

**APPENDIX E**  
**BIOLOGICAL RESOURCES**

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**APPENDIX E-1**  
**BIOLOGICAL RESOURCE METHODOLOGY**

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## Biological Resource Methodology

To identify resources, a preliminary analysis was conducted at each LTE site. A field survey area (FSA) was identified for each of the 231 proposed LTE sites on maps using a 500-foot radius circle centered on a presumed monopole location within each LTE site boundary. For all sites, the FSA encompasses the LTE site. At some larger LTE sites the boundary of the FSA and the LTE site boundary coincide. Some resources, including species with larger ranges, required analysis of a wider area. For these resources, including fish, amphibian and bird species, a wider review area was considered.

The FSA was used initially as a tool to help classify sites as either urban or non-urban. All 231 proposed LTE sites were examined using high resolution aerial photography provided by ESRI in ArcGIS version 10.0. Proposed LTE sites were classified as either urban or non-urban based on the vegetation or land cover within the FSA.<sup>1</sup> Google Earth<sup>2</sup> was also used for perspective views to verify the lack of potential habitat at sites classified as urban.

Sites with FSAs consisting entirely of urban or built-up land, disturbed land, ornamental vegetation, or a combination of these settings were classified as “urban” and not subjected to a field investigation due to their perceived non-existent value to evaluated species. A list of the 168 sites classified as “urban” is provided in Appendix E (Urban and Non-Urban Site Index) of the Biological Assessment. Non-urban sites were those containing native vegetation communities which warrant an investigation into their potential to support evaluated species. Most non-urban sites were subjected to field survey.

Field surveys for biological resources at non-urban sites were conducted in 2011, 2012 and 2013. The surveys in 2012 and 2013 covered new proposed sites as the proposed project was re-designed. Field surveys were conducted between January 24 and April 5, 2011; between January 18 and February 8, 2012; and between June 30 and July 26, 2013.

The surveys were conducted within the FSA of each non-urban LTE site by biologists with relevant expertise. Each field survey collected the following information:

- Names of biologists participating in the survey.
- Date/time survey began.
- Time survey ended.
- Weather (temperature, cloud cover, visibility).
- Location (site ID).
- Vegetation cover types and percent cover.
- Soil substrate particle size.
- Unique habitat features such as wetlands, cliffs, rocky outcrops, or trees suitable for nesting.
- Species of plants and animals observed.

Vegetation or land cover types were classified into 21 different vegetation types, primarily according to *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland,

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<sup>1</sup> None of the urban sites were found to contain proposed or designated Critical Habitat.

<sup>2</sup> Website: <http://www.google.com/earth/>. Accessed 4/9/14.

1986). The following sources were used to classify vegetation or land cover types occurring within FSAs, but not described by Holland (1986):

- Ruderal: Ruderal Vegetation Along Some California Roadsides (Frenkel, 1970).
- Marine and Ornamental: A Guide to Wildlife Habitats of California (Mayer and Laudenslayer, 1988).
- Ephemeral Stream: The Ecological and Hydrological Significance of Ephemeral and Intermittent Streams in the Arid and Semi-arid American Southwest (USEPA, 2008).

Biologists also carried into the field a color California Natural Diversity Database (CNDDDB) map displaying all CNDDDB records within a two-mile buffer around each site and a corresponding database extract. These materials included a column to record species occurrence potential (SOP) for all of the species considered in this EA. SOP is identified as one of the following: Not Anticipated, Low, Moderate, High, and Observed. Plant species were recorded in the field or were later identified through verification of voucher specimens. Wildlife species were identified through direct observation (aided by binoculars), identification of songs, call notes and alarm calls, or by detection of sign (burrows, tracks, scat, etc.). Field survey data were initially recorded on an approximately 1 inch: 90 feet scale color aerial photograph (with topographical overlay) of the project site, and then digitized into ArcGIS. Site photographs were taken to record general habitats, overall topography, and surrounding land use.

Depending on the season and time of day during which field surveys are conducted, some species of annual plants, invertebrates, amphibians, reptiles, birds, and mammals may not be detected due to dormancy, metamorphosis, hibernation, or seasonal migrations. However, field surveys for the proposed project supplement literature reviews, information from databases (CNDDDB, IPaC), and biologists' knowledge of species-specific habitat requirements and distribution patterns. This body of information is adequate to evaluate the potential for species to occur or to be affected at each of the proposed sites.

