4.4 Biological Resources

This section describes the environmental and regulatory settings and discusses impacts associated with construction and operation of the proposed Valley–Ivyglen 115-kilovolt (kV) Subtransmission Line Project (proposed Valley–Ivyglen Project) and the proposed Alberhill System Project (proposed Alberhill Project) with respect to biological resources. During scoping of the proposed Alberhill Project, comment letters were received from the California Department of Fish and Wildlife[1] (CDFW) and the Riverside County Habitat Conservation Agency (RCHCA) regarding the Stephens' kangaroo rat (SKR), SKR habitat, SKR reserve land, and other wildlife and plant species (e.g., livestock and protected trees). Comments were also received regarding consistency with the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) and construction impacts on nesting birds and fully protected species. These comments are addressed below.

Public comments received during scoping for the proposed Alberhill Project expressed concern about the effects of electromagnetic fields on humans, livestock, and wildlife; effects of construction noise on livestock, wildlife, and migration corridors; and the adequacy of survey data used in impact analyses. Impacts on wildlife and migratory corridors and survey data adequacy are discussed below. Electromagnetic fields are discussed in Section 4.8, "Hazards and Hazardous Materials." Impacts from noise are addressed in this section and in Section 4.11, "Noise and Vibration."

A total of three microwave antennas would be installed on existing structures at the Santiago Peak Communication Site in the United States Forest Service Cleveland National Forest, as well as at the Serrano Substation in the City of Orange as part of the proposed Alberhill Project. Due to the minor construction and operation activities associated with these components, these components would have no impact on biological resources. Therefore, these components of the proposed Alberhill Project are not discussed further in this section.

4.4.1 Environmental Setting

4.4.1.1 Data Sources

The information presented in the environmental setting was compiled from scientific literature and database searches, coordination with resource experts, and the results of field surveys provided by Southern California Edison (SCE or the applicant). For the purpose of this document, Valley–Ivyglen Project Phase 1 encompasses 115-kV Segments VIG4 through VIG8, and Phase 2 encompasses 115-kV Segments VIG1 through VIG3.

Literature Search and Review

Information on biological resources within the proposed Alberhill and Valley–Ivyglen Project area was gathered through desktop analyses and review of applicant conducted field survey reports. The desktop analyses were conducted by reviewing regional literature and accessing agency databases and resources and geographic information system (GIS) layers. The following data resources were reviewed:

- California Natural Diversity Database (CNDDB) 2015 records search of the Romoland, Lake Elsinore, Winchester, Bachelor Mountain, Murrieta, Lakeview, Perris, Steele Peak, Wildomar, Sitton Peak, Lake Mathews, Santiago Peak, Corona South, Riverside, and Alberhill United States Geological Survey (USGS) 7.5-minute quadrangles;

[1] Formerly known as the California Department of Fish and Game (CDFG).

- California Native Plant Society's (CNPS's) 2015 online Inventory of Rare and Endangered Vascular Plants of California for Romoland, Lake Elsinore, and Alberhill USGS 7.5-minute quadrangles (CNPS 2015);
- United States Fish and Wildlife Service (USFWS) Information for Planning and Conservation (USFWS 2015a);
- Special Animals List (CDFW 2015);
- National Wetlands Inventory (USFWS 2015b);
- National Hydrography Dataset (USGS 2015); and
- National Resources Conservation Service (NRCS) Hydric Soils (NRCS 2013).

Additional local and regional biological resources were reviewed to identify pertinent ordinances or conservation plans, including the Riverside County General Plan, the SKR Habitat Conservation Plan (HCP), and the Western Riverside County MSHCP.

Field surveys were conducted by the applicant and their biological consultants. Appendix E includes a list of applicant-supplied surveys reports used for the Valley–Ivyglen and Alberhill analyses. Survey methodologies are discussed below, as well as within each biotechnical report (Appendices F1, F2, and F3).

Vegetation Mapping Methods

The proposed Alberhill Project and Valley–Ivyglen Project are located within the MSHCP area, and vegetation communities within the proposed project area have been classified and mapped according to the MSHCP Conservation Area descriptions (Riverside County 2003a). The MSHCP vegetation types were used in place of those described in *A Manual of California Vegetation* to maintain consistency between this report and local HCP, which is consistent with the protocols of the CNPS (CNPS 2001). The applicant visually identified vegetation communities and dominant plant species and mapped communities on ortho-rectified aerial photographs of the proposed project area (AECOM 2011a; AMEC 2013a, 2013b).

To estimate impacts on each vegetation community, the proposed disturbance areas for each project component were layered over applicant-provided GIS vegetation layers (SCE 2013a). Impacts were calculated based on the acreage of each vegetation type that intersected the disturbance areas. In certain instances, ground-truthed data obtained during site visits were used in place of GIS data.

Special Status Plant Survey Methods

Protocol-level surveys were conducted for special status plants and MSHCP Narrow Endemic Plants (Appendix E) within the proposed Alberhill and Valley–Ivyglen Project areas. Botanical surveys for the proposed Alberhill and Valley–Ivyglen Projects were conducted from 2006 through 2014 following *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Species (*USFWS 2000*)*; *CNPS Botanical Survey Guidelines* (CNPS 2001); *Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities* (CDFG 2000); and *Protocols for Surveying and Evaluating Impacts on Special Status Native Plant Populations and Natural Communities* (CDFG 2009).

The applicant's surveys were conducted by qualified biologists during the optimal blooming period for each of the special status species identified as having the potential to occur in the proposed project area. Developed portions of the proposed project area were excluded from the acreage surveyed due to lack of

suitable plant habitat. The remaining undeveloped grassland and sage scrub habitat were surveyed on foot. To ensure thorough coverage of the surveyed area, pedestrian transects were systematic and spaced appropriately to compensate for varying vegetation densities and topography encountered. An effort was made to field survey 100 percent of the areas that may be impacted by construction or operation of the proposed project; however, areas inaccessible due to steep topography were surveyed by scanning the ground surface with binoculars. Every plant taxon encountered was identified to the taxonomic level necessary to determine its rarity and listing status, and any species that could not be immediately identified were brought into the laboratory for further investigation.

Oak Tree Survey Methods

Oak trees were surveyed in October and November 2011 for the proposed Alberhill Project. Survey locations within the project area were located in areas within 30 feet of known transmission lines, from the western project boundary at Interstate-15 (I-15) on Temescal Canyon Road to the eastern termination of the Alberhill 115-kV subtransmission line alternate route. Trees within the survey area were numbered and tagged, and evaluated for health, structural, and aesthetic quality (AECOM 2012a).

No oak trees were found on or adjacent to the VIG Phase 1 Project alignment (AMEC 2014a). For Phase 2, oak tree surveys were completed in October and November 2014 within 40 feet of the proposed centerline (AMEC 2014b). Tree location and canopy extent was mapped in the field and measurements were taken for trunk diameter at breast height, canopy spread, and height (AMEC 2014b).

Special Status Wildlife Survey Methods

The applicant conducted surveys to characterize wildlife habitat types and to evaluate the potential for occurrence of special status wildlife species in the proposed project area. The proposed project area was traversed by foot and vehicle to survey each vegetation community for evidence of wildlife presence. All wildlife and wildlife signs, including tracks, scat, nests, and vocalizations were noted. Protocol-level surveys for the following special status species were conducted (Appendix E):

- Southwestern willow flycatcher
- Coastal California gnatcatcher
- Least Bell's vireo
- Western yellow-billed cuckoo
- Vernal pool fairy shrimp
- Riverside fairy shrimp
- Western burrowing owl
- Quino checkerspot butterfly
- Arroyo toad
- SKR
- Los Angeles pocket mouse

For each survey, qualified biologists followed survey protocols set forth by the appropriate jurisdictional agency (e.g., CDFW, United States Army Corps of Engineers [USACE], or USFWS). In general, protocol-level surveys were conducted along the right-of-way (ROW) in the proposed project areas where suitable habitat existed for each species.

Jurisdictional Features Assessment Methods

A formal jurisdictional delineation of hydrologic features in proximity to the components of the proposed project area was conducted by the applicant for the proposed Alberhill and Valley–Ivyglen Projects. Surveyors used methods described in the USACE *Wetland Delineation Manual* (1987), the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008a), and *A Field Guide to the Identification of the Ordinary High Water Mark in the Arid West Region of the Western United States* (USACE 2008b). Hydrologic features were assessed for potential indicators of

stream, riparian, or wetland functions. Where wetland indicator vegetation was present, soil characteristics were evaluated from core samples obtained by auger. Dominant plant species were identified within plots of 3 square meters. Standard field survey forms for the Arid West Region were used to record and summarize field observations. The surveys were performed with consideration of the following agencies and regulations that would have jurisdictional authority over hydrologic resources in the proposed project area: USACE, CDFW, Regional Water Quality Control Board (RWQCB), and MSHCP.

Surveys for Additional Staging Areas

Field surveys for staging areas VIG10, VIG12, VIG13, VIG14, and ASP 14 were completed on September 15 and 16, 2015 (AECOM 2015). Plant communities were assessed using the CNPS/ CDFW Protocol for Combined Vegetation Rapid Assessment (CNPS 2014). The plant communities were first mapped as polygons using aerial imagery and then ground-truthed in the field. Reconnaissance-level pedestrian surveys were completed to assess habitat suitability for each sensitive plant and wildlife species with the potential to occur within the vicinity of the proposed staging areas. These surveys were performed outside of peak blooming season for most early spring and summer annual plant species.

4.4.1.2 Common and Special Status Natural Communities

The plant communities and habitat types within the proposed project area are described below. Plant communities were characterized using MSHCP methods (Volume II, Section C; Riverside County 2003a), which identifies plant communities according to the *Preliminary Descriptions of Terrestrial Natural Communities of California* (Holland 1986). Characterization was also aided by *A Guide to Wildlife Habitats of California* (Mayer and Laudenslayer 1988). Some vegetation communities, such as coast live oak woodland or subsets of more common communities (e.g., Riversidean sage scrub) are special status natural communities according to the CDFW.

Special status natural communities are defined as communities that are of limited distribution statewide or within a county or region and are often vulnerable to the environmental effects of development projects (CDFG 2009). These communities may or may not contain special status species or comprise their habitat, and may be interspersed with or represent subcomponents of more common vegetation types described in the previous section.

For this analysis, a list of special status natural communities were identified through a CNDDB inquiry of topographic quadrangles for the proposed Alberhill and Valley–Ivyglen project areas. The acreage of each vegetation community intersecting with project components was determined using applicant-provided GIS vegetation layers overlaid with the general disturbance areas for each project (SCE 2013b, 2014a). The title and description of the following special status natural communities are derived from the vegetation types described in the MSHCP, which generally follow the Sawyer-Keeler-Wolf and Holland classification systems (Sawyer, Keeler-Wolf and Evens 2009; Holland 1986). Special status vegetation communities are designated in parentheses below.

Southern Cottonwood-Willow Riparian Forest and Southern Willow Scrub (Special Status)

These forest and scrub communities are dominated by willows and occur around stream banks, slope seeps, and drainages. This vegetation community is valuable for its ability to stabilize banks and slopes. Plant species associated with this community include wax myrtle, Mexican elderberry, mulefat, and California sycamore.

Southern Mixed Riparian Forest and Southern Riparian Forest (Special Status)

In Western Riverside County, these vegetation communities are comprised of two co-dominant tree species, the Peruvian pepper tree and the ngaio tree. Both species are exotic species, introduced from Peru and New Zealand, respectively. Native species present in this community include willows, alders, and cottonwoods.

Southern Sycamore Alder Riparian Woodland (Special Status)

This community can be found in gullies and around intermittent streams, springs, stream banks, and terraces adjacent to floodplains. In Western Riverside County, this community occurs along low-elevation streams. This community is dominated by two tree species, California sycamore and alder. This woodland is one of the state's rarer vegetation communities because California sycamore does not compete well with other more obligate wetland trees such as alders and willows, and is often grazed or flooded due to human activities. Species associated with this community include slender wild oats, valley oak, Fremont cottonwood, and arroyo willow.

Coastal Sage Scrub or Riversidean Sage Scrub (Special Status)

This community is characterized by low, deciduous shrub species such as California sagebrush, California buckwheat, laurel sumac, and other sage species. This community is often interspersed with other plant communities such as grassland, chaparral, and oak riparian woodlands.

Chamise Chaparral (Special Status)

Chaparral is one of the most common and widespread vegetation types in Western Riverside County, occurring along the Santa Ana, San Bernardino, San Jacinto, and Agua Tibia Mountains. This shrub-dominated community is composed of low-growing evergreen species, the most common being chamise. Other species that may be present include manzanita, oak, laurel sumac, and toyon.

Coast Live Oak Woodland (Special Status)

This plant community occurs on cool, steep slopes or adjacent to stream channels in the interior of the woodland canopy. The woodland canopy can be continuous or open. This community is dominated by coast live oaks, which reach heights between 30 and 60 feet. Coast live oak woodland supports an understory of shade-tolerant species such as wild blackberry, California bay, poison oak, and miner's lettuce.

Non-native Grassland

Nonnative grassland is composed of introduced annual grass species with variable presence of other nonnative and native herbaceous species. These grasslands within the study area vary in quality and often intergrade into other communities. Some are annually disked while others are relatively undisturbed and intermixed with native annuals. Nonnative grasses found within the study area include slender oat, wild oat, red brome, foxtail barley, and English ryegrass. Herbaceous annual forbs present include nonnatives such as red-stem filaree, mustards, and common catchfly and disturbance tolerant native species such as doveweed, vinegar weed, and tarweeds.

Riversidean Alluvial Fan Scrub

In addition to scalebroom, this vegetation community is typically composed of white sage, redberry, flat-top buckwheat, cholla, tarragon, yerba santa, mulefat, and mountain-mahogany. Two sensitive annual species endemic to alluvial scrub vegetation in the MSHCP area include slender-horned spineflower and Santa Ana River woolly-star.

Cismontane Alkali Marsh

Typical cismontane alkali marsh species include yerba mansa, saltgrass, alkali-heath, cattails, common pickleweed, rushes, marsh flea-bane and sedges.

Mulefat Scrub

Mulefat scrub is dominated by mulefat, but also may include willows, sedges, and stinging nettle.

Riparian Scrub

Areas mapped as riparian scrub are dominated by willows, Mexican elderberry, and mulefat all at a younger successional stage than mature riparian forest.

Open Water

Open water habitat typically is unvegetated due to a lack of sunlight. However, open water may contain suspended organisms such as filamentous green algae, phytoplankton (including diatoms) and desmids. Floating plants such as duckweed, water buttercup and mosquito fern also may be present.

4.4.1.3 Jurisdictional Waters

Wetlands are ecologically productive habitats that support a diversity of plant and animal life. Often, species endemic to wetlands are found in no other habitat type. Wetlands are recognized as important natural systems because of their value to fish and wildlife, and their functions as storage areas for flood flows, groundwater recharge, nutrient recycling and water quality improvement. Wetlands are defined as areas that are periodically or permanently inundated by surface or ground water and support vegetation adapted to saturated soils.

The proposed Alberhill and Valley–Ivyglen Project areas traverse numerous drainages and wetland areas within the Santa Ana and San Jacinto River Watersheds. This portion of Western Riverside County is dominated by ephemeral washes that flow into the San Jacinto River and Temescal Wash, then continue into the Santa Ana River. The majority of waterways in the project area are minor ephemeral drainages containing water for short periods of time during large storm events. Larger waterways, including the San Jacinto River and Temescal Wash may be identified as seasonal waterways, containing water for longer periods on a seasonal basis, but not always perennially throughout their entire reaches. For a detailed description of the hydrology of the project area, see Section 4.9, "Hydrology and Water Quality."

4.4.1.4 Special Status Species

For the purposes of this environmental impact report (EIR), the term *special status species* refers to any of the following:

- Species listed as Endangered or Threatened under the Endangered Species Act (ESA) (Title 50, Code of Federal Regulations [CFR] Sections 17.11 and 17.12);
- Species listed as Endangered, Threatened, or Rare under the California Endangered Species Act (CESA) (Sections 670.2 and 670.5, Title 14, California Code of Regulations);

- Species without a formal listing status that meet the definitions of Endangered or Rare under California Environmental Quality Act (CEQA) Guidelines Section 15380, including CDFW Species of Special Concern, CNPS rare plant ranks 1B and 2, Candidate, or Proposed species for listing under the ESA, and USFWS Birds of Conservation Concern;
- Species listed as Species of Special Concern or Fully Protected by the CDFW; or
- Species protected under the MSHCP or SKR HCP.

Special status species occurrences or potential occurrences in the proposed project area and species covered under the MSHCP are listed in Appendix G (Tables 1 and 2). Additional information about these species is included in the technical studies for the proposed projects, which can be found in Appendices F1, F2, and F3. Expanded species descriptions are provided below for species known to inhabit proposed project areas or have high potential to occur.

Special Status Plants and Wildlife

Many of the special status plants found within the project area, including those plants designated as Narrow Endemic and Criteria Area Survey Species by the MSHCP, have specific and narrow habitat requirements, such as associations with specific soils or vegetation communities (Figure 4.4-1). Additionally, many of these species have specific physiological requirements, such as a need for certain amounts of rainfall and dry periods in order to bloom.

