during reconnaissance-level surveys. CNDDB (2007) records one historical occurrence within 5 miles of the proposed project in the USGS Lake Hughes quadrangle, east of Segment 5 in the vicinity of Elizabeth Lake. Currently it is known from only 2 disjunct localities. One is the Newhall Ranch southwest of Val Verde in Los Angeles County. The site has been proposed for residential development that would potentially cause the loss of

most, if not all, of the population. However, a Candidate Conservation Agreement with Assurances is currently being developed with the landowner that would conserve a portion of the habitat where the plant has been observed. The second population is located on the former Ahmanson Ranch in southeastern Ventura County. This site is under public ownership and is being managed to conserve the plant (Service 2006).

Northern Region: This variety may occur along Segments 5, 6, and 11 north of the ANF. A historical population of the plant occurs within 5 miles of Segment 5 in the vicinity of Elizabeth Lake. Suitable habitat includes sandy soils within Mojave Juniper Woodland and Scrub, Desert Wash, and Mojave Mixed Woody Scrub. The plant is considered absent from Segments 4 and 10. These segments are outside of the known range of the plant.

Central Region: This variety may occur along Segments 6 and 11 within the ANF. Suitable habitat includes sandy soils within Coastal Sage Scrub, Mule Fat Scrub, Sparsely Vegetated Streambed, Desert Wash, Mojave Juniper Woodland and Scrub, and Mojave Pinyon Woodland.

Southern Region: This variety may occur in the area south of the ANF along Segments 7, 8, and 11. Suitable habitats along these segments include sandy soils within Coastal Sage Scrub, Mule Fat Scrub, Sparsely Vegetated Streambed, and Riversidean Alluvial Fan Sage Scrub.

Slender-horned Spineflower (*Dodecahema leptoceras*). Federal Listing Status: Endangered; State Listing Status: Endangered; CNPS List 1B.1. Slender-horned spineflower is an annual herb in the buckwheat family (Polygonaceae) that flowers from April to June (CNPS 2007). It occurs on sandy beaches and floodplain terraces and is associated with alluvial fan scrub vegetation within chaparral, cismontane woodland, and coastal scrub communities at 656 to 2,500 feet (Service 1986). It is known from San Bernardino, Los Angeles, and Riverside counties. Many historical occurrences have been extirpated due to increased urbanization and stream channelization. Current threats to the remaining populations include development, flood control, vehicles, proposed reservoir construction, and non-native plants (CNPS 2007).

No individuals or populations of slender-horned spineflower were observed during reconnaissance-level surveys. CNDDB (2007) records 4 historical occurrences within 5 miles of the proposed project in the USGS Azusa, Mt. Wilson, and Pasadena quadrangles. Segment 11 bisects one of these populations in the foothills of the city of Altadena. This population was mapped within the Rubio Wash, but is presumed extirpated due to urbanization and modifications for flood control. Other populations, also possibly extirpated, occur 3 miles east of Segment 11 in La Crescenta and 3.5 miles west of Segment 11 along the West Fork of the San Gabriel River. A population that is presumed extant occurs along Cogswell Reservoir east of Segment 6 (CNDDB 2007).

Northern Region: This species is considered absent from the proposed project north of the ANF. This region lacks suitable habitat and is outside of the known range of the species.

Central Region: This species may occur along Segments 6 and 11 within the ANF. A historical population of this species occurs where Segment 11 crosses the Rubio wash. However, the population is presumed extirpated due to urbanization and streambed modification for flood control. Suitable habitats

may include alluvial sands and floodplains within Coastal Sage Scrub, Mule Fat Scrub, Sparsely Vegetated Streambed, Southern Cottonwood Willow Riparian Forest, Southern Sycamore Alder Riparian Woodland, Southern Coast Live Oak Riparian Forest, Southern Willow Scrub, and Southern Arroyo Willow Riparian Forest communities below 2,500 feet.

Southern Region: This species may occur along Segments 7, 8, and 11 south of the ANF. Suitable habitats may include alluvial sands and floodplains within Coastal Sage Scrub, Riversidean Alluvial Fan Sage Scrub, Mule Fat Scrub, Sparsely Vegetated Streambed, Southern Cottonwood Willow Riparian Forest, Southern Sycamore Alder Riparian Woodland, Southern Willow Scrub, and Southern Arroyo Willow Riparian Forest communities below 2,500 feet.

Brand's Phacelia (*Phacelia stellaris*). Federal Listing: Candidate; State Listing: None; CNPS List 1B.1. Brand's phacelia is an annual herb in the waterleaf family (Hydrophyllaceae) that typically blooms between March and June. This species occurs in sandy substrates within coastal dune and coast scrub communities at elevations below 1,113 feet (CNPS 2007). It was historically known from 15 populations in Los Angeles, Riverside, and San Diego counties, and in Baja California. Currently, the species is known from only 3 populations in San Diego and Riverside counties and is considered extirpated from Los Angeles County. Threats to the species include trampling by foot, vehicular traffic, and the spread of the non-native iceplant (*Carpobrotus edulis*) (Service 2004).

No individuals or populations of Brand's phacelia were observed during reconnaissance-level surveys. The CNDDB (2007) records one historical occurrence of this species within 5 miles of the proposed project in the El Monte USGS quadrangle.

Northern Region: The species is considered absent from the proposed project north of the ANF. This region is outside of the known range of the species and lacks suitable habitat. The species was known from only 15 occurrences, all of which occurred south of the Transverse Range.

Central Region: The species is considered absent from the proposed project within the ANF. This region is outside of the known range and elevation of the species. In addition, suitable habitat for this plant is absent. The species was known from only 15 occurrences, all of which occurred south of the Transverse Range.

Southern Region: This species may occur within the proposed project along Segments 7 and 8 south of the ANF. There is a historical population of this species within the proposed project in the San Gabriel River east of El Monte. However, the CNPS (2007) considers this population to be extirpated. This species is unlikely to occur along Segment 11 where habitat conditions are marginal for this species. Suitable habitats include sandy soils within Coastal Sage Scrub, Riversidean Alluvial Fan Sage Scrub, Sparsely Vegetated Streambed, and Mule Fat Scrub.

CNPS Listed and Forest Service Sensitive Plants

Chaparral Sand-verbena (*Abronia villosa* var. *aurita*). Federal Listing Status: None; State Listing Status: None; CNPS List 2.3. Chaparral sand-verbena is an annual herb in the four-o-clock family (Nyctaginaceae) that blooms from January to September. It occurs in Riverside, San Bernardino, San

Diego, and Imperial counties, as well as in Arizona and Baja California and is presumed extirpated in Orange County. It is found in chaparral, coastal scrub, and desert dunes habitats in loose sandy soils, at elevations of 262 to 5,249 feet. It is threatened by flood control activities, vehicles, and habitat loss to development (CNPS 2007).

No individuals or populations of chaparral sand-verbena were observed during reconnaissance-level surveys. There are no CNDDB (2007) listed occurrences within 5 miles of the proposed project; however, a population occurs within the Corona North USGS quadrangle, which is adjacent to the quadrangles containing the proposed project.

Northern Region: This variety is considered absent from the proposed project north of the ANF. This region lacks suitable habitat and is not within the known range of the plant, which is within the Sonoran Desert and the South Coast bioregion of California (Hickman 1993).

Central Region: This variety is considered absent from the proposed project within the ANF. Habitat conditions within this region are marginal for this species. In addition, this region does not overlap with the known range of the species. There are no documented or reported occurrences within the San Gabriel Mountains.

Southern Region: This variety may occur within the proposed project south of the ANF along Segment 8. There are 2 CNDDB (2007) records of the plant south of Segment 8 in the vicinity of Highway 91. The plant is considered unlikely to occur within Segments 7 and 11. There are no historical occurrences within these portions of the proposed project and habitat conditions are marginal. Suitable habitats along this segment include sandy soils within Coastal Sage Scrub, Scrub Oak Chaparral, Riversidean Alluvial Fan Sage Scrub, Mule Fat Scrub, Sparsely Vegetated Streambed, and Mixed Chaparral.

California Androsace (*Androsace elongata* ssp. *acuta*). Federal Listing Status: None; State Listing Status: None; CNPS List 4.2. Forest Service Watch List. California androsace is an annual herb that belongs to the primrose family (Primulaceae). This subspecies blooms from March to June. It occurs throughout California, with known occurrences in 19 California counties, including Los Angeles, Riverside, and Kern counties. It occurs in coastal scrub, chaparral, cismontane woodland, meadows and seeps, and valley and foothill grassland communities from 492 to 3,936 feet. This subspecies is considered very rare in Southern California (CNPS 2007).

No individuals or populations of California androsace were observed during reconnaissance-level surveys. The CNDDB (2007) does not currently record population occurrence data for List 4 species. However, the Consortium of California Herbaria (2007) lists several occurrences of California androsace in Puddingstone Canyon in the vicinity of San Dimas, as well as an occurrence on the edge of the Antelope Valley in the San Gabriel Mountains.

Northern Region: This subspecies may occur within the proposed project north of the ANF along Segments 4, 5, 6, and 11. Suitable habitats may include Mixed Chaparral and California Annual Grassland. There is a documented occurrence on the edge of the Antelope Valley within the San Gabriel Mountains. California androsace is unlikely to occur along Segment 10. However, Desert Bunchgrass Grassland may provide marginal habitat.

Central Region: This subspecies may occur within the ANF along Segments 6 and 11. There are several populations on the foothill desert slopes of the San Gabriel, Liebre, and San Bernardino Mountains. Suitable habitats may include Mixed Chaparral, Chamise Chaparral, Scrub Oak Chaparral, Coast Live Oak Woodland, Interior Live Oak Scrub, Coastal Sage Scrub, and California Annual Grassland.

Southern Region: This subspecies may occur within the proposed project south of the ANF along Segment 8. A population of this subspecies occurs in Puddingstone Canyon in the Frank G. Bonelli Regional Park in the Puente/Chino Hills. Suitable habitats may include Mixed Chaparral, Coastal Sage Scrub, California Walnut Woodland, Bunchgrass Grassland, and California Annual Grassland. This subspecies is considered unlikely to occur within Segments 7 and 11. The only record of this plant in the Los Angeles Basin occurs in the Puente/Chino Hills.

Slender Silver Moss (*Anomobryum julaceum*). Federal Listing Status: None; State Listing Status: None; CNPS List 2.2. Slender silver moss is a non-vascular plant in the Bryaceae family that produces spores in response to extreme drying conditions. Slender silver moss occurs in isolated populations throughout California and elsewhere, with known occurrences in 7 Californian counties from Humboldt to Los Angeles, as well as in other Pacific states. This species is found on damp rocks and road cut areas in lower montane coniferous forests, broadleaved upland forests, and North Coast coniferous forests at elevations of 328 to 3,281 feet (CNPS 2007).

No individuals or populations of slender silver moss were observed during reconnaissance-level surveys. No populations are known to occur within 5 miles of the proposed project (CNDDB 2007); however, a recorded population does occur within the Waterman Mountain USGS quadrangle.

Northern Region: This species is considered absent from the proposed project north of the ANF due to lack of appropriate habitat. The species is only known to occur within lower montane coniferous forests, broadleaved upland forests, and North Coast coniferous forests communities, all of which are absent from the Northern Region.

Central Region: This species may occur within the proposed project within the ANF. Suitable habitats may include rocky areas and talus slopes within Bigcone Douglas Fir-Canyon Live Oak Forests and Coulter Pine Forests.

Southern Region: This species is considered absent from the proposed project south of the ANF due to lack of appropriate habitat. The species is only known to occur within lower montane coniferous forests, broadleaved upland forests, and North Coast coniferous forests communities, all of which are absent from the Southern Region.

San Gabriel Manzanita (*Arctostaphylos gabrielensis*). Federal Listing: None; State Listing: None; CNPS List 1B.2. Forest Service Sensitive. San Gabriel Manzanita is an evergreen shrub in the heath family (Ericaceae) that blooms in March. It is typically found growing in rocky chaparral habitats at elevations around 5,000 feet. This species is endemic to Los Angeles County and known only from the Mill Creek Summit Divide in the San Gabriel Mountains (CNPS 2007).

San Gabriel Manzanita was observed on Segment 6 within the proposed project during reconnaissance-level surveys. Segment 6 of the proposed project runs through Mill Creek Summit Divide, which is the type locality of this species. CNDDB (2007) records one occurrence of the species within the Pacifico Mountain USGS quadrangle. The Consortium of California Herbaria (2007) also lists an occurrence within the Pacifico Mountain USGS quadrangle.

Northern Region: This species is considered absent from the proposed project north of the ANF. This region lacks suitable habitat for the species. It is known only from the Mill Creek Summit Divide region of the San Gabriel Mountains at elevations around 5,000 feet.

Central Region: This species is present and was observed within the proposed project along Segment 6 in the vicinity of the Mill Creek Summit Divide within the ANF. Because of the close proximity to the Mill Creek Summit Divide, it is likely to occur along Segment 11. Suitable habitats may include Chamise Chaparral, Mixed Chaparral, and Scrub Oak Chaparral.

Southern Region: This species is considered absent from the proposed project south of the ANF. This region lacks suitable habitat for the species. It is known only from the Mill Creek Summit Divide region of the San Gabriel Mountains at elevations around 5,000 feet.

San Bernardino Aster (*Aster bernardinus = Symphyotrichum defoliatum*). Federal Listing: None; State Listing: None; CNPS List 1B.2. Forest Service Sensitive. San Bernardino aster is a rhizomatous herb in the sunflower family (Asteraceae) that blooms from July to November (CNPS 2007). Its typical habitat includes moderately moist (mesic) sites within cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, and valley and foothill grassland habitats near ditches, streams, and springs between 7 and 6,693 feet. This species occurs in 46 USGS quadrangles in Kern, Los Angeles, Orange, Riverside, San Bernardino, and San Diego counties.

No individuals or populations of San Bernardino aster were observed during reconnaissance-level surveys. There are 2 CNDDB (2007) occurrences within 5 miles of the proposed project (within the San Dimas and Ontario USGS quadrangles), and the Consortium of California Herbaria (2007) lists this species as occurring within 9 quadrangles adjacent to the proposed project (Crystal Lake, Mount San Antonio, San Dimas, Ontario, Guasti, Cucamonga Peak, Prado Dam, Hollywood, and Inglewood).

Northern Region: This species is considered absent from the proposed project north of the ANF. There are no recorded occurrences of the species in the Antelope Valley or along the northern slopes of the San Gabriel Mountains, and the region lacks suitable habitat for the species.

Central Region: This species may occur along Segments 6 and 11 within the ANF. Suitable habitats may include any streams, springs, or mesic sites within Coastal Sage Scrub, California Annual Grassland, Bigcone Douglas Fir-Canyon Live Oak Forest, Coulter Pine Forest, Southern Cottonwood Willow Riparian Forest, Coast Live Oak Woodland, Canyon Oak Forest, California Bay Forest, Coast Live Oak Woodland, Southern Coast Live Oak Riparian Forest, Southern Sycamore Alder Riparian Woodland, Southern Willow Scrub, and Southern Arroyo Willow Riparian Forest.

Southern Region: This species may occur along Segments 7 and 8 south of the ANF. Two historic populations occur within 5 miles of Segment 8. This species is unlikely to occur along Segment 11 where habitat conditions are marginal. Suitable habitats may include streams, springs, or mesic sites within Coastal Sage Scrub, California Annual Grassland, Southern Cottonwood Willow Riparian Forest, Southern Coast Live Oak Riparian Forest, Southern Sycamore Alder Riparian Woodland, Southern Willow Scrub, and Southern Arroyo Willow Riparian Forest.

Greata's Aster (*Aster greatae* = *Symphyotrichum greatae*). Federal Listing Status: None; State Listing Status: None; CNPS List 1B.3. Greata's aster is a perennial herb in the sunflower family (Asteraceae) that blooms from June to October. This species is found on the slopes of the San Gabriel Mountains, in chaparral, broadleaved upland forests, lower montane coniferous forests, riparian woodlands, and southern oak woodlands, particularly in canyons (USDA 1995, CNPS 2007). Although CNPS indicates this plant is found only in mesic sites, the Forest Service indicates that the species can be found in dry canyon sites as well (USDA 1995, CNPS 2007). Greata's aster occurs in Los Angeles, San Bernardino, and Ventura counties, at elevations of 984 to 6,594 feet. No specific threats have as yet been identified for this species (CNPS 2007).