**APPENDIX E-2**  
**SENSITIVE SPECIES IN THE STUDY AREA**

## Appendix E-2. Sensitive Species in the Study Area

Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
<b>Plants</b>											
Abram's flowery puncturebract (=Abram's oxytheca)	<i>Acanthoscyphus parishii</i> var. <i>abramsii</i>	--	FSS	CRPR:1B.2	Sandy or shale based soils in chaparral. It is found at elevations from 3,750 to 6,750 feet. This plant blooms from June to August.	BUR LACFCP09	NA	No suitable habitat within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
Abram's alumroot	<i>Heuchera abramsii</i>	--	FSS	CRRP:4.3	Rocky soils in upper montane coniferous forest. This plant blooms from July to August.	BUR LACFCP09	NA	No suitable habitat within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from the ANF sites.
Santa Monica Mountains liveforever (=Santa Monica dudleya)	<i>Dudleya cymosa</i> ssp. <i>ovatifolia</i>	FT	--	CRPR:1B.1	On a broad scale, suitable habitat for this plant is generally located on sedimentary and conglomerate rock on canyon bottoms and shaded slopes in drainages along the south-facing slope of the Santa Monica Mountains (Dorsey 2007). Adjacent plant communities include coastal scrub and chaparral (CNDDDB 2008b). In most locations, the topographic relief has prevented deep soil formation; therefore, this species may be the only flowering plant occurring in a microhabitat that otherwise supports mosses, lichens, and club moss ( <i>Selaginella</i> spp.) (Dorsey 2007, CNDDDB 2008b) (USFWS 2009). This plant blooms from March to June.	LACF069	M	Suitable habitat in the form of shaded, generally south-facing slopes is present in Topanga Canyon, approximately 360 feet northeast of the center of the proposed LTE site.	NE	N	The following Bio CMRs would protect Santa Monica dudleya from project related effects: CMRs 6, 7, 8, 9, 10, 11, and 12.
Alkali mariposa lily	<i>Calochortus striatus</i>	--	FSS, BLMS	CRPR:1B.2	Occurs in calcareous sandy soil (Fiedler, 1985) in seasonally moist alkaline habitats such as alkali meadows (Mozingo and Williams, 1980), ephemeral washes, vernal moist depressions and at seeps within saltbush scrub at 300- 4500 ft. elevation (Fiedler and Ness, 1993). These plants are not found in soils with surface salts, or wetter areas with permanent standing surface water. The bulb remains dormant and does not sprout in dry years. This plant blooms from April to June.	BUR	NA	No suitable habitat within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from the site.

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<b>Plants</b>											
Baja navarretia	<i>Navarretia peninsularis</i>	--	FSS	CRPR:1B.2	grows in openings of chaparral and lower montane coniferous forests. Usually found along edges of vernal creeks, meadows, and snowmelt seeps within pinyon-juniper and yellow pine forests. This herb flowers from April to June. This species occurs at elevations from 100 to 2,150 feet.	BUR LACFCP09	NA	No suitable habitat within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
Barstow wooly sunflower	<i>Eriophyllum mohavense</i>	--	BLMS, WEMO	CRPR:1B.2	In the western Mojave desert it is found in sandy or rocky places in Mojavean desert scrub. Also found in chenopod scrub and playas. Elevation 1,600 – 3,027 feet. This plant blooms from April to May.	BRK	M	Moderately suitable habitat for this species is present in the form of Mojave creosote bush scrub.	--	N	The following CMRs would eliminate impacts to the Barstow wooly sunflower by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
Beach spectaclepod	<i>Dithyrea maritima</i>	--	ST	CRPR:1B.1	The general habitat for this species is sandy areas in coastal dunes or coastal scrub. It is found in small transverse fore dunes within approximately 164 – 984 feet from the surf. Beach spectacle pod is usually found in areas of these fragile dunes where the sand is relatively unstable. This plant blooms from This plant blooms from March to May. Elevation Range: 10 to 164 feet.	All Sites	NA	This species is not expected at all other proposed LTE sites due to the absence of suitable habitat.	--	N	There would be no effects to the species because it is presumed to be absent from all sites.



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<b>Plants</b>											
Big-cone Douglas fir	<i>Pseudotsuga macrocarpa</i>	--	MIS	--	Chaparral, foothill pine woodland	BUR	NA	Dry, south-facing slope lacks suitable habitat for the big cone Douglas fir.		N	No suitable habitats within project site or 500 foot survey area.
						LACFCP09	NA	Suitable habitat is present in coniferous woodland north of project site, within 500 ft. survey area.	--	N	No suitable habitat is present within the project site boundary for this MIS species. However, suitable habitat is present within the 500-foot survey area. The following CMRs would eliminate impacts to the big cone Douglas fir by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
Black oak	<i>Quercus kelloggii</i>	--	MIS	--	Foothill pine woodland, mixed coniferous forest	BUR	NA	Dry, south-facing slope lacks suitable habitat for black oak.	--	N	No suitable habitats within project site or 500 foot survey area.
						LACFCP09	M	Suitable habitat is present in coniferous woodland, north of project site, within 500 ft. survey area.	--	N	No suitable habitat is present within the project site boundary for this MIS species. However, suitable habitat is present within the 500-foot survey area. The following CMRs would eliminate impacts to the black oak by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
Blue oak	<i>Quercus douglasii</i>	--	MIS	--	Oak woodland and savannah.	BUR	NA	Site is above the elevation range of blue oak.	--	N	No impacts are anticipated because blue oaks are presumed absent from the ANF project sites and 500-foot survey areas.
						LACFCP09					