Multi-year, applicant-conducted surveys and CNDDB inquiry results for the topographic quadrangles in which the proposed Valley–Ivyglen and Alberhill Project components are located indicate that numerous sensitive plant and wildlife species could potentially occur in the proposed project area. Focused surveys for covered species were conducted as required under the MSHCP.

Focused or protocol-level surveys[2] were conducted for several threatened or endangered wildlife and plant species with the potential to occur within the project area, including SKR, least Bell's vireo, vernal pool fairy shrimp, Riverside fairy shrimp, coastal California gnatcatcher, Munz's onion, San Diego ambrosia, smooth tarplant, many-stemmed dudleya, spreading navarretia, California orcutt grass, Wright's trichocoronis, slender-horned spineflower, San Miguel savory, and Hammitt's clay cress. Appendix G (Tables 1 and 2) list all special status species with the potential to occur in the project area for the proposed Alberhill Project and the Valley–Ivyglen Projects.

4.4.1.5 Wildlife Corridors

A wildlife corridor is defined as a linear landscape feature that allows animal movement between two patches of habitat or between habitat and geographically discrete resources such as water (SDMMP 2011). Connections between extensive areas of open space are integral to maintaining regional biological diversity and population viability. Areas that serve as wildlife movement corridors are considered biologically sensitive because they can facilitate the persistence of special status species. In the absence of corridors, habitats become fragmented, isolated islands surrounded by development. Fragmented habitats support much lower numbers of species and increase the likelihood of extinction for select species.

[2] Focused wildlife surveys are those undertaken according to methods outlined by the Western Riverside MSCHP. Protocol-level surveys are those undertaken according to standards or guidelines published by wildlife agencies (e.g., CDFW, USFWS) or professional wildlife organizations (e.g., California Burrowing Owl Consortium).

Path: \\prtbhp1\GIS\SanFrancisco\CPUC\VIG_ASP\Maps\MXDs\Figure4_4_2_SKR_Conservation_Areas.mxd

IVYGLEN SUBSTATION
PROPOSED ALBERHILL SUBSTATION
LEE LAKE
SANTIAGO PEAK COMMUNICATIONS SITE
FOGARTY SUBSTATION
ELSINORE SUBSTATION
LAKE ELSINORE
CANYON LAKE
NEWCOMB SUBSTATION
SKYLARK SUBSTATION
VALLEY SUBSTATION
74
15
215

Stock Pond
Import soil source area
0 1,000 2,000 Feet

0 1 2 Miles
0 1 2 Kilometers

Source: AMEC 2011, ESRI 2010, SCE 2011, 2013, SJM 2010b, 2011, WRCRCA 2010, RCHCA 2007

- 1 VIG1
- 2 VIG2
- 3 VIG3
- 4 VIG4
- 5 VIG5
- 6 VIG6
- 7 VIG7
- 8 VIG8

- 1 ASP1
- 1.5 ASP1.5
- 2 ASP2
- 3 ASP3
- 4 ASP4

- 5 ASP5
- 6 ASP6
- 7 ASP7
- 8 ASP8

- Existing Substations
- Proposed Alberhill Substation
- Proposed 500-kV transmission lines
- 500-kV Serrano Valley Transmission Line
- Segment begin / end

- SKR occurrence / occurrences area
- RCHCA core reserve
- WRCRCA MSHCP Additional Reserve Land
- WRCRCA MSHCP area

- MSHCP sensitive soils
- RCHCA SKR HCP area
- High-quality habitat identified in RCHCA SKR HCP
- Castle & Cooke Property (MSHCP does not apply)

Figure 4.4-**1**

Stephens' Kangaroo Rat Conservations Areas and Occurences

Alberhill and Valley–Ivyglen Projects

Riverside County, California

Important distinctions exist between regional and local corridors. Regional corridors link two or more large areas of natural open space and maintain demographic and genetic exchange between wildlife populations residing within these geographically distinct areas, whereas local corridors give resident animals access to essential resources (water, food, cover, or den sites) within a large habitat patch and may also function as secondary connections to the regional corridor system. Different species have different corridor use potentials. For example, a landscape feature that functions as a corridor for a songbird may not suffice for a mountain lion or a reptile. Another useful distinction can be drawn between natural and constructed corridor elements. Natural elements are features of the landscape, such as canyons or riparian strips, which are conducive to animal movement. Constructed elements, such as roadway bridges and drainage culverts, are often part of a corridor. Wildlife corridors in a partially developed landscape generally include both natural and constructed elements. The MSHCP identifies blocks of contiguous habitat for covered species ("cores") and corridors for movement between cores ("linkages") (Riverside County 2003b). Analyses of impacts on MSHCP Schematic Cores and Linkages are included in this EIR under Impact BR-4 (ASP).

In the proposed project area, riparian corridors provide shade, cover, water, food, and discrete corridors for wildlife movement. Barriers to movement include the highways and paved roads (such as I-15 and State Route 74), as well as the numerous residential neighborhoods along the proposed transmission corridor. Areas of mountainous terrain, while providing corridors, may also present barriers to some species unable to navigate the steep topography. The MSHCP has identified numerous species that may utilize habitat corridors for movement, including coastal California gnatcatcher, SKR, bobcat, mountain lion, least Bell's vireo, Belding's orange-throated whiptail, and Quino checkerspot butterfly (Riverside County 2003a). The MSHCP promotes the conservation of contiguous habitat for these species, especially habitat containing appropriate refugia, foraging, and breeding habitat.

4.4.2 Regulatory Setting

4.4.2.1 Federal

Federal Endangered Species Act

Enacted to protect threatened and endangered (T&E) species and the ecosystems upon which they depend, the ESA (16 United States Code [U.S.C.] 1531 *et seq*.) is administered by USFWS and the National Marine Fisheries Service (NMFS). The USFWS has primary responsibility for terrestrial and freshwater organisms, while the NMFS is mainly responsible for marine wildlife such as whales and anadromous fish such as salmon. The ESA makes it unlawful for any person to take a listed T&E species without a permit. Take is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." Section 7 of the ESA requires a federal agency to consult with the USFWS when any action it carries out, funds, or authorizes may affect a listed T&E species. For projects that are not carried out, funded, or authorized by a federal agency, Section 10 of the ESA allows the USFWS to issue a permit to the project proponent to take listed T&E species incidental to otherwise legal activity.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) makes it illegal to "pursue, hunt, take, capture, kill, attempt to take, capture, kill, possess, sell, and barter" native migratory bird species without a permit. The MBTA (16 U.S.C. 703–712) was enacted in response to the decline of migratory bird populations from uncontrolled commercial uses. The MBTA is a multi-national effort to protect migratory birds and bird parts, including eggs, young, nests, and feathers. This act extends to almost all migratory birds and includes 836 species, including 58 species that may be legally hunted. The MBTA excludes certain game birds and non-native species (e.g., quail, turkeys, European starlings).

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (16 U.S.C. 668–668d, 54 Stat. 250) was enacted in 1940 to preserve eagle populations from wanton killing and population declines. This act makes it illegal to take bald eagles (*Haliaeetus leucocephalus*) or golden eagles (*Aquila chrysaetos*) eagles or to trade in eagle parts, eggs, or feathers. Take has been broadly interpreted to include altering or disturbing nesting habitat.

Additionally, this act prohibits molestation and disturbance. Rule changes made on September 11, 2009, Eagle Rule, 50 CFR Parts 13 and 22, finalized permit regulations to authorize limited take associated with otherwise lawful activities (74 Federal Register 175 [11 September 2009]). These new regulations established permit provisions for intentional take of eagle nests under particular limited circumstances.

Clean Water Act

Section 404

The Clean Water Act (CWA) (33 U.S.C. 1251 *et seq*.) regulates the discharge of pollutants into waters of the U.S. with the objective to restore and maintain the chemical, physical, and biological integrity of the nation's waters. Under Section 404 of the CWA, the USACE is authorized to regulate the discharge of fill or dredged material into waters of the U.S., which includes wetlands. Wetlands are defined as land "inundated or saturated by surface or ground water at a frequency or duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3; 40 CFR 230.3). The USACE has the authority to determine if a wetland or waterbody is subject to regulatory jurisdiction under Section 404. A Section 404 nationwide or individual permit from the USACE is required if the project would dredge or fill waters of the U.S.

The USACE evaluates permit applications for all construction activities that may impact waters of the U.S., including navigable waters. The USACE either performs or receives jurisdictional delineations for proposed developments and then provides a jurisdictional determination. The jurisdictional review performed by the USACE may require modifications of development plans to avoid or reduce impacts on waters of the U.S.

Section 401

Section 401 of the CWA stipulates that a federal agency cannot issue a permit or license for an activity that may result in a discharge to waters of the U.S. unless the state or tribe where the discharge would originate has granted or waived Section 401 water quality certification. The state or tribe may grant, grant with conditions, deny, or waive certification. In California, the RWQCB administers the Section 401 Water Quality Certification Program. Section 401 certification is required before the USACE may issue a Section 404 permit for discharge of dredged or fill material into waters of the U.S. Many states, including California, rely on Section 401 certification as a primary regulatory tool for protecting wetlands and other aquatic resources.

4.4.2.2 State

California Endangered Species Act

The CESA (California Fish and Game Code [CFGC] Section 2050 *et seq*.) establishes legal protection for state-listed T&E plants and wildlife under the guidance of the CDFW. The CDFW also identifies species of concern as those that may become listed as threatened or endangered due to loss of habitat, limited distributions, and diminishing population sizes or because the species is deemed to have scientific, recreational, or educational value. CFGC Section 2081 provides a permit process for incidental take of species listed as T&E pursuant to CESA when certain permit conditions are met.

California Fish and Game Code Section 1600 et seq.

Pursuant to CFGC Section 1600 *et seq*., CDFW has authority over all perennial, intermittent, and ephemeral rivers, streams, and lakes in the state, and requires any person, state, or local governmental agency, or public utility to notify the CDFW before beginning any activity that would "substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake" that supports fish or wildlife resources. A Lake or Streambed Alteration Agreement may be required for any proposed project that would result in an adverse impact to a river, stream, or lake. CDFW jurisdiction typically extends to the top of the bank and out to the outer edge of adjacent riparian vegetation, if present.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act defines waters of the state as "any surface water or groundwater, including saline waters, within the boundaries of the state." These waters include those considered waters of the U.S. under the jurisdiction of the USACE, as well as waters not covered by the USACE. The Porter-Cologne Water Quality Control Act established state and regional water quality control boards as the primary agencies responsible for the coordination and control over water quality in waters of the state. Pursuant to California Water Code Section 13260, a "person discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the state, other than into a community sewer system" must file a report of the discharge and application for waste discharge requirements with the appropriate RWQCB.

California Fish and Game Code, Sections 3503, 3503.5, 3511, and 5050

According to CFGC Section 1802, the CDFW has jurisdiction over the conservation, protection, and management of all California wildlife, fish, native plants (including state-listed T&E and other special status species), and their habitats necessary to maintain biologically sustainable populations. CFGC Section 3503 specifies the following general provision for birds: "it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto." Section 3503.5 states that it is "unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Construction disturbance during the breeding season that results in the incidental loss of fertile eggs or nestlings or otherwise leads to nest abandonment is considered take. The CDFW also considers disturbance that causes nest abandonment or loss of reproductive effort to be take. Sections 3511 and 5050 prohibit the taking and possession without a permit of birds and reptiles listed as "fully protected."

California Native Plant Protection Act of 1977

CFGC Section 1900 establishes the California Native Plant Protection Act, which includes provisions that prohibit the taking of listed rare or endangered plants from the wild. The act also includes a salvage requirement for landowners. Furthermore, it gives the CDFW authority to designate native plants as endangered or rare and establishes protection measures.

California Code of Regulations

Sections 670.2 and 670.5 list wildlife and plant species listed as threatened or endangered in California or by the federal government under the ESA. Species considered future protected species by the CDFW are designated California Species of Special Concern. Species of Special Concern currently have no legal status but are considered indicator species that are useful for monitoring regional habitat changes.

CEQA Guidelines Section 15380

In addition to species listed on the federal and state lists of protected species, CEQA Guidelines Section 15380(d) provides that a species shall be considered endangered, rare, or threatened if the species can be shown to meet certain specified criteria. A species may be considered "endangered" when its survival and reproduction in the wild are immediately threatened. A species may be considered "rare" when the species exists in such small numbers or in only a small portion of its range so that it may become endangered if the conditions of its habitat worsen. A species may be considered "threatened" if it meets the federal ESA criteria.

Non-listed species that may be considered under CEQA include, but are not limited to, plants categorized by the CNPS as rare or endangered (including those species considered rare and endangered only within California) or any plants considered locally or regionally significant by local governments or agencies. Because CEQA does not limit the discussion of impacts on species listed as T&E by either the federal or state governments, biological impacts are assessed and mitigation measures are assigned on a case-by-case basis, accounting for the scope of the project, the specifics of the site, and the individual species in question, among other factors.

4.4.2.3 Regional and Local

Western Riverside County Multiple Species Habitat Conservation Plan

The MSHCP serves as an HCP pursuant to Section 10(a)(1)(B) of the ESA and a Natural Communities Conservation Plan pursuant to the California Natural Communities Conservation Planning Act. The MSHCP was adopted by the County of Riverside in 2003 and is administered by the Western Riverside County Regional Conservation Authority (RCA). The MSHCP is one of several large, multi-jurisdictional habitat conservation planning efforts in Southern California that are designed to maintain biological diversity within rapidly urbanizing areas. The MSHCP provides conservation for 146 special status species, including federal and state listed endangered and threatened species, and provides incidental take permits for development projects that may impact these species. MSHCP areas are shown on Figure 4.4-1.

All components of the proposed project would be located within the MSHCP area except for the 115-kV Segment ASP2 and VIG5 sections that traverse the Castle and Cooke property (Figure 4.4-1). The Castle and Cooke property is exempt from measures or restrictions presented in the MSHCP. However, the applicant is entering into an agreement with the RCA to allow for coverage of the proposed project under the MSHCP on Castle and Cooke property.

The MSHCP requires that project sites be evaluated for a number of factors to assess how they meet criteria identified in the MSHCP. As part of this evaluation, MSHCP provisions require:

- Site-specific focused surveys for Narrow Endemic Plant Species and for all public and private projects where appropriate habitat is present. A narrow endemic species has a limited geographic distribution (e.g., Santa Rosa Plateau or San Jacinto River Valley), an affinity for a particular soil type (e.g., Domino, Travers, or Willow), or is restricted to a specific habitat (e.g., coastal sage scrub, vernal pools);
- Focused surveys must follow MSHCP protocol guidelines (i.e., surveys are limited to certain time periods, or a certain number of surveys must be conducted);

- Surveys for Criteria Area Wildlife Species where suitable habitat is present. Criteria Areas are identified within the MSHCP as geographic areas, soils, or habitat that support, or have the potential to support, covered species;
- Site surveys of riparian, riverine, and vernal pool resources in order to conserve these resources and the species that use them;
- Habitat compensation measures in the event that sensitive habitat is removed or adversely affected during project construction;
- Fee payment to the appropriate permit agency when work is conducted within certain jurisdictional areas of the MSHCP; and
- The MSHCP requires that focused habitat assessments be conducted for covered wildlife species when a project is located within suitable habitat. Certain species require the payment of an HCP fee. The MSHCP has also identified specific survey areas for certain wildlife species with the potential to occur within previously mapped habitat types. Focused habitat assessments or focused presence-absence surveys were undertaken in these areas for Munz's onion, San Diego ambrosia, smooth tarplant, arroyo toad, western burrowing owl, least Bell's vireo, Los Angeles pocket mouse, and San Bernardino kangaroo rat.

The RCA has issued the applicant a Certificate of Inclusion (COI) to become a Participating Special Entity (PSE) for the Valley–Ivyglen Phase 1 Project (SCE 2014b), and the applicant plans to submit PSE applications to the RCA for Valley–Ivyglen Phase 2 and the Alberhill Project in August and October 2015, respectively. To comply with PSE requirements, the applicant must follow all applicable provisions of the MSHCP. However, because components of the proposed projects also fall within the boundaries of the SKR HCP area, take of SKR must be obtained separately through the SKR HCP, as described below.

Additional Reserve Land

The MSHCP includes provisions for the acquisition of Additional Reserve Land (ARL) to conserve habitat needed to meet the goals and objectives of the MSHCP. Figure 4.4-1 show the locations of ARLs along the proposed projects. All MSHCP requirements apply to activities within Western Riverside County RCA ARL. Where ARL is also located within SKR HCP areas (Figure 4.4-1), all SKR HCP requirements also apply. SKR HCP core reserve requirements (e.g., requirements for the Lake Mathews-Estelle Mountain Core Reserve; Figure 4.4-1) do not apply to ARL.

Stephens' Kangaroo Rat Habitat Conservation Plan

The RCHCA, a Joint Powers Agreement agency, implements the SKR HCP, which was established in April 1996 (RCHCA 2007). Incidental take authorization for SKR can be authorized in accordance with the HCP by the USFWS pursuant to Section 10(a)(1)(B) of the ESA and a 30-year California Endangered Species Permit from the CDFW regarding management take of the same species, pursuant to CFGC Section 2081. The HCP describes the conservation, mitigation, and monitoring measures implemented to protect SKR and its habitat. The SKR HCP does not include other species and habitat types. The RCHCA currently manages several core reserves that have been set aside for SKR conservation and habitat preservation, including the Lake Mathews-Estelle Mountain Core Reserve, which is located adjacent to the northern terminus of the proposed Alberhill 500-kV transmission line routes (Figure 4.4-1).