During reconnaissance-level surveys Greata's aster was observed just outside of the proposed project for Segments 6 and 11. The CNDDB (2007) records 24 occurrences within 5 miles of the proposed project within the Azusa, San Dimas, Los Angeles, Ontario, Mt. Wilson, Juniper Hill, Pasadena, Pacifico Mountain, Acton, Condor Peak, and Chilao Flat USGS quadrangles.

Northern Region: This species may occur within the proposed project north of the ANF along Segments 5, 6, and 11. There is a recorded occurrence near Acton, just west of the Vincent Substation. Suitable habitats may include vernally wet to mesic sites within Southern Cottonwood Willow Riparian Forest. This species is considered absent along Segments 4 and 10 due to lack of appropriate habitat. In addition, this area of the proposed project is not within the known range of the species.

Central Region: This species is likely to occur within the proposed project along Segments 6 and 11 within the ANF. Three populations were seen just outside the proposed project. A population was observed just west of Segment 11 along Big Tujunga Mill Creek at the intersection of road 3N27. A second population was observed just east of Segment 6 in Monte Cristo Creek off of Lynx Gulch Road in the vicinity of Black Cargo Mine. A third population was observed off of Lynx Gulch Road just west of the Segment 6. In addition, there are several CNDDB (2007) records occurring within the proposed project along Segments 6 and 11. Suitable habitats may include vernally wet to mesic sites within Southern Cottonwood Willow Riparian Forest, Southern Sycamore Alder Riparian Woodland, Southern Willow Scrub, Southern Arroyo Willow Riparian Forest, and Southern Coast Live Oak Riparian Forest.

Southern Region: This species is likely to occur south of the ANF along Segment 11. There are several records of this species occurring adjacent to or within the proposed project. The species may occur on Segment 7, but is considered absent from Segment 8. The potential for occurrence is limited to the foothills of the San Gabriel Mountains. Suitable habitat exists only in the foothills of the San Gabriel Mountains and include vernally wet to mesic sites within Southern Cottonwood Willow Riparian Forest,

Southern Sycamore Alder Riparian Woodland, Southern Willow Scrub, Southern Arroyo Willow Riparian Forest, and Southern Coast Live Oak Riparian Forest.

San Antonio Milk-vetch (*Astragalus lentiginosus* var. *antonius*). Federal Listing Status: None; State Listing Status: None; CNPS List 1B.3; Forest Service Sensitive. San Antonio Milk-vetch is a perennial herb belonging to the pea family (Fabaceae) and blooms from April to July. This plant typically occurs within lower and upper montane coniferous forest communities between 4920 and 8,530 feet (CNPS 2007), and it is endemic to San Gabriel Mountains of Los Angeles and San Bernardino counties.

No individuals or populations of San Antonio Milk-vetch were observed during reconnaissance-level surveys. No populations are known to occur within 5 miles of the proposed project. This species is known from the Mount San Antonio, Telegraph Peak, and Valyermo USGS quadrangles.

Northern Region: This variety is considered absent from the proposed project north of the ANF. This region is not in the known range of the plant, and there are no recorded occurrences within desert habitats such as those that occur in the Northern Region. In addition, this region is outside the known elevation range of the plant.

Central Region: This variety is unlikely to occur along the highest elevations of Segments 6 and 11 within the ANF. It is a highly restricted endemic known to occur within only 3 USGS quadrangles, including the Mount San Antonio quadrangle that is adjacent to the proposed project. Suitable habitats may include dry, open sites within Bigcone Douglas Fir-Canyon Live Oak Forest, and Coulter Pine Forest.

Southern Region: This variety is considered absent from the proposed project south of the ANF. It is a highly restricted endemic of the upper montane regions of the San Gabriel Mountains.

Coulter's Saltbush (*Atriplex coulteri*). Federal Listing Status: None; State Listing Status: None; CNPS List 1B.2. Coulter's saltbush is a perennial herb in the goosefoot family (Chenopodiaceae) that blooms from March to October. This species is found in coastal bluff scrub, coastal dunes, coastal scrub, and valley and foothill grassland communities in areas underlain with clay or alkaline soils generally below 1,510 feet. Coulter's saltbush occurs in Los Angeles, Orange, Santa Barbara, San Diego, and San Bernardino counties, as well as on several of the Channel Islands and Baja California. Coulter's saltbush is threatened by development and feral herbivores, and CNPS indicates that there have been few recent, confirmed sightings of the species (CNPS 2007).

No individuals or populations of Coulter's saltbush were observed during reconnaissance-level surveys. CNDDB (2007) records one occurrence within the Prado Dam USGS quadrangle within 5 miles of the proposed project.

Northern Region: This species is considered absent from the proposed project north of the ANF. This region lacks suitable habitat and is not within the known range of this species. Hickman (1993) reports this species is restricted to the South Coast and Channel Island bioregions of California.

Central Region: This species is considered absent from the proposed project within the ANF. This region lacks suitable habitat and is not in the known range of this species. Hickman (1993) reports this species is restricted to the South Coast and Channel Island bioregions California.

Southern Region: This species may occur within the proposed project along Segment 8 south of the ANF. Segment 8a intersects a historical population of this species in the vicinity of Chino Creek. Suitable habitats may include clay or alkaline soils within Coastal Sage Scrub, California Annual Grassland, and Ruderal Grassland. This species is unlikely to occur along Segments 7 and 11. There are no records of this species within 10 miles of these segments.

Davidson's Saltscale (*Atriplex serenana* var. *davidsonii*). Federal Listing Status: None; State Listing Status: None; CNPS List 1B.2. Davidson's saltscale is an annual herb in the goosefoot family (Chenopodiaceae) that blooms from March to October. The plant is found at elevations below 656 feet within coastal scrub and coastal bluff scrub habitats underlain by alkaline soils (CNPS 2007). It occurs in Los Angeles, Orange, Riverside, San Diego, San Luis Obispo, Santa Barbara, and Ventura counties, as well as in Baja California and on Santa Cruz, Santa Catalina, and Santa Rosa Islands. No specific threats have as yet been identified for this variety (CNPS 2007).

No individuals or populations of Davidson's saltscale were observed during reconnaissance-level surveys. One CNDDB (2007) record occurs within the Yorba Linda USGS quadrangle, as well as the Glendora quadrangle that is adjacent to proposed project. No populations are known to occur within 5 miles of the proposed project.

Northern Region: This variety is considered absent from the proposed project north of the ANF. This region is not within the known range of the species; it is endemic to the South Coast bioregion of California (Hickman 1993). In addition, the suitable habitat (coastal scrub and coastal bluff scrub) is absent from this region.

Central Region: This variety is considered absent from the proposed project within the ANF. This region is not within the known range of the plant; it is endemic to the South Coast bioregion of California (Hickman 1993). In addition, this region also is below the lower elevation limit for the species.

Southern Region: This variety may occur within the proposed project south of the ANF along Segments 7 and 8. Suitable habitats may include alkaline soils within Coastal Sage Scrub communities. It is unlikely to occur along Segment 11, where most suitable habitat is either outside the plants' elevation limit or in isolated fragments within highly disturbed or urban areas.

Scalloped Moonwort (*Botrychium crenulatum*). Federal Listing Status: None; State Listing Status: None; CNPS List 2.2. Forest Service Sensitive. Scalloped moonwort is a rhizomatous, diminutive (generally <2 inches tall) fern in the adder's tongue family (Ophioglossaceae) that produces spores from June to September. This fern is known to live underground for 3 to 5 years before vegetative parts appear above ground. There may be 65 to several hundred times more plants situated below ground than appear during ground cover surveys (SCE 2007). This fern is found at elevations between 4,921 to 10,761 feet in freshwater bogs, fens, marshes, swamps, meadows, seeps, and mesic areas of lower montane coniferous forests. This species occurs in scattered, isolated, high-elevation populations throughout the

California floristic province, from Modoc to Los Angeles counties, as well as in Wyoming, Utah, Arizona, Oregon, Washington, and Idaho. It is threatened by grazing, trampling, and road deconstruction (CNPS 2007).

No individuals or populations of scalloped moonwort were observed during reconnaissance-level surveys. There is one CNDDB (2007) record for this species within the Crystal Lake USGS quadrangle, but no populations are known to occur within 5 miles of the proposed project. Scalloped moonwort has a large range which includes several western states, but it is usually uncommon and local wherever it is found. It is on watch, sensitive, or candidate lists in Nevada, Washington, and Oregon.

Northern Region: This species is considered absent from the proposed project north of the ANF. This region is below the lower elevation limit for this species.

Central Region: This species is unlikely to occur within the proposed project within the ANF. Only the highest parts of Segments 6 and 11 offer suitable habitat. These include seeps and mesic areas within Bigcone Douglas Fir-Canyon Live Oak Forest and Coulter Pine Forest.

Southern Region: This species is considered absent from the proposed project south of the ANF due to the species' known elevational limit.

Slender Mariposa Lily (*Calochortus clavatus* var. *gracilis*). Federal Listing Status: None; State Listing Status: None; CNPS List 1B.2. Forest Service Sensitive. Slender mariposa lily is a bulbiferous herb in the lily family (Liliaceae) that blooms from March to June. The plant occurs in valley and foothill grasslands, chaparral, or coastal scrub habitats, most often in shaded canyons at elevations between 1,181 and 3,281 feet. (Hickman 1993). It is endemic to the southern foothills and canyons of the San Gabriel Mountains and the western Transverse Range (from near Liebre Mountain east to Claremont) and occurs in Los Angeles and Ventura counties. It is threatened by development leading to loss of suitable habitats (CNPS 2007).

No individuals or populations of slender mariposa lily were observed during reconnaissance-level surveys. It is distributed in several highly restricted occurrences. CNDDB (2007) records list 10 occurrences from the ANF, including occurrences within the Azusa, Mount Baldy, Glendora, Burbank, Crystal Lake, and Aqua Dulce USGS quadrangles that are located adjacent to the proposed project. However, 5 of these records are more than 50 years old. The Azusa population is located within 5 miles of the proposed project and is in the vicinity of Cogswell Reservoir.

Northern Region: This variety is unlikely to occur within the proposed project north of the ANF along Segments 5, 6, and 11. Suitable habitats may include California Annual Grassland, Mojave Mixed Woodland and Scrub, and Mixed Chaparral. The plant is known only from the San Gabriel Mountains (Hickman 1993) and is considered absent from Segments 4 and 10 of the proposed project.

Central Region This variety may occur within the proposed project within the ANF along Segments 6 and 11. A recorded population of this plant occurs within 5 miles of the proposed project in the vicinity of Cogswell Reservoir. Suitable habitats may include Chamise Chaparral, Mixed Chaparral, Scrub Oak Chaparral, Interior Live Oak Scrub, Coastal Sage Scrub, and California Annual Grassland.

Southern Region: This variety may occur within the proposed project south of the ANF along Segments 7, 8, and 11. There are numerous historical reports of this plant within the foothills of the San Gabriel Mountains. Suitable habitats may include Mixed Chaparral, Coastal Sage Scrub, Bunchgrass Grassland, and California Annual Grassland.

Palmer's Mariposa Lily (*Calochortus palmeri* var. *palmeri*). Federal Listing Status: None; State Listing Status: None; CNPS List 1B.2. Forest Service Sensitive. Palmer's mariposa lily is a bulbiferous herb in the lily family (Liliaceae) that blooms from May to July. The plant occurs in wet meadows and seeps in lower montane coniferous forest and chaparral habitats at elevations from 3,281 to 7,841 feet. It occurs in Kern, Los Angeles, San Bernardino, Ventura, San Luis Obispo, Santa Barbara, and Riverside counties. Because this plant occurs in wet areas attractive to domestic livestock, it is seriously threatened by grazing (CNPS 2007).

No individuals or populations of Palmer's mariposa lily were observed during reconnaissance-level surveys. It has been found near the Angeles Crest Highway opposite the trail to Devils Canyon, in Mystic Canyon, the Charlton Flats area, and in the South Fork of Little Rock Creek in the Pinyon Flats area. CNDDB (2007) records an occurrence within the Chilao Flat USGS quadrangle, which is located within 5 miles of the proposed project. Additionally, the species is found within the Tehachapi North, Tehachapi South, and Tehachapi Northeast USGS quadrangles that are located just north of the proposed project in Kern County.

Northern Region: This variety is considered absent from the proposed project north of the ANF. The region lacks suitable habitat and is out of the known elevation range of this plant.

Central Region: This variety may occur within the proposed project south of the ANF along Segments 6 and 11. A population of this plant occurs within 5 miles of the proposed project in the vicinity of Devil's Canyon. Suitable habitats may include seeps within Chamise Chaparral, Mixed Chaparral, Scrub Oak Chaparral, Interior Live Oak Scrub, Bigcone Douglas Fir-Canyon Live Oak Forest, and Coulter Pine Forest.

Southern Region: This variety is considered absent from the proposed project south of the ANF. This region is outside of the known elevation range of the plant.

Plummer's Mariposa Lily (*Calochortus plummerae*). Federal Listing Status: None; State Listing Status: None; CNPS List 1B.2. Forest Service Sensitive. Plummer's mariposa lily is a bulbiferous herb in the lily family (Liliaceae) that blooms from May to July. This species occurs in areas of granitic rock outcrops or rocky soils of granitic origin, in lower montane coniferous forest, cismontane woodland, coastal scrub, valley and foothill grassland, and chaparral habitats at elevations from 328 to 5,577 feet. It is rarer at higher elevations and prefers brushy areas within suitable habitat types (CNPS 2007). Plummer's mariposa lily occurs in Los Angeles, San Bernardino, Ventura, Orange, and Riverside counties. Although its abundance has been significantly reduced by development activities, it continues to decline even where not directly threatened by development (CNPS 2007). Other possible threats include collecting, road maintenance, and competition from non-native plants (CNPS 2007).

Plummer's mariposa lily was observed within the proposed project along Segment 6 within the ANF. CNDDB (2007) records indicate that at least 13 known occurrences are found within 5 miles of the proposed project (CNDDB 2007). These populations occur within the Mount Wilson, Azusa, Chilao Flat, Pasadena, Fontana, and Condor Peak USGS quadrangles.

Northern Region: This species is considered absent from the proposed project north of the ANF. This part of the proposed project lacks suitable habitat and is not in the known range of the species.

Central Region: This species is present within the proposed project along Segment 6 and is likely to occur along Segment 11 within the ANF. During reconnaissance-level surveys, 2 individual Plummer's mariposa lily plants were observed at a previously known locality for this species (CNDDB 2007) within Segment 6 along Rincon Red Box Road north of Spring Camp. There are several additional CNDDB (2007) occurrences of this species adjacent to the proposed project. Suitable habitats may include rocky soils within California Annual Grassland, Chamise Chaparral, Mixed Chaparral, Scrub Oak Chaparral, Interior Live Oak Scrub, Coastal Sage Scrub, Bigcone Douglas Fir-Canyon Live Oak Forest, Coulter Pine Forest, Canyon Oak Forest, Coast Live Oak Woodland Forest, and California Bay Forest. Brushy areas within these habitats should be considered especially favorable for the species' occurrence (USDA 1995).

Southern Region: This species may occur along Segments 7, 8, and 11 south of the ANF. Suitable habitats may include rocky soils within Bunchgrass Grassland, California Annual Grassland, Chamise Chaparral, Mixed Chaparral, Scrub Oak Chaparral, Coastal Sage Scrub, Canyon Oak Forest, Coast Live Oak Woodland Forest, and California Bay Forest. Areas of dense shrubs within these habitats should be considered especially favorable for the species' occurrence (USDA 1995).