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Brand's phacelia (=Brand's star phacelia)	<i>Phacelia stellaris</i>	Candidate	--	CRPR:1B.1	open areas in coastal dunes and coastal scrub. This species typically occurs in sandy openings, sandy benches, dunes, sandy washes, or flood plains of rivers. This plant blooms from March to June.	All Sites	NA	The CNDDDB lists three extant populations of Brand's phacelia within Los Angeles County on coastal dune habitats. No proposed LTE sites are located within 500 feet of these populations. Furthermore, suitable habitats do not occur within 500 feet of proposed LTE sites.	NE	N	There would be no effects to the species because it is presumed to be absent from all sites.
Braunton's milk-vetch	<i>Astragalus brauntonii</i>	FE, CH	--	CRPR:1B.1	Found in closed-cone coniferous forest, chaparral, coastal scrub, valley and foothill grassland, especially in areas that have been recently burnt or disturbed. Prefers stiff gravelly clay soils overlying granite or limestone. It is found from 12 to 2,100 feet. This plant blooms from January to August.	CULV01	L	CNDDDB indicates Braunton's milk vetch historically occurred within one mile of the proposed LTE site. Marginally suitable habitat is present in disturbed coastal sage scrub within 500 feet of the proposed LTE site.	NE	N	The following Bio CMRs would protect Braunton's milk vetch from project related effects: 6, 7, 8, 9, 10, 11, and 12.
						LACF068	M	Potentially suitable habitats in chaparral occur within 500 feet of proposed LTE site.	NE	N	The following Bio CMRs would protect Braunton's milk vetch from project related effects: 6, 7, 8, 9, 10, 11, and 12.
						LAFD097	L	Marginally suitable habitats in non-native grasslands occur within 500 feet of proposed LTE site.	NE	N	The following Bio CMRs would protect Braunton's milk vetch from project related effects: 6, 7, 8, 9, 10, 11, and 12.
California Orcutt grass	<i>Orcuttia californica</i>	FE	--	CE, CRPR:1B.1	This plant blooms from April to August.	All sites	NA	No suitable habitat is present within 500 feet of proposed LTE sites.	NE	N	There would be no effects to the species because it is presumed to be absent from all sites.
California satintail	<i>Imperata brevifolia</i>	--	FSS	CRPR:2B.1	chaparral, coastal sage scrub, creosote bush scrub, and alkali seeps. It is found at elevations from sea level to 1,640 feet. This species flowers from September to May.	BUR	NA	No suitable habitat within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
						LACFCP09					
California saw-grass	<i>Cladium californicum</i>	--	FSS	CRPR:2B.2	This species is a perennial rhizomatous herb that grows in meadows and seeps and in either freshwater or alkaline marshes. This plant bloom from June to September.	BUR	NA	No suitable habitat within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
						LACFCP09					

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Chickweed oxytheca	<i>Sidotheca caryophylloides</i>	--	FSS	CRPR:4.3	This species is an annual herb that grows in sandy soils in lower montane coniferous forest. It grows at elevations from 3650 – 8,500 feet. This plant blooms from July to September.	BUR LACFCP09	NA	No suitable habitat within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
Chickweed oxytheca	<i>Sidotheca caryophylloides</i>	--	FSS	CRPR:4.3	This species is an annual herb that grows in sandy soils in lower montane coniferous forest. It grows at elevations from 3650 – 8,500 feet. This plant blooms from July to September.	BUR LACFCP09	NA	No suitable habitat within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
Chickweed oxytheca	<i>Sidotheca caryophylloides</i>	--	FSS	CRPR:4.3	This species is an annual herb that grows in sandy soils in lower montane coniferous forest. It grows at elevations from 3650 – 8,500 feet. This plant blooms from July to September.	BUR LACFCP09	NA	No suitable habitat within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
Coastal dunes milk-vech	<i>Astragalus tener</i> var. <i>titi</i>	FE	--	CE, CRPR:1B.1	Annual herb found in sandy soils of coastal bluff scrub, coastal dunes, and coastal prairie. Often found in vernal mesic areas. This plant blooms from March to May. It has been extirpated in most of Southern California. It is found at elevations from 3 to 164 feet.	All sites	NA	No suitable habitat is present within 500 feet of proposed LTE sites.	NE	N	There would be no effects to the species because it is presumed to be absent from all sites.
Conejo buckwheat	<i>Eriogonum crocatum</i>	--	--	CR, CRPR:1B.2	Conejo volcanic outcrops in chaparral, coastal scrub and valley and foothill grasslands. This plant blooms from April to July. Elevation Range: 150-500 feet.	All sites	NA	Suitable habitats are not present within 500 feet of proposed LTE sites.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
Conejo dudleya	<i>Dudleya abramsii</i> ssp. <i>parva</i> (= <i>Dudleya parva</i> )	FT	--	CRPR:1B.2	Inhabits coastal sage scrub and valley grasslands. It prefers soils that are either rocky or gravelly or clay or volcanic. It is found at elevations from 200 to 1,480 feet. It blooms from May to June.	All sites	NA	Suitable habitats are not present within 500 feet of proposed LTE sites.	NE	N	There would be no effects to the species because it is presumed to be absent from all sites.