Projects located within both the MSHCP and the SKR HCP cannot obtain incidental take authorization for SKR through the MSHCP, and must instead obtain take authorization through the SKR HCP. SKR conservation areas and confirmed locations of SKR in the proposed project area are shown in Figure 4.4-1.

Riverside County

The Riverside County General Plan (2014) establishes the following policies regarding biological resources that are relevant to the proposed projects:

- ***Policy OS 17.1:*** *Enforce the provisions of applicable MSHCPs, if adopted, when conducting review of development applications.*
- ***Policy OS 18.1:*** *Preserve multi-species habitat resources in the County of Riverside through the enforcement of the provisions of applicable MSHCPs, if adopted.*
- ***Policy ELAP 18.1:*** *Protect viable oak woodlands through adherence to the Oak Tree Management Guidelines adopted by Riverside County and the Vegetation section of the Multipurpose Open Space Element of the General Plan.*
- ***Policy ELAP 19.1:*** *Protect sensitive biological resources in the Elsinore Area Plan through adherence to General Plan policies found in the General Plan Multipurpose Open Space Element.*
- ***Policy ELAP 19.5:*** *Conserve wetlands including Temescal Wash, Collier Marsh, Alberhill Creek, Wasson Creek, and the lower San Jacinto River, (including marsh habitats and maintaining water quality).*

The Riverside County Oak Tree Management Guidelines are intended to address the treatment of oak woodlands in areas where zoning and/or general plan density restrictions would allow the effective use of clustering (Riverside County 1993). Permits from Riverside County are required for mature tree and oak woodland removal.

County of Riverside Roadside Tree Ordinance

The Riverside County Roadside Tree Ordinance 12.08.050 specifies that permits must be obtained from the County Transportation Director to remove or substantially trim trees planted in the ROW of County highways. Conditions may include requirements for the work to be done only by qualified tree surgeons or trimmers and for bond, insurance, or security to protect the local area and facilities from damage.

City of Lake Elsinore

The City of Lake Elsinore General Plan (2011) establishes the following goals and policies regarding biological resources that are relevant to the proposed projects:

- ***Policy 1.4:*** *Encourage revegetation with native plants compatible with natural surrounding habitat where soils have been disturbed during construction, and discourage plants identified in the MSHCP as unsuitable for conservation areas.*
- ***Policy 2.1:*** *Biological resources analyses of proposed projects shall include discussion of potential impacts on any plant or wildlife species that is officially listed as threatened or endangered by the USFWS and/or CDFW but not covered by the MSHCP.*
- ***Policy 2.2:*** *Development or modification shall be discouraged in areas containing riparian habitat of high functions and values or corridors with 80% or more of natural native habitat that link larger patches of natural native habitat containing 80% or more native plant species. Further, development in areas described for conservation, including areas planned for riparian/riverine restoration included in the MSHCP shall also be discouraged.*

In addition, Section 5.116 of the City of Lake Elsinore Municipal Code requires that permits be obtained for the removal or relocation of *significant palms*. Significant palms are defined by the Code as species of the family Palmaceae that, unless specifically provided otherwise, exceed 5 feet in height measured from the ground at the base of the trunk to the base of the crown.

City of Menifee

The City of Menifee General Plan (2013) establishes the following goals and policies regarding open space conservation and biological resources that are relevant to the proposed projects:

- ***Policy OSC-3.4:*** *Support the preservation of natural vegetation and rock outcroppings during and after the construction process.*
- ***Policy OSC-8.1:*** *Work to implement the Western Riverside County Multiple Species Habitat Conservation Plan in coordination with the Regional Conservation Authority.*
- ***Policy OSC-8.3:*** *Partner with non-profit agencies at the local, regional, state, and federal level to fulfill the obligations of the MSHCP to preserve and protect significant biological resources.*
- ***Policy OSC-8.5:*** *Recognize the impacts new development will have on the City's natural resources and identify ways to reduce these impacts.*

City of Wildomar

At the time of preparation of this EIR, the City of Wildomar has not adopted a general plan. The city was incorporated in 2008 and adopted all County of Riverside ordinances at that time. County ordinances remain in effect until the city enacts ordinances superseding them. Policies listed above under the Riverside County General Plan as applicable to the proposed Alberhill Project also apply to the City of Wildomar. No components of the proposed Valley–Ivyglen Project are located within the City of Wildomar.

4.4.3 Methodology and Significance Criteria

4.4.3.1 Methodology

The impact analysis for biological resources was conducted by: (1) gathering and analyzing information from numerous sources (see description of sources below) in addition to the data provided by the applicant and (2) evaluating temporal and spatial effects to habitats and organisms that may be present within the project area and within a regional geographic context. Recent survey data provided by the applicant were assessed for accuracy and appropriate implementation of resource agency protocols. Calculations for temporary and permanent disturbance to vegetation habitat were based on the applicant's projections of land disturbance resulting from construction of project components. Potential impacts and appropriate general minimization and mitigation measures were developed using guidelines or input from resource agencies, specifically the USFWS, CDFW, and USACE, and regional authorities such as the RCHCA and the RCA. Biologists with specific local and regional knowledge were consulted to determine potential impacts. Occurrence maps in the area were reviewed to determine resource location, distribution, and seasonality.

The impacts analysis identifies and describes impacts on biological resources within the proposed project area. In addition to the proposed project components, the analysis considers impacts caused by staging areas and access roads, and impacts on habitat adjacent to project components. The analyses focus on foreseeable changes to the baseline conditions in the context of the significance criteria presented above

and retained below for ease of reference. The analysis includes evaluations of direct and indirect effects, which are defined as follow:

- *Direct effects,* or primary effects, are those effects that are caused by the project and occur at the same time and place (CEQA Guideline Section 15358). Examples include incidental take during construction, or elimination or degradation of suitable habitat due to construction-related activities.
- *Indirect effects,* or secondary effects, are those effects which are caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable (CEQA Guideline Section 15358). Examples include the discharge of sediment or chemicals that adversely affect water quality downstream of the project site or an increase in human activity during project operations.

Cumulative effects (CEQA Guideline Section 15130 *et seq.*) are discussed in detail in Chapter 6.0.

4.4.3.2 Significance Criteria

Potential impacts on biological resources were evaluated according to the following significance criteria. The criteria were defined based on the checklist items presented in Appendix G of the CEQA Guidelines. The proposed projects would cause a significant impact on biological resources if they would:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS;

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

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

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

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

f) Conflict with the provisions of an adopted HCP, Natural Community Conservation Plan, or other approved local, regional, or state HCP.

4.4.4 Environmental Impacts and Mitigation Measures (Valley–Ivyglen Project)

4.4.4.1 Project Commitments (Valley–Ivyglen Project)

The applicant has committed to undertaking impact reduction measures as part of the design of the proposed Valley–Ivyglen Project. These measures, referred to in this document as Project Commitments, are the same for the proposed Alberhill and Valley–Ivyglen Projects, with the exception of Project Commitment A (see Section 4.4.5.1). These Project Commitments are considered to be part of the project description, and would be undertaken for all portions of the proposed Valley–Ivyglen and Alberhill Projects, including portions within the MSHCP. However, these commitments alone would not reduce

associated impacts on biological resources to less than significant levels. Therefore, additional mitigation measures have been developed to further reduce impacts on biological resources.

- **Project Commitment B: Worker Environmental Awareness Plan.** Prior to construction, a Worker Environmental Awareness Plan would be developed based on final engineering designs, the results of preconstruction surveys, and mitigation measures developed by the California Public Utilities Commission (CPUC). A presentation would be prepared by the applicant and shown to all site workers prior to their start of work. A record of all trained personnel would be kept with the construction foreman. In addition to the instruction for compliance with any site-specific biological or cultural resource protective measures and project mitigation measures, all construction personnel would also receive the following:
  - A list of phone numbers of the applicant's personnel (i.e., archeologist, biologist, environmental compliance coordinator, and regional spill response coordinator);
  - Instruction on the South Coast Air Quality Management District Rule 403 for control of dust;
  - Instruction on what typical cultural resources look like, and if discovered during construction, to suspend work in the vicinity of any find and contact the site foreman and archeologist or environmental compliance coordinator;
  - Instruction on washing the wheels, tracks, and underbodies of construction vehicles to minimize the spread of invasive species;
  - Instruction on individual responsibilities under the CWA, the Storm Water Pollution Prevention Plan (SWPPP) for the proposed projects, site-specific Best Management Practices (BMPs), and the location of Material Safety Data Sheets for the proposed projects;
  - Instructions to notify the foreman and regional spill response coordinator in case of hazardous materials spills and leaks from equipment or upon the discovery of soil or groundwater contamination;
  - A copy of the truck routes to be used for material delivery; and
  - Instruction that noncompliance with any laws, rules, regulations, or mitigation measures could result in being barred from participating in any remaining construction activities associated with the proposed projects.
- **Project Commitment C: Raptor Protection on Power Lines.** The applicant would design all 115-kV subtransmission structures consistent with the *Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 2006* (APLIC 2006).
- **Project Commitment D: Habitat Restoration and Revegetation Plan**. With input from the appropriate resource agencies, the applicant would develop and implement a Habitat Restoration and Revegetation Plan to restore areas where construction of the proposed projects would be unable to avoid impacts on native vegetation and sensitive resources, such as wetlands, wetland buffer areas, riparian habitat, and other sensitive natural communities. The applicant would restore all areas disturbed during construction of the proposed projects, including staging areas and pull, tension, and splicing sites, to as close to pre-construction conditions as possible, or to the conditions agreed upon between the applicant and landowner. Replanting and reseeding would be conducted under the direction the applicant or contract biologists. If revegetation would occur on private property, revegetation conditions would be part of the agreement between the applicant and the landowner.

- **Project Commitment H: Noise Control.** All construction and general maintenance activities, except in an emergency, would be limited to the hours of 7:00 a.m. to 7:00 p.m. and prohibited on Sundays and all legally proclaimed holidays. If the California Independent System Operator and/or California Department of Transportation require that conductor stringing over freeways or highways occur after 7:00 p.m., or on a Sunday, the applicant would obtain variances from all applicable jurisdictions.

  Construction equipment would use noise reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.

  Construction traffic would be routed away from residences and schools where feasible.

  Unnecessary construction vehicle use and idling time would be minimized to the extent feasible. The ability to limit construction vehicle idling time is dependent upon the sequence of construction activities and when and where vehicles are needed or staged. A "common sense" approach to vehicle use would be applied; if a vehicle is not required for use immediately or continuously for construction activities, its engine should be shut off. Note: certain equipment, such as large diesel-powered vehicles, require extended idling for warm-up and repetitive construction tasks.

  The applicant would notify all receptors within 500 feet of construction of the potential to experience significant noise levels during construction.

  During construction, the applicant would use sound walls, noise-reduction blankets, or other noise reduction measures prior to developing the project site in areas where sensitive receptors would be subjected to significant noise impacts.

  The applicant would shield small stationary equipment with portable barriers within 100 feet of residences.

  The applicant would minimize engine idling and turn off engines when not in use.

  Where blasting is required, the applicant would conduct additional pre-blast notification and coordination with residents, utilities, and others that may be affected by blasting operations.

4.4.4.2 Impacts Analysis (Valley–Ivyglen Project)

Impact BR-1 (VIG): Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.
LESS THAN SIGNIFICANT WITH MITIGATION

Direct, indirect, temporary, and permanent impacts on special status species and their habitats are discussed below. The discussion is organized according to impacts associated with all components of the proposed Valley–Ivyglen Project, including the proposed 115-kV subtransmission line routes, staging areas, and access roads. The analysis determines that impacts on special status species and their habitats would be less than significant with the implementation of mitigation measures.

Impacts would be most severe during construction, and would diminish during operations. Mitigation measures are intended to reduce potentially significant impacts during construction. No impacts would remain potentially significant during operations if mitigation measures are properly implemented to address the impact during construction.

The applicant has received a COI for Valley–Ivyglen Project Phase 1 in the Western Riverside MSHCP (SCE 2014b), which confirms the applicant's status as a PSE in the MSHCP. With the exception of SKR and birds protected by the Migratory Bird Treaty Act, the MSHCP outlines species-specific avoidance, mitigation, and compensation measures (Appendix H), and the applicant would be responsible for adhering to these requirements as a PSE. The applicant would also be responsible for adhering to the mitigation and compensation requirements outlined in the SKR HCP as a participant in this plan. In addition to these measures, the mitigation measures outlined below would be implemented to reduce potentially significant impacts on special status species to less than significant.

Special Status Plants

Permanent loss of special status plant species may result from impacts associated with permanent project features (e.g., new subtransmission structures and roadways), as well as the potential direct mortality of individuals (incidental take) due to project construction. The 115-kV structures and new access roads would permanently disturb approximately 141.5 acres of land (Table 2-5). Areas anticipated to be disturbed by construction include habitat supporting populations of special status plants, including small-flowered morning glory, Munz's onion, San Diego ambrosia, San Jacinto Valley crownscale, smooth tarplant, paniculate tarplant, slender-horned spineflower, Coulter's matilija poppy, Coulter's goldfields, white rabbit tobacco, chaparral sand verbena, Robinson's peppergrass, and small-flowered microseris. These species, and others with potential to occur along the 115-kV subtransmission line, could also be indirectly or temporarily impacted through increased dust, hydrologic changes, and ground disturbance related to trenching activities during construction. Populations of paniculate tarplant along Segment VIG-1 and populations of Coulter's matilija poppy along Segment VIG-6 may be directly impacted by blasting.

These impacts would be reduced with the implementation of Project Commitments B and D. However, populations of special status plants could be disturbed or removed by construction. Impacts from the construction and operation of the proposed Valley–Ivyglen Project would be significant. Implementation of MM BR-1 through MM BR-4 and MM BR-6 through MM BR-9 would restrict construction to certain work areas, require worker environmental training, limit the amount of native vegetation that is disturbed during construction, and require development of a restoration and revegetation plan. Implementation of these mitigation measures would reduce these impacts to less than significant by reducing the likelihood that special status plant populations in or near project areas would be removed or disturbed.

Critical Habitat for Coastal California Gnatcatcher, Munz's Onion, Thread-leaved Brodiaea, and San Diego Ambrosia

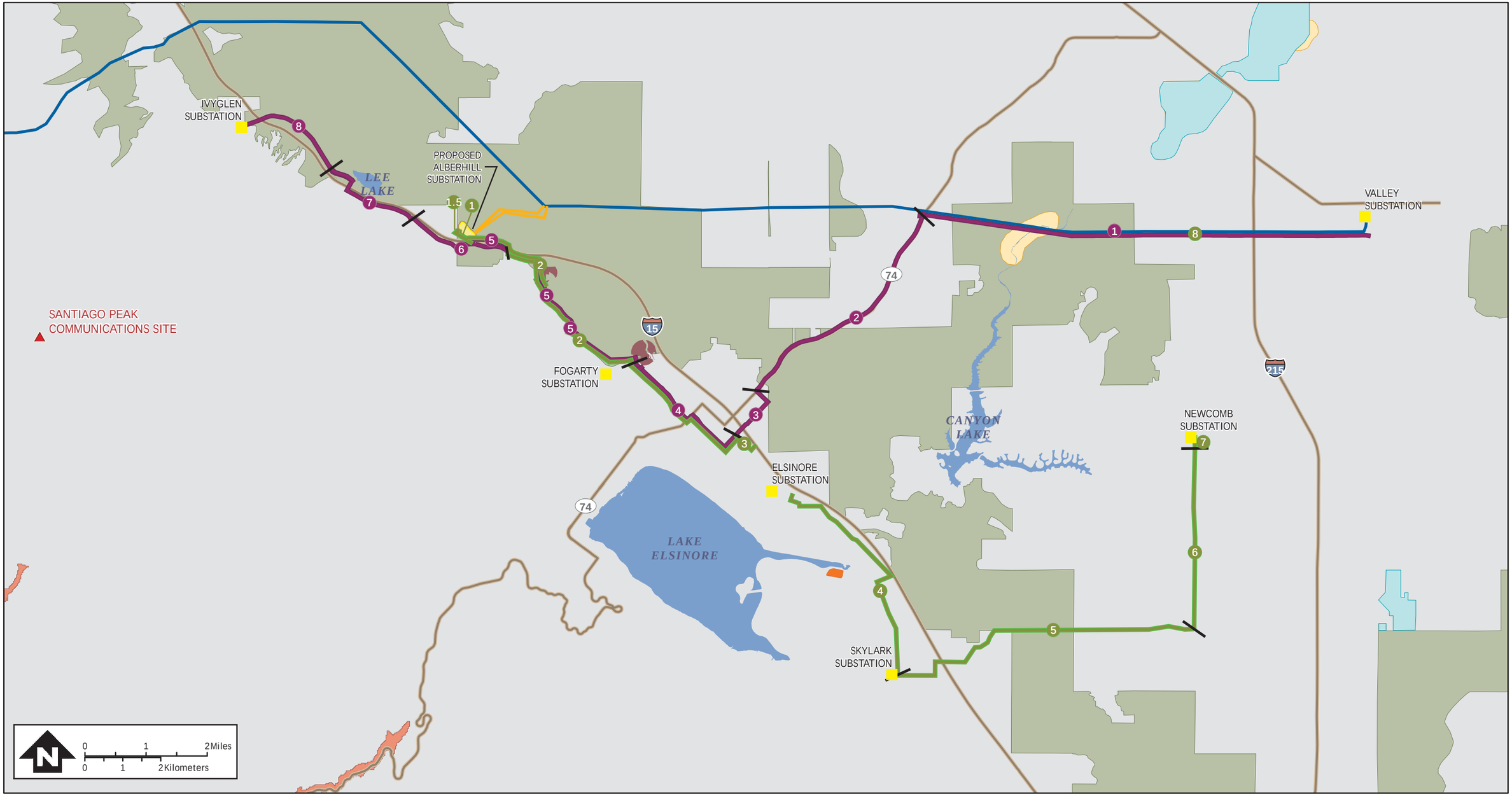
As shown in Figure 4.4-2 and detailed in Table 4.4-1, portions of the Valley–Ivyglen 115-kV subtransmission line occur within USFWS-designated critical habitat for coastal California gnatcatcher, Munz's onion, thread-leaved brodiaea, and San Diego ambrosia. Table 4.4-1 details the acreage of critical habitat that could be permanently or temporarily impacted by the proposed Valley–Ivyglen Project.