Alkali Mariposa Lily (*Calochortus striatus*). Federal Listing Status: None; State Listing Status: None; CNPS List 1B.2. Forest Service Sensitive. Alkali mariposa lily is a bulbiferous perennial in the lily family (Liliaceae) that blooms from April to June. Like all members of the genus *Calochortus,* alkali mariposa lilies appear in the late winter as long, narrow, grass-like leaves from a small, scaly, deep-seated underground stem (Hickman 1993). It occurs on salty or alkaline soils, often in saltgrass (*Distichlis spicata*) meadows or near alkali sinks, playas, floodplains, or springs. Habitat types include chaparral, chenopod scrub, and Mojavean Desert Scrub. This species occurs in the southern San Joaquin Valley, far western Mojave Desert, inland parts of southern California, and Nevada (Ash Meadows and formerly Las Vegas)

No individuals or populations of alkali mariposa lily were observed during reconnaissance-level surveys. The CNDDB (2007) records 2 occurrences within 5 miles of the proposed project, within the Waterman Mountain and Lancaster West USGS quadrangles.

Northern Region: This species may occur along Segments 4, 5, 6, 10, and 11 north of the ANF. Suitable habitats may include mesic sites with alkaline soils within Mixed Chaparral, Desert Saltbush Scrub, and Mojave Creosote Bush Scrub.

Central Region: This species is unlikely to occur along Segments 6 and 11 within the ANF. The CNDDB (2007) reports a single occurrence within the San Gabriel Mountains. However, the range of

this species is restricted to the western Mojave Desert region and the San Joaquin Valley, and the CNDDB (2007) states that there is uncertainty about this disjunct population, which may have been a misidentification. Any potential suitable habitats would include mesic sites with alkaline soils within Chamise Chaparral, Mixed Chaparral, and Scrub Oak Chaparral. The species should be considered absent within the southern half of Segments 6 and 11.

Southern Region: This species is considered absent from the proposed project south of the ANF. This region lacks the appropriate habitat and does not overlap with the known range of the species. It is restricted to the Mojave Desert and San Joaquin Valley (Hickman 1993).

Intermediate Mariposa Lily (*Calochortus weedii* var. *intermedius*). Federal Listing Status: None; State Listing Status: None; CNPS List 1B.2. Intermediate mariposa lily is a bulbiferous herb in the lily family (Liliaceae) that blooms from May to July (CNPS 2007). The plant occurs within chaparral, coastal scrub, and valley and foothill grassland habitats in rocky soils at elevations of 344 to 2,805 feet. It is found in Los Angeles, Orange, and Riverside counties within 19 USGS quadrangles.

No individuals or populations of intermediate mariposa lily were observed during reconnaissance-level surveys. There are 3 CNDDB (2007) occurrences recorded within 5 miles of the proposed project (in Orange and Los Angeles counties, within the Yorba Linda USGS quadrangle). In addition, there are 4 records listed by the Consortium of California Herbaria (2007) near Segment 8 in San Bernardino, Orange, and Los Angeles counties (Yorba Linda, La Habra, San Dimas, Prado Dam USGS quadrangles).

Northern Region: This variety is considered absent from the proposed project north of the ANF. This region lacks the appropriate habitat and is outside of the known range of the plant. It is known only from the South Coast and Northern Peninsular Range bioregions of California (Hickman 1993).

Central Region: This variety is considered absent from the proposed project within the ANF. This region lacks the appropriate habitat and is outside of the known range of the plant. It is known only from the South Coast and Northern Peninsular Range bioregions of California (Hickman 1993).

Southern Region: This variety may occur south of the ANF along Segment 8. A CNDDB (2007) record for the plant occurs immediately adjacent to Segment 8 in the Chino Hills region, in the vicinity of Sonome Canyon. Suitable habitats along this segment include rocky soils within California Annual Grassland, Coastal Sage Scrub, and Mixed Chaparral. This species is unlikely to occur along Segments 7 and 11. Habitat conditions within these segments are marginal.

Pierson's Morning-glory (*Calystegia peirsonii*). Federal Status: None; State Status: None; CNPS List 4.2. Pierson's morning glory is a perennial, rhizomatous herb in the morning-glory family (Convolvulaceae) that blooms from May-June. This species occurs in chaparral, chenopod scrub, cismontane woodland, coastal scrub, lower montane coniferous forest, and valley and foothill grassland habitats at elevations of 98 to 4,921 feet. Pierson's morning glory occurs in Los Angeles County and is primarily threatened by grazing (CNPS 2007).

No individuals or populations of Pierson's morning glory were observed during reconnaissance-level surveys. The CNDDB (2007) does not currently record population occurrence data for List 4 species.

However, there is one record listed by the Consortium of California Herbaria (2007) near Palmdale in Los Angeles County. This is a watch list species that is distributed in only one county throughout the state.

Northern Region: This species may occur along Segments 4, 5, 6, 10, and 11 north of the ANF. There are several reported occurrences of this species in the Antelope Valley. Suitable habitat includes rocky slopes within California Annual Grassland, Desert Bunchgrass Grassland, Desert Saltbush Scrub, and Mixed Chaparral.

Central Region: This species may occur along the northern areas of Segments 6 and 11 within the ANF. The range of this species does not extend south of the Mill Creek Summit Divide. Suitable habitat includes rocky slopes within California Annual Grassland, Bigcone Douglas Fir-Canyon Live Oak Forest, Coulter Pine Forest, Mixed Chaparral, Chamise Chaparral, Scrub Oak Chaparral, Coastal Sage Scrub, Coast Live Oak Woodland, California Bay Forest, and Canyon Oak Forest. It is considered absent from the southern portions of Segments 6 and 11, as all records from the Consortium of California Herbaria (2007) indicate the range of this species does not extend into the southern San Gabriel Mountains.

Southern Region: This species is considered absent from the proposed project south of the ANF. This region lacks the appropriate habitat and is outside of the known range of the species, which occurs only in the northern San Gabriel Mountains and adjacent Antelope Valley (Hickman 1993).

Pygmy Poppy (*Canbya candida*). Federal Listing Status: None; State Listing Status: None; CNPS List 4.2. Forest Service Sensitive. Pygmy poppy is an annual herb in the poppy family (Papaveraceae) that blooms from March to June (CNPS 2007). This species occurs within Joshua tree woodland, Mojavean desert scrub, or pinyon and juniper woodland habitats in gravelly, granitic, or sandy soils at elevations of 1,968 to 4,790 feet. It is found in Imperial, Inyo, Kern, Los Angeles, and San Bernardino counties.

No individuals or populations of Pygmy poppy were observed during reconnaissance-level surveys. The CNDDB (2007) does not currently record population occurrence data for List 4 species. However, there are several records listed by the Consortium of California Herbaria (2007) on the north slope of the San Gabriel Mountains and in Antelope Valley.

Northern Region: This species may occur along Segments 4, 5, 6, 10, and 11 north of the ANF. Suitable habitats may include sandy or rocky soils within Mojave Creosote Bush Scrub, Mojavean Pinyon and Juniper Woodland (Recently Burned), Mojave Mixed Woody Scrub, Mojave Juniper Woodland and Scrub, Desert Wash, and Mojave Pinyon Woodland.

Central Region: This species may occur along the drier, northern portions of Segments 6 and 11 within the ANF. The range of this species does not extend south of the Mill Creek Summit Divide. Suitable habitats may include sandy or rocky soils within Mojave Juniper Woodland and Scrub, Desert Wash, Mojavean Pinyon and Juniper Woodland (Recently Burned), and Mojave Pinyon Woodland. This species is considered absent along the southern portions of Segments 6 and 11 within the ANF. This region lacks suitable habitat, and is outside of the known range of the species.

Southern Region: This species is considered absent from the proposed project south of the ANF. This region lacks suitable habitat and is outside of the known range of the species.

Mojave Indian Paintbrush (*Castilleja plagiotoma*). Federal Listing Status: None; State Listing Status: None; CNPS List 4.3. Forest Service Sensitive. Mojave Indian paintbrush is a perennial hemiparasitic herb in to the figwort family (Scrophulariaceae) that blooms from April to June. Its preferred habitat includes Great Basin scrub, Joshua tree woodland, lower montane coniferous forest, and pinyon and juniper woodland communities at elevations of 984 to 8,200 feet. It can be found within Kern, Los Angeles, San Bernardino, and San Luis Obispo counties (CNPS 2007).

No individuals or populations of Mojave Indian paintbrush were observed during reconnaissance-level surveys. The CNDDB (2007) does not currently record population occurrence data for List 4 species. However, the Consortium of California Herbaria (2007) reports numerous populations within the San Gabriel Mountains and the Mojave Desert regions.

Northern Region: This species may occur along Segments 4, 5, 6, 10, and 11 north of the ANF. Suitable habitats may include Mojave Pinyon Woodland, Mojave Juniper Woodland and Scrub, Mojavean Pinyon and Juniper Woodland (Recently Burned), Deerweed/Chia Herbaceous Field (Recently Burned), and Big Sagebrush Scrub.

Central Region: This species may occur along Segments 6 and 11 within the ANF. The Consortium of California Herbaria (2007) lists several records of this species within the desert foothills of the San Gabriel Mountains. The range of this species does not extend south of the Mill Creek Summit Divide. Suitable habitats may include rocky places within Bigcone Douglas Fir-Canyon Live Oak Forest, Coulter Pine Forest, Mojave Pinyon Woodland, Mojave Juniper Woodland and Scrub, Mojavean Pinyon and Juniper Woodland (Recently Burned), Deerweed/Chia Herbaceous Field (Recently Burned), and Big Sagebrush Scrub.

Southern Region: This species is considered absent from the proposed project south of the ANF. This region lacks suitable habitat and is outside of the known range of the species.

Parry's Spineflower (*Chorizanthe parryi* var. *parryi*). Federal Listing: None; State Listing: None; CNPS List 3.2. Forest Service Sensitive. Parry's spineflower is an annual herb in the buckwheat family (Polygonaceae) that blooms from April to June. This plant occurs on sandy or rocky openings within chaparral and coastal scrub communities at elevations raging from 130 to 6,000 feet (CNPS 2007). It has been documented in Los Angeles, Riverside, and San Bernardino counties. The plant is found in dry, sandy, or gravelly soils in washes, alluvial benches, and in foothill microhabitats with unconsolidated soils and low vegetation cover. Associated species include California sagebrush (*Artemisia californica*), buckwheat (*Eriogonum* sp.), combseed (*Pectocarya* sp.), and brittlebush (*Encelia farinosa*). Development has been cited as the primary threat to this plant, and within the ANF, suitable habitat is threatened by flood regime alteration and unauthorized recreational uses, including use of vehicles off designated roads.

No individuals or populations of Parry's spineflower were observed during reconnaissance-level surveys. CNDDB (2007) records 4 historical occurrences within 5 miles of the proposed project in the Riverside

West, Lancaster West, Mt. Wilson, and Pasadena USGS quadrangles. Populations within Los Angeles County may all be extirpated (CNDDB 2007).

Northern Region: This variety is unlikely to occur along Segments 4, 5, 6, 10, and 11 north of the ANF. Suitable habitats may include sandy or rocky soils within Mojave Juniper Woodland and Scrub, Big Sagebrush Scrub, Desert Wash, Mixed Chaparral, and Mojave Mixed Woody Scrub.

Central Region: This variety may occur along Segments 6 and 11 within the ANF. The CNDDB reports an occurrence of this plant in the vicinity of Mt. Lowe. The range of the plant does not extend north of the Mill Creek Summit Divide. Suitable habitats may include sandy or rocky soils within Mojave Juniper Woodland and Scrub, Desert Wash, Big Sagebrush Scrub, Mixed Chaparral, Coastal Sage Scrub, Desert Wash, Interior Live Oak Scrub, Chamise Chaparral, and Scrub Oak Chaparral.

Southern Region: This variety may occur in the area south of the ANF along Segments 7, 8, and 11. Suitable habitats may include sandy soils within Coastal Sage Scrub, Scrub Oak Chaparral, Mixed Chaparral, Mule Fat Scrub, Sparsely Vegetated Streambed, and Riversidean Alluvial Fan Sage Scrub.

Long-spined Spineflower (*Chorizanthe polygonoides* var. *longispina*). Federal Listing Status: None; State Listing Status: None; CNPS List 1B.2. Long-spined spineflower is an annual herb in the buckwheat family (Polygonaceae) that blooms from April to July (CNPS 2007). This plant occurs within chaparral, coastal scrub, meadows and seeps, and valley and foothill grassland habitats in clay soils at elevations of 98 to 5,020 feet. It is found in Orange, Riverside, Santa Barbara, and San Diego counties (in 38 USGS quadrangles) and in Baja California.

No individuals or populations of long-spined spineflower were observed during reconnaissance-level surveys. There are no CNDDB (2007) occurrences recorded within 5 miles of the proposed project; however, there are 7 records listed by the Consortium of California Herbaria (2007) near the eastern portion of Segment 8.

Northern Region: This variety is considered absent from the proposed project north of the ANF. This region lacks suitable habitat and does not overlap with the known range of the species. Its distribution is generally restricted to the Peninsular Range (Hickman 1993).

Central Region: This variety is considered absent from the proposed project within the ANF. This region lacks suitable habitat and does not overlap with the known range of the species. Its distribution is generally restricted to the Peninsular Range (Hickman 1993).

Southern Region: This variety is unlikely to occur in the area south of the ANF along Segment 8. The northernmost population of this variety is over 10 miles to the south. Suitable habitats along this segment include any seeps or wet areas that have clay soils within California Annual Grassland, Bunchgrass Grassland, Ruderal Wetland, Coastal Sage Scrub, and Scrub Oak Chaparral. The plant is considered absent from Segments 7 and 11. These segments occur outside the known range of the variety.

White-bracted Spineflower (*Chorizanthe xanti* var. *leucotheca*). Federal Status: None; State Status: None; CNPS List 1B.2. White-bracted spineflower is an annual herb in the Polygonaceae family that blooms from April to June (CNPS 2007). It occurs in Mojavean desert scrub and pinyon and juniper

woodland habitats at elevations of 984 to 3,937 feet in Los Angeles, Riverside, and San Bernardino counties.

No individuals or populations of white-bracted spineflower were observed during reconnaissance-level surveys. There is one CNDDB (2007) record within 5 miles of the proposed project, within the Sleepy Valley USGS quadrangle, north of Palmdale.

Northern Region: This variety may occur along Segments 5, 6, and 11 north of the ANF. Within this region there is only one historical occurrence in the northern San Gabriel Mountains just north of Palmdale. It is located adjacent to Segment 5 in the vicinity of Portal Ridge. Suitable habitats may include Mojave Juniper and Woodland Scrub, Mojave Pinyon Woodland, and Desert Wash. This subspecies is unlikely to occur along Segments 4 and 10. Although suitable habitat is present, there are no reports of the plant occurring north of the Transverse Range.

Central Region: This variety may occur along the extreme northern portions of Segments 6 and 11 within the ANF. The CNDDB reports a population just north of Palmdale in the northern foothills of the San Gabriel Mountains. The range of the plant does not extend south of the Mill Creek Summit Divide. Suitable habitats may include Mojave Juniper and Woodland Scrub, Mojave Pinyon Woodland, and Desert Wash.

Southern Region: This variety is considered absent from the proposed project south of the ANF due to lack of suitable habitat.

San Gabriel River Dudleya (*Dudleya cymosa* ssp. *crebrifolia*). Federal Listing: None; State Listing: None; CNPS List 1B.2. Forest Service Sensitive. San Gabriel dudleya is a perennial herb in the stonecrop family (Crassulaceae) that blooms from April to July (CNPS 2007). It is endemic to the San Gabriel Mountains and occurs in habitats such as granitic slopes in chaparral communities from 900 to 1,300 feet in elevation. Threats to this subspecies include mining.

No individuals or populations of San Gabriel dudleya were observed during reconnaissance-level surveys. There is a single record for this subspecies within the ANF in Fish Canyon, above the city of Azusa. An approximately 1-mile long stretch of suitable habitat occurs along the walls of the canyon, and thousands of plants occur at this location (CNDDB 2007).

Northern Region: This subspecies is considered absent from the proposed project north of the ANF. This region lacks suitable habitat and does not overlap with the known range of the species. The subspecies is known only from Fish Canyon within the ANF.