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Coulter pine	<i>Pinus coulteri</i>	--	MIS	--	Chaparral and foothill pine woodland	BUR	M	Suitable habitat is present in southern mixed chaparral, surrounding project site.	NE	N	No suitable habitat is present within the project site boundaries of the two ANF sites. However, suitable habitat is present within the 500-foot survey area. The following CMRs would eliminate the potential for impacts to the Coulter pine by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
						LACFCP09	M	Suitable habitat is present in chaparral, south, east, and west of project site, within 500 foot survey area.			
Crested milk-vetch	<i>Astragalus bicristatus</i>	--	FSS	CRPR:4.3	Occurs in rocky, carbonate soils in lower montane coniferous forests and upper montane coniferous forests. Most often found in rocky ridges, stony sagebrush flats, lake shores, canyon benches, and openings in pine forests at elevations from 5577-8202 ft. This plant blooms from May – August.	BUR	NA	No suitable habitat within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
						LACFCP09					
Engelmann oak	<i>Quercus engelmannii</i>	--	MIS	--	Oak woodland and savannah.	BUR	NA	These sites are not within the range of the Engelmann oak	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
						LACFCP09					
Ewan's cinquefoil (=Ewan's woodbeauty)	<i>Drymocallis cuneifolia</i> var. <i>ewanii</i>	--	FSS	CRPR:1B.3	This species is a perennial herb found in riparian areas of lower montane coniferous forest (Yellow Pine forest) and in proximity to meadows and seeps. This species blooms from June to July. This species is found at elevations ranging from 6,230 to 7,870 feet.	BUR LACFCP09	NA	No suitable habitat within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.

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Forest camp sandwort	<i>Eremogone macradenia</i> var. <i>arcuifolia</i>	--	FSS	--	A perennial herb that occurs on dry slopes and foothills in yellow pine and oak forests at elevations between 1,970 – 7,874 feet. This species flowers from June to July.	BUR	NA	No suitable habitat within 500 feet.	--	N	There would be no effects to the species because it is presumed to be absent from this site.
						LACFCP09	M	There is moderate SOP for this species in coniferous woodland habitats within 500 feet of this site.	--	N	The following CMRs would eliminate impacts to the Forest Camp sandwort by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
Fragrant pitcher sage	<i>Lepechinia fragrans</i>	--	FSS	CRPR:4.2	Found in open areas in chaparral, dry ravines, and rocky slopes and ridgetops, including areas recovering from recent fire, between 200-3,600 feet. This plant blooms from March to October.	BUR LACFCP09	NA	No suitable habitat within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
Gambel's water cress	<i>Rorippa gambellii</i>	FE	--	CT CRPR:1B.1	Aquatic, herbaceous perennial, producing floating and emergent stems. Occurs naturally in open or semi-shaded sites along the edges of permanent, slow-moving streams and at the edges of freshwater marshes or lakes. This plant blooms from April to October.	All sites	NA	CNDDDB and IpaC Systems lists report that Gambel's watercress has been extirpated from Los Angeles and west Orange counties. Furthermore, no suitable habitat for this species is present within 500 feet of proposed LTE sites.	NE	N	There would be no effects to the species because it is presumed to be absent from all sites.

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Hall's monardella	<i>Monardella macrantha</i> ssp. <i>hallii</i>	--	FSS	CRPR:1B.3	chaparral, broadleaved upland woodland, cismontane woodland, coniferous forest (usually Big cone Spruce), and valley and foothill grassland. Elevation range is 2,000 to 6,600 feet. This plant blooms from June to October.	BUR	M	There is moderate SOP for this species in southern mixed chaparral within 500 feet of the site.	--	N	The following CMRs would eliminate impacts to the Hall's monardella by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
						LACFCP09	M	There is moderate SOP for this species in coniferous woodlands and chamise chaparral within 500 feet of the site.	--	N	The following CMRs would eliminate impacts to the Hall's monardella by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
Interior manzanita	<i>Arctostaphylos parryana</i> ssp. <i>tumescens</i>	--	FSS	CRPR:4.3	Perennial evergreen shrub that grows in chaparral and cismontane woodland. It grows at elevations from 6,890 to 7,580 feet and it blooms from February to April.	BUR	NA	All proposed LTE sites in the ANF are below the elevation range of this species.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
						LACFCP09					
Johnson's buckwheat	<i>Eriogonum microthecum</i> var. <i>johnstonii</i>	--	FSS	CRPR:1B.3	Found in rocky, subalpine coniferous forest lodgepole forest, and upper montane coniferous forest. 8,500 to 9,500 feet. This plant blooms from July to September.	BUR	NA	All proposed LTE sites in the ANF are below the elevation range of this species.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
						LACFCP09					
Jokerst's monardella	<i>Monardella australis</i> ssp. <i>jokerstii</i>	--	FSS	CRPR:1B.1	Occurs on steep scree or talus slopes between breccia, secondary alluvial benches along drainages and washes, chaparral, and lower montane coniferous forests. This species is known at elevations between 4,430 – 5,740 feet. The blooming period for this species is from July to September.	BUR	NA	No suitable habitat within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
						LACFCP09					