Table 4.4-1 Critical Habitat Acreage by Valley–Ivyglen Project Component

Critical Habitat Type	Valley–Ivyglen 115-kV Subtransmission Line Segments[1]							
	1	2	3	4	5	6	7	8
Coastal California gnatcatcher	182.80	57.81	0.71	---	172.66	34.96	30.39	36.18
Munz's onion	---	---	---	0.20	0.36	---	10.46	3.18
San Diego ambrosia	---	---	---	.41	35.84	---	---	---
Thread-leaved brodiaea	39.20	---	---	---	---	---	---	---

Source: USFWS 2011, SCE 2014a
Note: [1] Acreages include temporary and permanent impacts.

Path: \\prtbhp1\GIS\SanFrancisco\CPUC\VIG_ASP\Maps\MXDs\Figure4_4_3_USFWS_CriticalHabitat.mxd



Source: ESRI 2010, SCE 2011, 2013, USFWS 2015

- 1 VIG1
- 2 VIG2
- 3 VIG3
- 4 VIG4
- 5 VIG5
- 6 VIG6
- 7 VIG7
- 8 VIG8

- 1 ASP1
- 1.5 ASP1.5
- 2 ASP2
- 3 ASP3
- 4 ASP4
- 5 ASP5
- 6 ASP6
- 7 ASP7
- 8 ASP8

- Existing Substations
- Proposed Alberhill Substation
- Proposed 500-kV transmission lines
- 500-kV Serrano Valley Transmission Line
- Segment begin / end

USFWS Critical Habitat
- Arroyo southwestern toad
- Coastal California gnatcatcher
- Riverside fairy shrimp
- San Diego ambrosia
- Spreading navarretia
- Thread-leaved brodiaea

Figure 4.4-**2**

USFWS Critical Habitat

Alberhill and Valley–Ivyglen Projects

Riverside County, California

Impacts on critical habitat for these species would be reduced through the implementation of Project Commitments B and D. However, impacts from the construction and operation of the proposed Valley–Ivyglen Project would be significant. Implementation of MMs BR-1 through BR-9, which restrict construction to certain work areas, require worker environmental training, limit the amount of native vegetation that is disturbed during construction, restrict disturbance near active gnatcatcher nests, and require development of a restoration and revegetation plan, would reduce these impacts to less than significant by reducing the amount of disturbance to critical habitat for these species and requiring that disturbed areas be restored post-construction.

Special Status Wildlife

Construction, operation, and maintenance of the proposed Valley–Ivyglen Project could impact the following wildlife species and their habitats: western spadefoot, SKR, Southern California rufous-crowned sparrow, burrowing owl, white-tailed kite, coastal California gnatcatcher, yellow warbler, Los Angeles pocket mouse, least Bell's vireo, San Diego black-tailed jackrabbit, coastal western whiptail, and orange-throated whiptail. Table 4.4-2 depicts the presence of these species by Valley–Ivyglen Project component and several of these species are discussed in detail below. Impacts on special status species are anticipated to be largely temporary. However, the project would permanently disturb 141.5 acres of wildlife habitat, including habitat for special status species. Permanent disturbance would result from new 115-kV subtransmission line structures and access roads.

Table 4.4-2 Sensitive Plant and Wildlife Species and Critical Habitat Presence by Valley–Ivyglen Project Component

Species	Proposed Valley–Ivyglen 115-kV Subtransmission Line Segments							
	1	2	3	4	5	6	7	8
Plants								
Long-spined spineflower	P	---	---	---	---	---	---	---
Thread-leaved brodiaea	CHP	---	---	---	---	---	---	---
Paniculate tarplant	P	---	---	P	P	---	P	---
Coulter's matilija poppy	---	---	---	---	---	P	P	P
Slender-horned spineflower	---	---	---	---	---	---	P	
Robinson's pepper grass	---	---	---	---	P	P	P	---
Munz's onion	---	---	---	P; CHP	---	---	P	---
San Diego ambrosia	---	---	---	P	P; CHP	P	---	---
Smooth tarplant	---	---	---	P	---	---	---	---
Chaparral sand verbena	---	---	---	---	---	P	---	P
Coast live oak	---	---	---	---	---	---	P	P
Coulter's goldfields	---	---	---	P	---	---	---	---
San Jacinto Valley crownscale	---	---	---	P	---	---	---	---
Small-flowered microseris	P	---	---	P	---	---	P	---
Small-flowered morning glory	P	---	---	P	P	---	P	
Roundleaf stork's bill	---	---	---	P	---	---	---	---
White rabbit tobacco	---	---	---	---	---	---	---	P
Wildlife								
Western spadefoot	P	---	---	---	P	---	---	---
Orange-throated whiptail	P	P	---	---	P	P	P	P
Coastal western whiptail	P	---	---	---	---	P	P	P
Northern red-diamond rattlesnake	---	---	---	---	---	---	P	---
Coastal California gnatcatcher	P; CHP	P	CHP	---	CHP	CHP	CHP	CHP
Least Bell's vireo	P	P	---	P	P	P	---	P

Table 4.4-2 Sensitive Plant and Wildlife Species and Critical Habitat Presence by Valley–Ivyglen Project Component

Species	Proposed Valley–Ivyglen 115-kV Subtransmission Line Segments							
	1	2	3	4	5	6	7	8
Western burrowing owl	P	---	---	---	---	---	---	---
Golden eagle	P	---	---	---	P	---	---	---
White-tailed kite	P	P	---	P	P	P	---	P
Yellow warbler	P	P	---	P	P	P	P	P
Southern California rufous-crowned sparrow	P	P	P	P	P	P	P	P
Swainson's hawk	P	---	---	P	---		P	
Stephens' kangaroo rat	P	---	---	P	P	---	P	---
Los Angeles pocket mouse	---	---	---	---	---	---	---	P
Black-tailed jackrabbit	P	---	---	P	P	---	---	---
Willow Flycatcher	P	---	---	---	P	---	P	---
Peregrine Falcon	---	---	---	P	---	---	---	---

Sources: AMEC 2006a, 2006b, 2007, 2009a, 2009b, 2010, 2011a, 2011b, 2012a, 2012b, 2012c, 2013a, 2013b, 2013c, 2013d, 2014a, 2014b, 2014c, CNDDB 2015
Key:
P = Present
CHP = Critical Habitat Present

Special status wildlife species and their habitat would also be impacted temporarily. Trenching along Segments VIG1 and VIG8, and the telecommunications route would also temporarily disturb approximately 25.2 acres, or 21,000 linear feet, of potential wildlife habitat (Table 2-5). Blasting or fracturing may also occur in certain areas along the 115-kV subtransmission line during construction. Both of these activities would temporarily increase levels of noise, light, dust, vibrations, and human disturbance within and adjacent to the project area, and could contribute to the release of hazardous materials.

Impacts on all special status species in all project areas within MSHCP boundaries are covered under the MSHCP, with the exception of impacts on SKR, which are covered under the SKR HCP. Therefore, the MSHCP would dictate the type and extent of avoidance, mitigation, and compensation measures for each covered species, unless otherwise specified in project-specific mitigation measures. The applicant is entering into an agreement with the RCA to allow for coverage of the proposed project under the MSHCP on Castle and Cooke property, which is outside MSHCP boundaries. Should this agreement not be finalized, MM BR-14 outlines options for take coverage or avoidance of impacts to special status species on Castle and Cooke property.

Western Spadefoot

Western spadefoots were observed in a small depression approximately 300 feet south of Segment VIG1 during spring 2012 vernal pool branchiopod surveys. Spadefoot could be impacted directly and indirectly by construction activities. Increased sedimentation, dust, noise, and human activities could temporarily alter spadefoot habitat or disturb individuals during construction. Night lighting may disrupt spadefoot behavior or attract predators. Spadefoot habitat may be replaced by permanent project components such as new 115-kV subtransmission line structures and access roads.

Impacts on western spadefoot would be reduced by implementing Project Commitments B, D, and H; however, impacts from the construction and operation of the proposed Valley–Ivyglen Project would still be significant. Impacts to the western spadefoot would be reduced to less than significant through the implementation of MM BR-1 through MM BR-4, MM BR-7, and MM BR-10. Implementation of these measures would ensure construction is limited to designated areas, nighttime lighting would be shielded,

and fine-gauge fencing would be used to prevent western spadefoot from falling into trenches. Preconstruction surveys for the spadefoot will be completed by a qualified biologist and a biological monitor will be onsite during construction. MM BR-7 would ensure development of a habitat restoration and revegetation plan, which would include additional measures for each impacted special status species.

Stephens' Kangaroo Rat

SKRs were observed along the proposed Valley–Ivyglen Project during trapping surveys in 2011 (Table 4.4-2). Construction of the Valley–Ivyglen project could potentially impact SKR and its habitat. The use of temporary staging and work areas and the creation of new access roads would require vegetation to be removed or crushed, potentially damaging SKR burrows or injuring or killing individuals. Permanent impacts on SKR would occur from loss of habitat due to construction of permanent project components such as 115-kV subtransmission line structures and access roads. Vehicles or equipment may strike SKR on access roads. Trash left at work sites could attract SKR predators, such as coyotes or common ravens. SKR could also be harmed by inadvertent hazardous materials spills, including fuel and hydraulic fluid leaks. Introduced noxious and invasive plant species could out-compete existing annual vegetation that SKR feed upon and forage within.

The majority of the project would be located within the SKR HCP area except for the central portion of Segment VIG5, which crosses private land. Project-related impacts on SKR and associated burrows would be authorized through the SKR HCP. In October 2012, the applicant finalized the SKR HCP Implementation Agreement with the RCHCA (SCE 2014b). This agreement provides a process through which the applicant may obtain take authorization of SKR through the SKR HCP for the proposed Valley–Ivyglen Project. The USFWS and the CDFW provided a joint letter of concurrence with the agreement. This take authorization is in accordance with the terms and conditions in the USFWS Management Authorization (or USFWS' Federal Permit), the SKR HCP, and the SKR HCP Implementation Agreement.

To reduce impacts on SKR in areas where take is not authorized through the SKR HCP, the applicant will implement Project Commitments B and D. The Project Commitments require an employee environmental training program and development of a habitat restoration and revegetation plan. These measures will reduce the likelihood that SKR would be disturbed or killed or have its habitat removed.

However, impacts to SKR in areas outside the SKR HCP would remain. Implementation of MM BR-1 through MM BR-4, MM BR-9, and MM BR-10 would reduce impacts to SKR to less than significant. The mitigation measures would require the applicant to prevent the introduction and spread of invasive plants and entrapment of wildlife, restore native vegetation communities disturbed by construction, and use qualified biological monitors and preconstruction surveys to identify and relocate wildlife, including SKR, from areas that would be disturbed by construction activities. These measures would further reduce the likelihood that SKR are disturbed or killed during construction in areas outside the SKR HCP.

Belding's Orange-Throated Whiptail and Coastal Western Whiptail

Orange-throated and coastal western whiptails were observed along the proposed 115-kV subtransmission lines during biological surveys. These species inhabit chaparral and scrub vegetation areas with sandy soils. If either of these species are present during construction, construction of the substation could result in direct mortality of individuals and temporary and permanent habitat loss. Project Commitments B and D reduce the likelihood that the proposed Valley–Ivyglen Project would kill or injure these species by requiring a worker environmental training and habitat restoration plan. However, impacts on these species habitat would remain significant. Implementation of MM BR-1 through MM BR-4, MM BR-7, and MM BR-10 would reduce these impacts to less than significant levels by minimizing the chance that whiptails would be injured or killed during construction.

Special Status Birds

Construction of the proposed Valley–Ivyglen Project could potentially impact special status and migratory birds. Impacts could be most severe during the breeding season when construction activities could disturb nesting birds or the nests themselves. Because the project involves construction of subtransmission line poles in areas where subtransmission lines currently do not exist, birds may accidentally strike poles or lines. Construction would require the trimming of vegetation, including riparian vegetation, within and adjacent to work areas, potentially reducing the availability of nesting habitat or disturbing nesting birds. Light-duty helicopters may be used along 115-kV Segments VIG1 and VIG4 to VIG7, which may impact nesting and foraging behavior, through increased noise and from rotor wash. In addition to common migratory species, several special status species could potentially be impacted by construction. These include Southern California rufous-crowned sparrow, least Bell's vireo, coastal California gnatcatcher, burrowing owl, white-tailed kite, and yellow warbler.

Golden eagles were observed foraging during the 2010 surveys along Segments 1 and 5 of the proposed 115-kV subtransmission line. A peregrine falcon was observed during surveys along Segment VIG-4 and suitable foraging habitat is present along the proposed 115-kV subtransmission line. White-tailed kites have also been observed in the project area. Golden eagles, peregrine falcons, white-tailed kites, and other raptors may collide with transmission lines or be electrocuted by electrified components, especially if the line is new and the birds are not acclimated to its presence. However, with the implementation of Project Commitment C avian-safe transmission structures would be incorporated into the design of the 115-kV subtransmission line. Such structures provide adequate clearances to accommodate a large bird between energized or grounded parts, as recommended by the Avian Power Line Interaction Committee (APLIC) (APLIC 2006). Construction of the project may directly disturb or destroy nests of breeding raptors. Therefore, MM BR-11 requires the development and implementation of a Nesting Bird Management Plan for the protection of breeding birds. These two measures would ensure that impacts on golden eagles and other raptors are reduced to less than significant levels.

Table 4.4-2 details where least Bell's vireo, coastal California gnatcatcher, and southwestern willow flycatchers as well as critical habitat have been observed along the Valley–Ivyglen Project. These species require specific habitat parameters and vegetation communities in order to reproduce. Construction of the project may directly impact habitat for these species and may directly disturb or destroy nests. Project Commitments B and D would reduce impacts to these species through implementing a worker environmental training program and habitat restoration plan; however, impacts would remain that are still significant. MMs BR-1 through 7 and MM BR-12 would reduce impacts to less than significant levels for these species. The mitigation measures require preconstruction surveys, biological monitoring, avoidance or restoration of or compensation for impacts on riparian habitat or native vegetation, and the development of a Nesting Bird Management Plan. Collectively, these measures reduce direct disturbance of habitat for these species, require restoration of disturbed habitat, and reduce the likelihood that nests would be disturbed or destroyed during construction.

Western Burrowing Owl

Annual protocol-level surveys were conducted between 2006 and 2014 (Appendix E). Extensive burrowing owl habitat is present along the 115-kV subtransmission line. However, burrowing owls have only been observed along 115-kV Segment VIG1 (Table 4.4-2). Surveys of additional staging areas in September 2015 identified suitable burrows and habitat within staging areas VIG10 and VIG11. While no owls were observed during surveys, there are several occurrences documented in the area.

Owls may be struck by vehicles and burrows may be crushed by construction equipment. Breeding pairs may be indirectly impacted through increased noise, dust, and human disturbance. Should burrowing owls

nest in close proximity to construction, construction-related impacts would be significant. Trash left in work areas could attract owl predators such as common ravens and coyotes. The applicant shall implement Project Commitments B and H, which require a worker environmental awareness program and limit the noise from construction; however, impacts may still be significant. As a PSE in the MSHCP, the applicant would be required to conduct surveys for burrowing owl and provide compensation for impacted habitat. MM BR-12 requires preconstruction surveys for burrowing owls and avoidance of active nest burrows. MM BR-13 would require the applicant to keep work areas free of trash that may attract owl predators. Implementation of MM BR-12 and MM BR-13 would reduce impacts on burrowing owls to less than significant

Mitigation Measures

MSHCP mitigation measures and BMPs are included in Appendix H.

MM BR-1: Limit Construction to Designated Areas and Avoid Riparian, Aquatic, and Wetland Areas. Outside MSHCP boundaries, vehicular traffic (including movement of all equipment) shall be restricted to approved access roads and established construction areas shown in Figure 2.4 of the EIR. These areas shall be delineated in the field with flagging and signage. If disturbance is required outside the established construction areas, CPUC notification and approval shall be required. Sensitive resources such as waterbodies, oak trees, and special status plant populations shall be clearly marked for avoidance with flagging and signage. Nighttime lighting, if necessary adjacent to aquatic areas, shall be shielded away from these areas to prevent impacts on aquatic wildlife.

