

**Table 1 Special Status Plant Occurrence Potential for the Alberhill and Valley-Ivyglen Projects**

Scientific Name	Common Name	Conservation Status	Habitat Description	Potential to Occur on Alberhill Project	Potential to Occur on Valley-Ivyglen Project
<i>Abronia villosa</i> var. <i>aurita</i>	chaparral sand-verbena	1B.1	Occurs in chaparral and coastal scrub with sandy areas. 80-1600 m.	Moderate potential to occur along the proposed 500-kV and 115-kV routes as there are known occurrences in the vicinity of Lake Mathews.	Moderate potential to occur along Segments 1-3. Present along Segments 4-8.
<i>Allium marvinii</i>	Yucaipa onion	1B.1, MSHCP	Occurs in openings within chaparral plant communities. Often associated with clay soils. 760-1065 m.	Moderate potential to occur along the proposed 500-kV and 115-kV routes as suitable habitat is present.	Moderate potential to occur along Segments 1-8.
<i>Allium munzii</i>	Munz's onion	1B.1, ST, FE, MSHCP	Occurs in chaparral, coastal scrub, cismontane woodland, pinyon-juniper woodland, valley and foothill grassland with heavy clay soils. Grows in grasslands and openings within shrublands or woodlands. 300-1035m.	Moderate potential to occur along the proposed 500-kV routes as suitable habitat is present. High potential to occur along the proposed 115-kV routes.	High potential to occur along Segments 1-3. Present along Segments 4-8.
<i>Ambrosia pumila</i>	dwarf burr or San Diego ambrosia	1B.1, MSHCP	Occurs in chaparral, coastal scrub, valley and foothill grassland with sandy loam or clay soil. Persists where disturbance has been superficial. Sometimes present on margins or near vernal pools.	Present along the proposed 115-kV routes. No potential to occur along the proposed 500-kV routes as suitable habitat is not present. All project components would cross critical habitat for this species.	Present along Segments 1-8.
<i>Arabis johnstonii</i>	Johnston's rock cress	1B.2, MSHCP	Occurs within chaparral and lower montane coniferous forest. Often associated with eroded clay soils. 1350–2150 meters.	<i>Unlikely to occur in the Substation, 500-kV and the proposed 115-kV study areas.</i>	Not included in applicant analyses
<i>Arctostaphylos rainbowensis</i>	rainbow manzanita	1B.1	Occurs in chaparral habitat in lower elevation coastal Santa Ana Mountains.	Moderate potential to occur along the proposed 115-kV routes as suitable habitat is present.	Low potential to occur along Segments 1-8.
<i>Astragalus pachypus</i> var. <i>jaegeri</i>	Jaeger's milkvetch	1B.1	Occurs in a variety of habitats including chaparral, cismontane woodland, coastal scrub and valley / foothill grassland habitats. 365–915m.	Moderate potential to occur along the proposed 500-kV and 115-kV routes as suitable habitat is present.	Moderate potential to occur along Segments 1-8.
<i>Atriplex coronata</i> var. <i>notatior</i>	San Jacinto Valley crownscale	FE, 1B.1, MSHCP	Occurs in playas, chenopod scrub, valley and foothill grassland, vernal pools, and dry, alkaline flats in the San Jacinto River Valley. 400-500m.	Unlikely to occur along the proposed 500-kV routes due to the lack of appropriate habitat and soil types. Present with the along the proposed 115-kV routes.	High potential to occur along Segments 1-3. Present along Segments 4-8.

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<i>Atriplex coulteri</i>	Coulter's saltbush	1B.2	Occurs in coastal salt marshes, playas, valley and foothill grassland, vernal pools. Usually found on alkaline soils in playas, sinks, and grasslands. 1-1400m.	Unlikely to occur along the proposed 500-kV routes as suitable habitat not present. Moderate potential to occur along the proposed 115-kV routes as suitable habitat is present.	High potential to occur along Segments 1-8.
<i>Atriplex pacifica</i>	south coast saltscale	1B.2	Occurs in coastal scrub, coastal bluff scrub, playas, and chenopod scrub. Found in alkali soils. 1-500m.	Moderate potential to occur along the proposed 500-kV and 115-kV routes as suitable habitat is present.	Moderate potential to occur along Segments 1-3. High potential to occur along Segments 4-8.
<i>Atriplex parishii</i>	Parish's brittlescale	1B.1, MSHCP	Found in alkali meadows, vernal pools, chenopod scrub, and playas, usually on dry alkali flats with fine soils. 4-140m.	Unlikely to occur along the proposed 500-kV routes as suitable habitat is not present. Moderate potential to occur in the 115-kV study as suitable habitat is present near Temescal Wash and San Jacinto River.	Moderate potential to occur along Segments 1-3. High potential to occur along Segments 4-8.
<i>Atriplex serenana</i> var. <i>davidsonii</i>	Davidson's saltscale	1B.2, MSHCP	Occurs in coastal bluff scrub, and coastal scrub in alkaline soil. 3-250m.	Unlikely to occur along the proposed 500-kV routes as suitable habitat is not present. Moderate potential to occur along the proposed 115-kV routes as suitable habitat is present.	High potential to occur along Segments 4-8.
<i>Brodiaea filifolia</i>	thread-leaved brodiaea	FT, SE, 1B.1, MSHCP	Found in cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools. Usually associated with annual grassland and vernal pools; often surrounded by shrubland habitats. Needs clay soils. 25-860m.	Unlikely to occur along the proposed 500-kV routes as suitable habitat is not present. High potential to occur along the proposed 115-kV routes as suitable habitat is present.	High potential to occur along Segments 1-8.
<i>Berberis nevini</i>	Nevin's barberry	FE, SE, 1B.1, MSHCP	Occurs in a variety of habitats including cismontane woodland, chaparral, sage scrub and riparian scrub habitat. Often associated with sandy or gravelly soils. 274-825m.	Moderate potential to occur along the proposed 500-kV and 115-kV routes as suitable habitat is present.	Low potential to occur along Segments 1-8.
<i>Brodiaea orcuttii</i>	Orcutt's brodiaea	1B.1, MSHCP	Found in vernal pools, valley and foothill grassland, closed-cone coniferous forest, cismontane woodland, chaparral, meadows. Requires mesic, clay habitats; sometimes serpentine; usually in vernal pools and small drainages. 30-1615m.	Unlikely to occur along the proposed 500-kV routes as suitable habitat is not present. Moderate potential to occur along the proposed 115-kV routes as suitable habitat is present.	Moderate potential to occur along Segments 1-3. High potential to occur along Segments 4-8.

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Scientific Name	Common Name	Conservation Status	Habitat Description	Potential to Occur on Alberhill Project	Potential to Occur on Valley-Ivyglen Project
<i>Calochortus plummerae</i>	Plummer's mariposa-lily	1B.2, MSHCP	Occurs in coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest on rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire. 90-1610m.	Moderate potential to occur along the proposed 500-kV and 115-kV routes as suitable habitat is present.	Moderate potential to occur along Segments 1-8.
<i>Calochortus weedii</i> var. <i>intermedius</i>	intermediate mariposa-lily	1B.2, MSHCP	Found in coastal scrub, chaparral, valley and foothill grassland on dry, rocky open slopes and rock outcrops. 120-850m.	Moderate potential to occur along the proposed 500-kV and 115-kV routes as suitable habitat is present.	Moderate potential to occur along Segments 1-8.
<i>Caulanthus simulans</i>	Payson's jewel flower	4.2, MSHCP	Occurs in frequently burned areas or in other disturbed sites such as streambeds within chaparral and coastal scrub habitats.	Moderate potential to occur in the substation, 500-kV, and the proposed 115-kV study areas.	Not included in applicant analyses
<i>Ceanothus ophiochilus</i>	Vail Lake ceanothus	FT, SE, 1B.1, MSHCP	Occurs within chamise chaparral habitats. Usually found on ridgelines and north-facing slopes. Usually associated with gabbroic or pyroxenite-rich rock outcrops. 580-1065 meters.	Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.	Not included in applicant analyses
<i>Centromadia parryi</i> ssp. <i>australis</i>	southern tarplant	1B.1	Occurs in coastal scrub, chaparral on dry slopes and flats, sometimes at interface of 2 vegetation types, such as chaparral and oak woodland. Needs dry, sandy soils. 40-1705m.	Moderate potential to occur along the proposed 500-kV and 115-kV routes as suitable habitat is present.	Not included in applicant analyses. Potential to occur unknown.
<i>Centromadia pungens</i> ssp. <i>laevis</i>	smooth tarplant	1B.1, MSHCP	Found in valley and foothill grassland, chenopod scrub, meadows, playas, riparian woodland, alkali meadow, alkali scrub. Also found in disturbed places. 0-480m.	Unlikely to occur along the proposed 500-kV routes as suitable habitat is not present. Present along the proposed 115-kV routes.	High potential to occur along Segments 1-3. Present along Segments 4-8.
<i>Chorizanthe leptotheca</i>	peninsular spineflower	4.2, MSHCP	Occurs within chaparral, coastal scrub, and lower montane coniferous forest. 300-1900 meters.	Moderate potential to occur in the substation, 500-kV, and the proposed 115-kV study areas.	Not included in applicant analyses
<i>Chorizanthe parryi</i> var. <i>parryi</i>	Parry's spineflower	1B.1, MSHCP	Occurs in coastal scrub, chaparral on dry slopes and flats, sometimes at interface of 2 vegetation types, such as chaparral and oak woodland. Needs dry, sandy soils. 40-1705m.	Potential to occur along the proposed 500-kV routes. Present along the proposed 115-kV routes.	Present along Segments 1-3. High potential to occur along Segments 4-8.