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Late-flowered mariposa lily	<i>Calochortus fimbriatus</i>	--	FSS	CRPR:1B.3	Perennial bulbiferous herb found in chaparral, cismontane woodland and riparian woodlands, it is often found in serpentine soils. This species blooms from June to August. It is found at elevations from 900 to 6,250 feet.	BUR	M	There is moderate SOP for this species in southern mixed chaparral within 500 feet of the site.		N	The following CMRs would eliminate impacts to the late-flowered mariposa lily by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
						LACFCP09	M	There is moderate SOP for this species in coniferous woodlands and chamise chaparral within 500 feet of the site.	--	N	The following CMRs would eliminate impacts to the late-flowered mariposa lily by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
Lemon lily	<i>Lilium parryi</i>	--	FSS	CRPR:1B.2	Occurs in meadows, streams, and springs in montane coniferous forest, riparian scrub. 4,000 to 9,000 feet. This plant blooms from July to August.	BUR LACFCP09	NA	No suitable habitat within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.

## Appendix E-2. Sensitive Species in the Study Area

Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
Lyon's pentachaeta	<i>Pentachaeta lyonii</i>	FE, CH	--	CE, CRPR:1B.1	Rocky or clay-based soils in the openings in chaparral and coastal sage scrub, and in valley grasslands. This plant blooms from March to August.	LACF065	M	Moderately suitable habitat is present within 30 feet of this proposed LTE site in adjacent non-native grassland habitats.	NE	N	The following CMRs would eliminate impacts to the Lyon's pentachaeta by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
						LACF083	L	Marginally suitable habitat is present within disturbed coastal sage scrub habitats, approximately 180 feet west, opposite a paved street.	NE	N	The following CMRs would eliminate impacts to the Lyon's pentachaeta by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
Many-stemmed dudleya	<i>Dudleya multicaulis</i>	--	FSS	CRPR:1B.2	Found in chaparral, valley and foothill grassland, and coastal sage scrub. It is found in heavy, often clayey soils or grassy slopes, at elevations from 0 to 2,592 feet. This plant blooms from April to July.	BUR	NA	No suitable habitat within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
						LACFCP09					
						BRK	NA	No suitable habitat occurs within 500 feet of proposed LTE sites on BLM managed lands.	--	N	There would be no effects to the species because it is presumed to be absent from this site.
Marcescent dudleya	<i>Dudleya cymosa</i> ssp. <i>marcescens</i>	FT	--	CR, CRPR:1B.2	Perennial herb that grows in rocky, volcanic soils in chaparral of the western Santa Monica Mountains. This plant blooms from April to July. Found at the elevations from 490 to 1,700 feet.	LACF069	H	Highly suitable habitat occurs on north-facing slopes and shady riparian habitats within Topanga Canyon approximately 400 to 500 feet east of this proposed LTE site.	NE	N	The following CMRs would eliminate impacts to the marcescent dudleya by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.



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Marsh sandwort	<i>Arenaria paludicola</i>	FE	--	CE, CRPR:1B.1	Coastal species that was historically known to occur in wetlands and in freshwater marshes. This species blooms from May to August.	All sites	NA	No proposed potentially suitable habitats are present within 500 feet of any proposed LTE sites. This species has been extirpated from the area.	NE	N	There would be no effects to the species because it is presumed to be absent from all sites.
Mason's nestraw	<i>Stylocline masonii</i>	--	FSS,	CRPR:1B.1	Occurs in sandy soils of chenopod scrub and pinyon-juniper woodland. Its elevation range is from 330 to 3,940 feet in elevation. This plant blooms from Mar to May.	BUR	NA	No suitable habitat within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
						LACFCP09					
Mesa horkelia	<i>Horkelia cuneata</i> var. <i>puberula</i>	--	FSS	CRPR:1B.1	Occurs in sandy or gravelly areas in chaparral, coastal sage scrub and cismontane woodland at 165 to 2,790 feet. Blooms from February to July and in some cases until September.	BRK	NA	No suitable habitat within 500 feet of proposed LTE sites on BLM managed lands.	--	N	There would be no effects to the species because it is presumed to be absent from this site.
						BUR					
Mesa horkelia	<i>Horkelia cuneata</i> var. <i>puberula</i>	--	FSS	CRPR:1B.1	Occurs in sandy or gravelly areas in chaparral, coastal sage scrub and cismontane woodland at 165 to 2,790 feet. Blooms from February to July and in some cases until September.	LACFCP09	NA	No suitable habitat within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
						BUR					
Mojave paintbrush	<i>Castilleja plagiotoma</i>	--	FSS	CRPR:4.3	Occurs in alluvial fans in Great Basin scrub, dry sagebrush scrub, pinyon-juniper woodlands, Joshua tree woodlands, and lower montane conifer forests at elevations of 980-8,200 feet. This plant blooms from April to June.	BUR	M	There is moderate SOP for this species disturbed coastal sage scrub within 500 feet of the site.	--	N	The following CMRs would eliminate impacts to the Mojave paintbrush by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
						LACFCP09					