MM BR-2: Preconstruction Surveys. Qualified biologists shall conduct preconstruction surveys no less than seven days prior to the start of construction in any given project construction area. Surveyors shall focus on areas proposed for vegetation removal or ground disturbance that are within habitat that a qualified biologist has deemed suitable for sensitive species. As part of preconstruction surveys, the composition of the vegetation community shall be surveyed to establish baseline conditions prior to construction and to guide post-construction restoration efforts. The surveys shall be conducted to determine the presence of special status plants, noxious weeds, and all wildlife species for the purpose of preventing direct loss of vegetation and wildlife and the spread of noxious plant species. Preconstruction surveys shall be performed for each discrete work area prior to the start of ground disturbance, or if work has lapsed for longer than one week. Biologists shall document survey results in a daily logbook.

MM BR-3: Biological Monitoring During Construction. In areas where sensitive resources may be impacted by construction activities, a qualified biological monitor shall be present during construction activities. The monitor shall have the authority to temporarily stop work that he or she determines to be threatening to a special status wildlife or plant species. The monitor shall determine appropriate action, and work will resume once the monitor determines there is no longer a threat to the special status species or approval has been obtained from the appropriate wildlife agencies or CPUC.

MM BR-4: Limit Removal of Native Vegetation Communities and Trees. For project areas located outside the MSHCP boundaries, the removal of native vegetation and trees shall be limited to the minimum practicable area required for construction of the project. Grading, grubbing, graveling, or paving shall only occur for permanent project components. The applicant shall use temporary staging areas in a way that facilitates post-construction restoration.

MM BR-5: California gnatcatcher protection measures. A qualified biologist shall conduct preconstruction surveys no more than seven days prior to removal of Riversidean sage scrub habitat during the coastal California gnatcatcher breeding season (15 February through 15 August). Should nesting coastal California gnatcatcher be observed during preconstruction surveys, vegetation removal

and other construction-related disturbance shall not commence within the applicable nest buffer area, as identified in the projects' Nesting Bird Management Plan, until the nest is determined to be inactive.

MM BR-6: Oak tree protection measures. This measure applies to oak trees in all project areas. Preventive measures shall be taken during construction activities to minimize impacts in the protected zone of each oak tree. The protected zone commences at a point 5 feet outside the dripline and extends inward to the trunk of the tree. All work conducted in the protected zone of oak trees shall be performed using hand implements and in the presence of a certified arborist. If it is determined that oak tree removal is necessary, the applicant shall relocate oak trees to a place outside of the area of anticipated impacts under the direction of the certified arborist.

If the applicant cannot feasibly relocate oak trees that are removed, 15-gallon oak trees or larger shall be planted at a 2:1 ratio within the appropriate habitat to replace removed trees. These replacement trees shall be indigenous coast live oak trees that have been grown in a natural form (no topping or street tree forming).

The applicant shall be responsible for monitoring and maintaining the relocated or replacement trees for a minimum of two years.

In addition, the following minimization measures shall be implemented under the direction of the certified arborist:

- Equipment, materials, and vehicles shall not be stored, parked, or operated within the protected zone of an oak tree, except on sites approved for this use by a certified arborist.
- Removal of the natural leaf mulch within the protected zone of oak trees is prohibited except where absolutely necessary.
- All trees not approved for removal shall be fenced or flagged for avoidance and to designate the protected zone.
- Any pruning, including removal of dead wood, shall be performed in compliance with the latest American National Standards Institute pruning standards by a certified arborist (or certified tree worker).
- Any root-pruning required within the protected zone of an oak shall be limited to the minimum amount necessary. All root-pruning shall consist of clean, 90-degree angle cuts utilizing sharp hand tools. Any major roots (2 inches or greater in diameter) encountered shall be preserved to the extent possible and wrapped in moist burlap until the soil is replaced. Soil shall be replaced around preserved roots as soon as possible.

MM BR-7: Habitat Restoration and Revegetation Plan Requirements. Pursuant to Project Commitment D, the applicant shall develop a Habitat Restoration and Revegetation Plan to address ground disturbance in all project areas. In addition to including the provisions set forth in Project Commitment D, the Habitat Restoration and Revegetation Plan shall detail topsoil segregation and conservation methodology; restoration of special status plant species habitat; vegetation removal and revegetation methods, including seed mixes, rates, and transplants; criteria to monitor and evaluate revegetation success; and alternative restoration and revegetation methods in the event that the revegetation success criteria are not initially reached. The applicant shall implement the Habitat Restoration and Revegetation Plan until the restoration success criteria are achieved. Appropriate agencies (CPUC, USFWS, and CDFW) shall be consulted during the preparation of the Habitat Restoration and Revegetation Plan. A copy of the final Habitat Restoration and Revegetation Plan, along

with documentation of agency review and incorporation of comments into the final version, shall be provided to the CPUC for approval prior to the CPUC issuing a notice to proceed.

MM BR-8: Special Status Plant Avoidance and Mitigation Measures. For project areas located outside MSHCP boundaries, the applicant shall avoid the special status plant populations listed in Appendix G, Table 1. However, where avoidance is not feasible, special status plants in project work areas shall be identified in the field, and the following avoidance measures shall be implemented to minimize the possibility of inadvertent encroachment:

- A qualified biologist shall flag or otherwise mark special status plants. Construction crews will avoid direct or indirect impacts on these flagged areas. Should impacts on special status plants be unavoidable, the applicant will implement the following measures:
  - A qualified botanist shall determine if transplantation is feasible. If determined feasible, a qualified botanist shall develop and implement a transplantation plan in coordination with appropriate agencies (CDFW, RCA). The special status plant transplantation plan shall identify a suitable transplant site, moving the plant material and seed bank to the transplant site, collecting seed material and propagating it in a nursery, and monitoring the transplant sites to document recruitment and survival rates.
  - If transplantation is infeasible, the applicant shall replace impacted special status plants at a 2:1 ratio within the project area within one year of the end of construction. Measures to restore special status plants shall be implemented in accordance with the Habitat Restoration and Revegetation Plan (MM BR-7).

MM BR-9: Invasive Plant Control Measures. The applicant shall develop an Invasive Plant Management Plan outlining measures to prevent the spread of invasive plants such as tamarisk (*Tamarix* sp.) and giant reed (*Arundo donax*) during construction of the projects. The Invasive Plant Management Plan shall include, but is not limited to, the following measures:

- All vehicles and equipment shall be cleaned prior to arrival at the work site.
- Straw or hay bales used for sediment barrier installations or mulch distribution shall be obtained from weed-free sources.

The Invasive Plant Management Plan will be submitted to the CDFW and CPUC for review and comment no more than three months prior to the start of construction. A copy of the final Invasive Plant Management Plan, along with documentation of agency review (CDFW and CPUC) and incorporation of comments into the final version, shall be provided to the CPUC for approval prior to the CPUC issuing a notice to proceed.

MM BR-10: Prevent Wildlife Entrapment. In all project work areas, the applicant shall install covers, ramps, and/or fencing to avoid trapping wildlife in excavations or trenches. Covers must be weighted at the edges or installed in a way that prevent wildlife from attempting to burrow beneath the cover. Fine-gauge fencing shall be used to prevent small animals from passing through the fence. Ramps with an angle of less than 45 degrees shall be utilized. The applicant's biological monitor will check open trenches and excavations for trapped wildlife each morning prior to the start of work on the trench or excavation. Trenches and excavations that are covered for more than one week will be inspected on a weekly basis. In addition, where retaining walls or another method of slope stabilization are required, the facility shall be sited, designed, and oriented to avoid impacts on the movement of native wildlife species and established wildlife corridors in coordination with the wildlife agencies (USFWS, CDFW, RCA).

MM BR-11: Migratory Birds and Raptors Impact Reduction Measures. The applicant shall develop a Nesting Bird Management Plan in consultation with the USFWS and CDFW that outlines protective measures and BMPs that shall be employed in all project work areas to prevent disturbance of active nests. The final Plan shall be submitted to the CPUC for approval. The Nesting Bird Management Plan shall include the following components: species-specific buffer distances (including vertical buffers in areas where helicopters will be used) and conditions under which these buffer distances can be reduced, including concurrence by the CDFW, USFWS, and CPUC for special status species; dates of local breeding seasons during which nest surveys shall be conducted; preconstruction nest survey timing, methods, and surveyor qualifications; nest deterrent methods, including vegetation clearing; monitoring and reporting protocols during construction; protocols for determining whether a nest is active; protocols for documenting, reporting, and protecting active nests within construction areas; and avian monitor qualifications. If preconstruction survey protocols exist for a certain species, the Nesting Bird Management Plan shall incorporate these protocols. The survey area shall include the construction area, plus an additional distance large enough to accommodate the protective buffer of bird species likely to occur in proximity to the construction area.

The Nesting Bird Management Plan shall further specify that active bird nests shall not be removed during breeding season unless the projects are expressly permitted to do so by the USFWS or CDFW; all project-related nest failures shall be reported to the USFWS and CDFW; and the biological monitor shall halt work if he or she determines that active nests would be disturbed by construction activities. If construction begins during the breeding season (February 1 through August 31), the Nesting Bird Management Plan shall be submitted to the USFWS and CDFW for review and comment no less than six months prior to the start of construction, with the intent that the plan will be finalized no less than two months prior to the start of construction. A copy of the final Nesting Bird Management Plan, along with documentation of agency review (CDFW, USFWS, CPUC) and incorporation of comments into the final version, shall be provided to the CPUC for approval prior to the CPUC issuing a notice to proceed during the breeding season.

MM BR-12: Burrowing Owl Impact Reduction Measures. To reduce impacts on burrowing owls, the applicant shall implement the following measures in all project work areas:

- Surveys for burrowing owls will be conducted by a qualified biologist within 30 days of construction during the non-breeding season and within 14 days of construction during the breeding season (February 1 through August 31) to confirm whether burrowing owls occupy the site. Surveys shall be performed throughout the project areas that contain suitable burrowing owl habitat, with a potential to be impacted by construction activities, plus an additional area extending 300 feet from the projects' boundaries.
- If an occupied burrow is identified, the applicant shall adhere to buffer distances detailed in the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012).
- The biologist will report all project-related impacts on burrowing owl to the appropriate resource agencies (CDFW and RCA, depending on the location of the impact).
- If impacts on burrowing owls or occupied burrows are unavoidable, the applicant shall develop and implement a Burrowing Owl Compensation Plan in consultation with the CDFW and RCA that is consistent with mitigation guidelines as outlined in the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012) or MSHCP guidelines for burrowing owl mitigation and compensation, as appropriate. The Burrowing Owl Compensation Plan shall describe the compensatory measures that will be undertaken to address the loss of burrowing owl burrows within the project area. The compensatory mitigation shall include mitigation for permanent impacts on nesting, occupied, and satellite burrows and occupied burrowing owl habitat by permanent conservation

of vegetation communities comparable to or better than the impacted area on sufficiently large acreage containing fossorial mammals.

MM BR-13: Trash Abatement. The applicant shall keep project areas free of trash and debris. Food-related trash items shall be stored in enclosed containers and regularly removed from site.

MM BR-14: Protection of Special Status Species on Castle and Cooke Land. The applicant is entering into an agreement with the RCA to allow for coverage of the Valley–Ivyglen and Alberhill Projects' obligations under the MSHCP on Castle and Cooke property, which falls outside MSHCP boundaries and thus is exempt from mitigation under the MSHCP. If this agreement is finalized prior to the start of construction, it shall be in effect for the duration of the projects or until SCE opts out. Should SCE opt out of the MSHCP, or if this agreement with the RCA is not finalized, the applicant shall implement the same or a greater level of species-specific avoidance, mitigation, restoration, and compensation measures as would have been required under the MSHCP. These additional measures would include MM BR-1, MM BR-4, and MM BR-8.

Impact BR-2 (VIG): Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS.
LESS THAN SIGNIFICANT WITH MITIGATION

Construction of the proposed Valley–Ivyglen Project would have a direct, permanent impact on riparian habitat and several vegetation communities that are listed as special status by CDFW (Table 4.4-3). Impacts on riparian habitat and wetlands are further discussed in Impact BR-3 (VIG) below. The MSHCP outlines mitigation and compensation measures for impacts on riparian habitat, vernal pools, and Covered Species' habitat.

Table 4.4-3 CNDDB Sensitive Vegetation Communities along Components of the Valley–Ivyglen Project (in acres)

Vegetation Community	Valley-Ivyglen 115-kV Segment								
	1	2	3	4	5	6	7	8	Total
Chamise Chaparral	---	---	---	---	4.69	31.94	0.61	---	37.24
Coast Live Oak Woodland	---	---	---	---	---	0.06	1.01	1.24	2.31
Riversidean Sage Scrub[2]	100.40	21.07	0.11	0.28	47.13	133.05	22.39	7.49	331.92
Southern Cottonwood-Willow Riparian Woodland[1]	.79	---	---	2.38	7.47	9.34	---	---	19.98
Southern Sycamore-Alder Riparian Woodland[1]	---	---	---	---	---	---	---	0.34	0.34

Source: SCE 2013a, 2014a

[1] CNDDB sensitive community is entitled "California sycamore woodland"

[2] Riversidean sage scrub is a type of coastal sage scrub (Holland 1986), which is part of sensitive natural community alliances according to CNDDB; coastal sage scrub is also a sensitive community under the MSHCP.

Special status vegetation communities present along the 115-kV subtransmission line include chamise chaparral, coast live oak woodland, Riversidean sage scrub, Southern cottonwood-willow riparian

woodland, Southern sycamore-alder riparian woodland, and Southern willow scrub. In addition, local policies protect certain vegetation communities. The City of Lake Elsinore General Plan Policy 2.2 discourages development within high-quality riparian habitat or high concentrations of (80 percent or more) natural native habitat and native plant species. The Riverside County General Plan establishes policies to protect oak woodlands.

Direct, permanent impacts on special status natural communities would result from the removal of vegetation for 115-kV installation and access road construction. Impacts may also result from the use of staging yards and wire-stringing sites. Trees or native vegetation may be trimmed or crushed during construction to accommodate equipment. For the purpose of this analysis, all special status natural communities that intersect with the disturbance buffers for the Valley–Ivyglen project are considered to be directly and permanently impacted, unless otherwise noted.

Special status natural communities may be disturbed or removed during construction. Project Commitment B would require a worker environmental training program and Project Commitment D would require development of a Habitat Restoration and Revegetation Plan. Implementation of these project commitments would reduce impacts to special status natural communities; however, impacts would still be significant. MM BR-1 through MM BR-4 would limit construction to designated areas, require preconstruction surveys and biological monitoring, and would limit the removal of native vegetation. MM BR-6 would limit the removal oak trees within the project area. MM BR-7 would clarify what must be included in the Habitat Restoration and Revegetation Plan mentioned in Project Commitment D. MM BR-9 would require implementation of an Invasive Plant Management Plan, which would help prevent the spread of invasive species in the project area. Implementation of these mitigation measures would reduce impacts to special status species to less than significant, through avoidance and vegetation restoration measures.

Mitigation Measures

MM BR-1: Limit Construction to Designated Areas and Avoid Riparian, Aquatic, and Wetland Areas.

MM BR-2: Preconstruction Surveys.

MM BR-3: Biological Monitoring During Construction.

MM BR-4: Limit Removal of Native Vegetation Communities and Trees.

MM BR-6: Oak tree protection measures.

MM BR-7: Habitat Restoration and Revegetation Plan Requirements.

MM BR-9: Invasive Plant Control Measures.

Impact BR-3 (VIG): Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
LESS THAN SIGNIFICANT WITH MITIGATION

Numerous hydrologic features that are subject to state and federal jurisdiction are present along the 115-kV subtransmission line and could be impacted by construction. Direct, permanent impacts on wetland habitat may result from grading and clearing of vegetation during construction of the proposed Valley–

Ivyglen Project. Grading and vegetation removal can remove or destabilize topsoil necessary for plant growth and contribute to soil erosion and sedimentation. New structures and access roads placed within existing hydrologic features may reroute surface flow, deposit fill into hydrologic features, or permanently remove aquatic habitat. The applicant anticipates that approximately 0.37 acres of wetlands under the jurisdiction of USACE and 0.89 acres under the jurisdiction of the CDFW would be permanently impacted by construction (Appendix G, Table 3). Segment VIG8 would permanently impact less than 0.1 acres of jurisdictional waters.