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<i>Chorizanthe polygonoides</i> var. <i>longispina</i>	long-spined spineflower	1B.2, MSHCP	Found in chaparral, coastal scrub, meadows, valley and foothill grassland on gabbroic clay. 30-1450m.	Present along the proposed 500-kV routes. High potential to occur along the proposed 115-kV routes as suitable habitat is present.	Present along Segments 1-8.
<i>Chorizanthe xanti</i> var. <i>leucotheca</i>	white-bracted spineflower	1B.2, MSHCP	Found in Mojavean desert scrub and pinyon-juniper woodland.	Low potential to occur along the proposed 500-kV and 115-kV routes as suitable habitat is not present.	Low potential to occur along Segment 1-3.
<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>	summer holly	1B.2	Found in mixed chaparral, sometimes post-burn. 30-550m.	Moderate potential to occur along the proposed 500-kV and 115-kV routes as suitable habitat is present.	Low potential to occur along Segments 1-8.
<i>Convolvulus simulans</i>	small-flowered morning glory	4.2	Occurs in chaparral (openings), coastal scrub, valley and foothill grassland/ clay, and serpentine seeps.	High potential to occur along the proposed 500-kV and 115-kV line routes.	Present along Segments 1-8.
<i>Cupressus forbesii</i>	Tecate cyprus	1B.2	Found in chaparral, closed-cone pine forest. 450–1500 m.	Unlikely to occur along 500-kV transmission line and 115-kV subtransmission line routes.	Low potential to occur along Segments 1-8.
<i>Deinandra mohavensis</i>	Mojave tarplant	SE, 1B.3, MSHCP	Occurs within mesic areas of chaparral and sage scrub habitats. Also associated with riparian scrub. 640–1600 meters.	Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.	Not included in applicant analyses
<i>Deinandra paniculata</i>	paniculate tarplant	4.2	Found in coastal scrub, valley and foothill grasslands, and vernal pools.	Present along 500-kV transmission line and 115-kV subtransmission line routes.	Present along Segments 1-8.
<i>Dodecahema leptoceras</i>	slender-horned spineflower	FE, SE, 1B.1, MSHCP	Found in chaparral, coastal scrub (alluvial fan sage scrub), flood-deposited terraces and washes. 200-760m.	Moderate potential to occur along the proposed 500-kV and 115-kV routes as suitable habitat is present and historic CNDDB occurrences have been recorded in the vicinity of Lake Elsinore.	Moderate potential to occur along Segment 1-3. High potential to occur along Segment 4-8.
<i>Dudleya cymosa</i> ssp. <i>ovatifolia</i>	Santa Monica dudleya	1B.2	Occurs in chaparral, coastal scrub in canyons on sedimentary conglomerates and on primarily north-facing slopes. 210-500m.	Moderate potential to occur along the proposed 500-kV and 115-kV routes as suitable habitat is present and historic CNDDB occurrences have been recorded in the vicinity of Lake Elsinore.	Low potential to occur along Segments 1-3.
<i>Dudleya multicaulis</i>	many-stemmed dudleya	1B.2, MSHCP	Found in chaparral, coastal scrub, valley and foothill grassland in heavy, often clayey soils or grassy slopes. 0-790m.	Moderate potential to occur along the proposed 500-kV and 115-kV routes as suitable habitat is present.	Moderate potential to occur along Segment 1-3. High potential to occur along Segment 4-8.

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<i>Dudleya viscida</i>	sticky dudleya	1B.2, MSHCP	Found in coastal scrub, coastal bluff scrub and chaparral on north and south-facing cliffs and banks. 10-550m.	Moderate potential to occur along the proposed 500-kV and 115-kV routes as suitable habitat is present.	Low potential to occur along Segments 1-8.
<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>	Santa Ana River woolstar	FE, SE, 1B.1, MSHCP	Occurs within alluvial-fans or sandy river terraces. Known from one extended but fragmented population (associated with Santa Ana River). 91-610 meters.	Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.	Not included in applicant analyses
<i>Erodium macrophyllum</i>	round-leaved filaree	1B.1, MSHCP	Occurs in grasslands with relatively low cover of annual grasses on friable/clay soils. 15-1200m.	Moderate potential to occur in the 500-kV as suitable habitat is present. High potential to occur along the proposed 115-kV routes as suitable habitat is present.	Present along Segments 1-8.
<i>Eryngium aristulatum</i> var. <i>parishii</i>	San Diego button-celery	FE, SE, 1B.1, MSHCP	Found in vernal pools, coastal scrub, valley and foothill grassland. San Diego mesa hardpan and claypan vernal pools and southern interior basalt flow vernal pools; usually surrounded by scrub. 15-620m.	Unlikely to occur along the proposed 500-kV routes as area is outside recognized range for the species. Moderate potential to occur along the proposed 115-kV routes as suitable habitat present and also due to historic CNDDDB occurrences in the Murrieta and Wildomar topographic quadrangles.	Low potential to occur along Segments 1-3. Moderate potential to occur along Segments 4-8.
<i>Geothallus tuberosus</i>	Campbell's liverwort	1B.1	Occurs within mesic areas of sage scrub habitat and vernal pools often associated with clay soils. 10-600m.	Moderate potential to occur along the proposed 500-kV and 115-kV routes. Species has been mapped within the Wildomar topographic quadrangles and CNPS suggests this species has the potential to occur within other Riverside County topographic quadrangles.	Not included in applicant analyses. Potential to occur unknown.
<i>Harpagonella palmeri</i>	Palmer's grapplinghook	4.2, MSHCP	Occurs in clay soils in coastal sage scrub, chaparral, and valley and foothill grassland.	Present along the 115-kV subtransmission line routes.	High potential to occur along Segments 1-8.
<i>Holocarpa virgata</i> ssp. <i>elongata</i>	graceful tarplant	4.2, MSHCP	Occurs within cismontane woodland, chaparral, sage scrub, and valley/foothill grassland habitat. Locally known within grasslands and oak woodlands on the Santa Rosa Plateau. Associated well developed clay soils. 60-1100 meters.	Unlikely to occur within the substation, 500-kV, and the proposed 115-kV study areas.	Not included in applicant analyses

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<i>Hordeum intercedens</i>	vernal barley	3.2, MSHCP	Occurs in vernal pools or mesic areas within sage scrub and valley/foothill grassland habitats. Often associated with saline flats and depressions. 5–1000m.	Unlikely to occur along the proposed 500-kV routes due to rugged terrain and lack of suitable habitat. Moderate potential to occur along the proposed 115-kV routes as suitable habitat is present (e.g., adjacent to Temescal Wash and San Jacinto River).	Low potential to occur along Segments 1-3. Moderate potential to occur along Segments 4-8.
<i>Horkelia cuneata</i> ssp. <i>puberula</i>	mesa horkelia	1B.1	Found in chaparral, cismontane woodland, coastal scrub at sandy or gravelly sites. 70-810m.	Moderate potential to occur along the proposed 500-kV and 115-kV routes as suitable habitat is present.	Moderate potential to occur along Segments 1-8.
<i>Hulsea vestita</i> ssp. <i>callicarpa</i>	beautiful hulsea	4.2, MSHCP	Occurs within chaparral and lower montane coniferous forest. Often associated with rocky or gravelly, granitic soils. 915–3050 meters.	Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.	Not included in applicant analyses
<i>Imperata brevifolia</i>	California satintail	2.1	Occurs in a variety of habitat types, including chaparral, sage scrub, Mojavean desert scrub, meadows and seeps, riparian scrub. Often associated with alkaline soils. 0–500m.	Moderate potential to occur along the proposed 500-kV and 115-kV routes as suitable habitat is present.	Moderate potential to occur along Segments 1-8.
<i>Juglans californica</i>	Southern California black walnut	4.2, MSHCP	Occurs on slopes and in canyons and valleys within chaparral, cismontane woodland, and sage scrub habitats. 50–900 meters.	No potential to occur in the substation study area. Moderate potential to occur within the 500-kV and the proposed 115-kV study areas.	Not included in applicant analyses
<i>Juncus luciensis</i>	Santa Lucia dwarf rush	1B.2	Occurs in a variety of habitat types, including chaparral, Great Basin scrub, lower montane coniferous forest, meadows, seeps, and vernal pools. 300-2040 meters.	Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.	Not included in applicant analyses
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Coulter's goldfields	1B.1, MSHCP	Found in coastal salt marshes, playas, valley and foothill grassland, vernal pools. Usually found on alkaline soils in playas, sinks, and grasslands. 1-1400m.	Unlikely to occur along the proposed 500-kV routes as suitable habitat is not present. Present along the proposed 115-kV routes.	High potential to occur along Segment 1-3. Present along Segments 4-8.
<i>Lepidium virginicum</i> var. <i>robinsonii</i>	Robinson's pepper-grass	1B.2	Occurs in chaparral and coastal scrub in dry soils and shrubland. 1-945m.	Present along the proposed 500-kV routes. Moderate potential to occur along the proposed 115-kV routes as suitable habitat is present.	Moderate potential to occur along Segments 1-3. High potential to occur along Segments 4-8.

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<i>Lepechinia cardiophylla</i>	Heart-leaved pitcher sage	1B.2, MSHCP	Found in closed cone coniferous forest, chaparral, cismontane woodland (520-1370m)	Unlikely to occur along proposed 500-kV and 115-kV routes.	Low potential to occur along Segments 1-8.
<i>Limnanthes gracilis</i> ssp. <i>parishii</i>	Parish's Meadowfoam	1B.2, ST, MSHCP	Lower montane coniferous forest, meadows, vernal pools.	No potential to occur in the substation, 500-kV, and the proposed 115-kV study areas.	Low. No habitat present along Segments 1-8.
<i>Microseris douglasii</i> ssp. <i>platycarpa</i>	small-flowered microseris	4.2, MSHCP	Occurs in clay soils within cismontane woodland, coastal scrub, valley grasslands, and vernal pools.	Present along the proposed 115-kV routes.	Present along Segments 1-8.
<i>Mimulus clevelandii</i>	Cleveland's bush monkeyflower	4.2, MSHCP	Occurs within chaparral, cismontane woodland, and lower montane coniferous forest. Often associated with gabbroic soils in disturbed areas/openings with above described habitat types. 815–2000 meters.	Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas. Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.	Not included in applicant analyses
<i>Mimulus diffusus</i>	Palomar monkeyflower	4.3, MSHCP	Occurs within chaparral and lower montane coniferous forest. Often associated with sandy or gravelly soils. 1220–1830 meters.	Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.	Not included in applicant analyses
<i>Monardella hypoleuca</i> ssp. <i>lanata</i>	felt-leaved monardella	1B.2	Occurs in understory in mixed chaparral, chamise chaparral, and southern oak woodland; sandy soil. 300-1575m.	Moderate potential to occur along the proposed 500-kV and 115-kV routes as suitable habitat is present.	Low potential to occur along Segments 1-8.
<i>Monardella macrantha</i> ssp. <i>halli</i>	Hall's monardella	1B.3	Found in broad-leaved upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland.	Unlikely to occur along proposed 500-kV and 115-kV routes.	Low potential to occur along Segments 1-8
<i>Muhlenbergia californica</i>	California muhly	4.3, MSHCP	Occurs within wetlands or mesic sites in chaparral, sage scrub, and lower montane forest habitats. Also found in meadows and seeps. Locally known in the San Jacinto Mountains. 100-2000 meters.	Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.	Not included in applicant analyses
<i>Myosurus minimus</i> ssp. <i>apus</i>	little mouse-tail	3.1, MSHCP	Occurs in valley/foothill grasslands with alkaline soils and vernal pools. 20–640m.	Unlikely to occur along the proposed 500-kV routes as suitable habitat is not present. Moderate potential to occur along the proposed 115-kV routes as suitable habitat is present, particularly in areas adjacent to Temescal Wash and San Jacinto River.	Moderate potential to occur along Segments 1-8