Central Region: This subspecies may occur along the extreme southern portions of Segment 6 adjacent to Fish Canyon within the ANF. Suitable habitats may include granitic slopes and canyons within Mixed Chaparral, Interior Live Oak Scrub, Coastal Sage Scrub, Chamise Chaparral, and Scrub Oak Chaparral. The subspecies is unlikely to occur on the southern portions of Segment 11. The nearest recorded occurrence of this subspecies is from Fish Canyon, approximately 10 miles to the east.

Southern Region: This subspecies may occur in the foothills of the San Gabriel Mountains along Segment 7 south of the ANF. The portions of this segment within the foothills of the San Gabriel Mountains are in

close proximity to Fish Canyon, where the subspecies is known to occur. It is unlikely to occur along the northern portions of Segment 11 and is considered absent from Segment 8. Suitable habitats may include granitic slopes and canyons within Mixed Chaparral, Coastal Sage Scrub, Chamise Chaparral, and Scrub Oak Chaparral.

San Gabriel Mountain Dudleya (*Dudleya densiflora*). Federal Listing Status: None; State Listing Status: None; CNPS List 1B.2. Forest Service Sensitive. San Gabriel Mountain dudleya is a perennial herb in the stonecrop family (Crassulaceae) that blooms from March to July. This species occurs in chaparral, coastal scrub, and lower montane coniferous forest habitats on granitic cliffs and canyon walls at elevations of 800 to 2,000 feet. It is known only from the San Gabriel Mountains (CNPS 2007) in Los Angeles County (Glendora and Azusa USGS quadrangles). Since the 1940s, the abundance of this species has declined, especially at lower canyon sites (Stephenson and Calcarone 1999). It is threatened by quarrying activities, recreational impacts due to hiking trails, and road maintenance that could cause damage to surrounding cliff faces (CNPS 2007).

No individuals or populations of San Gabriel Mountain dudleya were observed during reconnaissance-level surveys. There are 5 CNDDB (2007) occurrences recorded within 5 miles of the proposed project, within the Azusa USGS quadrangle.

Northern Region: This species is considered absent from the proposed project north of the ANF. This region lacks suitable habitat and is outside of the known range of the species.

Central Region: This species may occur along the southern portions of Segment 6 within the ANF. Suitable habitats may include granitic cliffs and canyon walls within Chamise Chaparral, Scrub Oak Chaparral, Interior Live Oak Scrub, Coastal Sage Scrub, and Mixed Chaparral. The species is unlikely to occur on the northern portions of Segment 11. The species is known only from the foothill canyons north of Azusa.

Southern Region: This species may occur in the extreme northern portions of Segment 7 south of the ANF. The species is unlikely to occur along Segment 8 and is considered absent from Segment 11within the Southern Region. The species is known only from the foothill canyons north of Azusa. Suitable habitats may include granitic cliffs and canyon walls within Chamise Chaparral, Scrub Oak Chaparral, Coastal Sage Scrub, and Mixed Chaparral between 800 and 2,000 feet.

Many-stemmed Dudleya (*Dudleya multicaulis*). Federal Listing Status: None; State Listing Status: None; CNPS List 1B.2. Forest Service Sensitive. Many-stemmed dudleya is a perennial herb belonging to the stonecrop family (Crassulaceae) that blooms from April to July (CNPS 2007). The preferred habitat for this species is generally clay soils within chaparral, coastal scrub, and valley and foothill grassland communities at elevations ranging from 230 to 2,600 feet. This species is found in Los Angeles, Orange, Riverside, San Bernardino, and San Diego counties. Threats to the species include development, road construction, grazing, and recreation (CNPS 2007).

No individuals or populations of many-stemmed dudleya were observed during reconnaissance-level surveys. There is one CNDDB (2007) record within 5 miles of the proposed project, within the La Habra USGS quadrangle.

Northern Region: This species is considered absent from the proposed project north of the ANF. This region lacks suitable habitat and is outside of the known range of the species. Hickman (1993) reports this species as occurring only within the South Coast bioregion of California.

Central Region: This species may occur along the southern portions of Segments 6 and 11 within the ANF. The Consortium of California Herbaria (2007) reports several occurrences within the southern foothills of the San Gabriel Mountains. Suitable habitats may include clay soils within Chamise Chaparral, Mixed Chaparral, Scrub Oak Chaparral, Coastal Sage Scrub, and California Annual Grassland. The potential for this species to occur is restricted to suitable habitats below 3,000 feet. It is considered absent from higher elevation sites.

Southern Region: This species may occur along Segments 7, 8, and 11 south of the ANF. There is a CNDDB (2007) record of the species in the Chino Hills region south of Segment 8. In addition, several populations exist within the Frank G. Bonelli Regional Park between the cities of Pomona and San Dimas. Suitable habitats may include clay soils within Mixed Chaparral, Scrub Oak Chaparral, Coastal Sage Scrub, and California Annual Grassland.

Round-leaved Filaree (*Erodium macrophylla* = *California macrophylla*). Federal Listing Status: None; State Listing Status: None; CNPS List 1B.1. Round-leaved filaree is an annual herb in the geranium family (Geraniaceae) that blooms from March to May. This species occurs on clay soils in valley and foothill grasslands or open cismontane woodlands at elevations from 49 to 3,937 feet. It occurs in many counties throughout California, including Kern, Los Angeles, and Riverside, and extends from Oregon to Baja California. This species is threatened by urbanization, habitat alteration, vehicles, pipeline construction, feral pigs, and non-native plants; it is also potentially threatened by grazing (CNPS 2007).

No individuals or populations of Round-leaved filaree were observed during reconnaissance-level surveys. CNDDB (2007) records occurrences within the Lake Hughes, Glendora, and Lake Matthews USGS quadrangles, which are located adjacent to the proposed project. The Lake Hughes quadrangle population is located in the vicinity of Lake Elizabeth, which is within 5 miles of the proposed project (CNDDB 2007).

Northern Region: This species is unlikely to occur along Segments 4, 5, 6, 10, and 11 north of the ANF. The grassland habitats occurring in these segments provide only marginal habitat for this species and there are no historical occurrences within the Mojave Desert region. Suitable habitats may include clay soils within Desert Bunchgrass Grassland and California Annual Grassland.

Central Region: This species is unlikely to occur along Segments 6 and 11 within the ANF. The only record of this species in the San Gabriel Mountains is in the vicinity of Elizabeth Lake. Suitable habitats may include clay soils within Coast Live Oak Woodland and California Annual Grassland communities.

Southern Region: This species may occur along Segment 8 south of the ANF in the Puente/Chino Hills area. This species is unlikely to occur along Segment 7 and 11. Suitable habitats may include clay soils within Bunchgrass Grassland, California Annual Grassland, California Walnut Woodland, and Coast Live Oak Woodland.

San Gabriel Bedstraw (*Galium grande*). Federal Listing: None; State Listing: None; CNPS List 1B.2. Forest Service Sensitive. San Gabriel bedstraw is a tufted, deciduous, perennial herb in the madder family (Rubiaceae) that blooms from January to July. It typically occurs in open chaparral, oak woodland, or similar woodland communities including stands of Bigcone Douglas fir, generally at high elevations (approximately 3,000 to 6,000 feet). It is restricted to the Transverse Ranges of southern California and is documented only from Los Angeles County. Urbanization and associated impacts (firebreak maintenance and trail and road use) are the primary threats to this species. Mining, horticultural collecting, grazing, and off-road vehicles are secondary threats.

A single plant of San Gabriel bedstraw was observed on 2 October 2007 by H. T. Harvey & Associates botanists at a previously recorded location (CNDDB 2007) 400 feet east of Segment 6 along the Monrovia Canyon Truck Trail north of Bliss Peak. CNDDB (2007) records a total of 8 occurrences within 5 miles of the proposed project. The populations occur near Chantry Flat and near Sand, Sawpit, Monrovia, and Fish Canyons (CNDDB 2007). There is a historical record from the Liebre Mountains northeast of Castaic, but no recent surveys have detected the species. One population occurs on a private inholding within the ANF on a Boy Scout camp that is subject to heavy disturbance (SCE 2007).

Northern Region: This species is considered absent from the proposed project north of the ANF. This region lacks suitable habitat and is outside of the known range of the species.

Central Region: This species is likely to occur along Segment 6 and may occur along Segment 11 within the ANF. The species was observed 400 feet east of Segment 6 along the Monrovia Canyon Truck Trail north of Bliss Peak. In addition, there are several CNDDB (2007) occurrences adjacent to Segments 6 and 11. Suitable habitats may include open areas within Bigcone Douglas Fir-Canyon Live Oak Forest, California Bay Forest, Coast Live Oak Woodland, Canyon Oak Forest, Chamise Chaparral, Scrub Oak Chaparral, Interior Live Oak Scrub, and Mixed Chaparral.

Southern Region: This species is considered absent from the proposed project south of the ANF. This region lacks suitable habitat and is outside of the known range of the species. This species is endemic to the San Gabriel Mountains.

Los Angeles Sunflower (*Helianthus nuttallii* ssp. *parishii*) Federal Listing Status: None; State Listing Status: None; CNPS List 1A. Los Angeles sunflower is a rhizomatous herb in the sunflower family (Asteraceae) that blooms from August to October. This subspecies is typically found in association with salt or freshwater marshes below 5,500 feet. It occurred in Los Angeles, Orange and San Bernardino counties, but it is presently presumed to be extinct. It was last seen in 1937. However, a *Helianthus* population discovered in 2002 on the Newhall Ranch in Santa Clarita may represent this subspecies, but chromosomal tests have proven inconclusive; the validity of the identification remains in question (CNPS 2007).

No individuals or populations of Los Angeles sunflower were observed during reconnaissance-level surveys. There is one historical occurrence within 5 miles of the proposed project, within the Los Angeles USGS quadrangle (CNDDB 2007).

Northern Region: This subspecies is considered absent from the proposed project north of the ANF. This region lacks suitable habitat and is outside of the known range of the subspecies.

Central Region: This subspecies is unlikely to occur along Segments 6 and 11 within the ANF. The species is presumed extinct and no historical records occur within this portion of the San Gabriel Mountains. Habitats conditions are marginal but may include Southern Cottonwood Willow Riparian Forest, Southern Coast Live Oak Riparian Forest, Southern Sycamore Alder Riparian Woodland, Southern Willow Scrub, and Southern Arroyo Willow Riparian Forest.

Southern Region: This subspecies is unlikely to occur along Segments 7 and 8 south of the ANF. This species is presumed extinct and no historical records occur within the proposed project. However, suitable habitat may still exist within the Whittier Narrows Recreation Area. Suitable habitats may include the margins of Freshwater Marsh, Water, Southern Cottonwood Willow Riparian Forest, Southern Coast Live Oak Riparian Forest, Southern Sycamore Alder Riparian Woodland, Southern Willow Scrub, and Southern Arroyo Willow Riparian Forest. The plant is considered absent from Segment 11 due to the lack of appropriate habitat.

Southern Tarplant (*Hemizonia parryi* ssp. *australis* = *Centromadia parryi* ssp. *australis*) Federal Listing Status: None; State Listing Status: None; CNPS List 1B.1. Southern Tarplant is an annual herb in the sunflower family (Asteraceae) that blooms from May to November (CNPS 2007). This plant occurs in Los Angeles, Orange, Santa Barbara, San Diego, and Ventura counties; in Baja California; and on Santa Catalina Island. Its typical habitat includes the margins of marshes and swamps, vernally mesic sites within valley and foothill grassland, and vernal pools below 1,400 feet. In addition, the CNDDB (2007) reports that the subspecies often occurs in disturbed sites and can be associated with alkaline soils. According to the CNPS (2007), many historical occurrences have been extirpated and population fragmentation is a serious problem. Additional threats include development, urbanization, vehicles, and foot traffic.

No individuals or populations of southern tarplant were observed during reconnaissance-level surveys. There are 3 CNDDB (2007) records within 5 miles of the proposed project within the Yorba Linda, Pasadena, and South Gate USGS quadrangles.

Northern Region: This subspecies is considered absent from the proposed project north of the ANF. This region lacks suitable habitat and does not overlap with the known range of the species. It is known only from the South Coast bioregion of California (Hickman 1993).

Central Region: This subspecies is considered absent from the proposed project within the ANF. There are no recorded occurrences of this subspecies within the San Gabriel Mountains, and it is restricted to the South Coast bioregion of California (Hickman 1993). In addition, this subspecies is generally found below 1,400 feet, which is below the elevation range of this region.

Southern Region: This subspecies may occur along Segments 7, 8, and 11 south of the ANF. A historic population occurs just south of Segment 8 on the southern slopes of the Chino Hills, immediately north of Yorba Linda (CNDDB 2007). This population occurs in disturbed Coastal Sage Scrub, a community not described by the CNPS (2007) as potential habitat for this species. Suitable habitats may include Coastal

Sage Scrub, Southern Cottonwood Willow Riparian Forest, Southern Sycamore Alder Riparian Woodland, Southern Willow Scrub, Southern Coast Live Oak Riparian Forest, and Southern Arroyo Willow Riparian Forest, mesic sites within Bunchgrass Grassland, California Annual Grassland, Ruderal Grassland, as well as along the margins of Ruderal Wetland, Freshwater Marsh, and Water.

Smooth Tarplant (*Hemizonia pungens* ssp. *laevis* = *Centromadia pungens* ssp. *laevis*). Federal Listing Status: None; State Listing Status: None; CNPS List 1B.1. Smooth tarplant is an annual herb in the sunflower family (Asteraceae) that blooms from April to September (CNPS 2007). This subspecies occurs within chenopod scrub, meadows and seeps, playas, riparian woodland, and valley and foothill grassland habitats in alkaline soils at elevations below 1,575 feet. It is found in San Diego, Riverside, and San Bernardino counties in 34 USGS quadrangles.

No individuals or populations of smooth tarplant were observed during reconnaissance-level surveys. According to the CNDDB (2007), there are no current or historical populations within 5 miles of the proposed project; however, records greater than this distance exist within several quadrangles containing the proposed project, including Prado Dam and Corona (CNDDB 2007).

Northern Region: This subspecies is considered absent from the proposed project north of the ANF. This region lacks suitable habitat and does not overlap with the known range of the species. The species is known only from the South Coast and Peninsular Range bioregions of California.

Central Region: This subspecies is considered absent from the proposed project within the ANF. This region lacks suitable habitat and does not overlap with the known range of the species. The species is known only from the South Coast and Peninsular Range bioregions of California. In addition, this region is outside the known elevation range of the species.

Southern Region: This subspecies may occur along Segment 8 south of the ANF. Although there are no records of this taxon within Los Angeles County, there are several populations in San Bernardino and Riverside counties adjacent to the Los Angeles County border. This subspecies is unlikely to occur in the area south of the ANF along Segments 7 and 11. Suitable habitats along this segment include seeps or wet areas that have alkaline soils within California Annual Grassland, Bunchgrass Grassland, Ruderal Wetland, Southern Arroyo Willow Riparian Forest, Southern Coast Live Oak Riparian Forest, Southern Sycamore Alder Riparian Forest, and Southern Willow Scrub.

Urn-flowered Alumroot (*Heuchera elegans*). Federal Listing: None; State Listing: None; CNPS List 4.3. Forest Service Sensitive. Urn-flowered alumroot is a rhizomatous herb in the saxifrage family (Saxifragaceae) that blooms from May to June. This species occurs in rocky habitats within cismontane woodland as well as lower and upper montane coniferous forest communities at elevations of 3700 to 8,500 feet (CNPS 2007). It occurs in Kern, Los Angeles, and San Bernardino counties. Urn-flowered alumroot may be at risk from trampling by off-trail hikers, collection for the nursery trade, and expansion of ski areas.

No individuals or populations of urn-flowered alumroot were observed during reconnaissance-level surveys. Most documented occurrences of this species have been restricted to the San Gabriel Mountains, and it is most common in the central portion of these mountains. However, the Consortium of California

Herbaria (2007) lists several populations as occurring outside of the San Gabriel Mountains. There are 2 unconfirmed historic records from the San Bernardino Mountains and one disjunct record from the Sespe Mountains of Ventura County (SCE 2007).

Northern Region: This species is considered absent from the proposed project north of the ANF. This region lacks suitable habitat and is outside of the known range of the species.