Federally and state protected wetlands may also be temporarily impacted by construction. Approximately 4 acres under the jurisdiction of the USACE and 5 acres under the jurisdiction of the CDFW are anticipated to be temporarily impacted. Trenching along Segment VIG1, VIG8, and the telecommunications route could temporarily deposit fill into hydrologic features, reroute surface flow, or contribute to sedimentation. The blasting that is anticipated to be needed along Segments VIG-1, VIG-2, VIG-5, VIG-6, and VIG-8 may directly impact drainages within or adjacent to the project ROW. However, the applicant has stated that trenching along Segment VIG8 would mostly occur within the road shoulder, limiting impacts on jurisdictional features and special status species. Construction of underground line along VIG8 would temporarily impact approximately 3 acres of jurisdictional waters. Construction of the proposed Valley-Ivyglen Project may directly impact wetlands through soil disturbance, crossing by vehicles, topographic changes that affect wetland hydrology, removal of wetland vegetation, and erosion, sedimentation, and input of pollutants. Potential impacts on wetlands would be reduced to less than significant by MMs BR-1, BR-2, and BR-3, which would limit construction to designated areas and protect aquatic resources, require site specific surveys, and biological monitoring. MM BR-15 would control erosion, sedimentation, and input of pollutants.

Numerous vernal pools representing marginally suitable habitat for Riverside fairy shrimp and vernal pool fairy shrimp were identified along the 115-kV subtransmission line route during vernal pool branchiopod surveys (Appendix E). The applicant conducted protocol-level surveys per USFWS and MSHCP requirements in 2009, 2010, 2011, 2012, and 2013. A total of 156 vernal pools were surveyed, and none contained federally listed vernal pool branchiopods. Therefore, this species is confirmed absent along the Valley–Ivyglen 115-kV subtransmission line. In addition, the applicant has provided confirmation that construction activities would not contribute to changes to topography that would impact vernal pool hydrology (CGR 2013). Therefore, no impacts to vernal pools are expected to result from construction of the proposed Valley–Ivyglen project.

Mitigation Measures

MM BR-1: Limit Construction to Designated Areas and Avoid Riparian, Aquatic, and Wetland Areas.

MM BR-2: Preconstruction Surveys.

MM BR-3: Biological Monitoring During Construction.

MM BR-15: Stormwater Pollution Prevention Plan (SWPPP) Best Management Practices (BMPs). BMPs to be included in the SWPPP shall include, but are not limited to, the following:

- The applicant shall not stockpile brush, loose soils, excavation spoils, or other similar debris material within sensitive habitats.
- If visible dust is present during construction activities, standard dust suppression techniques (e.g., water spraying) shall be used in all ground disturbance areas.

- During construction activities, measures shall be in place to ensure that contaminants are not discharged from construction sites. The SWPPP shall define areas where hazardous materials and trash will be stored; vehicles will be parked, fueled, and serviced; and construction materials will be stored.
- Runoff, sedimentation, and erosion shall be minimized through the use of water bars, silt fences, staked straw bales, wattles, and mulching and seeding of all disturbed areas. These measures shall be designed to minimize ponding, eliminate flood hazards, and avoid erosion and siltation into any creeks, streams, rivers, or bodies of water, and to preserve roadways and adjacent properties. BMPs shall be included for helicopter landing, fueling, and servicing areas and areas where helicopters are used for construction activities. For the proposed Valley–Ivyglen Project, BMPs shall also be included for blasting.
- Equipment storage, fueling, and staging areas shall be located in upland sites away from riparian areas or other sensitive habitats. These designated areas shall be located to prevent any runoff from entering sensitive habitat. Where vehicle maintenance (excluding fueling) cannot be avoided in areas outside those previously identified, these maintenance activities shall be performed at least 150 feet from all aquatic resources, or as specified by agency permits, on an impermeable bladder or tarp specified for such maintenance activities. Project-related spills of hazardous materials shall be cleaned up immediately and contaminated soils removed to approved disposal areas.

Verification of Construction General Permit coverage approval and the approved SWPPP(s) shall be provided to the CPUC at least 30 days prior to start of construction. Updated SWPPPs shall be provided to the CPUC on request during construction.

Impact BR-4 (VIG): Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
LESS THAN SIGNIFICANT WITH MITIGATION

The proposed Valley–Ivyglen Project would interfere with the movement of native resident wildlife species and/or impede the use of native wildlife nursery sites. The MSHCP Conservation Area is comprised of a variety of existing and proposed cores, extensions of existing cores, linkages, constrained linkages, and non-contiguous habitat blocks are shown on Figure 4.1.3 of the MSHCP. No existing cores or linkages are located within the project area. However, the 115-kV subtransmission line would intersect Proposed Linkages 1, 2 5, 6, and 19, Core 1, and Extension of Existing Core 2 (Riverside County 2003b; Figure 4.1.3).

The 115-kV subtransmission line is overhead in the areas where the notable proposed linkages and cores are located. The 115-kV structures would be widely spaced and are not anticipated to restrict the regional movement of native fish or wildlife. However, migrating wildlife could be significantly affected on a local scale during construction. For example, wildlife could become trapped in excavations. In addition, vegetation removal from construction may fragment normally contiguous areas of wildlife habitat used for movement. Project Commitment B would require a worker environmental awareness program, which would educate construction workers on potential wildlife interactions with the job sites; however, impacts could still be significant. MM BR-7 requires the development of a Habitat Restoration and Revegetation Plan that describes the restoration of terrestrial and aquatic movement corridors that may have been interrupted during construction. MM BR-10 would be implemented to prevent wildlife moving through work sites from becoming trapped in trenches or excavations. SCE would also implement MM BR-11 and

MM BR-12, which would require the implementation of a Nesting Bird Management Plan and burrowing owl impact reduction measures. With the implementation of these mitigation measures, impacts under this criterion would be less than significant.

Mitigation Measures

MM BR-7: Habitat Restoration and Revegetation Plan Requirements.

MM BR-10: Prevent Wildlife Entrapment.

MM BR-11: Migratory Birds and Raptors Impact Reduction Measures.

MM BR-12: Burrowing Owl Impact Reduction Measures.

Impact BR-5 (VIG): Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
LESS THAN SIGNIFICANT

The proposed Valley–Ivyglen Project is not anticipated to conflict with any local policies or ordinances. Construction of the 115-kV subtransmission line would require the removal or trimming of oak trees, which are protected by Riverside County and Lake Elsinore Municipal policies (e.g., Riverside County Roadside Tree Ordinance 12.08.050, Section 5.116 of the City of Lake Elsinore Municipal Code, Riverside County's General Plan, and City of Lake Elsinore General Plan Policy 2.2). These ordinances require permits for the removal or trimming of certain types of trees, including oak trees. The applicant would obtain all necessary permits prior to the removal or trimming of these trees. For a further discussion about impacts on oak trees, native plants and riparian environments, refer to Impacts BR-1 and BR-2.

Impact BR-6 (VIG): Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.
LESS THAN SIGNIFICANT WITH MITIGATION

The entirety of the proposed Valley–Ivyglen 115-kV subtransmission line is located within the plan areas of the MSHCP and SKR HCP (Figure 4.4-1), with the exception of the center portion of Segment VIG5, which is located on private land.

Unlike the MSHCP, the SKR HCP does not include a PSE provision in which applicants may streamline the take permitting process. The applicant was required to pursue an alternative mechanism for obtaining SKR take authorization for both proposed projects. The applicant worked with the RCHCA to amend the SKR HCP to allow the applicant to obtain SKR incidental take authorization within SKR HCP areas for both the Alberhill and Valley–Ivyglen projects. As of October 15, 2012 the applicant finalized an SKR HCP Implementation Agreement with the RCHCA, which provides a process through which the applicant may obtain take authorization of SKR pursuant to the SKR HCP (AMEC 2014a). The Implementation Agreement also applies to work within MSHCP areas identified as ARL because SKR HCP core reserve requirements do not apply to ARL (Figure 4.4-1). The Implementation Agreement also allows the applicant to obtain take for SKR on lands owned by Castle and Cooke. As of June, 2015, the RCHCA is processing a COI to formalize this take agreement and identify the applicant as a participant in the SKR HCP for both the Valley–Ivyglen and Alberhill Projects. The COIs will be finalized prior to construction and will be included in the Notice to Proceed request for each project.

As a PSE under the MSHCP, the applicant is required to prepare an MSHCP consistency report and Determination of Biologically Equivalent or Superior Preservation for approval by the RCA. In addition, under MM BR-7 (Habitat Restoration and Revegetation Plan), the applicant would consult with the USFWS and CDFW prior to start of construction to develop a Habitat Restoration and Revegetation Plan for native vegetation and sensitive resources including wetlands, wetland buffer areas, riparian habitat, and natural communities. The applicant would also consult with the agencies after construction of the Valley–Ivyglen Project to ensure that areas are adequately restored or compensation is provided. Under MM BR-6, MM BR-7, MM BR-8, MM BR-11, and MM BR-12, the applicant would consult with the USFWS, CDFW, RCA, and RCHCA prior to, during, and after construction of the Valley–Ivyglen Project (as applicable) regarding oak trees, special status plants, nesting birds, and burrowing owl impact avoidance and reduction. MSHCP critical habitat and protected species, the SKR HCP, and impacts on SKR are further discussed under Impact BR-1 (VIG).

The USFWS and CDFW have authorized the applicant's entry into the Lake Mathews-Estelle Mountain Core Reserve for clipping and snubbing during construction of the Alberhill 500-kV transmission lines under the applicant's existing maintenance agreement with the RCHCA (USFWS and CDFW 2013a). A description of this work is provided in Section 4.4.5.2 (SKR).

Mitigation Measures

MM BR-6: Oak tree protection measures.

MM BR-7: Habitat Restoration and Revegetation Plan Requirements.

MM BR-8: Special Status Plant Avoidance and Mitigation Measures.

MM BR-11: Migratory Birds and Raptors Impact Reduction Measures.

MM BR-12: Burrowing Owl Impact Reduction Measures.

4.4.5 Environmental Impacts and Mitigation Measures (Alberhill Project)

4.4.5.1 Project Commitments (Alberhill Project)

The applicant has committed to undertaking impact reduction measures as part of the design of the proposed Alberhill Project. These measures, referred to in this document as Project Commitments, are the same for the proposed Alberhill and Valley–Ivyglen Projects (see Section 4.4.4.1).

4.4.5.2 Impacts Analysis (Alberhill Project)

Impact BR-1 (ASP): Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.
LESS THAN SIGNIFICANT WITH MITIGATION

Direct, indirect, temporary, and permanent impacts on special status species, migratory bird species, and vegetation communities are discussed below. The discussion is organized according to impacts associated with all components of the proposed Alberhill Project, the proposed substation site, the proposed 500-kV transmission line routes, and the proposed 115-kV subtransmission line routes.

Impacts would be most severe during construction, and would diminish during operations. Mitigation measures are intended to reduce potentially significant impacts during construction. No impacts would remain potentially significant during operations if mitigation measures are properly implemented to address the impact during construction.

Impacts on all special status species in all project areas within MSHCP boundaries are covered under the MSHCP, with the exception of impacts on SKR, which are covered under the SKR HCP. Therefore, the MSHCP would dictate the type and extent of avoidance, mitigation, and compensation measures for each covered species, unless otherwise specified in project-specific mitigation measures. In addition to these measures, the mitigation measures outlined below would be implemented to reduce potentially significant impacts on special status species to less than significant. The applicant is entering into an agreement with the RCA to allow for coverage of the proposed Valley–Ivyglen and Alberhill projects under the MSHCP on Castle and Cooke property, which is outside MSHCP boundaries. Should this agreement not be finalized, MM BR-14 outlines options for take coverage or avoidance of impacts to special status species on Castle and Cooke property.

Direct, permanent impacts on special status species or their habitat are associated with the installation of permanent components of the proposed Alberhill Project (e.g., proposed substation, 500-kV tower and 115-kV pole footings, and new access roads) and the potential direct incidental take caused by construction of the proposed Alberhill Project. Permanent components would require the complete removal of vegetation within their footprint. Overall, the project would permanently impact 87.9 acres of land, using the conventional method for constructing the 500 –kV Line and 68.8 acres if using the helicopter method for constructing the 500-kV Line (see Tables 2-6 and 2-7 in Chapter 2, "Project Description"). Temporary impacts on special status species would result from the temporary use of staging areas, conductor pulling, stringing, and tensioning areas, the improvement and use of existing access roads, and the removal of existing towers. In addition, construction activities would produce elevated levels of dust, night light, and noise within and adjacent to the components of the proposed Alberhill Project. The proposed Alberhill Project would temporarily disturb 269.4 acres using the conventional method for constructing the 500-kV Line and 245 acres if using the helicopter method for constructing the 500-kV Line of land (Table 2-6 and 2-7).

Overall, construction and operation of the proposed Alberhill Project could negatively impact individuals of the following special status wildlife species and their habitats: Quino checkerspot butterfly, vernal pool fairy shrimp, Riverside fairy shrimp, orange-throated whiptail, western spadefoot, coastal California gnatcatcher, least Bell's vireo, western burrowing owl, golden eagle, San Bernardino kangaroo rat, and SKR (Table 4.4-4). Dulzura kangaroo rat, a species protected under the MSHCP, may also be impacted. Construction and operation of the proposed Alberhill Project could also result in adverse impacts on the following special status plants: long-spined spineflower, Munz's onion, paniculate tarplant, Coulter's matilija poppy, Parry's spineflower, Robinson's pepper grass, San Diego ambrosia, and smooth tarplant (Table 4.4-1). Table 4.4-4 details the presence of these species within the Alberhill Project area by project component. These species were analyzed in this document because of their moderate to high potential to occur within the proposed Alberhill Project area, their elevated conservation status (i.e., listed as threatened or endangered), or the necessity to obtain a permit or provide compensation for impacts on the species or its habitat. Construction and operation of the proposed Alberhill Project could also result in adverse impacts on migratory bird species and special status vegetation communities.

Table 4.4-4 Sensitive Plant and Wildlife Species and Critical Habitat Presence by Alberhill Project Component

Species	Proposed Substation Site	Proposed 500-kV Lines	Proposed Alberhill 115-kV Subtransmission Line Segments								
			1	1.5	2	3	4	5	6	7	8
Plants											
Long-spined spineflower	---	P	---	---	---	---	---	P	---	---	---
Paniculate tarplant	---	P	---	---	P	---	P	Pt	P	---	---
Coulter's matilija poppy	---	P	---	---	---	---	---	---	---	---	---
Parry's spineflower	---	P	---	---	---	---	---	P	P	---	---
Robinson's pepper grass	P	P	P	---	P	---	---	---	---	---	---
Munz's onion	---	CHP	---	---	P; CHP	---	---	---	---	---	---
San Diego ambrosia	---	---	---	---	P; CHP	---	---	---	---	---	---
Smooth tarplant	---	---	---	---	P	---	P	---	P	---	P
Chaparral sand verbena	---	---	---	P	---	---	---	---	---	---	---
Palmer's grapplinghook	---	---	---	---	---	---	---	P	---	---	---
Coast live oak	P	P	P	P	P	P	P	P	P	P	---
Coulter's goldfields	---	---	---	---	P	---	---	---	---	---	---
San Jacinto Valley crownscale	---	---	---	---	P	---	---	---	---	---	---
Small-flowered microseris	---	---	---	---	P	---	---	---	---	---	---
Small-flowered morning glory	---	---	---	---	P	---	---	---	---	---	---
Wildlife											
Quino checkerspot butterfly	HPP	---	---	---	---	---	---	---	---	---	---
Vernal pool fairy shrimp	---	---	---	---	---	---	PHP	PHP	---	---	---
Riverside fairy shrimp	---	---	---	---	---	---	PHP	PHP	---	---	---
Western spadefoot	PHP	---	---	---	P	---	---	---	---	---	---
Orange-throated whiptail	P	P	P	---	P	---	---	P	---	---	---
Coastal California gnatcatcher	P;CHP	Present	---	---	CHP	---	---	P; CHP	---	---	---
Least Bell's vireo	P	---	---	P	P	---	---	---	---	---	---
Southern California rufous-crowned sparrow	P	P	P	P	P	P	P	P	P	P	---
Western burrowing owl	PHP	---	---	---	---	---	---	---	P	---	---
Golden eagle	P	P	---	---	---	---	---	---	---	---	---
White-tailed kite	P	---	---	---	P	---	---	---	---	---	---
Southwestern Willow Flycatcher	---	---	---	---	P	---	P	---	---	---	---
Yellow Warbler	---	---	---	---	---	---	P	---	---	---	---
Peregrine Falcon	---	---	---	---	P	---	---	---	---	---	---
Stephens' kangaroo rat	P	PHP	PHP	P	---	---	P	P	P	---	---
Dulzura kangaroo rat	P	P	---	---	---	---	---	---	---	---	---
San Diego woodrat	---	---	---	---	---	---	---	P	---	---	---
Black-tailed jackrabbit	---	---	---	---	P	---	---	---	P	---	---

Sources: AECOM 2009a, 2009b, 2009c, 2009d, 2010a, 2010b, 2010c, 2010d, 2011a, 2011b, 2011c, 2011d, 2011e, 2011f, 2011g, 2012b, 2012c, 2014; AMEC 2006a, 2006b, 2009a, 2009b, 2011, 2012; Bloom Biological 2011; CNDDB 2015; Kidd 2013, 2014; Read 2010; Read and Forde 2010; Faulkner 2009; SJM Biological Consultants 2010a, 2010b, 2011

Key:
CHP = Critical Habitat Present
HPP = Host Plant Present
P= Present
PHP = Potential Habitat Present

1

Critical Habitat for Coastal California Gnatcatcher, Munz's Onion, and San Diego Ambrosia

Portions of the proposed Alberhill substation site, 500-kV transmission lines, and 115-kV subtransmission lines occur within USFWS-designated critical habitat for coastal California gnatcatcher, Munz's onion, and San Diego ambrosia (Figure 4.4-2). Each of these project components cross critical habitat for coastal California gnatcatcher. This species was confirmed to be present adjacent to 115-kV Segment ASP5 in 2011. Critical habitat for Munz's onion and San Diego ambrosia and a known population of San Diego ambrosia occur adjacent to 115-kV Segment ASP2. Impacts on the critical habitat for these species are presented in Table 4.4-5.