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<i>Nama stenocarpum</i>	mud nama	2.2, MSHCP	Occurs within marshes and along the margins of lakes. 5–500m.	Unlikely to occur along the proposed 500-kV routes as suitable habitat is not present. Moderate potential to occur along the proposed 115-kV routes as suitable habitat is present, particularly in areas adjacent to Temescal Wash and San Jacinto River.	Low potential to occur along Segments 1-8.
<i>Navarretia fossalis</i>	Moran's navarretia	FT, 1B.1	Found in vernal pools, chenopod scrub, marshes and swamps, playas; in San Diego hardpan and San Diego claypan vernal pools; and in swales and vernal pools often surrounded by other habitat types. 30-1300m.	Unlikely to occur along the proposed 500-kV routes as suitable habitat is not present. Moderate potential to occur along the proposed 115-kV routes as suitable habitat is present, particularly in areas adjacent to Temescal Wash and San Jacinto River.	Moderate potential to occur along Segments 1-8
<i>Navarretia prostrata</i>	prostrate vernal pool navarretia	1B.1, MSHCP	Found in coastal scrub, valley and foothill grassland in alkaline soils or vernal pools. 15-700m.	Unlikely to occur along the proposed 500-kV routes as suitable habitat is not present. Moderate potential to occur along the proposed 115-kV routes as suitable habitat is present.	Moderate potential to occur along Segments 1-3. Low potential to occur along Segments 4-8.
<i>Nolina cismontana</i>	chaparral nolina	1B.2	Occurs in chaparral, coastal scrub /sandstone or gabbro.	Moderate potential to occur along the proposed 500-kV and 115-kV routes.	Moderate potential to occur along Segments 1-3. Low potential to occur along Segments 4-8.
<i>Orcuttia californica</i>	California Orcutt grass	FE, SE, 1B.1, MSHCP	All known localities are associated with vernal pools, specifically southern basaltic clay pan alkaline vernal pools. 15-660m.	Unlikely to occur along the proposed 500-kV routes as suitable habitat is not present. Moderate potential to occur along the proposed 115-kV routes.	Moderate potential to occur along Segments 1-3. Low potential to occur along Segments 4-8.
<i>Penstemon californicus</i>	California beardtongue	1B.2, MSHCP	Occurs within chaparral, lower montane coniferous forest, and pinyon juniper woodland. Often associated with sandy soils. 1170–2300 meters.	Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.	Not included in applicant analyses
<i>Pentochaeta aurea</i> ssp. <i>allenii</i>	Allen's daisy	1B.1	Occurs within openings in sage scrub and valley/foothill grassland habitats. 75–520m.	Moderate potential to occur along the proposed 500-kV and 115-kV routes as suitable habitat is present.	Moderate potential to occur along Segments 1-8.
<i>Phacelia stellaris</i>	Brand's phacelia	1B.1, MSHCP	Occurs within sandy washes and alluvial benches in alluvial flood plains. The species is generally dependent on periodic flooding and sediment transport. 1–400m.	Moderate potential to occur along the proposed 500-kV and 115-kV routes as suitable habitat is present.	Moderate potential to occur along Segments 1-8.



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<i>Phacelia suaveolens</i> ssp. <i>keckii</i>	Santiago Peak Phacelia	1B.3, MSHCP	Found in closed cone coniferous forest and chaparral. 545-1600m.	Low potential to occur along the proposed 500-kV and 115-kV routes.	Low potential to occur along Segments 1-8.
<i>Pseudognaphalium leucocephalum</i>	white rabbit-tobacco	2.2	Riparian woodland, cismontane woodland, coastal scrub, chaparral in sandy, gravelly sites. 0-2100m.	Moderate potential to occur along the proposed 500-kV and 115-kV routes as suitable habitat is present.	Present along Segments 4-8.
<i>Quercus dumosa</i>	Nuttall's scrub oak	1B.1	Occurs within closed-cone coniferous forest chaparral and sage scrub and is usually associated with sandy, clay loam soils. 15-400m.	Moderate potential to occur along the proposed 500-kV and 115-kV routes as suitable habitat is present.	Moderate potential to occur along Segments 1-8.
<i>Quercus engelmannii</i>	Engelmann oak	4.2, MSHCP	Occurs within chaparral, cismontane woodland, riparian woodland, valley/foothill grassland habitat. Locally known in the Santa Rosa Plateau and the Crown Valley area near lake Skinner. 50-1300 meters.	No potential to occur in the substation and 500-kV study areas. Unlikely to occur in the proposed 115-kV study areas.	Not included in applicant analyses
<i>Romneya coulteri</i>	Coulter's matilija poppy	4.2, MSHCP	Occurs in dry canyon washes below 1200 m.	Present adjacent to the proposed 500-kV routes. Moderate potential to occur along the proposed 115-kV routes.	Present along Segments 4-8.
<i>Satureja chandleri</i>	San Miguel savory	1B.2, MSHCP	Found in chaparral, cismontane woodland, coastal scrub, riparian woodland, and valley and foothill grassland in rocky, gabbroic or metavolcanic substrate. 120-1005m.	Moderate potential to occur along the proposed 500-kV and 115-kV routes as suitable habitat is present and also due to historic CNDDB occurrences in the Alberhill, Murrieta, and Wildomar topographic quadrangles.	Moderate potential to occur along Segment 1-3.
<i>Scutellaria bolanderi</i> ssp. <i>austromontana</i>	southern mountains skullcap	1B.2	Found in chaparral, cismontane woodland, and lower montane coniferous forest in gravelly soils on streambanks or in mesic sites in oak or pine woodland. 425-2000m.	Moderate potential to occur along the proposed 500-kV routes as suitable habitat is present. Unlikely to occur along the proposed 115-kV routes as area is below elevation range for this species.	Low potential to occur along Segments 4-8.
<i>Senecio aphanactis</i>	chaparral ragwort	2.2	Found in chaparral, cismontane woodland, and coastal scrub. 15-800m	High potential to occur along the proposed 500-kV route. Moderate potential to occur along the proposed 115-kV route.	Moderate potential to occur along Segments 1-3. High potential to occur along Segment 4-8.
<i>Sibaropsis hammittii</i>	Hammitt's clay-cress	1B.2, MSHCP	Occurs in valley and foothill grassland and chaparral in mesic microsites in open areas on clay soils. 730-1065m.	Moderate potential to occur along the proposed 500-kV and 115-kV routes as suitable habitat is present.	Low potential to occur along Segments 1-3.

**Table 1 Special Status Plant Occurrence Potential for the Alberhill and Valley-Ivyglen Projects**

Scientific Name	Common Name	Conservation Status	Habitat Description	Potential to Occur on Alberhill Project	Potential to Occur on Valley-Ivyglen Project
<i>Sidalcea neomexicana</i>	salt spring checkerbloom	2.2	Found in alkali playas, brackish marshes, chaparral, coastal scrub, lower montane coniferous forest, and Mojavean desert scrub in alkali springs and marshes. 0-1500m.	Unlikely to occur along the proposed 500-kV routes as suitable habitat is not present. Moderate potential to occur along the proposed 115-kV routes, particularly in areas adjacent to Temescal Wash and San Jacinto River.	Moderate potential to occur along Segments 1-3. High potential to occur along Segments 4-8.
<i>Sphaerocarpos drewei</i>	bottle liverwort	1B.1	Occurs within openings on soil in chaparral and sage scrub habitats. 90-600m.	Moderate potential to occur along the proposed 500-kV and 115-kV routes as suitable habitat is present.	Moderate potential to occur along Segments 1-3. High potential to occur along Segments 4-8.
<i>Symphotrichum defoliatum</i>	San Bernardino aster	1B.2	Found in meadows and seeps, marshes and swamps, coastal scrub, cismontane woodland, lower montane coniferous forest, and grassland. Associated with vernal mesic grassland or near ditches, streams and springs, and disturbed areas. 2-2040m.	Moderate potential to occur along the proposed 500-kV and 115-kV routes as suitable habitat is present.	Moderate potential to occur along Segments 1-8.
<i>Tetracoccus dioicus</i>	Parry's tetracoccus	1B.2, MSHCP	Found in chaparral, coastal scrub, and stony, decomposed gabbroic soils. 165-1000m.	Low potential to occur along the proposed 500-kV and 115-kV routes.	Low potential to occur along Segments 1-8.
<i>Tortula californica</i>	California screw moss	1B.2	Found in chenopod scrub and valley and foothill grasslands with sandy soil. 10-1460m.	Moderate potential to occur along the proposed 500-kV and 115-kV routes as suitable habitat is present and historic CNDDDB occurrences in the Alberhill and Lake Elsinore topographic quadrangles.	Low potential to occur along Segments 1-8.
<i>Trichocoronis wrightii</i> var. <i>wrightii</i>	Wright's trichocoronis	1B.1, MSHCP	Found in meadows, marsh and swamp riparian forest and vernal pools. 5-435m.	High potential to occur along the proposed 500-kV route. Moderate potential to occur along the proposed 115-kV route.	Moderate potential to occur along Segments 1-3. High potential to occur along Segments 4-8.
<i>Viguiera viguiera (purisimae)</i>	La Purisima viguiera	2.3	Occurs within coastal bluff scrub and chaparral. CNPS maps this species' range within Orange and San Diego counties only. 365-425 meters.	Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.	Not included in applicant analyses

Sources: 2014a AMEC 2014a, 2014b CNDDDB 2015, CNPS 2015

Key: FE = Federally Endangered, FT = Federally Threatened, SE = Endangered in the state of California, ST = Threatened in the state of California; CNPS Listing: 1B = Rare or endangered in California and elsewhere, 1B.1 = Seriously endangered in California, 1B.2 = Somewhat endangered in California, 2 = Rare or endangered in California, but more common elsewhere, 2.3 = Plants for which more information is needed, 4.2 = Uncommon and somewhat endangered in California, MSHCP = Protected under the Multiple Species Habitat Conservation Plan