Central Region: This species may occur along Segments 6 and 11 within the ANF. The Consortium of California Herbaria (2007) lists 55 occurrence records within the San Gabriel Mountains. Suitable habitats may include rocky areas within Bigcone Douglas Fir-Canyon Live Oak Forest, Coulter Pine Forest, Coast Live Oak Woodland, California Bay Forest, and Canyon Oak Forest.

Southern Region: This species is considered absent from the proposed project south of the ANF. This region lacks suitable habitat and is outside of the known range of the species.

Mesa Horkelia (*Horkelia cuneata* ssp. *puberula*). Federal Listing: None; State Listing: None; CNPS List 1B.1. Forest Service Sensitive. Mesa horkelia is a perennial herb in the rose family (Rosaceae) that blooms from February to July (CNPS 2007). It typically occurs in sandy or gravelly habitats within chaparral, cismontane woodland, and coastal scrub communities ranging from 200 to 2,700 feet. It is found in Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, San Luis Obispo, and Ventura counties.

No individuals or populations of mesa horkelia were observed during reconnaissance-level surveys. CNDDB (2007) records 15 occurrences of the subspecies within 5 miles of the proposed project (Mt. Wilson, Baldwin Park, San Dimas, Pasadena, Glendora, and El Monte USGS quadrangles). Many historical occurrences within the Los Angeles Basin and San Gabriel Mountains are possibly extirpated (CNDDB 2007).

Northern Region: This subspecies is considered absent from the proposed project north of the ANF. This region lacks suitable habitat and is outside of the known range of the subspecies.

Central Region: This subspecies may occur on the southern portions of Segments 6 and 11 within the ANF. Suitable habitats may include sandy or gravelly habitats within Coast Live Oak Woodland, California Bay Forest, Canyon Oak Forest, Coastal Sage Scrub, Chamise Chaparral, Interior Live Oak Scrub, Scrub Oak Chaparral, and Mixed Chaparral.

Southern Region: This subspecies may occur along Segments 7, 8, and 11 south of the ANF. Suitable habitats may include sandy or gravelly soils within Coast Live Oak Woodland, Coastal Sage Scrub, Riversidean Alluvial Fan Sage Scrub, Mule Fat Scrub, Sparsely Vegetated Streambed, Scrub Oak Chaparral, and Mixed Chaparral.

San Gabriel Mountains Sunflower (*Hulsea vestita* ssp. *gabrielensis*). Federal Listing: None; State Listing: None; CNPS List 4.3. Forest Service Sensitive. San Gabriel Mountains sunflower is a perennial herb in the sunflower family (Asteraceae) that blooms between May and July (CNPS 2007). It occurs in rocky habitats within lower and upper montane coniferous forest communities at elevations

ranging between 4,900 and 8,200 feet. It is endemic to Los Angeles, San Bernardino, and Ventura counties.

No individuals or populations of San Gabriel Mountains sunflower were observed during reconnaissance-level surveys. The CNDDB (2007) does not currently record population occurrence data for List 4 species; however, there is one occurrence listed by the Consortium of California Herbaria (2007) within the San Gabriel Mountains in the vicinity of the proposed project.

Northern Region: This subspecies is considered absent from the proposed project north of the ANF. This region lacks suitable habitat and is outside of the known range of the subspecies.

Central Region: This subspecies may occur along Segments 6 and 11 at higher elevations within the ANF. The Consortium of California Herbaria (2007) reports an occurrence between Segments 6 and 11 on Mt. Gleason Road, and additional reports indicate occurrences down to 4,000 feet. Suitable habitats may include rocky areas within Bigcone Douglas Fir-Canyon Live Oak Forest and Coulter Pine Forest.

Southern Region: This subspecies is considered absent from the proposed project south of the ANF. This region lacks suitable habitat and is outside of the known range of the subspecies.

California Satintail (*Imperata brevifolia*). Federal Listing: None; State Listing: None; CNPS List 2.1. Forest Service Sensitive. California satintail is a rhizomatous grass in the grass family (Poaceae) that blooms from September to May. This species occurs in meadows and seeps within chaparral, coastal scrub, and Mojavean desert scrub; it can also be found in mesic sites along riparian scrub communities. It is distributed widely outside of California, but is considered seriously endangered within the state. There are occurrence records for this species in 13 counties, including Los Angeles, Kern, and San Bernardino counties. It typically occurs at elevations below 1,700 feet (CNPS 2007), but has been recorded as high as 4,000 feet (The Consortium of California Herbaria 2007).

No individuals or populations of California satintail were observed during reconnaissance-level surveys. CNDDB (2007) lists 2 occurrences of the species within 5 miles of the proposed project (Azusa and Condor Peak USGS quadrangles).

Northern Region: This species is unlikely to occur within the proposed project north of the ANF. Although this species occurs in Los Angeles and Kern counties, there are no listed occurrences within the Northern Region of the proposed project. Suitable habitats may include alkali meadows and seeps or mesic sites within Mixed Chaparral, Mojave Creosote Bush Scrub, Mojave Mixed Woody Scrub, and Mojavean Pinyon and Juniper Woodland (Recently Burned).

Central Region: This species may occur along the northern portions of Segments 6 and 11 within the ANF. The Consortium of California Herbaria (2007) reports an occurrence east of Segment 6 between Fish Canyon and Roberts Canyon. Suitable habitats may include alkali meadows and seeps or mesic sites within Chamise Chaparral, Mixed Chaparral, Scrub Oak Chaparral, Interior Live Oak Scrub, Coastal Sage Scrub, Mojavean Pinyon and Juniper Woodland (Recently Burned), and Mojave Mixed Woody Scrub.

Southern Region: This species may occur along the portions of Segments 7, 8, and 11 in the San Gabriel Mountains south of the ANF. Suitable habitats may include alkali meadows and seeps or mesic sites within Mixed Chaparral and Coastal Sage Scrub.

Southern California Black Walnut (*Juglans californica* var. *californica* = *Juglans californica*). Federal Listing: None; State Listing: None; CNPS List 4.2. Forest Service Watch List. Southern California Black Walnut is a deciduous tree that is endemic to Southern California. Its habitat requirements are generally alluvial soils within chaparral, cismontane woodland, and coastal scrub communities at elevations from 150 to 3,000 feet. The CNPS (2007) considers this species to be fairly endangered throughout its range and states that much of the walnut forest vegetation community is fragmented and in decline.

Southern California black walnut was observed on Segments 8 and 11 during reconnaissance-level surveys. CNDDB (2007) lists 22 occurrences of the species (as California Walnut Woodland) within 5 miles of the proposed project in the Yorba Linda, La Habra, Baldwin Peak, and Prado Dam USGS quadrangles. The Consortium of California Herbaria (2007) lists occurrences of this species within Los Angeles, Riverside, Orange, and Kern counties.

Northern Region: This variety is considered absent from the proposed project north of the ANF. This region lacks suitable habitat and is outside of the known range of the species.

Central Region: This variety is present along Segment 11 and is likely to occur on Segment 6 within the ANF. It was observed during surveys in 2007 on Segment 11 where Dark Canyon Road crosses the proposed project. Suitable habitats may include alluvial soils within Coast Live Oak Woodland, California Bay Forest, Coastal Sage Scrub, Chamise Chaparral, Scrub Oak Chaparral, Mixed Chaparral, and Canyon Oak Forest.

Southern Region: This variety is present along Segment 8 and may occur on Segments 7 and 11 south of the ANF. Most populations in Segment 8 were mapped as California Walnut Woodland, but many individual trees were observed in stands of Coast Live Oak Woodland. Suitable habitats may include alluvial soils within California Walnut Woodland, Coast Live Oak Woodland, Coastal Sage Scrub, and Mixed Chaparral.

Pale-yellow Layia (*Layia heterotricha*). Federal Listing Status: None; State Listing Status: None; CNPS List 1B.1. Pale-yellow layia is an annual herb in the sunflower family (Asteraceae) that blooms from March to June. It occurs within cismontane woodland, pinyon and juniper woodland, and valley and foothill grassland habitats on alkaline and clay soils at elevations of 984 to 5,594 feet. It is occurs in Fresno, Los Angeles, Monterey, Santa Barbara, San Benito, and Ventura counties (within 33 USGS quadrangles) and considered to be extirpated from Kings, Kern, and San Luis Obispo counties. This species is threatened by agricultural conversion, the construction of the San Antonio Reservoir, and possibly by overgrazing (CNPS 2007).

No individuals or populations of pale-yellow layia were observed during reconnaissance-level surveys. There are no CNDDB (2007) occurrences within 5 miles of the proposed project, although there is one record listed by the Consortium of California Herbaria (2007) in the vicinity of Lancaster.

Northern Region: This species is unlikely to occur along Segments 4, 5, 6, 10, and 11 north of the ANF. It is known from a single historical occurrence in the Antelope Valley. Suitable habitats may include clay or alkaline soils within California Annual Grassland, Desert Bunchgrass Grassland, Ruderal Grassland, Mojave Juniper Woodland and Scrub, and Mojave Pinyon Woodland.

Central Region: This species is considered absent from the proposed project within the ANF. Although suitable habitat is present along the northernmost portions of Segments 6 and 11, this region does not overlap with the known range of the species.

Southern Region: This species is considered absent from the proposed project south of the ANF. This region lacks suitable habitat and does not overlap with the known range of the species.

Fragrant Pitcher Sage (*Lepechinia fragrans*). Federal Listing: None; State Listing: None; CNPS List 4.2. Forest Service Sensitive. Fragrant pitcher sage is a perennial shrub in the mint family (Lamiaceae) that blooms from March to October (CNPS 2007). This species is found in San Bernardino, Los Angeles, Ventura, and Santa Barbara counties. It typically occurs in canyon chaparral at elevations ranging from 66 to 4,298 feet. Species associated with fragrant pitcher sage include California sagebrush, California buckwheat (*Eriogonum fasciculatum*), and white sage (*Salvia apiana*).

Fragrant pitcher sage was observed on Segment 11 during 2007 field surveys. The CNDDB (2007) does not currently record population occurrence data for List 4 species; however, the Consortium of California Herbaria (2007) lists several occurrences of the species in the vicinity of the proposed project.

Northern Region: This species is considered absent from the proposed project north of the ANF. This region lacks suitable habitat and does not overlap with the known range of the species.

Central Region: This species is present within the proposed project along Segment 11 and is likely to occur on Segment 6 within the ANF. The species was observed within the proposed project just inside of the ANF where Mount Lukens Road crosses the segment, and again just outside the proposed project on Dark Canyon Road. Suitable habitats include north-facing slopes within Chamise Chaparral, Scrub Oak Chaparral, Interior Live Oak Scrub, and Mixed Chaparral.

Southern Region: This species is present within the proposed project along Segment 11 and may occur on Segment 7 south of the ANF. It was observed on Segment 11 immediately outside the ANF along Road 2N76.2, south of the Angeles Crest Station. Suitable habitats may include north-facing slopes within Scrub Oak Chaparral and Mixed Chaparral. Fragrant pitcher sage is considered absent from Segment 8, which outside of the known range of the species.

Robinson's Pepper-grass (*Lepidium virginicum* var. *robinsonii*). Federal Listing Status: None; State Listing Status: None; CNPS List 1B.2. Robinson's pepper-grass is an annual herb in the mustard family (Brassicaceae) that blooms from January to July. This variety occurs within chaparral and coastal scrub habitats at elevations below 2,903 feet. It is present in Los Angeles, Orange, Riverside, San Bernardino, and San Diego counties within 33 USGS quadrangles, but it is considered to be extirpated from Santa Barbara County (CNPS 2007).

No individuals or populations of Robinson's pepper-grass were observed during reconnaissance-level surveys. There are 5 CNDDB (2007) occurrences recorded within 5 miles of the proposed project in the Mount Wilson, Ontario, and Azusa USGS quadrangles and 2 records listed by the Consortium of California Herbaria (2007) near Segments 6 and 7 in the Mount Wilson and Azusa USGS quadrangles.

Northern Region: This variety is considered absent from the proposed project north of the ANF. This region lacks suitable habitat and does not overlap with the known range of the species.

Central Region: This variety may occur along Segments 6 and 11 within the ANF. A reported population occurs between Segments 6 and 11 in the foothills of the San Gabriel Mountains north of Sierra Madre. Suitable habitats may include Chamise Chaparral, Scrub Oak Chaparral, Interior Live Oak Scrub, Coastal Sage Scrub, and Mixed Chaparral.

Southern Region: This variety may occur along Segments 7, 8, and 11 south of the ANF. The CNDDB (2007) and the Consortium of California Herbaria (2007) list several occurrences in the vicinity of these segments. Suitable habitats may include Coastal Sage Scrub and Mixed Chaparral.

Ocellated Humboldt Lily (*Lilium humboldtii* ssp. *ocellatum*). Federal Listing: None; State Listing: None; CNPS List 4.2. Forest Service Watch List. Ocellated Humboldt lily is a perennial bulbiferous herb in the lily family (Liliaceae) that blooms from March to July. It occurs in riparian woodland openings within chaparral, cismontane woodland, coastal scrub, and lower montane coniferous forest communities below 6,000 feet (CNPS 2007). Within the ANF, ocellated Humboldt lily occurs on gravelly soils in gullies and canyons in chaparral and southern oak woodland communities (USDA 1995). This subspecies is endemic to Southern California. The CNPS (2007) considers ocellated Humboldt lily to be fairly endangered throughout its range and lists development and horticultural collecting as significant threats to current populations.

Ocellated Humboldt lily was observed on Segment 11 during 2007 field surveys. The CNDDB (2007) does not currently record population occurrence data for List 4 species, but the Consortium of California Herbaria (2007) list 2 occurrences near the proposed project in the Burbank and Mount San Antonio USGS quadrangles.

Northern Region: This subspecies is considered absent from the proposed project north of the ANF. This region lacks suitable habitat and does not overlap with the known range of the species.

Central Region: This subspecies is likely to occur on Segment 11 and may occur along Segment 6 within the ANF. The subspecies was observed less than 400 feet outside the ANF boundary within the proposed project along Segment 11. Suitable habitats may include gravelly soils and in gullies and canyons within Chamise Chaparral, Scrub Oak Chaparral, Coastal Sage Scrub, Mixed Chaparral, Coast Live Oak Woodland, Interior Live Oak Scrub, Canyon Oak Forest, Bigcone Douglas Fir-Canyon Oak Forest, Coulter Pine Forest, Southern Arroyo Willow Riparian Forest, Southern Cottonwood Willow Riparian Forest, Southern Sycamore Alder Riparian Forest, and Southern Willow Scrub, and Southern Coast Live Oak Riparian Forest.

Southern Region: This subspecies is present within the proposed project along Segment 11 and may occur along Segments 7 and 8 south of the ANF. Suitable habitats may include gravelly soils and in gullies and canyons within Chamise Chaparral, Scrub Oak Chaparral, Mixed Chaparral, Coastal Sage Scrub, Coast Live Oak Woodland, California Walnut Woodland, Southern Arroyo Willow Riparian Forest, Southern Cottonwood Willow Riparian Forest, Southern Sycamore Alder Riparian Forest, and Southern Willow Scrub.

Lemon Lily (*Lilium parryi*). Federal Listing: None; State Listing: None; CNPS List 1B.2. Forest Service Sensitive. Lemon lily is a perennial bulbiferous herb in the lily family (Liliaceae) that blooms from July to August. Habitats include meadows and seeps within lower and upper montane coniferous forest communities at elevations ranging from 4,000 to 9,000 feet. This species occurs in Los Angeles, Riverside, San Bernardino, and San Diego counties, although most occurrences within Los Angeles County are very small. Lemon lily is threatened by horticultural collecting, water diversion, and grazing (CNPS 2007).

No individuals or populations of lemon lily were observed during reconnaissance-level surveys. There is one CNDDB (2007) occurrence within 5 miles of the proposed project in the Pacifico Mountain USGS quadrangle. In addition, the Consortium of California Herbaria (2007) lists 8 occurrences near the proposed project in the Glendora, Pacifico Mountain, Waterman Mountain, Crystal Lake, Mount San Antonio, Mount Baldy, Telegraph Peak, and Devore USGS quadrangles in San Bernardino and Los Angeles counties.