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Mojave tarplant	<i>Deinandra mohavensis</i>	--	BLMS, FSS	CRPR:1B.3	Annual herb that prefers mesic soils found in chaparral, desert scrub and riparian scrub. Flowers from June to January. This species occurs at elevations from 2,100 to 5,250 feet.	BUR LACFCP09	NA	No suitable habitat within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
Mt. Gleason's paintbrush	<i>Castilleja gleasoni</i>	--	FSS	CRPR:1B.2	Occurs in granitic substrates in chaparral, coniferous forest, and pinyon/juniper woodland generally west of Chilao area. 3,800 to 7,100 feet. This plant blooms from May to July.	BUR	M	There is moderate SOP for this species in southern mixed chaparral within 500 feet of the site.	--	N	The following CMRs would eliminate impacts to the Mt. Gleason's paintbrush by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
						LACFCP09	M	There is moderate SOP for this species in coniferous woodlands and chamise chaparral within 500 feet of the site.	--	N	The following CMRs would eliminate impacts to the Mt. Gleason's paintbrush by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
Nevin's barberry	<i>Berberis nevinii</i>	FE	--	CE, CRPR:1B.1	Occurs in washes, chaparral, cismontane woodland, riparian scrub, and coastal scrub habitats. Generally found in lowlands or drainages in sandy to gravelly soils at elevations of 900 to 2,870 feet. This plant blooms from March to June.	CLM	L	Marginally suitable habitat in the form of Riversidian alluvial fan scrub is present within 500 feet of the site.	NE	N	The following CMRs would eliminate impacts to the Nevin's barberry by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.

## Appendix E-2. Sensitive Species in the Study Area

Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
Orcutt's linanthus	<i>Linanthus orcuttii</i>	--		CRPR:1B.3	Occurs in openings, chaparral, lower montane coniferous forest, and pinyon and juniper woodlands. It blooms from May-June at elevations between 3,000 – 7,040 feet. It occurs in Los Angeles, San Bernardino, Riverside, and San Diego counties.	BUR	M	There is moderate SOP for this species in southern mixed chaparral within 500 feet of the site.	--	N	The following CMRs would eliminate impacts to the Orcutt's linanthus by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
						LACFCP09	M	There is moderate SOP for this species in coniferous woodlands and chamise chaparral within 500 feet of the site.	--	N	The following CMRs would eliminate impacts to the Orcutt's linanthus by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
Palmer's mariposa lily	<i>Calochortus palmeri</i> var. <i>palmeri</i>	--	BLMS, FSS	CRPR:1B.2	It occurs in meadows and vernal moist places in Yellow Pine Forest or Chaparral. Flowers from April to July. 3,500 to 7,250 feet.	BUR	M	There is moderate SOP for this species in southern mixed chaparral within 500 feet of the site.	--	N	The following CMRs would eliminate impacts to Palmer's mariposa lily by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
						LACFCP09	M	There is moderate SOP for this species in coniferous woodlands and chamise chaparral within 500 feet of the site.	--	N	The following CMRs would eliminate impacts to Palmer's mariposa lily by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.

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Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
Parish's checkerbloom	<i>Sidalcea hickmanii</i> ssp. <i>parishii</i>	--	FSS	CR, CRPR:1B.2	Occurs in chaparral, cismontane woodland, and lower montane coniferous forest. It is found at elevations from 3,280 to 8,200 feet. It blooms from June to August.	BUR	M	There is moderate SOP for this species in southern mixed chaparral within 500 feet of the site.	--	N	The following CMRs would eliminate impacts to Parish's checkerbloom by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
						LACFCP09	M	There is moderate SOP for this species in coniferous woodlands and chamise chaparral within 500 feet of the site.	--	N	The following CMRs would eliminate impacts to Parish's checkerbloom by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
Parry's spineflower	<i>Chorizanthe parryi</i> var. <i>parryi</i>	--	FSS	CRPR:1B.1	An annual herb that occurs in creosote bush scrub, coastal scrub, chaparral, valley and foothill grasslands and pinyon-juniper woodlands, in sandy or gravelly soils. Found in sandy or rocky openings. This plant blooms April to June. Occurs at elevations from 900 to 4,000 feet.	BUR	NA	Site is above the elevation range of this species.	--	N	There would be no effects to the species because it is presumed to be absent from this site.
						LACFCP09	M	Suitable habitat in the form of chaparral is present within 500 feet of this site.	--	N	The following CMRs would eliminate impacts to Parry's spineflower by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
						BRK	H	Highly suitable habitat in the form of creosote bush scrub is present within 500 feet of this site.	--	N	The following CMRs would eliminate impacts to Parry's spineflower by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.