**Table 2 Special Status Wildlife Occurrence Potential for the Alberhill and Valley-Ivyglen Projects**

Scientific Name	Common Name	Conservation Status	Habitat Description	Potential to Occur on Alberhill Project	Potential to Occur on Valley-Ivyglen Project
<b>Invertebrates</b>					
<i>Branchinecta lynchi</i>	vernal pool fairy shrimp	FT, MSHCP	Found in shallow, short-lived pools with grass or earth substrate throughout California's Central Valley.	Low potential to occur at the proposed substation site and along the 500-kV routes. Moderate potential to occur along the proposed 115-kV routes.	High potential to occur along Segments 1-8.
<i>Euphydryas editha quino</i>	Quino checkerspot butterfly	FE, MSHCP	Occurs in sunny openings within chaparral and coastal sage shrublands in parts of Riverside and San Diego Counties. Hills and mesas near the coast. Need high densities of food plants, including <i>Plantago erecta</i> , <i>P. insularis</i> , and <i>Orthocarpus purpurescens</i> .	High potential to occur along the proposed 500-kV routes as nectar sources and host plant are present. Moderate potential to occur along the proposed 115-kV routes.	Moderate potential to occur along Segments 1-8.
<i>Streptocephalus woottoni</i>	Riverside fairy shrimp	FE, MSHCP	Found in deep vernal pools, ephemeral ponds, stock ponds with low alkalinity and high temperature in Los Angeles, Orange, and Riverside Counties.	Low potential to occur along the proposed 500-kV routes. Moderate potential to occur along the proposed 115-kV routes.	Moderate potential to occur along Segments 1-8
<b>Amphibians</b>					
<i>Anaxyrus californicus</i>	arroyo toad	FE, SSC, MSHCP	Associated with semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of streams in drier parts of range.	Moderate potential to occur along the proposed 500-kV routes. Confirmed absent along the proposed 115-kV routes.	Moderate potential to occur along Segments 1-8.
<i>Spea hammondi</i>	western spadefoot	SSC, MSHCP	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Seasonal pools are essential for breeding and egg-laying.	High potential to occur along the proposed 500-kV and 115-kV routes.	Present along Segments 1-8.
<b>Reptiles</b>					

**Table 2 Special Status Wildlife Occurrence Potential for the Alberhill and Valley-Ivyglen Projects**

Scientific Name	Common Name	Conservation Status	Habitat Description	Potential to Occur on Alberhill Project	Potential to Occur on Valley-Ivyglen Project
<i>Aspidoscelis hyperythra</i>	orange-throated whiptail	SSC, MSHCP	Inhabits low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats. Prefers washes and other sandy areas with patches of brush and rocks. Perennial plants necessary for its major food, termites.	Present in the 500-kV and high potential to occur along the proposed 115-kV routes.	Present along Segments 1-8.
<i>Aspidoscelis (Cnemidophorus) tigris stejnegeri</i>	coastal western whiptail	MSHCP	Found in dense chaparral and sage scrub, especially around sandy washes and streambeds	High potential to occur along the proposed 500-kV and 115-kV line routes.	Present along Segments 1-8.
<i>Clemmys marmorata pallida</i>	southwestern pond turtle	SSC, MSHCP	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Unlikely to occur along the proposed 500-kV routes due to lack of suitable habitat. High potential to occur along the proposed 115-kV routes.	Moderate potential to occur along Segments 1-8.
<i>Crotalus ruber ruber</i>	northern red-diamond rattlesnake	SSC, MSHCP	Inhabits chaparral, woodland, grassland, and desert areas. Occurs in rocky areas and dense vegetation. Needs rodent burrows, cracks in rocks or surface cover objects.	High potential to occur along the proposed 500-kV and 115-kV routes.	High potential to occur along Segments 1-3, Present along Segments 4-8
<i>Lampropeltis zonata (parvirubra)</i>	San Bernardino Mountain kingsnake	SSC, MSHCP	Occurs throughout a limited range which includes the San Jacinto, Santa Rosa, San Bernardino, Santa Susana, and San Gabriel Mountains, of southern California. Found in coniferous forest, oak-pine woodlands, riparian woodland, chaparral and coastal sage scrub. Preferred areas include wooded areas near a stream with rock outcrops, talus or rotting logs.	Unlikely to occur along the proposed 500-kV and 115-kV routes due to marginal habitat and elevation preference.	Moderate potential to occur along Segments 1-8.
<i>Lampropeltis zonata (pulchra)</i>	California mountain kingsnake (San Diego population)	SSC, MSHCP	Restricted to the San Gabriel and San Jacinto Mountains of Southern California. Inhabits a variety of habitats, including valley-foothill hardwood, coniferous, chaparral, riparian, and wet meadows.	Moderate potential to occur along the proposed 500-kV and 115-kV routes due to marginal habitat.	Moderate potential to occur along Segments 1-8.

**Table 2 Special Status Wildlife Occurrence Potential for the Alberhill and Valley-Ivyglen Projects**

Scientific Name	Common Name	Conservation Status	Habitat Description	Potential to Occur on Alberhill Project	Potential to Occur on Valley-Ivyglen Project
<i>Phrynosoma coronatum</i> (blainvillei population)	coast (San Diego) horned lizard	SSC, MSHCP	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	High potential to occur along the proposed 500-kV and 115-kV routes.	High potential to occur along Segments 1-8.
<i>Salvadora hexalepis virgulata</i>	coast patch-nosed snake	SSC	Found in open habitats and brush.	Moderate potential to occur along proposed 500-kV and 115-kV routes.	Moderate potential to occur along Segments 1-3. High potential to occur along Segments 4-8.
<i>Thamnophis hammondi</i>	two-striped garter snake	SSC, MSHCP	Occurs from sea to about 7,000 feet in elevation. Highly aquatic, found in or near permanent fresh water, often along streams with rocky beds and riparian growth.	Unlikely to occur along the proposed 500-kV routes, due to limited, marginal habitat. Moderate potential to occur along the proposed 115-kV routes.	Moderate potential to occur along Segments 1-3. High potential to occur along Segments 4-8.
<b>Birds</b>					
<i>Accipiter cooperii</i>	Cooper's hawk	MSHCP	An uncommon, though increasing, breeding resident species in cismontane southern California. Forages over a broad variety of woodland and shrub communities. Nests within a variety of woodland habitats, such as riparian or oak woodlands, but in recent years has shown a tolerance for developed areas.	High potential to occur along the proposed 500-kV and 115-kV routes.	Present along Segments 1-8.
<i>Accipiter striatus</i>	sharp-shinned hawk	SSC, MSHCP	An uncommon winter visitor to southern California. Occurs in a variety of woodland and shrubland communities (native and non-native), wherever concentrations of small birds (their preferred prey) may be found.	Moderate potential to occur along the proposed 500-kV and 115-kV routes.	Present along Segments 1-8.
<i>Agelaius tricolor</i>	tricolored blackbird	SSC, MSHCP	Small blackbird characterized by red-and-white shoulder patch. Highly colonial species, most numerous in the Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few miles of the colony.	Moderate potential to occur along the proposed 500-kV and 115-kV routes.	Low potential to occur along Segments 1-8.

**Table 2 Special Status Wildlife Occurrence Potential for the Alberhill and Valley-Ivyglen Projects**

Scientific Name	Common Name	Conservation Status	Habitat Description	Potential to Occur on Alberhill Project	Potential to Occur on Valley-Ivyglen Project
<i>Aimophila ruficeps canescens</i>	Southern California rufous-crowned sparrow	MSHCP	A fairly common resident, and breeder, in cismontane southern California. Prefers relatively steep, often rocky hillsides, with dominant vegetation ranging from grasses and forbs, to a moderate shrub cover (including coastal sage scrub or sparse chaparral communities).	High potential to occur along the proposed 500-kV route. Present along the 115kV route.	Present along Segments 1-8.
<i>Ammodramus savannarum</i>	Grasshopper sparrow	SSC, MSHCP	Nests and forages in areas of relatively expansive grasslands (both native and non-native), including grasslands interspersed with occasional shrubs (e.g., sage scrub species) or taller weeds (e.g., wild artichoke). Can occur on level or sloping terrain; generally found in lower elevations.	High potential to occur along the proposed 500-kV routes and moderate potential to occur along the proposed 115-kV routes.	High potential to occur along Segments 1-8.
<i>Amphispiza belli belli</i>	Bell's sage sparrow	MSHCP	An uncommon, localized resident, and breeder, in cismontane southern California. Preferred habitat includes low, dense chaparral (typically chamise dominant) in interior foothills, as well as coastal sage scrub (often with white sage).	Moderate potential to occur along the proposed 500-kV and 115-kV routes.	Present along Segments 1-8.
<i>Aquila chrysaetos</i>	golden eagle	MSHCP, FP	Found in rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons and large trees in open areas provide nesting habitat.	Present along the proposed 500-kV routes (moderate potential to nest). Moderate potential to occur along the proposed 115-kV routes.	Present along Segments 1-8.
<i>Ardea herodias</i>	great blue heron	FP, MSHCP	Breeds very locally, especially away from the coast. Forages at a wide variety of wetland habitats, including ponds, marshes, creeks, flood control channels, etc. Also will forage for rodents in fallow agricultural fields and vacant lots. Clusters of tall trees (e.g., eucalyptus) are often used for nesting.	Unlikely to occur along the proposed 500-kV routes, due to minimal foraging habitat. High potential to occur along the proposed 115-kV routes, with moderate potential for nesting near wetlands with adjacent tall trees.	High potential to occur along the Segments 1-8, with moderate potential for nesting near wetlands with adjacent tall trees.