Northern Region: This species is considered absent from the proposed project north of the ANF. This region lacks suitable habitat, is outside of the known range of the species, and is outside the species' known elevation range.

Central Region: This species may occur along Segments 6 and 11 within the ANF. A population occurs within 5 miles of the proposed project in the vicinity of Pacifico Mountain just east of Segment 6. Suitable habitat includes meadows and seeps within Bigcone Douglas Fir-Canyon Live Oak Forest and Coulter Pine Forest.

Southern Region: This species is considered absent from the proposed project south of the ANF. This region lacks suitable habitat, is outside of the known range of the species, and is outside the species' known elevation range.

San Gabriel Linanthus (*Linanthus concinnus*). Federal Listing: None; State Listing: None; CNPS List 1B.2. Forest Service Sensitive. San Gabriel linanthus is an annual herb in the phlox family (Polemoniaceae) that blooms from May to July. This species occurs on dry, rocky slopes within chaparral and montane coniferous forest communities at elevations of 5,000 to 9,200 feet. It is endemic to the San Gabriel Mountains of Los Angeles and San Bernardino counties. The primary threat to this species is recreational activity within the ANF (CNPS 2007).

No individuals or populations of San Gabriel linanthus were observed during reconnaissance-level surveys. There are 3 recorded occurrences of San Gabriel linanthus within 5 miles of the proposed project: one record from the Chilao Flat USGS quadrangle and 2 records from the Mt. Wilson USGS

quadrangle. In addition, the Consortium of California Herbaria (2007) lists 12 occurrences of the species near the proposed project within the Burbank, Pasadena, Mount Wilson, Chilao Flat, Waterman Mountain, Crystal Lake, Valyermo, Mescal Creek, Mount San Antonio, Mount Baldy, Cucamonga Peak, and Telegraph Peak USGS quadrangles.

Northern Region: This species is considered absent from the proposed project north of the ANF. This region lacks suitable habitat, is outside of the known range of the species, and is outside the species' known elevation range.

Central Region: This species may occur at the highest elevations along Segments 6 and 11 within the ANF. Suitable habitats may include dry rocky slopes within Chamise Chaparral, Scrub Oak Chaparral, Interior Live Oak Scrub, Mixed Chaparral, Bigcone Douglas Fir-Canyon Live Oak Forest, and Coulter Pine Forest.

Southern Region: This species is considered absent from the proposed project south of the ANF. This region lacks suitable habitat, is outside of the known range of the species, and is outside the species' known elevation range.

Orcutt's Linanthus (*Linanthus orcuttii*). Federal Listing: None; State Listing: None; CNPS List 1B.3. Orcutt's linanthus is an annual herb in the phlox family (Polemoniaceae) that blooms from May to June (CNPS 2007). This species typically occurs within chaparral, lower montane coniferous forest, and pinyon and juniper woodland habitat within openings between 3,002 and 7,038 feet. Orcutt's linanthus occurs in 13 USGS quadrangles within Riverside, San Bernardino, and San Diego counties as well as in Baja California, but it is considered extirpated in Los Angeles County.

No individuals or populations of Orcutt's linanthus were observed during reconnaissance-level surveys. There is one CNDDB (2007) occurrence within 5 miles of the proposed project in the Pasadena USGS quadrangle.

Northern Region: This species is considered unlikely to occur along Segments 5, 6, and 11 north of the ANF. Although suitable habitat is present, there are no reported occurrences of the species on the northern slopes of the San Gabriel Mountains. The closest population occurs on the desert slopes of the San Gabriel Mountains. Suitable habitats include Mojave Juniper Woodland and Scrub, Mojave Pinyon Woodland, Mojave Mixed Woody Scrub, Deerweed/Chia Herbaceous Field (Recently Burned), Recently-Burned Juniper and Pinyon Woodland, and Mixed Chaparral. This species is considered absent from Segment 4 and 10. These segments are outside the known range of the species.

Central Region: This species is unlikely to occur along Segments 6 and 11 within the ANF. There are occurrences of this species from the San Bernardino Mountains and Peninsular Ranges but not from the San Gabriel Mountains. Suitable habitats may include Chamise Chaparral, Scrub Oak Chaparral, Mixed Chaparral, Bigcone Douglas Fir-Canyon Live Oak Forest, and Coulter Pine Forest above 3,000 feet.

Southern Region: This species is unlikely to occur along the proposed project south of the ANF. This region is outside the known elevation range of the species. However, there is a historical population in

the vicinity of Pasadena that was last seen in 1925. Suitable habitats may include Scrub Oak Chaparral and Mixed Chaparral.

Peirson's Lupine (*Lupinus peirsonii*). Federal Listing: None; State Listing: None; CNPS List 1B.3. Forest Service Sensitive. Peirson's lupine is a perennial herb in the legume family (Fabaceae) that typically blooms from April to May (CNPS 2007). This species occurs on gravelly or rocky slopes within Joshua tree woodland, lower and upper montane coniferous forest, and pinyon and juniper woodland communities at elevations of 3,200 to 8,200 feet. It is known only from the San Gabriel Mountains in Los Angeles County.

No individuals or populations of Peirson's lupine were observed during reconnaissance-level surveys. There is one CNDDB (2007) occurrence within 5 miles of the proposed project within the Chilao Flat USGS quadrangle. In addition, the Consortium of California Herbaria (2007) lists the species as occurring in Los Angeles County within the Chilao Flat, Juniper Hills, Valyermo, and Crystal Lake USGS quadrangles.

Northern Region: This species may occur along Segments 5, 6, and 11 within the San Gabriel Mountains north of the ANF. Suitable habitats may include gravelly or rocky slopes within Mojave Pinyon Woodland, Joshua Tree Woodland, and Mojave Juniper Woodland and Scrub. This species is endemic to the San Gabriel Mountains and is considered absent from Segments 4 and 10.

Central Region: This species is likely to occur along Segment 6 and may occur along Segment 11 within the ANF. A single CNDDB (2007) occurrence of Peirson's lupine intersects Segment 6 in the vicinity of Alder Creek. Suitable habitats may include gravelly or rocky slopes within Bigcone Douglas Fir-Canyon Live Oak Forest, Coulter Pine Forest, Mojave Pinyon Woodland, and Mojave Juniper Woodland and Scrub.

Southern Region: This species is considered absent from the proposed project south of the ANF. This region is outside of the known range of the species. Required habitats for the species are Joshua tree woodland, lower and upper montane coniferous forest, and pinyon and juniper woodland communities, none of which are found in the Southern Region. In addition, this region is outside the known elevation range of the species.

Davidson's Bush Mallow (*Malacothamnus davidsonii*). Federal Listing: None; State Listing: None; CNPS List 1B.2. Davidson's bush mallow is a deciduous shrub in the mallow family (Malvaceae) that blooms from June to January (CNPS 2007). This species typically occurs on sandy washes and flats within coastal scrub and chaparral communities (USDA 1995), and it is generally associated with disturbance (Hickman 1993). It occurs in disjunct populations in Los Angeles, Monterey, Santa Clara, San Luis Obispo, and San Mateo counties at elevations of 600 to 2,800 feet (CNPS 2007). Within Los Angeles County, its known distribution extends from the San Fernando Valley to the western San Gabriel Mountains. Urbanization is a significant threat to current populations within Los Angeles County (CNPS 2007).

No individuals or populations of Davidson's bush mallow were observed during reconnaissance-level surveys. The CNDDB (2007) records 4 occurrences of this species within 5 miles of the proposed project

in the Sunland and Condor Peak USGS quadrangles. A population of Davidson's bush mallow was reported as occurring along Segment 6 on Forest Service Road 4N18.1 in the vicinity of Rabbit Peak (AMEC 2007). However, after comparing specimens from this site to herbarium collections at Rancho Santa Ana Botanical Garden, H. T. Harvey & Associates botanists concluded that the plants occurring along Segment 6 were not *M. davidsonii*, but the more common species, *M. fremontii*. The species in this genus are difficult to identify due to variation between populations, hybridization among the species, and the many indistinct and intergrading local forms (Hickman 1993).

Northern Region: This species is considered absent from the proposed project north of the ANF. This region is outside of the known range of the species and there are no recorded occurrences within desert habitats such as those that occur in the Northern Region. A range extension into such habitat is unlikely.

Central Region: This species may occur along Segments 6 and 11 within the ANF. Suitable habitats may include disturbed areas such as road cuts within Coastal Sage Scrub, Chamise Chaparral, Mixed Chaparral, and Scrub Oak Chaparral.

Southern Region: This species may occur along Segments 7, 8, and 11 south of the ANF. Suitable habitats may include disturbed areas such as road cuts within Coastal Sage Scrub, Mule Fat Scrub, Riversidean Alluvial Fan Sage Scrub, Sparsely Vegetated Streambed, Mixed Chaparral, and Scrub Oak Chaparral.

Hall's Monardella (*Monardella macrantha* ssp. *hallii*). Federal Listing: None; State Listing: None; CNPS List 1B.3. Forest Service Sensitive. Hall's monardella is a rhizomatous herb in the mint family (Lamiaceae) that typically blooms from June to August. This subspecies is typically found on dry slopes and ridges within broadleaved upland forest, chaparral, cismontane woodland, lower montane coniferous forest, and valley and foothill grassland communities at elevations of 2,400 to 7,200 feet. It is known from the San Gabriel, San Bernardino, and Peninsular Ranges within Los Angeles, Orange, Riverside, San Bernardino, and San Diego counties. Threats to the species include road maintenance and recreational activities (CNPS 2007).

No individuals or populations of Hall's monardella were observed during reconnaissance-level surveys. There are no CNDDB (2007) records occurring within 5 miles of the proposed project. The only occurrence within Los Angeles County is in the vicinity of Sunset Peak within the ANF in the Mount Baldy USGS quadrangle (CNDDB 2007).

Northern Region: This subspecies is considered absent from the proposed project north of the ANF. This region is outside of the known range of the subspecies and there are no recorded occurrences within desert habitats such as those that occur in the Northern Region. The only recorded occurrence in Los Angeles County occurs on the south slope of the San Gabriel Mountains.

Central Region: This subspecies is unlikely to occur along Segments 6 and 11 within the ANF. The only known occurrence of this subspecies within the San Gabriel Mountains is over 10 miles east of the proposed project in the vicinity of Sunset Peak. Suitable habitats may include California Annual Grassland, Chamise Chaparral, Mixed Chaparral, Scrub Oak Chaparral, Coast Live Oak Woodland, Canyon Oak Forest, Bigcone Douglas Fir-Canyon Live Oak Forest, and Coulter Pine Forest

Southern Region: This subspecies is considered absent from the proposed project south of the ANF. The only occurrence within Los Angeles County is in the vicinity of Sunset Peak within the ANF. In addition, this region is outside the subspecies' known elevation range.

Rock Monardella (*Monardella viridis ssp. saxicola*). Federal Listing: None; State Listing: None; CNPS List 4.2. Forest Service Sensitive. Rock monardella is a rhizomatous sub-shrub in the mint family (Lamiaceae) that blooms from June to August. This subspecies is found on dry rocky slopes within chaparral and lower montane coniferous forest communities at elevations of 1,600 to 6,000 feet. It is endemic to Los Angeles and San Bernardino counties. The primary threat to this species is development (CNPS 2007).

No individuals or populations of rock monardella were observed during reconnaissance-level surveys. The CNDDB (2007) does not currently record population occurrence data for List 4 species; however, the Consortium of California Herbaria (2007) records several occurrences in the general vicinity of San Dimas Canyon and Tanbark Flats, in the San Gabriel Mountains east of the proposed project.

Northern Region: This subspecies is considered absent from the proposed project north of the ANF. This region is not in the known range of the subspecies, and there are no recorded occurrences within desert habitats such as those that occur in the Northern Region. The subspecies is known only from the southern San Gabriel Mountains.

Central Region: This subspecies may occur along Segments 6 and 11 within the ANF. Suitable habitats may include dry rocky slopes within Chamise Chaparral, Mixed Chaparral, Scrub Oak Chaparral, Bigcone Douglas Fir-Canyon Live Oak Forest, and Coulter Pine Forest.

Southern Region: This subspecies may occur along Segments 7 and 11 south of the ANF. Because the subspecies is endemic to the San Gabriel Mountains (Hickman 1993), it is considered absent from Segment 8. Suitable habitats may include dry rocky slopes within Mixed Chaparral and Scrub Oak Chaparral.

Baja Navarretia (*Navarretia peninsularis*). Federal Listing: None; State Listing: None; CNPS List 1B.2. Forest Service Sensitive. Baja navarretia is an annual herb in the phlox family (Polemoniaceae) that blooms from June to August (CNPS 2007). This species occurs on mesic sites within chaparral and lower montane coniferous forest communities at elevations of 4,900 to 7,600 feet. It occurs in 12 USGS quadrangles within Kern, Los Angeles, Santa Barbara, San Bernardino, San Diego, and Ventura counties, and in Baja California.

No individuals or populations of Baja navarretia were observed during reconnaissance-level surveys. There are no records of the species occurring within 5 miles of the proposed project (CNDDB 2007). The occurrence of Baja navarretia in Los Angeles County is apparently restricted to the extreme northwestern part of the county in the Lebec quadrangle (CNPS 2007). The CNDDB (2007) lists a total of 16 total occurrences for this species, with most occurring in the Los Padres and San Bernardino National Forests.

Northern Region: This species is considered absent from the proposed project north of the ANF. This region is outside of the known range of the species and there are no recorded occurrences within desert habitats such as those that occur in the Northern Region. In addition, this species is generally found at elevations above 4,900 feet, which is above the maximum elevation reached in the Northern Region (4,000 feet).

Central Region: This species is unlikely to occur in the Central Region. However, suitable habitats may include mesic sites within Chamise Chaparral, Mixed Chaparral, Scrub Oak Chaparral, Bigcone Douglas Fir-Canyon Live Oak Forest, and Coulter Pine Forest along the highest portions of Segments 6 and 11 within the ANF.

Southern Region: This species is considered absent from the proposed project south of the ANF. This region is outside of the known range of the species, and there are no recorded occurrences within the Los Angeles Basin. In addition, the species is generally found at elevations above 4,900 feet, above the maximum elevation reached in the Southern Region (2,000 feet).

Piute Mountains Navarretia (*Navarretia setiloba*). Federal Listing Status: None; State Listing Status: None; CNPS List 1B.1. Piute Mountains navarretia is an annual herb in the phlox family (Polemoniaceae) that blooms from May to June (CNPS 2007). This species occurs within cismontane woodland, pinyon and juniper woodland, and valley and foothill grassland habitats in clay or gravelly loam soils at elevations of 1,000 to 6,890 feet. It is found in Kern and Tulare counties (within 10 USGS quadrangles).

No individuals or populations of Piute Mountains navarretia were observed during reconnaissance-level surveys. There are no CNDDB (2007) occurrences recorded within 5 miles of the proposed project. The species is known from the Tehachapi and Southern Sierra Nevada Mountains.

Northern Region: This species is unlikely to occur along Segments 4 and 10 north of the ANF. The species is considered absent from Segments 5, 6, 10, and 11. The species is endemic to the Tehachapi and Southern Sierra Nevada Mountains, and a range extension into these segments is unlikely.

Central Region: This species is considered absent from the proposed project within the ANF. This region is outside of the known range of the species. The plant is endemic to the Tehachapi and Southern Sierra Nevada Mountains, and a range extension into the San Gabriel Mountains is unlikely.

Southern Region: This species is considered absent from the proposed project south of the ANF. This region is outside of the known range of the species. The plant is endemic to the Tehachapi and Southern Sierra Nevada Mountains, and a range extension into the Southern Region is unlikely.