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Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
Peirson's lupine	<i>Lupinus peirsonii</i>	--	FSS	CRPR:1B.3	Habitat is loose, gravelly soils to 6,500 feet in the San Gabriel Mountains. Blooming period is April – May.	BUR	NA	Suitable habitat in the form of loose, gravelly soil is not present within 500 feet of this site.	--	N	The following CMRs would eliminate impacts to Peirson's lupine by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
						LACFCP09	M	Suitable habitat in the form of loose gravelly soil is present within 500 feet of this site.	--	N	The following CMRs would eliminate impacts to Peirson's lupine by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
Pygmy hulsea	<i>Hulsea vestita</i> ssp. <i>pygmaea</i>	--	FSS	CRPR:1B.3	A perennial herb that occurs in alpine to subalpine rocky slopes and talus, granitic or volcanic substrates at elevations between 9,842-12,795 feet. This species flowers from June-October.	BUR	NA	All proposed LTE sites in the ANF are below the elevation range of this species.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
						LACFCP09					
Rigid fringepod	<i>Thysanocarpus rigidus</i>	--	FSS	CRPR:1B.2	Occurs on dry, rocky slopes in pinyon and juniper woodlands. Elevation range is 1,500 – 5,600 feet. Blooming period is Feb – May.	BUR	NA	No suitable habitat within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
						LACFCP09					
Robbin's nemacladus	<i>Nemacladus secundiflorus</i> var. <i>robbinsii</i>	--	FSS	CRPR:1B.2	This species is an annual herb that grows in openings among chaparral and valley grasslands. This herb blooms from April to June. This species is found at elevations between 1,150 and 5,580 feet.	BUR	NA	Proposed LTE sites in the ANF are outside of the known range of this species.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
						LACFCP09					

## Appendix E-2. Sensitive Species in the Study Area

Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
Rock Creek broomrape	<i>Orobanche valida</i> ssp. <i>valida</i>	--	FSS	CRPR:1B.2	A parasitic perennial herb found in Chaparral, Pinyon/Juniper, and decomposed granitic soils. Found from 4,100 to 6,600 feet in elevation. Blooms from May to September.	BUR	M	There is moderate SOP for this species in southern mixed chaparral within 500 feet of the site.	--	N	The following CMRs would eliminate impacts to Rock Creek broomrape by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
						LACFCP09	M	There is moderate SOP for this species in coniferous woodlands and chamise chaparral within 500 feet of the site.	--	N	The following CMRs would eliminate impacts to Rock Creek broomrape by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
Rock-loving oxytrope	<i>Oxytropis oreophila</i> var. <i>oreophila</i>	--	FSS	CRPR:2B.3	Occurs in rocky or gravelly soils in alpine boulder and talus slopes and in subalpine coniferous forest. This species can be found at elevations from 11,150 to 12,470 feet. It blooms from June to September.	BUR LACFCP09	NA	All proposed LTE sites in the ANF are below the elevation range of this species.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
Rock monardella	<i>Monardella viridis</i> ssp. <i>saxicola</i> (= <i>Monardella saxicola</i> )	--	FSS	CRPR:4.2	A perennial herb that grows in dry, serpentine soils in rocky areas found in chaparral, broadleaved forest, lower montane and closed-cone conifer forest and cismontane woodlands. This species blooms May to September. At elevations between 1,400 – 6,000 feet.	BUR LACFCP09	NA	No suitable habitat within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.

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Ross' pitcher sage	<i>Lepechinia rossii</i>	--	FSS	CRPR:1B.2	This species is a woody shrub found only in chaparral. This shrub flowers from May to September. This shrub occurs at elevations from 1,000 to 2,600 feet.	BUR LACFCP09	NA	No suitable habitat within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
Salt marsh bird's-beak	<i>Chloropyron maritimum</i> ssp. <i>maritimum</i>	FE	--	CE, CRPR:1B.2	Annual hemiparasitic herb that grows in coastal dunes and coastal salt marshes. It blooms from May to October. It is found at elevations between 0 and 100 feet.	All sites	NA	Suitable habitat for this species is not present within 500 feet of proposed LTE sites.	NE	N	There would be no effects to the species because it is presumed to be absent from all sites.
Salt Spring checkerbloom	<i>Sidalcea neomexicana</i>	--	FSS	CRPR:2B.2	Prefers mesic and alkaline soils in chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub and playas. Flowers from March to June. Found at elevations from 50 to 5,020 feet.	BUR	M	There is moderate SOP for this species in southern mixed chaparral within 500 feet of the site.	--	N	The following CMRs would eliminate impacts to Salt Spring checkerbloom by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
						LACFCP09	M	There is moderate SOP for this species in coniferous woodlands and chamise chaparral within 500 feet of the site.	--	N	The following CMRs would eliminate impacts to Salt Spring checkerbloom by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.

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Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
San Antonio milk-vetch	<i>Astragalus lentiginosus</i> var. <i>antonius</i>	--	FSS	CRPR:1B.3	Occurs on open slopes in lower and upper montane coniferous forests. Occurs from 5,000 to 8,500 feet in elevation. Blooms April to July.	BUR	NA	No suitable habitat within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
						LACFCP09					
San Bernardino aster	<i>Symphyotrichum defoliatum</i>	--	FSS	CRPR:1B.2	Occurs in cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland. It prefers as its microhabitats ditches, streams, and springs. This species flowers July to November. It occurs at elevation from 15 to 6,700 feet.	BUR	M	There is moderate SOP for this species in southern mixed chaparral within 500 feet of the site.	--	N	The following CMRs would eliminate impacts to San Bernardino aster by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
						LACFCP09	M	There is moderate SOP for this species in coniferous woodlands and chamise chaparral within 500 feet of the site.			The following CMRs would eliminate impacts to San Bernardino aster by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.