Table 4.4-5 California Gnatcatcher, San Diego Ambrosia, and Munz's Onion Critical Habitat Acreages by Project Component

Species	Alberhill Project Components[1]		
	Proposed Alberhill Substation Site	Proposed Alberhill 500-kV Transmission Line Routes	Proposed Alberhill 115-kV Subtransmission Line Routes
Coastal California gnatcatcher	42.94 acres	51.49 acres	134.81 acres
Munz's onion	--	--	0.25 acres
San Diego ambrosia	--	--	8.80 acres

Source: USFWS 2011, SCE 2013b
Note:
[1]Acreages include temporary and permanent impacts.

Temporary impacts on critical habitat are related to project construction. Construction activities would temporarily disturb or remove vegetation and produce elevated levels of noise, dust, and light within and adjacent to the project area. These impacts are associated with construction staging areas, wire stringing sites, the removal of existing towers, and the use and improvement of existing access roads. The impacts along the 500-kV Line Route to Coastal California gnatcatcher habitat would be less than those presented in Table 4.4-5 if helicopters are used in conjunction with the conventional method.

Permanent impacts on the critical habitat for these three species are associated with permanent project features (e.g., substation, new towers, access roads) that would remain throughout the life of the project, as well as the potential for direct, incidental take of individuals during project construction. The project would require the permanent removal of these species' critical habitat for the construction of the proposed substation, pole and tower footings, and access roads.

Impacts on critical habitat for these species would be reduced with the implementation of Project Commitments B and D, which require a worker environmental awareness program and a habitat restoration and revegetation plan; however, impacts would still be significant. MMs BR-1 through BR-4 and MM BR-7 through MM BR-9 restrict construction to certain work areas, require preconstruction surveys, require biological monitoring, limit the amount of native vegetation that is disturbed during construction, require development of a Habitat Restoration and Revegetation Plan, required avoidance of special status plant species, and help reduce the spread of invasive species. Within MSHCP boundaries, these impacts would be reduced to less than significant through MSHCP-specific mitigation measures and BMPs (Appendix H).

Special Status Plants

Construction-related activities such as site preparation, vegetation removal, installation of poles or towers and the use of construction equipment could cause permanent and temporary direct and indirect impacts through the loss of special status plants or their habitat, root or seed damage, or changes in soil chemistry

or composition. Permanent direct impacts include result from new access roads, clearing of vegetation at tower footing locations, or the application of herbicides for fire prevention and weed control. Indirect impacts on special status plants may be caused by soil disturbance, sedimentation or runoff, and increased dust levels during construction.

Construction of the substation would require the removal of three valley oaks protected under the 1996 County of Riverside Open Space and Conservation Element. In addition, the establishment of the 5-acre Import Soil Source Area extending from the northeast corner of the substation may result in the permanent removal of approximately 12 oaks.

Pole footings would avoid populations of special status plant species where possible and impacts of project construction, operation, and maintenance to special status plants would be reduced by Project Commitments B and D, which require a worker environmental awareness program and a habitat restoration and revegetation plan; however, impacts would still be significant. MMs BR-1 through BR-4 and MM BR-6 through BR-9 would reduce the impacts to special status plant species to less than significant. In areas where the removal of special status plants cannot be avoided, MM BR-8 provides conditions for the restoration of and compensation for impacted special status plant species. MM BR-9 outlines measures to minimize the introduction and spread of invasive plant species. MM BR-4 limits the removal of native vegetation during construction activities, and MM BR-7 provides for the creation and implementation of a post-construction Habitat Restoration and Revegetation Plan for temporarily impacted native vegetation. The removal of oak trees would be avoided to the fullest extent practicable. However, should the removal of these oaks be unavoidable, MM BR-6 would reduce impacts to less than significant levels.

The applicant would become a PSE in the MSHCP. PSEs under the MSHCP are required to conduct site-specific focused surveys for Narrow Endemic Plant Species and provide compensation in the event that sensitive habitat is removed or adversely affected during project construction. The analysis determines that impacts on special status plants would be less than significant with the implementation of mitigation measures.

Western Burrowing Owl

Burrowing owls and burrows were observed at several locations along the Alberhill 115-kV subtransmission line while completing protocol-level surveys from 2011 to 2014 and have the potential to be impacted by project construction. Owls may be struck by vehicles and burrows may be crushed by construction equipment. Breeding pairs may be indirectly impacted through increased noise, dust, and human disturbance. Should burrowing owls nest in close proximity to construction, construction-related impacts would be significant. Trash left in work areas could attract owl predators such as common ravens and coyotes. The applicant shall implement Project Commitments B and H, which require a worker environmental awareness program and limit the noise from construction; however, impacts may still be significant. As a PSE in the MSHCP, the applicant would be required to conduct surveys for burrowing owl and provide compensation for impacted habitat. MM BR-12 requires preconstruction surveys for burrowing owls and avoidance of active nest burrows. MM BR-13 would require the applicant to keep work areas free of trash that may attract owl predators. Implementation of MM BR-12 and MM BR-13 would reduce impacts on burrowing owls to less than significant.

Stephens' Kangaroo Rat

Construction of the proposed Alberhill Project would cause adverse impacts on SKR and its habitat. All major project components cross or are adjacent to habitat known to be suitable for SKR. Table 4.4-4 describes where SKR are present. The impacts would be temporary and permanent, direct and indirect. SKR are present along the project alignment, and SKR that maintain territories in areas adjacent to work

areas could be impacted by construction and operations. SKR maintain territories between 0.1 and 0.4 acres (USFWS 1997). In general, construction of the project, including clearing and grading and areas where matting or crushing of vegetation would occur, would result in temporary impacts. Permanent impacts on SKR would occur from loss of habitat (e.g., within the substation footprint and at tower sites) and would be localized.

SKR would be susceptible to death or injury from project vehicles and equipment during clearing and grading, or any activities where ground is disturbed or vegetation crushed. Project-related traffic on access roads and construction activities at work sites could also result in the death or injury of SKR. SKR could also be harmed by inadvertent hazardous materials spills, including fuel and hydraulic fluid leaks. All crew activities, as well as trash and debris associated with construction of the project could attract predators of SKR, including coyotes and domestic dogs.

SKR habitat would be lost in project areas where permanent structures, access roads, or the proposed substation would be located. With a total area of approximately 42.9 acres, the proposed substation site and adjacent Import Soil Source Area would result in the largest project-related loss of suitable SKR habitat in a single area. In all areas of the project where vegetation and soil would be disturbed, but especially in areas that would be cleared or graded, the quality of SKR habitat would be negatively affected. Introduced noxious and invasive plant species could out-compete existing annual vegetation that SKR forage within.

To reduce impacts on SKR, a number of avoidance and minimization measures are provided, including Project Commitments B, D, and H. The Project Commitments require worker environmental training, require development of a Habitat Restoration and Revegetation Plan, and require construction noise control. Even with the implementation of these Project Commitments, impacts to SKR would still be significant. MM BR-1 through MM BR-3 would limit construction to designated areas, and require preconstruction surveys and biological monitoring. MM BR-7 requires the applicant to develop a Habitat Restoration and Revegetation plan, including additional measures not described in Project Commitment D. MM BR-10 would prevent the entrapment of SKR. MM BR-16 pertains to protective measures that would be used during construction access to the Lake Mathews-Estelle Mountain Core Reserve. Collectively, these measures would reduce the likelihood that SKR are injured or killed, or that their habitat is adversely modified during construction. With implementation of these measures, impacts would be reduced to less than significant.

Migratory Birds

Construction activities, such as noise, human presence, and habitat alteration due to tree trimming or vegetation removal, can affect the nesting behavior of migratory bird species. Construction of the 500-kV Line and segment ASP 5 may require the use of helicopters. Helicopters would be used for the 500-kV transmission line if the helicopter method is chosen in place of the conventional method for eight towers. The choice between methods is detailed in Section 2.4.5.2. Impacts from the use of helicopters to migratory birds could include changes in nesting and foraging behavior in the vicinity of the 500-kV transmission line due to rotor wash and noise. Under certain conditions, impacts on bird species could be considered a take under the MBTA, ESA, CESA or CFGCs 3503 and 3503.5. In addition, some bird species may be at increased risk of colliding with new transmission structures and lines.

However, these impacts on sensitive and migratory bird populations would be minimized by adoption of Project Commitment C, MM BR-1, MM BR-2, MM BR-3, MM BR-5, and MM BR-11. Project Commitment C states that subtransmission line poles would be designed to be raptor-safe in accordance with APLIC standards. MM BR-2 requires preconstruction surveys to ensure that existing nests are located and protected before construction begins and MM BR-3 requires biological monitoring during construction. MM BR-5 outlines protection measures for coastal California gnatcatchers and MM BR-11

requires the development and implementation of a Nesting Bird Management Plan to protect birds during the breeding season. These measures collectively will reduce the likelihood that birds are injured or killed or their nests or habitat disturbed during construction. With implementation of these measures, impacts will be reduced to less than significant.

Special Status Birds

The construction of the proposed substation, 500-kV lines, and 115-kV lines may negatively impact special status birds, including least Bell's vireo, yellow warblers, coastal California gnatcatcher, golden eagles, white-tailed kites, and peregrine falcons. Table 4.4-4 details the project components where these species have been observed.

Yellow warblers, least Bell's vireos, white-tailed kites, and peregrine falcons have been observed during bird surveys at the proposed substation site or along the 115-kV subtransmission line (see Table 4.4-4). Construction may indirectly impact these species through increased human presence, noise (from helicopters, construction equipment, and increased traffic) and dust, and directly impact them through the removal of habitat and direct disturbance of nests during the breeding season. These impacts would be considered significant. Project Commitments B and D would reduce impacts to these species through implementing a worker environmental training program and habitat restoration plan; however, impacts would remain that are still significant. MMs BR-1 through BR-4 and MM BR-11 would reduce impacts to less than significant levels for these species. The mitigation measures require preconstruction surveys, biological monitoring, avoidance or restoration of or compensation for impacts on riparian habitat or native vegetation, and the development of a Nesting Bird Management Plan. Collectively, these measures reduce direct disturbance of habitat for these species, require restoration of disturbed habitat, and reduce the likelihood that nests would be disturbed or destroyed during construction.

Golden eagles can be attracted to transmission structures because they provide a perch for hunting, and on rare occasion, nesting. Eagles, falcons, and other birds may also collide with transmission lines, which can be difficult for birds to detect during inclement weather or at night. The 500-kV line is not preexisting like the 115-kV line, and may pose an increased risk to golden eagles and other birds because resident birds would not be acclimated to the presence of the new lines. However, with the implementation of Project Commitment C, avian-safe transmission structures would be incorporated into the design of the 115-kV and 500-kV lines. Such structures provide adequate clearances to accommodate a large bird between energized or grounded parts, as recommended by APLIC (APLIC 2006). Construction of the project may directly disturb or destroy nests of breeding raptors. Therefore, MM BR-11 requires the development and implementation of a Nesting Bird Management Plan for the protection of breeding birds. This measure would ensure that impacts on golden eagles and other raptors are reduced to less than significant levels. With implementation of this measure, the project is not anticipated to significantly impact golden eagles through risk of collision with the 500-kV line.

Quino Checkerspot Butterfly

Quino checkerspot butterfly habitat exists within the footprint of the proposed substation site and Import Soil Source Area (Table 4.4-4). Populations of foothill plantain, a critically important host plant for Quino checkerspot larvae, were recorded present in 2009 in the southeastern portion of the substation footprint and within the central portion of the Import Soil Source Area. No butterflies or larvae were identified during the 2009 Quino survey. Therefore, construction of the proposed project is not anticipated to impact Quino checkerspot butterflies.

Special Status Reptiles and Amphibians

In 2013, an orange throated whiptail was observed within the disturbance area for the proposed substation. Western spadefoot has not been observed within the substation footprint. No arroyo toad

adults, larvae, or eggs were observed during protocol-level surveys in 2010. Construction of the proposed project is not anticipated to significantly impact Belding's orange-throated whiptail, western spadefoot, or arroyo toad.

Riverside Fairy Shrimp and Vernal Pool Fairy Shrimp

Surveys were undertaken in 2009 and 2010 to identify vernal pools that may provide for vernal pool branchiopods, specifically Santa Rosa Plateau fairy shrimp, Riverside fairy shrimp, and vernal pool fairy shrimp. In 2012 and 2013, protocol-level vernal pool branchiopod surveys conducted for the Valley–Ivyglen project identified numerous vernal pools along Segments ASP1.5 and ASP2. Surveys determined that no listed vernal pool branchiopods were present in these pools. Therefore, construction of the proposed project is not anticipated to impact Riverside or vernal pool fairy shrimp.

Mitigation Measures

MM BR-1: Limit Construction to Designated Areas and Avoid Riparian, Aquatic, and Wetland Areas.

MM BR-2: Preconstruction Surveys.

MM BR-3: Biological Monitoring During Construction.

MM BR-4: Limit Removal of Native Vegetation Communities and Trees.

MM BR-5: California gnatcatcher protection measures.

MM BR-6: Oak tree protection measures.

MM BR-7: Habitat Restoration and Revegetation Plan Requirements.

MM BR-8: Special Status Plant Avoidance and Mitigation Measures.

MM BR-9: Invasive Plant Control Measures.

MM BR-10: Prevent Wildlife Entrapment.

MM BR-11: Migratory Birds and Raptors Impact Reduction Measures.

MM BR-12: Burrowing Owl Impact Reduction Measures.

MM BR-13: Trash Abatement.

MM BR-14: Protection of Special Status Species on Castle and Cooke Land.

MM BR-16: Stephens' Kangaroo Rat Take Avoidance within Core Reserve. The applicant shall ensure that take of SKR within the Lake Mathews-Estelle Mountain Core Reserve does not occur during any project construction activity. To avoid take of SKR, the following measures shall be implemented:

Daylight Hours Only

- No vehicle or equipment use for any project construction activity shall occur within the Core Reserve or on its roadways within 30 minutes prior to sunset or 30 minutes after sunrise except during an emergency condition. If an emergency condition occurs and nighttime access or use is

necessary, the CPUC shall be notified within 24 hours. To the extent feasible, biological monitors qualified to monitor for SKR shall be present during emergency access to the Core Reserve.

Monitoring

- No more than 14 days prior to conducting any project construction activity within the Core Reserve, biological monitors qualified to monitor for SKR shall complete preconstruction surveys and flag confirmed and potential SKR burrow complexes (including burrows that may be used by other kangaroo rat species) for avoidance. Survey areas shall include Lake Street and all access roads to 500-kV tower sites evaluated in the EIR and approved by the CPUC for construction access, plus a 25-foot buffer area (except in areas inaccessible by foot) on each side of these roads. Surveyed and flagged areas shall also include all 500-kV ROWs to be accessed within the Core Reserve.

Vehicle Use

- Vehicle use and worker access within the Core Reserve shall be minimal. Vehicles shall not travel faster than 10 miles per hour within the Core Reserve. All construction vehicles and equipment shall remain on existing access and maintenance roads used to access the applicant's 500-kV towers within the Core Reserve.
- Biological monitors qualified to monitor for SKR shall accompany all workers to and from all work sites within the Core Reserve, and shall conduct daily clearance sweeps immediately prior to any project construction activity for all areas within the Core Reserve to be accessed that day.
- If activities at 500-kV tower sites adjacent to the Core Reserve require equipment to back up into the Core Reserve on areas that are not existing access roads, biological monitors qualified to monitor for SKR shall monitor the process of backing up and exiting the Core Reserve areas and all activities that occur in proximity to the equipment while it is located within the Core Reserve area. Equipment shall be carefully inspected by the monitors for SKR prior to backing up or exiting the Core Reserve area. If SKR are present, the equipment shall not be moved until all SKR have left the equipment and all areas within 20 feet of the equipment.

Signage

- Clearly marked and visible signs listing the required speed limit and reminding drivers to watch for and avoid kangaroo rats shall be posted at the entry point into the Core Reserve and at regular intervals thereafter (at minimum every 0.25 miles) along all roads to be accessed within the Core Reserve.

Other Requirements

- The applicant shall not access the 0.5-mile Hilltop Road segment located within the Core Reserve between 500-kV Towers M13-12 and M13-T1 other than by foot. If accessed by foot, no more than 14 days prior to access, preconstruction surveys shall be conducted along the 0.5-mile Hilltop Road segment to identify and flag potential kangaroo rat burrow complexes for avoidance.

No activities other than grounding and wire snubbing and vehicle use required for these activities shall occur at 500-kV tower sites located within the Core Reserve.