Short-joint Beavertail (*Opuntia basilaris* var. *brachyclada*). Federal Status: None; State Status: None; CNPS List 1B.2. Forest Service Sensitive. Short-joint beavertail is in the cactus family (Cactaceae) and blooms from May to June (CNPS 2007). It has flattened joints and no tubercles, and it is difficult to distinguish from the more common variety of the species, *Opuntia basilaris* var. *basilaris* (SCE 2007). Short-joint beavertail typically occurs in open chaparral, juniper woodland, or similar woodland communities from 1,394 to 5,900 feet. This variety is restricted to the Transverse Ranges of

southern California and documented only from Los Angeles and San Bernardino counties. CNPS (2007) lists urbanization as the primary threat, but mining, horticultural collecting, grazing, and off-road vehicles are important secondary threats. Mistretta and Parra-Szijj (1991 as cited in SCE 2007) counted approximately 900 plants at 15 localities within the ANF and at 2 locations within the boundaries of San Bernardino National Forest. A sizable proportion of the approximately 60 known occurrences are on ANF lands, where Species Management Guidelines are being applied.

No individuals or populations confirmed as *Opuntia basilaris* var. *brachyclada* were observed during reconnaissance-level surveys. However, several individuals matching the description of *Opuntia basilaris* var. *basilaris* in the Jepson Manual (Hickman 1993) were observed within the proposed project. A complicating factor in the identification of these cacti was the recent fires that had burned many of the individual plants. Although the plants were resprouting following the fire, the morphological features used to identify the subspecies in the technical keys were not yet mature at the time of the surveys. There are 21 CNDDB (2007) occurrence records within 5 miles of the proposed project and 30 occurrence records within the ANF.

Northern Region: This variety is likely to occur along Segments 5, 6, and 11 north of the ANF. There are 2 recorded occurrences of the species within the proposed project. One is a CNDDB (2007) record on Segment 5, 0.7 miles south of Anaverde Creek, and the other occurrence was reported to occur on Segment 11 by AMEC (2007) less than a mile north of the Vincent Substation, just south of the ANF. Suitable habitats may include Mojave Juniper Woodland and Scrub, Mojave Pinyon Woodland, Mojave Mixed Woody Scrub, Deerweed/Chia Herbaceous Field (Recently Burned), Recently-Burned Juniper and Pinyon Woodland, and Mixed Chaparral. The species is considered absent from Segments 4 and 10. The plant is restricted to the desert slopes of the San Gabriel and San Bernardino Mountains, and a range extension into the Antelope Valley is unlikely.

Central Region: This variety is considered likely to occur along the northern portions of Segments 6 and 11 within the ANF. There are 4 recorded occurrences of the variety within 1,000 feet of Segment 6. Three of these are USFS data records occurring at Mill Creek Summit adjacent to Segment 6 off of Road 4N18. The fourth occurrence is an AMEC (2007) record that occurs adjacent to Segment 6 at Mill Creek Summit off of Mt. Gleason Road. However, H. T. Harvey & Associates botanists concluded that the AMEC (2007) occurrence was the common subspecies *Opuntia basilaris* var. *basilaris* and not *O. basilaris* var. *brachyclada*. Suitable habitat includes Mojave Juniper Woodland and Scrub, Mojave Pinyon Woodland, Deerweed/Chia Herbaceous Field (Recently Burned), Mojavean Pinyon and Juniper Woodland (Recently Burned), Mixed Chaparral, Chamise Chaparral, and Scrub Oak Chaparral. The variety is unlikely to occur south of the Mill Creek Summit Divide as it is restricted to the desert slopes of the San Gabriel and San Bernardino Mountains.

Southern Region: This variety is considered absent from the proposed project south of the ANF. This region is outside of the known range of the species. This plant is endemic to the arid, northern slopes of the San Gabriel and San Bernardino Mountains.

Rock Creek Broomrape (*Orobanche valida* ssp. *valida*). Federal Listing: None; State Listing: None; CNPS List 1B.2. Forest Service Sensitive. Rock creek broomrape is a perennial parasitic herb in the

broomrape family (Orobanchaceae) that blooms from May to July (CNPS 2007). This plant occurs in Los Angeles, San Bernardino, and Ventura counties. It occurs on granitic soils within chaparral and pinyon and juniper woodland communities at elevations of 4,000 to 7,000 feet. Rock creek broomrape parasitizes chaparral shrubs such as yerba santa (*Eriodictyon* spp.) and silk tassel (*Garrya* spp.) (USDA 1995).

No individuals or populations of rock creek broomrape were observed during reconnaissance-level surveys. There are no CNDDB (2007) records within 5 miles of the proposed project. This plant is known from only 4 occurrences, 2 of which occur on the ANF. It occurs within the Mt. Baldy and Valyermo USGS quadrangles, neither of which is located near the proposed project (CNDDB 2007).

Northern Region: This subspecies is considered absent from the proposed project north of the ANF. It is known only from the Transverse Range and has only been reported at higher elevations than those occurring in the Northern Region.

Central Region: This subspecies is unlikely to occur along the proposed project within the ANF. The plant is currently known from only 3 populations, the closest of which occurs over 10 miles to the east in the Mt. Baldy USGS quadrangle. Suitable habitat may include Mojave Juniper Woodland and Scrub, Mojave Pinyon Woodland, Deerweed/Chia Herbaceous Field (Recently Burned), Mojavean Pinyon and Juniper Woodland (Recently Burned), Mixed Chaparral, Chamise Chaparral, and Scrub Oak Chaparral.

Southern Region: This subspecies is considered absent from the proposed project south of the ANF. This region is not in the known range of the subspecies. The plant is endemic to the Transverse Range and occurs at elevations above 4,000 feet, which is above the maximum elevation in the Southern Region (2,000 feet).

Chickweed Oxytheca (*Oxytheca caryophylloides* = *Sidotheca caryophylloides*). Federal Listing: None; State Listing: None; CNPS List 4.3. Forest Service Sensitive. Chickweed oxytheca is an annual herb in the buckwheat family (Polygonaceae) and blooms from July to September (CNPS 2007). It occurs in habitats such as sandy soils within lower montane coniferous forest communities from 3,654 to 8,530 feet. It is known from Los Angeles, Riverside, San Bernardino, Tulare, and Ventura counties and is restricted to the San Gabriel, San Bernardino, San Jacinto, and Southern Sierra Nevada Mountains.

No individuals or populations of chickweed oxytheca were observed during reconnaissance-level surveys. The CNDDB (2007) does not currently record population occurrence data for List 4 species. The Consortium of California Herbaria (2007) list 2 occurrences east the proposed project within the Waterman Mountain USGS quadrangle.

Northern Region: This species is considered absent from the proposed project north of the ANF. This region is outside of the known range of the species, as it is restricted to the San Gabriel, San Bernardino, San Jacinto, and Southern Sierra Nevada Mountains. In addition, its preferred habitat, lower montane coniferous forest, is absent from this region.

Central Region: This species may occur along Segments 6 and 11 within the ANF. Suitable habitat includes sandy soils within Bigcone Douglas Fir-Canyon Live Oak Forest, and Coulter Pine Forest. The

2 records of this species in the vicinity of the proposed project occur on Waterman Mountain and Kratka Ridge.

Southern Region: This species is considered absent from the proposed project south of the ANF. This region is outside of the known range of the species, which is restricted to the San Gabriel, San Bernardino, San Jacinto, and Southern Sierra Nevada Mountains. Its preferred habitat, lower montane coniferous forest, is absent from this region. The species is known to occur at elevations above 3,600 feet, while the maximum elevation in the Southern Region is below 2,000 feet.

San Bernardino Grass-of-Parnassus (*Parnassia cirrata* = *Parnassia cirrata* var. *cirrata*). Federal Listing: None; State Listing: None; CNPS List 1B.3. Forest Service Sensitive. San Bernardino grass-of-Parnassus is a perennial herb in the saxifrage family (Saxifragaceae) that blooms from August to September (CNPS 2007). It occurs in habitats such as streams and mesic sites within lower and upper montane coniferous forests and meadows and seeps. It is known only from the San Gabriel and San Bernardino Mountains of Los Angeles and San Bernardino counties at elevations ranging from 4,100 to 8,000 feet.

No individuals or populations of San Bernardino grass-of-Parnassus were observed during reconnaissance-level surveys. There are no CNDDB (2007) occurrences recorded within 5 miles of the proposed project. The species is known to occur within the Glendora, Mount San Antonio, and Crystal Lake USGS quadrangles.

Northern Region: This species is considered absent from the proposed project north of the ANF. This region is outside of the known range of the species, which is restricted to the San Gabriel and San Bernardino Mountains. In addition, its preferred habitat, lower montane coniferous forest, is absent from this region.

Central Region: This species may occur along Segments 6 and 11 within the ANF. Suitable habitat includes mesic sites within Bigcone Douglas Fir-Canyon Live Oak Forest, and Coulter Pine Forest.

Southern Region: This species is considered absent from the proposed project south of the ANF. This region is outside of the known range of the species, as it is restricted to elevations above 4,100 feet in the San Gabriel and San Bernardino Mountains. In addition, its preferred habitat, lower montane coniferous forest, is absent from this region.

Gairdner's Yampah (*Perideridia gairdneri* ssp. *gairdneri*). Federal Listing: None; State Listing: None; CNPS List 4.2. Forest Service Watch List. Gairdner's yampah is a perennial herb belonging to the carrot family (Apiaceae) that blooms from June to October (CNPS 2007). It is generally found in coastal counties within chaparral, coastal prairie, and valley and foothill grassland communities below 1,197 feet. However, the Consortium of California Herbaria (2007) reports occurrences for this species up to 8,200 feet. It occurs in the South Coast, Central Coast, and North Coast bioregions of California (Hickman 1993).

No individuals or populations of Gairdner's yampah were observed during reconnaissance-level surveys. The CNDDB (2007) does not currently record population occurrence data for List 4 subspecies and the

Consortium of California Herbaria (2007) lists no occurrences within Los Angeles County. The CNPS (2007) states that there is uncertainty about the distribution of this subspecies within Southern California and considers it endangered in this region. Threats to this species include agriculture, grazing, invasive plants, habitat alteration, and urbanization.

Northern Region: This subspecies is considered absent from the proposed project north of the ANF. This region is outside of the known range of the species and there are no recorded occurrences within desert habitats such as those that occur in the Northern Region. A range extension into such habitat is unlikely.

Central Region: It is unlikely this subspecies would occur within the proposed project within the ANF. Although suitable habitat is present, there are no records of the species occurring within this region. Suitable habitat includes Mixed Chaparral, Scrub Oak Chaparral, and California Annual Grassland.

Southern Region: It is unlikely this subspecies would occur within the proposed project south of the ANF. Although suitable habitat is present, there are no records of the species occurring within this region. Suitable habitat includes California Annual Grassland, Bunchgrass Grassland, and Mixed Chaparral.

Transverse Range Phacelia (*Phacelia exilis*). Federal Listing: None; State Listing: None; CNPS List 4.3. Forest Service Sensitive. Transverse Range phacelia is an annual herb in the waterleaf family (Hydrophyllaceae) and blooms from May to August. This species occurs in habitats such as meadows and seeps or sandy and gravelly areas within lower and upper montane coniferous forest communities between 3,608 and 8,858 feet (CNPS 2007). It occurs in Kern, Los Angeles, San Bernardino, Tulare, and Ventura counties and is endemic to the Transverse Range and the Southern Sierra Nevada Mountains.

No individuals or populations of Transverse Range phacelia were observed during reconnaissance-level surveys. The CNDDB (2007) does not currently record population occurrence data for List 4 species, and the Consortium of California Herbaria (2007) lists no occurrences of this species within the San Gabriel Mountains. The closest known population occurs in the San Bernardino Mountains.

Northern Region: This species is considered absent from the proposed project north of the ANF. This region is outside of the known range of the species, which is the Transverse Range and the Southern Sierra Nevada. There are no records of the species occurring within desert habitats, such as those that are present in the Northern Region. It prefers montane coniferous forest, which is absent from the Northern Region.

Central Region: This species is unlikely to occur within the proposed project within the ANF. The nearest recorded populations occur in the San Bernardino Mountains. Suitable habitat includes meadows and seeps with sandy or gravelly soils within Bigcone Douglas Fir-Canyon Live Oak Forest and Coulter Pine Forest.

Southern Region: This species is considered absent from the proposed project south of the ANF. This region is outside of the known range of the species, which is the Transverse Range and the Southern Sierra Nevada. There are no records of the species occurring within the habitats types present in the

Southern Region. It prefers montane coniferous forest, which is absent from the Southern Region. In addition, this region is outside of the elevation range of the species, which occurs above 3,600 feet. The maximum elevation in the Southern Region is below 2,000 feet.

San Gabriel Oak (*Quercus durata* var. *gabrielensis*). Federal Listing: None; State Listing: None; CNPS List 4.2. San Gabriel oak is an evergreen shrub that belongs to the oak family (Fagaceae) and blooms from April to May (CNPS, 2007). This plant is typically found on granitic soils within chaparral and cismontane woodland communities between 1,476 and 3,281 feet. It is restricted to the San Gabriel Mountains of Los Angeles County.

San Gabriel oak was observed within the proposed project within the southern half of the Central Region along Segments 6 and 11. The CNDDB (2007) does not currently record population occurrence data for List 4 species.

Northern Region: This variety is considered absent from the proposed project north of the ANF. This region is outside of the known range of the species and there are no recorded occurrences within desert habitats such as those that occur in the Northern Region. A range extension into such habitat is unlikely.

Central Region: This variety is present and was observed along Segments 6 and 11 within the ANF. The variety hybridizes with scrub oak (*Q. berberidifolia*) and was often observed in mixed stands with this species. Suitable habitats may include granitic soils within Chamise Chaparral, Scrub Oak Chaparral, Mixed Chaparral, and Canyon Oak Forest.

Southern Region: This variety may occur in the foothills of the San Gabriel Mountains along Segments 6 and 11 south of the ANF. Suitable habitats include Mixed Chaparral and Scrub Oak Chaparral. This variety is considered absent from Segment 8. It is a narrowly restricted endemic that is known only from the San Gabriel Mountains.

Parish's Gooseberry (*Ribes divaricatum* var. *parishii*). Federal Listing: None; State Listing: None; CNPS List 1A. Parish's gooseberry is a deciduous shrub in the gooseberry family (Grossulariaceae) that blooms from February to March. This variety typically occurs in riparian woodland habitats at elevations ranging from 200 to 1,000 feet. It was endemic to Los Angeles and San Bernardino counties, but is now presumed extinct. It was known from fewer than 5 occurrences and was last seen in 1980 in the Whittier Narrows Recreation Area, which lies within the proposed project. Recent surveys have been unsuccessful in relocating the plant. The likely causes for the extirpation include invasive weeds, habitat loss, stream flow alteration, successive drought years, and human-caused fires (CNPS 2007).

No individuals or populations of Parish's gooseberry were observed during reconnaissance-level surveys. CNDDB (2007) records 3 historical occurrences within 5 miles of the proposed project (El Monte and Pasadena USGS quadrangles).

Northern Region: This variety is considered absent from the proposed project north of the ANF. . This region is outside of the known range of the species and there are no recorded occurrences within desert habitats such as those that occur in the Northern Region. A range extension into such habitat is unlikely.

Central Region: This variety is considered absent from the proposed project within the ANF. This region is outside of the known elevation and distribution range of the plant and there are no recorded occurrences within habitats that occur in the Central Region. A range extension into such habitat is unlikely.

Southern Region: This variety is unlikely to occur within the proposed project south of the ANF. Two historical populations occurred within the Whittier Narrows Recreation Area, but the plants have not been seen since 1980. Suitable habitats may include Southern Arroyo Willow Riparian Forest, Southern Coast Live Oak Riparian Woodland, Southern Cottonwood Willow Riparian Forest, Southern Sycamore Alder Riparian Forest, and Southern Willow Scrub.

Coulter's matilija poppy (*Romneya coulteri*). Federal Listing Status: None; State Listing Status: None; CNPS List 4.2. Coulter's matilija poppy is a rhizomatous herb in the poppy family (Papaveraceae) that blooms from March to July. This plant occurs in chaparral and coastal scrub habitats in areas that have burned (USDA 1995, CNPS 2007). Coulter's matilija poppy occurs at 65 to 3,937 ft elevation in Los Angeles, Orange, Riverside, and San Diego counties. It is threatened by urbanization, flood control, road widening, and road maintenance (CNPS 2007).

Coulter's matilija poppy was observed during 2008 focused surveys in Segment 11, but it is known from 148 collections in the Consortia of Herbaria (2007). There are no CNDDB (2007) records near the project alignment. This species is considered by CNPS (2007) to be fairly endangered within California.