**Table 2 Special Status Wildlife Occurrence Potential for the Alberhill and Valley-Ivyglen Projects**

Scientific Name	Common Name	Conservation Status	Habitat Description	Potential to Occur on Alberhill Project	Potential to Occur on Valley-Ivyglen Project
<i>Asio otus</i>	long-eared owl	SSC	Medium-sized brown owl with conspicuous ear tufts. Found in riparian bottomlands with tall willows, cottonwoods, and oaks. Requires adjacent open land with abundant rodents and the presence of old nests of crows, hawks, or magpies for breeding.	Moderate potential to occur along the proposed 500-kV routes and unlikely along the proposed 115-kV routes as a winter visitor (unlikely for nesting at remote, well-developed riparian areas).	Low potential to occur along Segments 1-3. High potential to occur along Segments 4-8.
<i>Athene cunicularia</i>	burrowing owl	SSC, MSHCP	Inhabits open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Unlikely to occur along the proposed 500-kV routes due to lack of suitable habitat and terrain features. Present along the proposed 115-kV routes.	Moderate potential to occur along Segments 1-3. Present along Segments 4-8.
<i>Botaurus lentiginosus</i>	American bittern	MSHCP	A fairly rare winter visitor to southern California; formerly a regular breeder throughout the coastal slope. Generally restricted to fairly extensive freshwater marsh habitats with dense patches of cattails and rushes.	No potential to occur in the substation and 500-kV study area due to a lack of suitable habitat. Occurs (as a fly-over) in the proposed 115-kV study area.	Not included in applicant analyses
<i>Buteo regalis</i>	ferruginous hawk	MSHCP	A rare to uncommon transient and winter visitor in southern California. Typically requires extensive grasslands, sparsely vegetated rolling hills and agricultural fields for foraging habitat. Roosts in open areas, usually in a lone tree or utility pole.	Moderate potential to occur as a transient or winter visitor along the proposed 500-kV and 115-kV routes.	Moderate potential to occur along Segments 1-8.
<i>Buteo swainsoni</i>	Swainson's hawk	ST, MSHCP	A fairly rare, though increasing, spring and fall transient in southern California. Has been extirpated for years (from most of the region) as a breeder. Forages over a variety of open habitats, including grasslands, rangeland, agricultural fields.	Moderate potential to occur as a transient along the proposed 500-kV and 115-kV routes.	Present along Segments 4-8.
<i>Campylorhynchus brunneicapillus sandiegensis</i>	coastal cactus wren	SSC, MSHCP	Found in Southern California coastal sage scrub. Wrens require tall <i>Opuntia</i> cactus for nesting and roosting.	Unlikely to occur along the proposed 500-kV and 115-kV routes due to marginal breeding and foraging habitat.	Low potential to occur along Segments 1-8.

**Table 2 Special Status Wildlife Occurrence Potential for the Alberhill and Valley-Ivyglen Projects**

Scientific Name	Common Name	Conservation Status	Habitat Description	Potential to Occur on Alberhill Project	Potential to Occur on Valley-Ivyglen Project
<i>Chaetura vauxi</i>	Vaux's swift	SSC	In southern California, the Vaux's swift occurs only as a spring and fall migrant	Moderate potential to occur (as a transient) in the substation and 500-kV study areas. Occurs (as a fly-over) in the proposed 115-kV study area.	Not included in applicant analyses
<i>Circus cyaneus</i>	northern harrier	SSC, MSHCP	Small raptor found in coastal salt and fresh-water marsh. Nests and forages in grasslands, from salt grass in desert sinks to mountain marshes. Nests on ground in shrubby vegetation, usually at marsh edge. Nest built of a large mound of sticks in wet areas.	High potential to occur as a winter visitor along the proposed 500-kV routes and moderate potential to occur along the proposed 115-kV routes (moderate potential to nest along the proposed 500-kV routes and unlikely to nest along the proposed 115-kV routes due to lack of any substantial, undisturbed habitat).	Present along Segments 1-8.
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo	SSC, MSHCP	Inhabits extensive deciduous riparian thickets or forests with dense, low-level or understory foliage, and which abut on slow-moving watercourses, backwaters, or seeps. Willow almost always a dominant component of the vegetation.	No potential to occur in the substation, 500-kV, or the proposed 115-kV study areas due to a lack of suitable habitat.	Low potential to occur along Segments 1-8
<i>Cypseloides niger</i>	black swift	SSC, MSHCP	An extremely rare and localized summer resident (May to Aug.) and breeder, with breeding now restricted to only a few southern California sites. Requires relatively expansive tracts of mature floodplain riparian forest, generally consisting of dense cottonwoods and willows, with a well-developed understory component.	Moderate potential to occur as a rare transient along the proposed 500-kV and 115-kV routes (unlikely to breed due to lack of suitable habitat).	Moderate potential to occur as a rare transient along Segments 1-8. Low potential to breed along Segments 1-8 due to lack of suitable habitat.
<i>Elanus leucurus</i>	white-tailed kite	FP, MSHCP	An uncommon, resident breeder in cismontane southern California. Winter roost site concentrations occasionally form during winter. Occurs in a variety of open habitats, foraging over valley and foothill grasslands, meadows, open marshy bottomlands, and agricultural fields; requires scattered large trees or mature riparian groves, for nesting and winter roost sites.	Present adjacent to the proposed substation site. Moderate potential to occur along the proposed 500-kV and 115-kV routes as either a breeder or wintering roost.	Present along Segments 1-8.



**Table 2 Special Status Wildlife Occurrence Potential for the Alberhill and Valley-Ivyglen Projects**

Scientific Name	Common Name	Conservation Status	Habitat Description	Potential to Occur on Alberhill Project	Potential to Occur on Valley-Ivyglen Project
<i>Empidonax traillii extimus</i>	southwestern willow flycatcher	FE, SE, MSHCP	Small, olive-gray flycatcher that breeds in dense riparian habitats along rivers, streams, or other wetlands dominated by willows and other small trees. May also nest in tamarisk and Russian olive. Requires dense foliage less than 20 yards from water or saturated soil. Feeds on flying insects.	No potential to occur along the proposed 500-kV routes. Moderate potential to occur along the proposed 115-kV routes due to the presence of habitat.	High potential to occur along Segments 1-8.
<i>Eremophila alpestris actia</i>	California horned lark	MSHCP	In southern California, a fairly common winter visitor, and uncommon, localized summer resident/breeder. Occurs in winter, and as a breeder, in sparse grasslands, large vacant lots, fallow agricultural fields, rangeland, typically on relatively level terrain.	Occurs in the substation and proposed 115-kV study areas. Unlikely to occur in the 500-kV study area.	Present along Segments 1-8.
<i>Falco peregrinus</i>	peregrine falcon	SE, MSHCP	A fairly rare perennial visitor throughout cismontane southern California, with most occurring along the coast. Locally, has adapted to breeding in urban environments, especially where high-rise buildings and concentrations of rock doves, as a reliable food source, are present. In more natural settings, foraging habitat typically includes a variety of coastal and interior wetland communities, as well as open areas such as airports and farmland.	Unlikely to occur along the proposed 500-kV routes as a transient/ winter visitor. Moderate potential to occur along the proposed 115-kV routes as a transient/ winter visitor.	Low potential to nest along Segments 1-8. Present along segments 4-8.
<i>Haliaeetus leucocephalus</i>	bald eagle	FD, SE, FP, BCC, MSHCP	Occurs primarily as a fairly rare, localized winter visitor to southern California, preferring ocean shore, estuaries, lake margins, and riverine habitats. Nesting has recently been documented in southern California mountain lakes (e.g., Lake Hemet). Nests and roosts in large, old-growth trees as well as tall snags, especially where near open water or other open wetland habitats and available sources of food	Unlikely to occur (as a breeder) in the substation, 500-kV, or the proposed 115-kV study areas due to a lack of suitable habitat.	Not included in applicant analyses

**Table 2 Special Status Wildlife Occurrence Potential for the Alberhill and Valley-Ivyglen Projects**

Scientific Name	Common Name	Conservation Status	Habitat Description	Potential to Occur on Alberhill Project	Potential to Occur on Valley-Ivyglen Project
<i>Icteria virens</i>	yellow-breasted chat	SSC, MSHCP	Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 feet of ground.	Unlikely to occur along the proposed 500-kV routes. Moderate potential to occur in the more well-developed riparian areas along the proposed 115-kV routes.	Present along Segments 1-8.
<i>Lanius ludovicianus</i>	loggerhead shrike	SSC, MSHCP	A rare to uncommon breeding resident in southern California, with an influx into the region during winter. Prefers open terrain, with short vegetation, including rangeland, agricultural fields, open brushlands, etc. Was once more common and widely distributed in North America.	Occurs in the substation study area. Moderate potential to occur in the 500-kV and the proposed 115-kV study areas	Present along Segments 1-8.
<i>Nycticorax nycticorax</i>	black-crowned night heron	MSHCP	An uncommon to fairly common resident in southern California, being most common near the coast; breeds locally. Foraging habitat includes a variety of coastal and interior wetland communities, riparian woodlands and waterways. Roosts and breeds in dense marshes, or groves of dense trees (native or non-native) near water bodies or other foraging areas.	Occurs in the substation survey area (as a fly-over). Unlikely to occur in the 500-kV study area. Occurs in the proposed 115-kV study area.	Moderate potential to occur along Segments 1-8.
<i>Oreortyx pictus</i>	mountain quail	MSHCP	A generally uncommon breeding resident in the mountains of southern California. Rarely comes down to the foothills on the coastal slopes of the mountains. Prefer montane chaparral and a variety of montane woodlands where a brushy understory is also present.	Unlikely to occur in the substation, 500-kV, or the proposed 115-kV study areas due to their elevation and habitat preferences.	Not included in applicant analyses
<i>Pandion haliaetus</i>	osprey	MSHCP	An uncommon, primarily non-breeding visitor to southern California, with largest numbers occurring outside the breeding season. Nesting has been increasing in recent years, especially near the coast. Most frequent along the immediate coast, although occurs also at larger inland bodies of water (e.g., lakes, reservoirs, rivers).	No potential to occur along the proposed 500-kV routes due to a lack of suitable habitat. Moderate potential to occur along the proposed 115-kV routes primarily near areas of open water.	Low potential to occur along Segments 1-8.