Impact BR-2 (ASP): Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS.
LESS THAN SIGNIFICANT WITH MITIGATION

Riparian habitat and special status natural communities are present within the proposed Alberhill Project area. Impacts on riparian habitat and wetlands are further discussed in Impact BR-3 (ASP). Several natural communities designated as special status by the CDFW are present at the proposed substation site and along the proposed 500-kV transmission line and 115-kV subtransmission line routes, including chamise chaparral, coast live oak woodland, Riversidean sage scrub, Southern cottonwood-willow riparian woodland, and Southern sycamore-alder riparian woodland (Table 4.4-6). In addition, Riverside County's General Plan establishes policies to protect oak woodlands and the City of Lake Elsinore General Plan Policy 2.2 discourages development within high-quality riparian habitat or high concentrations (80 percent or more) of natural native habitat and native plant species.

Direct, permanent impacts on special status natural communities would result from the removal of vegetation for substation construction, pole and tower installation, helicopter pads (if helicopter construction method is used for the 500-kV transmission lines), and access road construction. Impacts may also result from the use of temporary staging yards and wire-stringing sites. In addition, trees or native vegetation may require trimming, crushing, or removal to accommodate construction of the proposed Alberhill Project. The impacts along the 500-kV transmission line to Riversidean Sage Scrub and Southern Sycamore-Alder Riparian Woodland habitat would be less than those presented in Table 4.4-6 if helicopters are used in conjunction with the conventional method.

Impacts analyses for special status natural communities were completed by overlaying the applicant-provided GIS data for the vegetation communities over the general disturbance area for the proposed Alberhill Project (SCE 2013d). Special status natural communities may be disturbed or removed during construction. Project Commitment B would provide a worker environmental awareness program to ensure compliance with onsite biological resource protection measures. Project Commitment D would require development of a Habitat Restoration and Revegetation Plan. However, populations of special status plants could be disturbed or removed by construction. Impacts from the construction and operation of the proposed Alberhill Project would be significant.

MMs BR-1 through BR-4, MM BR-6, MM BR-7, and MM BR-9 would limit construction to designated areas, require preconstruction surveys and biological monitoring, and would limit the removal of native vegetation and oak trees. MMs BR-1 through BR-4 would limit construction to designated areas, require preconstruction surveys and biological monitoring, and would limit the removal of native vegetation. MM BR-6 would limit the removal of oak trees within the project area. MM BR-7 would require the inclusion of additional provisions in the Habitat Restoration and Revegetation Plan that will be developed pursuant to Project Commitment D. MM BR-9 would require implementation of an Invasive Plant Management Plan, which would help prevent the spread of invasive species in the project area. Implementation of these mitigation measures would reduce impacts to special status natural communities to less than significant, through avoidance and vegetation restoration measures. Therefore, impacts under this criterion would be less that significant with mitigation.

Table 4.4-6 Vegetation Types along Components of the Alberhill Project (in Acres)

Vegetation Community	Alberhill Substation	500-kV Transmission Lines	115-kV Subtransmission Segments									Total
			1	1.5	2	3	4	5	6	7	8	
Chamise Chaparral	---	---	---	---	---	---	---	1.66	1.98	---	---	3.64
Coast Live Oak Woodland	---	---	---	---	1.64	---	---	3.38	---	---	---	5.02
Riversidean Sage Scrub[2]	4.47	30.17	---	---	15.06	0.93	1.62	2.22	0.86	---	---	55.33
Southern Cottonwood-Willow Riparian Woodland	---	---	---	0.76	1.38	---	0.57	---	---	---	---	2.71
Southern Sycamore-Alder Riparian Woodland[1]	---	0.58	---	---	---	---	---	---	---	---	---	0.58
Southern Willow Scrub	0.80	---	---	3.19	6.97	---	---	0.69	0.06	---	---	11.71

Source: SCE 2013a, 2014a

Notes:

1 CNDDB sensitive community is entitled "California sycamore woodland"

2 Riversidean sage scrub is a type of coastal sage scrub (Holland 1986), which is part of sensitive natural community alliances according to the CNDDB; coastal sage scrub is also a sensitive community under the MSHCP.

Key:

CNDDB = California Natural Diversity Database

kV = kilovolt

MSHCP = Multiple Species Habitat Conservation Plan

Mitigation Measures

MM BR-1: Limit Construction to Designated Areas and Avoid Riparian, Aquatic, and Wetland Areas.

MM BR-2: Preconstruction Surveys.

MM BR-3: Biological Monitoring During Construction.

MM BR-4: Limit Removal of Native Vegetation Communities and Trees.

MM BR-6: Oak tree protection measures.

MM BR-7: Habitat Restoration and Revegetation Plan Requirements.

MM BR-9: Invasive Plant Control Measures.

Impact BR-3 (ASP): Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
LESS THAN SIGNIFICANT WITH MITIGATION

Numerous wetlands, drainages, or riparian areas, including many known to be subject to federal jurisdiction, have been identified in proximity to components of the proposed Alberhill Project. Numerous vernal pools were also identified and surveyed as potential habitat for vernal pool branchiopods. Construction of new access roads; clearing vegetation, which exposes topsoil to weathering and erosion; and installing facilities within wetland or upland drainage areas would result in direct, permanent impacts on federally protected wetlands (including upland areas and drainages) as defined by Section 404 of the CWA. These vernal pools, along with Riverside fairy shrimp and vernal pool fairy shrimp, are discussed above under Impact BR-1 (ASP).

The applicant anticipates that approximately 0.3 acres of federally jurisdictional waters would be permanently impacted by construction (Appendix G, Table 4). Although not all of the features are considered to be federally protected wetland systems, several potentially support sensitive wildlife species, and may fall under the jurisdiction of the CDFW. Approximately 0.8 acres of waters under the jurisdiction of the CDFW may be permanently impacted. These features would generally be impacted only temporarily and would be restored following construction. These temporary impacts would total approximately 0.5 acres under the jurisdiction of the USACE and 1.71 acres under the jurisdiction of the CDFW (Appendix G, Table 4). However, permanent, direct impacts on wetlands may result from placing project elements within these features.

ASP-13, an artificial 0.84-acre stock pond that supports riparian vegetation, is located within the proposed Alberhill substation site (Figure 2-2i). The stock pond will be removed during construction of the proposed substation.

ASP-8 is an unvegetated channel that drains southward towards Staging Area ASP1 and eventually flows into a concrete channel (ASP-9) located along the staging area's eastern boundary and into a culvert beneath I-15. The feature is subject to state and federal jurisdiction. The northern portion of this feature west of Lake Street at 500-kV Tower R15X/SA6 would be directly and permanently impacted by the access road for Tower R13/SA5.

In addition to impacts on ASP-13 and ASP-8, several other small, unvegetated channels (ASP-10, ASP-11, and ASP-12) would be impacted during construction of the 500-kV transmission line.

Construction of the project may directly impact wetlands through soil disturbance, crossing by vehicles, topographic changes that affect wetland hydrology, removal of wetland vegetation, and erosion, sedimentation, and input of pollutants. Potential impacts on wetlands would be reduced to less than significant by MMs BR-1, BR-2 and BR-3, which would limit construction to designated areas and protect aquatic resources, require site-specific surveys, and biological monitoring. MM BR-15 would control erosion, sedimentation, and input of pollutants. Collectively, these measures would reduce impacts under this criterion to less than significant.

Mitigation Measures

MM BR-1: Limit Construction to Designated Areas and Avoid Riparian, Aquatic, and Wetland Areas.

MM BR-2: Preconstruction Surveys.

MM BR-3: Biological Monitoring During Construction.

MM BR-15: Stormwater Pollution Prevention Plan (SWPPP) Best Management Practices (BMPs).

Impact BR-4 (ASP): Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
LESS THAN SIGNIFICANT

The MSHCP identifies blocks of contiguous habitat for covered species ("cores") and corridors for movement between cores ("linkages") (Riverside County 2003b; Figure 4.1-3). No component of the proposed Alberhill Project would be located in existing core or linkage areas identified by the MSHCP, although access into the Lake Mathews-Estelle Mountain Reserve (Core C), would be required (see discussion under Impact BR-6 [ASP]). However, the Alberhill substation; 500-kV transmission lines; and Segments ASP1, ASP 1.5, and ASP 2 would transect Proposed Core 1. Segment ASP4 would cross Proposed Linkage 2 and Proposed Extension to Existing Core 3 (Riverside County 2003b).

Construction of the proposed Alberhill Project would not significantly interfere with the movement of wildlife species because the proposed 500-kV transmission line and 115-kV subtransmission line structures would be sufficiently spaced to allow wildlife movement. Although the proposed substation would be surrounded by a perimeter wall, sufficient open space would surround the proposed substation to allow wildlife to move freely around the substation. There are no known native wildlife nursery sites within the project area. Therefore, construction and operation of the project is not anticipated to interfere with the movement of wildlife species or impede the use of nursery sites.

Feature ASP-8, discussed in Impact BR-3 (ASP) above, would be crossed by an access road to 500-kV Tower SA5. This feature is connected to Temescal Wash, which is a tributary of the Santa Ana River, and thus could potentially allow for the movement of fish and aquatic wildlife during peak flow periods. However, the installation of a crossing at this location is not expected to interfere with the movement of water within the drainage, and would therefore not have a significant impact on the movement of migratory fish.

Impact BR-5 (ASP): Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
LESS THAN SIGNIFICANT

The proposed Alberhill Project would comply with all applicable local ordinances and policies. Construction of the substation and other project components would require the removal of approximately 12 oak trees and the trimming of numerous more, and several local policies and ordinances govern the removal or trimming of such trees (e.g., Riverside County Roadside Tree Ordinance 12.08.050, Section 5.116 of the City of Lake Elsinore Municipal Code, Riverside County's General Plan, City of Lake Elsinore General Plan Policy 2.2). These ordinances require permits for the removal or trimming of certain types of trees. The applicant would obtain all necessary permits prior to the removal or trimming of these trees. For a further discussion about impacts on oak trees, native plants, and riparian environments, refer to Impacts BR-1 and BR-2.

Impact BR-6 (ASP): Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.
LESS THAN SIGNIFICANT WITH MITIGATION

With the exception of an approximately 2-mile-long section of 115-kV Segment ASP2, each component of the proposed Alberhill Project would be constructed within the plan areas of the MSHCP and SKR HCP (Figure 4.4-1). The applicant consulted with the USFWS, CDFW, Western Riverside County RCA, and RCHCA and would continue consultation with these agencies prior to, during, and after construction of the proposed Alberhill Project to ensure that no violations of the ESA, CESA, MSHCP, or SKR HCP occur during construction or operation of the proposed Alberhill Project.

MSHCP and SKR HCP

The majority of the proposed project would be located within the SKR HCP area except for a section in the center of the proposed 115-kV Segment ASP2 route. The HCP was implemented to protect the SKR and its habitat and to put forth conservation, mitigation, and monitoring measures for projects that impact the species within the plan area. The HCP area would be impacted through the direct removal of suitable SKR habitat during the construction of project components.

As of October 15, 2012, the applicant finalized an SKR HCP Implementation Agreement with the RCHCA, which provides a process through which the applicant may obtain take authorization of SKR pursuant to the SKR HCP (AMEC 2014a). The Implementation Agreement also applies to work within MSHCP areas identified as Additional Reserve Land because SKR HCP core reserve requirements do not apply to Additional Reserve Land (Figure 4.4-1). The Implementation Agreement also allows the applicant to obtain take for SKR on lands owned by Castle and Cooke. As of June, 2015, the RCHCA is processing a COI to formalize this take agreement and identify the applicant as a participant in the SKR HCP for both the Valley–Ivyglen and Alberhill projects. The COIs will be finalized prior to construction and will be included in the Notice to Proceed request for each project.

The applicant would be a PSE under the MSHCP, which requires that the applicant prepare a MSHCP consistency report and Determination of Biologically Equivalent or Superior Preservation for approval by the RCA. In addition, under MM BR-7 the applicant would consult with the USFWS and CDFW prior to start of construction to develop a Habitat Restoration and Revegetation Plan for native vegetation and sensitive resources including wetlands, wetland buffer areas, riparian habitat, and natural communities. The applicant would also consult with the agencies after construction of the proposed Alberhill Project to ensure

that areas are adequately restored or compensation is provided. Under MM BR-6, MM BR-8, MM BR-9, MM BR-11, and MM BR-12 the applicant would consult with the USFWS, CDFW, RCA, and RCHCA prior to, during, and after construction of the proposed Alberhill Project (as applicable) regarding oak trees, special status plants, nesting birds, burrowing owl impact avoidance and reduction. MSHCP protected species, the SKR HCP, and impacts on SKR are further discussed under Impact BR-1 (ASP).

Lake Mathews-Estelle Mountain Core Reserve

The RCHCA currently manages several core reserves that have been set aside for SKR conservation and habitat preservation, including the Lake Mathews-Estelle Mountain Core Reserve. The applicant would be able to obtain SKR take authorization for work within MSHCP and SKR HCP areas, but would not be able to obtain SKR take authorization for work within the Lake Mathews-Estelle Mountain Core Reserve. Although work within the reserve is allowed for the maintenance of existing infrastructure, including transmission facilities, it is not allowed for the construction of new infrastructure unless the new construction work is conducted by a public agency (SKR HCP Sections 5.c.1.s and 5.c.1.t, and Implementation Agreement Section III.A.1.a(4)).

The proposed 500-kV transmission line routes would be adjacent to the reserve but not enter its boundaries (Figure 4.4-1). The use of helicopters to construct eight transmission structures along the 500-kV transmission line (if the helicopter construction method is chosen for the eight towers instead of the conventional method) would produce noise, especially if helicopters are used near the boundary of the reserve. Construction of the line would require entry into the reserve to access the applicant's existing 500-kV tower sites. USFWS and CDFW have authorized the applicant's entry into the reserve for clipping and snubbing work related to construction of the 500-kV transmission line under the applicant's existing maintenance agreement with the RCHCA (USFWS and CDFW 2013a). The existing access roads would also be used by tensioning and pulling equipment for conductor stringing (Figure 2-2i). The applicant would drive on Lake Street to an existing access road and on Hilltop Road.

Construction of the proposed 500-kV transmission lines would also require minimal access to the reserve by construction crews for grounding and snubbing activities to ensure worker safety and may require limited access for wire stringing equipment positioning as described in Chapter 2, "Project Description," Section 2.3.2.1, "Lake Mathews-Estelle Mountain Reserve," Section 2.4.5.3, "Grounding and Snubbing: Core Reserve Access," and under the heading, "500-kV Transmission Line Wire Stringing," in Section 2.4.5.5, "Wire Stringing." USFWS, CDFW, and RCHCA reviewed the applicant's description of these proposed activities within the reserve, the proposed locations for these activities, and SJM Biological Consultants' 2012 live-trapping report for the locations (SJM Biological Consultants 2012).

USFWS, CDFW, and RCHCA concurred that the grounding and snubbing activities as described by the applicant could be accommodated at the locations specified within the reserve pursuant to the SKR HCP's provisions for maintenance of existing facilities (SKR HCP Section 5.c.1.t). The agencies stated that the proposed activities within the Reserve are not expected to result in SKR take or have a long-term negative effect on the Reserve (RCHCA 2013; USFWS and CDFW 2013a, 2013b). In addition to the proposed activities within the Reserve specified in the wildlife agency letters, the applicant's wire stinging equipment may need to be positioned such that it extends onto existing roadways within the Reserve or within areas at the perimeter of the reserve immediately adjacent to the proposed work areas at 500-kV Towers SA6 and VA6 and existing tower sites M13-T4, M13-T3, and M13-T2 (Figure 2-2i). Vegetation in these areas may be crushed as identified in the USFWS and CDFW letter (USFWS and CDFW 2013a).

While the applicant has secured concurrence from USFWS, CDFW, and the RCHCA that work within the Reserve would not likely result in take of SKR, this agreement does not permit the applicant to take SKR during these activities. Should the applicant injure or kill SKR within the core reserve, this action would violate the terms of the HCP and the ESA and CESA.

Measures would be put in place to avoid take of SKR within the Reserve and avoid disturbance of occupied SKR habitat to the maximum extent feasible (MM BR-2, MM BR-3, and MM BR-16). The proposed activities within the Reserve would not result in land disturbance and would be located on existing roadways and within the applicant's exiting transmission line corridor ROW. While it is the position of the USFWS, CDFW, and RCHCA that the proposed activities can be accommodated by the SKR HCP (RCHCA 2013; USFWS and CDFW 2013a, 2013b), if take occurs a conflict would occur. SKR may be taken by vehicular traffic or equipment use at the existing 500-kV tower sites within the Reserve. Although 2011 and 2012 surveys and trapping results do not indicate the presence of SKR or suitable SKR habitat in areas where activities associated with construction of the proposed Alberhill Project would occur, the possibility of SKR take, however unlikely, still exists. MM BR-2, MM BR-3, and MM BR-16 would ensure that take of SKR would be avoided to the maximum extent feasible.

Mitigation Measures

MM BR-2: Preconstruction Surveys.

MM BR-3: Biological Monitoring During Construction.

MM BR-6: Oak tree protection measures.

MM BR-7: Habitat Restoration and Revegetation Plan Requirements.

MM BR-8: Special Status Plant Avoidance and Mitigation Measures.

MM BR-9: Invasive Plant Control Measures.

MM BR-11: Migratory Birds and Raptors Impact Reduction Measures.

MM BR-12: Burrowing Owl Impact Reduction Measures.

MM BR-16: Stephens' Kangaroo Rat Take Avoidance within Core Reserve.

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