Northern Region: This species is considered absent from the proposed project alignment north of the ANF. This region is not in the known range of the species.

Central Region: This species may occur in the southern potions of Segments 6 and 11 within the ANF, and dormant seed banks of this species may exist in unburned chaparral and scrub habitats. Suitable habitats may include recently burned or disturbed sites within Chamise Chaparral, Scrub Oak Chaparral, Interior Live Oak Scrub, Coastal Sage Scrub, Mixed Chaparral, and California Annual Grassland.

Southern Region: This species may occur outside of the urban areas of Segments 7, 8, and 11 south of the ANF. There is an extant population of this species between Segment 7 and 11 north of Monrovia, just south of the ANF boundary. Suitable habitats may include recently burned or disturbed sites within Coastal Sage Scrub, Mixed Chaparral, Interior Live Oak Scrub, and California Annual Grassland.

Southern Skullcap (*Scutellaria bolanderi* ssp. *austromontana*). Federal Listing: None; State Listing: None; CNPS List 1B.2. Forest Service Sensitive. Southern skullcap is a rhizomatous herb that belongs to the mint family (Lamiaceae) and typically blooms between June and August (CNPS 2007). This subspecies is endemic to Southern California and has documented occurrences in Los Angeles, Riverside, San Bernardino, and San Diego counties. It is found in mesic sites within chaparral, cismontane woodland, and lower montane coniferous forest between 1,900 and 6,600 feet. The only record of this subspecies in Los Angeles County is near El Monte. There is question as to the validity of this record. It may be a solitary occurrence of a small number of plants persisting for one season or could have been misidentified (CNDDB 2007). The nearest extant population occurs on the San Bernardino National Forest.

No individuals or populations of southern skullcap were observed during reconnaissance-level surveys. The CNDDB (2007) records one historical occurrence in Los Angeles County near El Monte between Segments 7 and 11, although this occurrence possibly represents a population that failed to reproduce naturally. Other historical populations occur within the San Bernardino and Cleveland National Forests.

Northern Region: This subspecies is considered absent from the proposed project north of the ANF. This region is outside of the known range of the subspecies and there are no recorded occurrences within desert habitats such as those that occur in the Northern Region. A range extension into such habitat is unlikely.

Central Region: This subspecies is unlikely to occur along Segments 6 and 11 within the ANF. Although suitable habitat is present, there are no records of this subspecies within the ANF. Suitable habitats may include Chamise Chaparral, Scrub Oak Chaparral, Mixed Chaparral, Coast Live Oak Woodland, Canyon Oak Forest, Bigcone Douglas Fir-Canyon Live Oak Forest, and Coulter Pine Forest.

Southern Region: This subspecies is unlikely to occur along the proposed project south of the ANF. The only record for this species within this region is questionable and could have been misidentified. In addition, most of the Southern Region is located below 1,900 feet, which is below the known lower elevation limit of the subspecies. Suitable habitats include mesic sites within Mixed Chaparral, California Walnut Woodland, and Coast Live Oak Woodland.

Rayless Ragwort (*Senecio aphanactis*). Federal Listing Status: None; State Listing Status: None; CNPS List 2.2. Rayless ragwort is an annual herb that belongs to the sunflower family (Asteraceae) and blooms from January to April. It typically occurs on dry alkaline flats within chaparral, cismontane woodland, and coastal scrub communities between 50 and 2,624 feet. This species is known from Baja California and 17 counties in California, including Los Angeles, Orange, San Bernardino, and Riverside counties.

No individuals or populations of rayless ragwort were observed during reconnaissance-level surveys. There is one CNDDB (2007) occurrence within 5 miles of the proposed project in the Riverside West USGS quadrangle.

Northern Region: This species is considered absent from the proposed project north of the ANF. There are no records indicating that this species occurs within the desert habitats of the Northern Region. Hickman (1993) indicates the species is not known from this regions geographic area.

Central Region: This species is considered absent from the proposed project within the ANF. There are no records indicating that this species occurs within the habitats of the Central Region. A range extension into such habitat is unlikely. Hickman (1993) indicates the species is not known from this regions geographic area.

Southern Region: This species may occur along Segment 8 south of the ANF. It is unlikely to occur along Segments 7 and 11. There are no recorded occurrences within this region. Suitable habitats may include dry alkaline flats within Mixed Chaparral and Coastal Sage Scrub. There may be potential habitat for this species within the Whittier Narrows Recreation Area.

Salt Spring Checkerbloom (*Sidalcea neomexicana*). Federal Listing Status: None; State Listing Status: None; CNPS List 2.2. Salt spring checkerbloom is a perennial herb in the mallow family (Malvaceae) that blooms from March to June (CNPS 2007). This species occurs within chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, and playa habitats in alkaline, mesic soils at elevations of 49 to 5,020 feet. It is found in 7 counties, including Kern, Orange, Riverside, and San Bernardino counties within 17 USGS quadrangles. It is considered to be extirpated from Los Angeles County.

No individuals or populations of salt spring checkerbloom were observed during reconnaissance-level surveys. There is one CNDDB (2007) occurrence within 5 miles of the proposed project in the Prado Dam USGS quadrangle. There are 2 records listed by the Consortium of California Herbaria (2007) near Segment 8 in San Bernardino County in the Prado Dam and Ontario USGS quadrangles.

Northern Region: This species is unlikely to occur within the proposed project north of the ANF. There are no recorded occurrences of the species in the Antelope Valley or the northern San Gabriel Mountains. Suitable habitats include alkali and/or mesic sites within Mixed Chaparral, Desert Saltbush Scrub and Mojave Creosote Bush Scrub.

Central Region: This species is unlikely to occur along Segment 6 and 11 within the ANF. There is one record of this species in the Liebre Mountains. Suitable habitats include mesic soils within Mixed Chaparral, Chamise Chaparral, Scrub Oak Chaparral, Bigcone Douglas Fir-Canyon Live Oak Forest, and Coulter Pine Forest.

Southern Region: This species may occur along Segments 7 and 11 south of the ANF. A historic population occurs along Segment 8. The population is mapped in the vicinity of Chino Creek just east of highway 71. The species is unlikely to occur along Segment 11 where habitat conditions are marginal. Suitable habitats may include alkali and/or mesic soils within Coastal Sage Scrub and Mixed Chaparral.

Piute Mountains Jewel-flower (*Streptanthus cordatus* var. *piutensis*). Federal Listing Status: None; State Listing Status: None; CNPS List 1B.2. Piute Mountains jewel-flower is a perennial herb in the mustard family (Brassicaceae) that blooms from May to July (CNPS 2007). It is found within broadleaved upland forest, closed-cone coniferous forest, and pinyon and juniper woodland habitats in clay or metamorphic soils at elevations of 3,593 to 5,692 feet. It is found in Kern County within 4 USGS quadrangles.

No individuals or populations of Piute Mountains jewel-flower were observed during reconnaissance-level surveys. There are no CNDDB (2007) occurrences within 5 miles of the proposed project. The Consortium of California Herbaria (2007) reports all collections as occurring in the Tehachapi and Southern Sierra Nevada Mountains.

Northern Region: This variety is unlikely to occur along Segment 4 of the proposed project north of the ANF. The only suitable habitat for the plant occurs in Mojave Juniper Woodland and Scrub in clay or metamorphic soils within the extreme northern portions of Segment 4. All reports of the variety are from the Tehachapi and Southern Sierra Nevada Mountains, and is therefore considered absent from Segments 5, 6, and 11. It is also absent from Segment 10 due to the lack of appropriate habitat.

Central Region: This variety is considered absent from the proposed project within the ANF. All reports of the species are from the Tehachapi and Southern Sierra Nevada Mountains.

Southern Region: This variety is considered absent from the proposed project south of the ANF. All reports of the species are from the Tehachapi and Southern Sierra Nevada Mountains.

Mason's Neststraw (*Stylocline masonii*). Federal Listing Status: None; State Listing Status: None; CNPS List 1B.1. Mason's neststraw is an annual herb in the sunflower family (Asteraceae) that blooms from March to May (CNPS 2007). This species occurs in habitats such as sandy soils within chenopod scrub, and pinyon and juniper woodland habitats at elevations of 328 to 3,936 feet. It occurs in Kern, Los Angeles, Monterey, and San Luis Obispo counties.

No individuals or populations of Mason's neststraw were observed during reconnaissance-level surveys. The CNDDB (2007) records one occurrence within 5 miles of the proposed project within the Acton USGS quadrangle.

Northern Region: This species may occur along Segments 5, 6, and 11 north of the ANF. A single population occurs within 5 miles of the proposed project just west of the Vincent Substation outside of Acton. Suitable habitats for the species may include Mojave Juniper Woodland and Scrub, Mojave Pinyon Woodland, Mojavean Pinyon and Juniper Woodland (Recently Burned), and Desert Saltbush Scrub. This plant is considered absent from Segments 4 and 10, as these segments are outside the known range of the species.

Central Region: This species may occur along Segments 6 and 11 within the ANF on the arid, northern slopes of the San Gabriel Mountains. A single population occurs within 5 miles of the proposed project just west of the Vincent Substation outside of Acton. Suitable habitats for the species may include Mojave Juniper Woodland and Scrub, Mojave Pinyon Woodland, and Mojavean Pinyon and Juniper Woodland (Recently Burned). The species is considered absent from the southern portions of the San Gabriel Mountains, as suitable habitat for the species does not exist within this portion of the proposed project.

Southern Region: This species is considered absent from the proposed project south of the ANF. The species is not known to occur south of the Transverse Ranges. In addition, suitable habitat for the species does not exist within this portion of the proposed project.

Lemmon's Syntrichopappus (*Syntrichopappus lemmonii*). Federal Listing: None; State Listing: None; CNPS List 4.3. Forest Service Watch List. Lemmon's syntrichopappus is an annual herb in the sunflower family (Asteraceae) that blooms in April and May. This species occurs in chaparral, Joshua tree woodland, and pinyon and juniper woodlands in sandy or gravelly soils at elevations between 1,640 and 6,004 feet. It is found in Kern, Los Angeles, Monterey, Riverside, and San Bernardino counties.

No individuals or populations of Lemmon's syntrichopappus were observed during reconnaissance-level surveys. The CNDDB (2007) does not currently record population occurrence data for List 4 species. However, the Consortium of California Herbaria (2007) lists several occurrences of the species within the general vicinity of the proposed project.

Northern Region: This species may occur along Segments 4, 5, 6, 10, and 11 north of the ANF. There are documented occurrences on the arid, northern slopes of the San Gabriel Mountains, as well as near the cities of Vincent, Palmdale, Lancaster, and Mojave. Suitable habitats may include sandy or gravelly soils within Joshua Tree Woodland, Mixed Chaparral, Mojave Juniper Woodland and Scrub, Mojave Pinyon Woodland, Mojave Mixed Woody Scrub, Deerweed/Chia Herbaceous Field (Recently Burned), Mojavean Pinyon and Juniper Woodland (Recently Burned), and Mojave Desert Wash.

Central Region: This species may occur along Segments 6 and 11 within the ANF. There are documented occurrences on the arid, northern slopes of the San Gabriel Mountains. Suitable habitats may include sandy or gravelly soils within Mixed Chaparral, Scrub Oak Chaparral, Chamise Chaparral, Interior Live Oak Scrub, Mojave Juniper Woodland and Scrub, Mojave Pinyon Woodland, Mojave Mixed Woody Scrub, Deerweed/Chia Herbaceous Field (Recently Burned), Mojavean Pinyon and Juniper Woodland (Recently Burned), and Desert Wash

Southern Region: It is unlikely this species occurs along Segments 7 and 11 south of the ANF. It is considered absent from Segment 8. All reported populations of the species are from the Transverse Ranges, Peninsular Range, and Mojave Desert regions. There are no reports of the species within the southern foothills of the San Gabriel Mountains or the Los Angeles Basin. Suitable habitats include sandy soils within Mixed Chaparral, Mule Fat Scrub, Riversidean Alluvial Fan Sage Scrub, and Sparsely Vegetated Streambed.

Sonoran Maiden Fern (*Thelypteris puberula* var. *sonorensis*). Federal Listing: None; State Listing: None; CNPS List 2.2. Forest Service Sensitive. Sonoran maiden fern is a rhizomatous fern in the helypteris family (Thelypteridaceae) that produces spores between January and September (CNPS 2007). Its typical habitat includes meadows and seeps within streams at elevations between 164 and 2,000 feet. It occurs in 15 USGS quadrangles in Los Angeles, Riverside, Santa Barbara, and San Bernardino counties as well as in Arizona, Baja California, and northern Mexico.

No individuals or populations of Sonoran maiden fern were observed during reconnaissance-level surveys. There are 3 CNDDB (2007) occurrences within 5 miles of the proposed project: one in the Mt. Wilson USGS quadrangle and 2 in the Azusa USGS quadrangle. In addition, the Consortium of California Herbaria (2007) lists several occurrences of the variety within the San Gabriel Mountains.

Northern Region: This variety is considered absent from the proposed project north of the ANF. Habitat conditions within this region are not suitable for the plant, which prefers year-round mesic conditions. In addition, there are no records of this variety occurring within the desert habitats that dominate the Northern Region.

Central Region: This variety may occur along the southern portions of Segments 6 and 11 within the ANF. There are 3 CNDDB (2007) occurrences within 5 miles of the proposed project. Suitable habitats may include streams, springs, or mesic sites within Southern Cottonwood Willow Riparian Forest, Southern Coast Live Oak Riparian Forest, Southern Sycamore Alder Riparian Woodland, Southern Willow Scrub, and Southern Arroyo Willow Riparian Forest.

Southern Region: This variety may occur within the San Gabriel Mountains along Segments 7 and 11 south of the ANF. The species is considered absent from Segment 8. All reported populations of the plant within Los Angeles County are from the Transverse Ranges. There are no records or data that indicate that the plant occurs within the Los Angeles Basin. Habitat conditions within this region are generally marginal, lacking the year-round mesic conditions required by this variety. However, suitable habitats along Segment 7 and 11 may include streams, springs, or mesic sites within Southern Cottonwood Willow Riparian Forest, Southern Coast Live Oak Riparian Forest, Southern Sycamore Alder Riparian Woodland, Southern Willow Scrub, and Southern Arroyo Willow Riparian Forest.

Golden Violet (*Viola aurea*). Federal Listing Status: None; State Listing Status: None; CNPS List 2.2. Golden violet is a perennial herb in the violet family (Violaceae) that blooms from April to May (CNPS 2007). This species occurs in Great Basin scrub and pinyon and juniper woodland in sandy soils at elevations of 3,280 to 5,900 feet. Golden violet is found in Kern, Mono, San Bernardino, San Diego, and Sierra counties. It is common in Nevada but threatened by grazing in some areas of California (CNPS 2007).

No individuals or populations of golden violet were observed during reconnaissance-level surveys. There is one CNDDB (2007) record within 5 miles of the proposed project, within the Mojave USGS quadrangle.

Northern Region: This species may occur along Segments 5, 6, and 11 north of the ANF. There are documented occurrences on the arid, northern slopes of the San Gabriel Mountains. Suitable habitats may include sandy soils within Joshua Tree Woodland, Mojave Juniper Woodland and Scrub, Mojave Pinyon Woodland, Deerweed/Chia Herbaceous Field (Recently Burned), Mojavean Pinyon and Juniper Woodland (Recently Burned), and Desert Wash. The species is considered absent from Segments 4 and 10. There are no records of this plant occurring in the Antelope Valley.

Central Region: This species may occur along the desert slopes of Segments 6 and 11 within the ANF. There are documented occurrences on the arid, northern slopes of the San Gabriel Mountains. Suitable habitats may include sandy soils within Joshua Tree Woodland, Mojave Juniper Woodland and Scrub, Mojave Pinyon Woodland, Deerweed/Chia Herbaceous Field (Recently Burned), Mojavean Pinyon and Juniper Woodland (Recently Burned), and Desert Wash.

Southern Region: This species is considered absent from the proposed project south of the ANF. The required habitat for golden violet, Great Basin scrub and pinyon and juniper woodland, is not present within this region.

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