**Table 2 Special Status Wildlife Occurrence Potential for the Alberhill and Valley-Ivyglen Projects**

Scientific Name	Common Name	Conservation Status	Habitat Description	Potential to Occur on Alberhill Project	Potential to Occur on Valley-Ivyglen Project
<i>Phalacrocorax auritus</i>	double-crested cormorant	MSHCP	Fairly common, year-round in southern California, with largest numbers during the non-breeding season. Breeding occurs locally, though is increasing, primarily along the coast. Preferred foraging areas typically include larger lakes, reservoirs and rivers, with tall trees and snags used for roosting.	Occurs in the substation, 500-kV, and proposed 115-kV study areas (as a flyover). Moderate potential to occur as a breeder in the proposed 115-kV study area primarily in areas of open water.	Low potential to occur along Segments 1-8.
<i>Picoides pubescens</i>	downy woodpecker	MSHCP	An uncommon to fairly common breeding resident in cismontane southern California, being more common to the north and west of Riverside Co. Inhabits a variety of woodland communities, including urban settings, though is most typical in a variety of riparian communities.	Occurs in the substation survey area. Unlikely to occur in the 500-kV study area. Moderate potential to occur in the proposed 115-kV study area.	Present along Segment 8.
<i>Plegadis chihi</i>	white-faced ibis	MSHCP	Generally, an uncommon, though increasing, transient and winter visitor to southern California; also occurs as a very local summer resident and breeder. Foraging birds occur in flooded agricultural fields, marshes, flood control ditches, etc.; breeders typically require fairly extensive, and undisturbed, marshes, with cattails, bullrush.	Occurs in the substation survey area (as a fly-over). Unlikely to occur along the proposed 500-kV routes due to generally unsuitable habitat. Moderate potential to occur as a visitor along the proposed 115-kV routes, especially in the larger flood control channels or marshes.	Moderate potential to occur along Segments 1-8.
<i>Polioptila californica californica</i>	coastal California gnatcatcher	FT, SSC, MSHCP	Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California. Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	Occurs in the substation, 500-kV, and proposed 115-kV study areas.	Present along Segments 1-8
<i>Progne subis</i>	purple martin	SSC, MSHCP	Restricted to Riversidean, Diegan and Venturan sage scrub communities, in arid washes, mesas, and on mild to moderate slopes. Habitat typically dominated or co-dominated by California sagebrush, California buckwheat, and brittlebush. Most populations occur below 1,500' elevation.	Unlikely to occur along the proposed 500-kV and 115-kV routes due to marginal habitat.	Low potential to occur along Segments 1-8.

**Table 2 Special Status Wildlife Occurrence Potential for the Alberhill and Valley-Ivyglen Projects**

Scientific Name	Common Name	Conservation Status	Habitat Description	Potential to Occur on Alberhill Project	Potential to Occur on Valley-Ivyglen Project
<i>Tachycineta bicolor</i>	tree swallow	MSHCP	A common spring and fall transient throughout southern California, and an uncommon, localized summer resident and breeder. For nesting, typically prefers open bodies of water, including rivers and marshy areas, with scattered trees and/or snags, or artificial nest boxes.	High potential to occur as a transient along the proposed 500-kV and 115-kV routes. Moderate potential to occur as a breeder along the proposed 115-kV routes.	Moderate potential to occur along Segments 1-8.
<i>Setophaga petechia brewsteri</i>	yellow warbler	SSC, MSHCP	A common spring and fall transient throughout southern California, and an uncommon, though increasing summer visitor (Apr. to Aug.) and breeder, primarily along the coastal slope. For breeding, requires mature riparian woodland, primarily consisting of tall cottonwoods, willows or alders.	Occurs in the substation and the proposed 115-kV study areas as a widespread transient (moderate potential to occur as a breeder in the substation and proposed 115-kV study areas). Moderate potential to occur as a transient in the 500-kV study area (Unlikely to occur as a breeder in the 500-kV study area).	Present along Segments 1-8.
<i>Spinus lawrencei</i>	Lawrence's goldfinch	SSC	Typically nests in arid, open woodlands near chaparral, weed fields, and small bodies of water.	High potential to occur along the proposed 500-kV and 115-kV line routes.	Present along Segments 4-8.
<i>Vireo bellii pusillus</i>	least Bell's vireo	FE, SE, MSHCP	Summer resident of Southern California in low riparian habitat or in dry river bottoms below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, mesquite, and other shrubs.	Unlikely to occur along the proposed 500-kV routes due to marginal habitat. Present at proposed substation site and along the proposed 115-kV routes.	Present along Segments 1-8
<b>Mammals</b>					
<i>Antrozous pallidus</i>	pallid bat	SSC	Small, light-colored bat with large eyes. Inhabits chaparral and shrub steppe vegetation; roosts in cliff and rock outcrops and shallow caves, and manmade structures. Feeds on flying insects.	Moderate potential to occur along the proposed 500-kV and 115-kV routes.	High potential to forage and low potential to roost along Segments 1-8.
<i>Chaetopidus californicus femoralis</i>	Dulzura California pocket mouse	SSC	Found at the scrub-grassland interface and woodlands and chaparral.	Unlikely to occur in the substation, 500-kV, or the proposed 115-kV study areas.	Moderate potential to occur along Segments 1-8.
<i>Chaetodipus fallax fallax</i>	Northwestern San Diego pocket mouse	SSC, MSHCP	Found in coastal scrub, chaparral, grasslands, sagebrush in sandy, herbaceous areas, usually in association with rocks or coarse gravel.	Occurs in the substation, 500-kV, and the proposed 115-kV study areas.	Present along Segments 1-8.

**Table 2 Special Status Wildlife Occurrence Potential for the Alberhill and Valley-Ivyglen Projects**

Scientific Name	Common Name	Conservation Status	Habitat Description	Potential to Occur on Alberhill Project	Potential to Occur on Valley-Ivyglen Project
<i>Dipodomys merriami parvus</i>	San Bernardino kangaroo rat	FE, SSC, MSHCP	Occurs over a very limited range within western Riverside and southwest San Bernardino counties. Alluvial sage scrub on alluvial fans, flood plains, along washes, in adjacent upland areas, and in areas with historic braided stream channels. Prefers the more open early and intermediate stages of alluvial sage scrub, but mature scrub provides important for animals to take refuge during floods.	No potential to occur along the proposed 500-kV routes due to the lack of suitable habitat. Unlikely to occur along the proposed 115-kV routes due to the presence of marginal habitat. Confirmed absent during surveys.	Low potential to occur along Segments 1-8.
<i>Dipodomys simulans</i>	Dulzura kangaroo rat	MSHCP	Occurs in gravelly and sandy soils in open chaparral and grassland communities. In southern California, occurs in lowland-scrub and coastal mountain habitat below 800 m.	Present in the Core Reserve north of the proposed 500-kV routes and along the proposed 115-kV routes.	Present along Segments 4-8.
<i>Dipodomys stephensi</i>	Stephens' kangaroo rat	FE, ST, MSHCP, SKR HCP	Found primarily in annual and perennial grasslands, but also occurs in coastal scrub and sagebrush with sparse canopy cover. Prefers buckwheat, chamise, brome grass and filaree. Will burrow into firm soil.	Occurs adjacent to the substation and 500-kV study areas. Occurs in the proposed 115-kV study area.	Present along Segments 1-8.
<i>Eumops perotis californicus</i>	western mastiff bat	SSC	Large brown bat with distinctive wrinkled snout. Occurs in riparian and woodland habitats, but may also occur in urban or disturbed areas. Roosts in cliff and rock outcrops, shallow caves, and manmade structures.	Moderate potential to occur along the proposed 500-kV and 115-kV routes.	Moderate potential to occur along Segments 1-8.
<i>Lasiurus blossevillii</i>	western red bat	SSC, MSHCP	Medium-sized light brown bat found in open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces, high buildings, trees and tunnels. Typically roosts singly in the foliage of trees in riparian environments.	Moderate potential to occur in along the proposed 500-kV and 115-kV routes.	High potential to forage and low potential to roost along Segments 1-8.
<i>Lasiurus xanthinus</i>	western yellow bat	SSC, MSHCP	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	Moderate potential to occur along the proposed 500-kV and 115-kV routes due to range and marginal habitat.	Moderate potential to forage along Segments 1-8.

**Table 2 Special Status Wildlife Occurrence Potential for the Alberhill and Valley-Ivyglen Projects**

Scientific Name	Common Name	Conservation Status	Habitat Description	Potential to Occur on Alberhill Project	Potential to Occur on Valley-Ivyglen Project
<i>Lepus californicus bennettii</i>	San Diego black-tailed jackrabbit	SSC, MSHCP	Inhabits intermediate canopy stages of shrub habitats and open shrub or forest edges.	Moderate potential to occur along the proposed 500-kV routes. Present along 115-kV Segment ASP2.	Present along Segments 1-8.
<i>Lynx rufus</i>	bobcat	MSHCP	Occurs throughout most of southern California, inhabiting a wide range of habitats including mixed woodlands and forest edge, marsh, riparian and various brushland communities (such as sage scrub and chaparral). Large tracts of habitat are most often favored. Rests or dens in rocky clefts, caves, rock shelters, hollow logs, under fallen trees, etc.	High potential to occur along the proposed 500-kV and 115-kV routes.	High potential to occur along Segments 1-8.
<i>Mustela frenata</i>	long-tailed weasel	MSHCP	A fairly common, though rarely seen, resident of southern California, west of the deserts, in a variety of habitats and elevations. Often near water. Favored habitats include brushlands, open woodlands, agricultural field edges, riparian communities and marshlands. Tolerant of close proximity to humans.	High potential to occur along the proposed 500-kV and 115-kV routes.	High potential to occur along Segments 1-8.
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	SSC, MSHCP	Found in coastal scrub of Southern California. Moderate to dense canopies preferred. They are particularly abundant in rock outcrops and rocky cliffs and slopes.	Occurs in the substation, 500-kV, and the proposed 115-kV study areas.	Present along Segments 1-8.
<i>Nyctinomops femorosaccus</i>	pocketed free-tailed bat	SSC	Found in pinyon-juniper woodland, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oasis habitats.	Unlikely to occur along the proposed 500-kV and 115-kV routes.	Low potential to occur along Segments 1-8.
<i>Onychomys torridus ramona</i>	southern grasshopper mouse	SSC	Found in desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover. Feeds almost exclusively on arthropods, especially scorpions and grasshoppers.	Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.	Moderate potential to occur along Segments 1-8.

**Table 2 Special Status Wildlife Occurrence Potential for the Alberhill and Valley-Ivyglen Projects**

Scientific Name	Common Name	Conservation Status	Habitat Description	Potential to Occur on Alberhill Project	Potential to Occur on Valley-Ivyglen Project
<i>Perognathus longimembris brevinasus</i>	Los Angeles pocket mouse	SSC, MSHCP	Found in low-elevation grasslands and coastal sage communities in and around the Los Angeles Basin. Open ground with fine sandy soils. May not dig extensive burrows, but instead hide under weeds and dead leaves.	Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas due to lack of suitable habitat.	Present along Segments 1-8.
<i>Puma concolor</i>	mountain lion	SSC, MSHCP	Occupies a wide variety of habitats, including brushlands and woodlands with good cover, wetlands, riparian communities, and occasionally in more open habitats. Studies have determined that habitat areas of at least 750 square miles are needed to ensure long-term population persistence (e.g., individual territories average well over 100 sq. miles per male, less for females). Protection of viable wildlife movement areas is considered very important for healthy lion populations.	High potential to occur along the proposed 500-kV routes. Unlikely to occur along the proposed 115-kV routes, due to level of human disturbance, limited preferred prey (deer), and extent of remaining open space.	Low potential to occur along Segments 1-8.
<i>Taxidea taxus</i>	American badger	SSC	Occurs in grasslands and scrublands with sparse cover. Excavates burrows for dens and breeding. Forages primarily on burrowing rodents, but also eats small birds, insects, and reptiles.	Moderate potential to occur along the proposed 500-kV and 115-kV routes.	Low potential to occur along Segments 1-8.

Sources: AECOM 2014a ; CNDDDB 2015; AMEC 2014a, 2014b

Key: Core Reserve = SKR HCP Lake Mathews-Estelle Mountain Core Reserve, FE = Federally Endangered, FT = Federally Threatened, SE = Endangered in the state of California, FP = Fully protected in the state of California, ST = Threatened in the state of California, SSC = CDFW Species of Special Concern, MSHCP = protected under the Western Riverside Multiple Species Habitat Conservation Plan, SKR HCP = Protected under the Stephens' Kangaroo Rat Habitat Conservation Plan

**Table 3 Impacts to State and Federal Jurisdictional Waters**

Feature	Description of Anticipated Impact	Feature Type	Habitat Type	USACE Impacts (acres/linear feet) <sup>a, b, c</sup>		RWQCB Impacts (acres/linear feet) <sup>a, b, c</sup>		CDFW Impacts (acres/linear feet) <sup>a, b, c</sup>	
				Permanent	Temporary	Permanent	Temporary	Permanent	Temporary
VIG1-1	New road crossing ephemeral wash with gabion	Other Waters	Unvegetated Channel	0.010/50	0.004/20	0.010/50	0.004/20	0.010/50	0.004/20
VIG1-2	New road crossing ephemeral wash with gabion	Other Waters	Unvegetated Channel	0.010/70	0.003/20	0.010/70	0.003/20	0.010/70	0.003/20
VIG1-3	Existing road crossing ephemeral wash with gabion	Other Waters	Unvegetated Channel	0.008/30	0.004/10	0.008/30	0.004/10	0.008/30-	0.004/10
VIG1-4	Existing road crossing ephemeral wash with gabion	Other Waters	Unvegetated Channel	0.003/30	0.001/10	0.003/30	0.001/10	0.003/30	0.001/10
		Wetland	Southern Willow Scrub	0.003/10	0.004/10	0.003/10	0.004/10	0.003/10	0.004/10
VIG1-5	Existing road crossing ephemeral wash with gabion	Other Waters	Unvegetated Channel	0.004/30	0.001/10	0.004/30	0.001/10	0.004/30	0.001/10
VIG1-6	Existing road crossing ephemeral wash with gabion	Other Waters	Unvegetated Channel	0.003/30	0.002/20	0.003/30	0.002/20	0.003/30	0.002/20
VIG1-7	New road and pole construction	Riparian	Southern Willow Scrub	0.005/40	0.012/20	0.005/40	0.012/20	0.005/40	0.012/20
VIG1-8	Riparian vegetation trimming for line clearance	Riparian/Wetland	Southern Willow Scrub	-	-	-	-	0.277/350	-
VIG1-9	Vegetation clearing for pole construction	Other Waters	Non-native Grassland	0.003/20	-	0.003/20	-	0.003/20	-
VIG1-10	Vegetation clearing for pole and temporary road construction	Other Waters	Non-native Grassland	0.007/20	0.426/200	0.007/20	0.426/200	0.007/20	0.426/200
VIG1-11	Road crossing ephemeral wash with new culvert	Other Waters	Unvegetated Channel	0.004/30	0.001/10	0.004/30	0.001/10	0.004/30	0.001/10
VIG1-12	Riparian vegetation trimming for line clearance	Riparian/Wetland	Southern Cottonwood/Willow Riparian Forest	-	-	-	-	0.122/130	-



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Feature	Description of Anticipated Impact	Feature Type	Habitat Type	USACE Impacts (acres/linear feet) <sup>a, b, c</sup>		RWQCB Impacts (acres/linear feet) <sup>a, b, c</sup>		CDFW Impacts (acres/linear feet) <sup>a, b, c</sup>	
				Permanent	Temporary	Permanent	Temporary	Permanent	Temporary
VIG1-13	Road crossing ephemeral wash with new culvert	Other Waters	Unvegetated Channel	0.012/80	0.004/40	0.012/80	0.004/40	0.012/80	0.004/40
VIG1-14	Temporary road grading across ephemeral wash	Other Waters	Unvegetated Channel	-	0.007/30	-	0.007/30	-	0.007/30
VIG1-15	Road crossing ephemeral wash with new culvert	Other Waters	Unvegetated Channel	0.014/110	0.005/50	0.014/110	0.005/50	0.014/110	0.005/50
VIG1-16	Riparian vegetation trimming for line clearance	Riparian/Wetland	Southern Willow Scrub	-	-	-	-	0.027/60	-
VIG2-1	New road crossing ephemeral wash with gabion	Other Waters	Unvegetated Channel	0.005/40	0.004/20	0.005/40	0.004/20	0.005/40	0.004/20
VIG2-2	New pole placement and riparian vegetation trimming for line clearance	Riparian/Wetland	Southern Cottonwood/Willow Riparian Forest	0.034/120	-	0.034/120	-	0.108/180	-
VIG2-3	New pole placement and riparian vegetation trimming for line clearance	Riparian/Wetland	Southern Cottonwood/Willow Riparian Forest	0.018/80	-	0.018/80	-	0.400/600	-
VIG2-4	Existing road grading in ephemeral wash	Other Waters	Unvegetated Channel	0.004/30	0.002/20	0.004/30	0.002/20	0.004/30	0.002/20
VIG2-5	Existing road grading in ephemeral wash	Other Waters	Unvegetated Channel	0.004/30	0.004/30	0.004/30	0.004/30	0.004/30	0.004/30
VIG2-6	Existing road grading in ephemeral wash	Other Waters	Unvegetated Channel	-	0.010/80	-	0.010/80	-	0.010/80
VIG2-7	Existing road grading in ephemeral wash	Other Waters	Unvegetated Channel	-	<0.001/3	-	<0.001/3	-	<0.001/3

**Table 3 Impacts to State and Federal Jurisdictional Waters**

Feature	Description of Anticipated Impact	Feature Type	Habitat Type	USACE Impacts (acres/linear feet) <sup>a, b, c</sup>		RWQCB Impacts (acres/linear feet) <sup>a, b, c</sup>		CDFW Impacts (acres/linear feet) <sup>a, b, c</sup>	
				Permanent	Temporary	Permanent	Temporary	Permanent	Temporary
VIG2-8	New road construction	Riparian	Mulefat Scrub	-	-	-	-	0.011/120	0.088/160
VIG2-9	New road and pole construction	Other Waters	Unvegetated Channel	0.024/140	0.020/140	0.024/140	0.020/140	0.037/140	0.050/140
VIG2-10	New road and pole construction	Riparian	Southern Cottonwood/Willow Riparian Forest	-	-	-	-	-	0.035/40
VIG2-11	New road and pole construction	Riparian	Southern Cottonwood/Willow Riparian Forest	-	-	-	-	-	0.012/30
VIG2-12	New road and pole construction	Riparian	Southern Cottonwood/Willow Riparian Forest	-	-	-	-	0.003/10	0.041/100
VIG2-13	New road and pole construction	Riparian	Southern Cottonwood/Willow Riparian Forest	-	-	-	-	-	0.008/50
VIG2-15	Pole construction in ephemeral wash	Other Waters	Unvegetated Channel	0.006/10	0.087/50	0.006/10	0.087/50	0.006/10	0.087/50
VIG2-16	Road and pole construction	Riparian	Southern Cottonwood/Willow Riparian Forest	-	0.037/70	-	0.037/70	-	0.186/320
		Wetland	Southern Cottonwood/Willow Riparian Forest	0.002/10	0.173/260	0.002/10	0.173/260	0.002/10	0.173/260
VIG2-17	Road and pole construction	Wetland	Southern Cottonwood/Willow Riparian Forest	-	0.021/80	-	0.021/80	-	0.021/80
VIG2-18	Road and pole construction	Wetland	Southern Cottonwood/Willow Riparian Forest	0.007/10	0.109/120	0.007/10	0.109/120	0.007/10	0.109/120
VIG2-19	Road and pole construction	Wetland	Southern Cottonwood/Willow Riparian Forest	0.013/20	0.008/10	0.013/20	0.008/10	0.013/20	0.008/10

**Table 3 Impacts to State and Federal Jurisdictional Waters**

Feature	Description of Anticipated Impact	Feature Type	Habitat Type	USACE Impacts (acres/linear feet) <sup>a, b, c</sup>		RWQCB Impacts (acres/linear feet) <sup>a, b, c</sup>		CDFW Impacts (acres/linear feet) <sup>a, b, c</sup>	
				Permanent	Temporary	Permanent	Temporary	Permanent	Temporary
VIG2-20	Road and pole construction in ephemeral wash	Other Waters	Unvegetated Channel	0.208/330	0.322/330	0.208/330	0.322/330	0.208/330	0.322/330
VIG2-21	Road and pole construction in ephemeral wash	Other Waters	Unvegetated Channel	0.001/10	0.006/40	0.001/10	0.006/40	0.001/10	0.006/40
VIG2-22	Existing road grading in ephemeral wash	Other Waters	Unvegetated Channel	-	0.018/40	-	0.018/40	-	0.018/40
VIG2-23	Road and pole construction in ephemeral wash	Other Waters	Unvegetated Channel	0.001/10	0.014/50	0.001/10	0.014/50	0.001/10	0.014/50
VIG2-24	Existing road grading in ephemeral wash	Other Waters	Unvegetated Channel	-	0.006/20	-	0.006/20	-	0.011/20
VIG2-25	Existing road grading in ephemeral wash	Other Waters	Unvegetated Channel	-	0.016/50	-	0.016/50	-	0.016/50
VIG2-26	Road construction in ephemeral wash	Other Waters	Unvegetated Channel	0.025/360	0.024/170	0.025/360	0.024/170	0.027/360	0.070/170
VIG2-27	Existing road crossing ephemeral wash with new gabion	Riparian	Southern Willow Scrub	0.010/20	0.026/40	0.010/20	0.026/40	0.036/20	0.077/40
VIG2-28	Road and pole construction in ephemeral wash	Other Waters	Unvegetated Channel	0.003/40	0.022/320	0.003/40	0.022/320	0.003/40	0.022/320
VIG2-29	Pole construction in ephemeral wash	Other Waters	Unvegetated Channel	-	0.016/40	-	0.016/40	-	0.030/40
VIG2-30	Pole construction in ephemeral wash	Other Waters	Unvegetated Channel	-	0.029/30	-	0.029/30	-	0.074/30
VIG2-31	Road and pole construction in ephemeral wash	Other Waters	Unvegetated Channel	0.004/40	0.024/110	0.004/40	0.024/110	0.004/40	0.024/110

**Table 3 Impacts to State and Federal Jurisdictional Waters**

Feature	Description of Anticipated Impact	Feature Type	Habitat Type	USACE Impacts (acres/linear feet) <sup>a, b, c</sup>		RWQCB Impacts (acres/linear feet) <sup>a, b, c</sup>		CDFW Impacts (acres/linear feet) <sup>a, b, c</sup>	
				Permanent	Temporary	Permanent	Temporary	Permanent	Temporary
VIG2-32	Road and pole construction in ephemeral wash	Other Waters	Unvegetated Channel	0.003/40	0.010/140	0.003/40	0.010/140	0.003/40	0.010/140
VIG2-33	Construction of underground line	Other Waters	Unvegetated Channel	-	0.064/40	-	0.064/40	-	0.064/40
VIG2-34	Construction of underground line	Other Waters	Unvegetated Channel	-	0.029/40	-	0.029/40	-	0.132/40
VIG2-35	Construction of underground line	Other Waters	Unvegetated Channel	-	0.003/20	-	0.003/20	-	0.003/20
VIG2-36	Construction of underground line	Other Waters	Unvegetated Channel	-	0.001/20	-	0.001/20	-	0.001/20
VIG2-37	Construction of underground line	Other Waters	Unvegetated Channel	-	0.022/40	-	0.022/40	-	0.022/40
VIG2-38	Construction of underground line	Other Waters	Unvegetated Channel	-	0.071/40	-	0.071/40	-	0.071/40
VIG2-39	Construction of underground line	Other Waters	Unvegetated Channel	-	0.240/440	-	0.240/440	-	0.240/440
VIG2-40	Construction of underground line	Other Waters	Unvegetated Channel	-	0.637/950	-	0.637/950	-	0.637/950
VIG2-41	Construction of underground line	Other Waters	Unvegetated Channel	-	0.786/1450	-	0.786/1450	-	0.786/1450
VIG2-42	Construction of underground line	Other Waters	Unvegetated Channel	-	0.037/30	-	0.037/30	-	0.037/30
VIG2-43	Construction of underground line	Other Waters	Unvegetated Channel	-	0.014/30	-	0.014/30	-	0.014/30
VIG2-44	Construction of underground line	Other Waters	Unvegetated Channel	-	0.024/40	-	0.024/40	-	0.024/40
VIG2-45	Construction of underground line	Other Waters	Unvegetated Channel	-	0.002/30	-	0.002/30	-	0.002/30
VIG2-46	Construction of underground line	Other Waters	Unvegetated Channel	-	0.022/30	-	0.022/30	-	0.022/30
VIG2-47	Construction of underground line	Other Waters	Unvegetated Channel	-	0.708/1680	-	0.708/1680	-	0.708/1680
VIG2-48	Construction of underground line	Other Waters	Unvegetated Channel	-	0.022/30	-	0.022/30	-	0.022/30

**Table 3 Impacts to State and Federal Jurisdictional Waters**

Feature	Description of Anticipated Impact	Feature Type	Habitat Type	USACE Impacts (acres/linear feet) <sup>a, b, c</sup>		RWQCB Impacts (acres/linear feet) <sup>a, b, c</sup>		CDFW Impacts (acres/linear feet) <sup>a, b, c</sup>	
				Permanent	Temporary	Permanent	Temporary	Permanent	Temporary
VIG2-49	Construction of underground line	Other Waters	Unvegetated Channel	-	0.032/30	-	0.032/30	-	0.032/30
VIG2-50	Construction of underground line	Other Waters	Unvegetated Channel	-	0.111/650	-	0.111/650	-	0.238/650
VIG2-51	Construction of underground line	Riparian	Southern Sycamore/Alder Riparian Woodland	-	-	-	-	-	0.001/10
VIG2-52	Construction of underground line	Riparian	Southern Sycamore/Alder Riparian Woodland	-	-	-	-	-	0.030/20
VIG2-53	Construction of underground line	Riparian	Southern Sycamore/Alder Riparian Woodland	-	-	-	-	-	0.012/20
VIG2-54	Construction of underground line	Other Waters	Unvegetated Channel	-	0.109/340	-	0.109/340	-	0.155/340
VIG2-55	Pole and underground construction	Other Waters	Unvegetated Channel	-	0.089/290	-	0.089/290	0.010/40	0.180/290
<b>Totals Phase 1</b>				<b>0.086/550</b>	<b>0.474/450</b>	<b>0.086/550</b>	<b>0.474/450</b>	<b>0.512/1090</b>	<b>0.474/450</b>
<b>Total Phase 2</b>				<b>0.374/1350</b>	<b>4.033/8513</b>	<b>0.374/1350</b>	<b>4.033/8513</b>	<b>0.895/2100</b>	<b>4.967/5376</b>
<b>Grand Totals</b>				<b>0.460/1900</b>	<b>4.507/8963</b>	<b>0.460/1900</b>	<b>4.507/8963</b>	<b>1.407/3190</b>	<b>5.441/5826</b>

Source: SCE 2013

**Table 4 Alberhill Project Potential Impacts on Federal and State Jurisdictional Waters**

Feature	Location	Feature Type	Habitat Type	USACE Impacts (acres/linear feet) <sup>a, b, d</sup>		RWQCB Impacts (acres/linear feet) <sup>a, b, d</sup>		CDFW Impacts (acres/linear feet) <sup>a, b, d</sup>		Avoidance of jurisdictional feature(s) being considered, but contingent upon final engineering
				Permanent	Temporary	Permanent	Temporary	Permanent	Temporary	
115kV Alignment										
ASP-1	Murrieta Road	Other Waters	Unvegetated Channel/ Vegetated Swale Feature	-	-	<0.01%/6	0.38/660	<0.01%/6	0.38/666	
ASP-2	Bundy Canyon and Murrieta Road (Laydown Yard ST-4)	Other Waters	Unvegetated Channel/ Swale Feature	-	-	-	0.04/419	-	-	
ASP-3	Bundy Canyon and Edwards Street	Other Waters	Unvegetated Channel	-	0.01/28	-	0.01/28	-	0.01/28	
		Riparian	Southern Coast Live oak Woodland	-	-	-	-	-	0.10	
<i>Feature Impact Subtotal</i>				-	0.01/28	-	0.01/28	-	0.12/28	
ASP-4	Lost Road and Gafford Road	Other Waters	Unvegetated Channel	-	<0.01/3	-	<0.01/3	-	<0.01/3	<b>X</b>
ASP5	Laydown Yard ST-3	Other Waters	Unvegetated Channel	-	0.01/151	-	0.01/151	-	0.04/151	<b>X</b>
ASP-6	Auto Center Drive	Other Waters	Unvegetated Channel	-	<0.01/15	-	<0.01/15	-	0.12/229	
ASP-7	Camino Del Norte	Other Waters	Unvegetated Channel/ Swale Feature	-	-	-	0.04/77	-	0.04/77	
Substation/500kV Alignment										
ASP-8	R13 Access Road	Wetland	Disturbed Wetland	0.01/30	0.01/5	0.01/30	0.01/5	0.02/30	<0.01/5	
		Riparian	Southern Riparian Woodland	-	-	-	-	0.03	0.08	
		Other Waters	Unvegetated Channel	0.02/165	0.02/205	0.02/165	0.02/205	0.03/165	0.03/205	
<i>Feature Impact Subtotal</i>				0.03/195	0.03/210	0.03/195	0.03/210	0.08/195	0.07/210	
ASP-9	Laydown Yard BP-1	Other Waters	Unvegetated Channel	-	0.28/1,007	-	0.28/1,007	-	0.63/1,007	<b>X</b>

**Table 4 Alberhill Project Potential Impacts on Federal and State Jurisdictional Waters**

Feature	Location	Feature Type	Habitat Type	USACE Impacts (acres/linear feet) <sup>a, b, d</sup>		RWQCB Impacts (acres/linear feet) <sup>a, b, d</sup>		CDFW Impacts (acres/linear feet) <sup>a, b, d</sup>		Avoidance of jurisdictional feature(s) being considered, but contingent upon final engineering
				Permanent	Temporary	Permanent	Temporary	Permanent	Temporary	
ASP-10	Between R7 and R8	Other Waters	Unvegetated Channel	-	0.08/290	-	0.08/290	-	0.14/290	
ASP-11	At R5	Other Waters	Unvegetated Channel/ Swale Feature	-	-	0.06/325	0.03/157	-	-	
ASP-12	Black Powder Road	Other Waters	Culvert	-	<0.01/15	-	<0.01/15	-	<0.01/15	
ASP-13	Substation Pond	Wetland	Southern Willow Scrub	0.20	-	0.20	-	0.63	-	
		Wetland	Coastal and Valley Freshwater Marsh	0.08	-	0.08	-	0.08	-	
<i>Feature Impact Subtotal</i>				<i>0.28</i>	<i>-</i>	<i>0.28</i>	<i>-</i>	<i>0.71</i>	<i>-</i>	
ASP-14	South of Alberhill Substation	Wetland	Southern Willow Scrub	-	0.09	-	0.09	-	0.10	
		Other Waters	Unvegetated Channel	-	0.01/148	-	0.01/148	-	0.01/148	
<i>Feature Impact Subtotal</i>				<i>-</i>	<i>0.10/148</i>	<i>-</i>	<i>0.10/148</i>	<i>-</i>	<i>0.11/148</i>	
<b>Grand Total of Impacts on Jurisdictional Waters</b>				<b>0.31/195</b>	<b>0.54/1,867</b>	<b>0.38/526</b>	<b>1.03/3,180</b>	<b>0.80/201</b>	<b>1.71/2,824</b>	

Source: SCE 2013, 2014