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San Bernardino grass of Parnassus	<i>Parnassia cirrata</i> var. <i>cirrata</i>	--	FSS	CRPR:1B.3	Found in meadows and seeps, open chaparral, and lower and upper montane forest. Rocky slopes from 1,500 to 5,000 feet. Blooms from August to September.	BUR	M	There is moderate SOP for this species in southern mixed chaparral within 500 feet of the site.	--	N	The following CMRs would eliminate impacts to San Bernardino grass of Parnassus by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
						LACFCP09	M	There is moderate SOP for this species in coniferous woodlands within 500 feet of the site.	--	N	The following CMRs would eliminate impacts to San Bernardino grass of Parnassus by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
San Fernando Valley spineflower	<i>Chorizanthe parryi</i> var. <i>fernandina</i>	FC	FSS	CE	Based upon historical collections, <i>Chorizanthe parryi</i> var. <i>fernandina</i> occurred in sandy to gravelly soils, often in washes, and mostly in coastal sage scrub (Reveal 1979, pp. 1-2). Apparently, <i>C. parryi</i> var. <i>fernandina</i> was also collected in some areas with relatively deep soils in coastal sage scrub (Glenn Lukos & Associates 1999, p. 17). Contrary to some historical data, recent information from investigations conducted on the site of the plants rediscovery (after being considered extinct for 70 years) indicates that it occurs in sparsely vegetated areas with thin or highly mineralized soils (i.e., low organic content) (Sapphos Environmental 2001, p. 60).	BUR LACFCP09	NA	Suitable habitat is not present within 500 feet of proposed LTE sites within the ANF.	NE	N	There would be no effects to the species because it is presumed to be absent from ANF sites.

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Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
				CRPR:1B.1		LACF078	M	Moderately suitable habitat in the form of rabbitbrush scrub, approximately 100 feet north of this proposed LTE site.	NE	N	The following CMRs would eliminate impacts to San Fernando Valley spineflower by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
San Gabriel bedstraw	<i>Galium grande</i>	--	FSS	CRPR:1B.2	Open broad-leaved upland forest, open chaparral, cismontane woodland, lower montane coniferous forest at elevations of 1,400 to 5,000 feet. Blooms January to July	BUR	M	There is moderate SOP for this species in southern mixed chaparral within 500 feet of the site.	----	N	The following CMRs would eliminate impacts to San Gabriel bedstraw by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
						LACFCP09	M	There is moderate SOP for this species in coniferous woodlands and chamise chaparral within 500 feet of the site.	--	N	The following CMRs would eliminate impacts to San Gabriel bedstraw by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.

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San Gabriel linanthus	<i>Linanthus concinnus</i>	--	FSS	CRPR:1B.2	Occurs on rocky outcroppings in chaparral. Elevation range is 4,400 – 7150 ft.	BUR	M	There is moderate SOP for this species in southern mixed chaparral within 500 feet of the site.	--	N	The following CMRs would eliminate impacts to San Gabriel linanthus by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
						LACFCP09	NA	This site is not near the Mill Creek Summit.	NE	N	There would be no effects to the species because it is presumed to be absent from this site.
San Gabriel manzanita	<i>Arctostaphylos glandulosa</i> ssp. <i>gabrielensis</i>	--	FSS	CRPR:1B.2	Occurs on rocky outcroppings in chaparral. Elevation range is 4,400 – 7150 ft.	BUR	M	There is moderate SOP for this species in southern mixed chaparral within 500 feet of the site.	--	N	The following CMRs would eliminate impacts to San Gabriel manzanita by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
						LACFCP09	M	There is moderate SOP for this species in southern mixed chaparral within 500 feet of the site.	--	N	The following CMRs would eliminate impacts to San Gabriel manzanita by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
San Gabriel Mountains dudleya	<i>Dudleya densiflora</i>	--	FSS	CRPR:1B.1	Steep granitic canyon walls adjacent to chaparral, coastal scrub, and coniferous forest. 900 to 1,700 feet. This plant blooms from March to June.	BUR LACFCP09	NA	No suitable habitat within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.

Appendix E-2. Sensitive Species in the Study Area											
Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
San Gabriel Mountains sunflower	<i>Hulsea vestita</i> ssp. <i>gabrielensis</i>	--	FSS	CRPR:4.3	A perennial herb that can generally be found on the talus of mountain slopes, often in soils of volcanic origin. The habitats it is associated with include lower montane coniferous forests and upper montane coniferous forests. The blooming period of this species is from May to July and it occurs at elevations from 4,900-8,200 feet.	BUR	NA	No suitable habitat within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
						LACFCP09					
Santa Susana tarplant	<i>Deinandra minthornii</i>	--	BLMS	CR	Coastal sage scrub and chaparral. Blooming Period: July to November. Elevation Range: 2,300 to 6,350 feet	BRK	NA	No suitable habitat is present within 500 feet of proposed sites on BLM managed lands.	--		There would be no effects to the species because it is presumed to be absent from this site.
			WEMO	CRPR:1B.2		BUR	NA	There is moderate SOP for this species in southern mixed chaparral within 500 feet of the site.	--	N	The following CMRs would eliminate impacts to Santa Susana tarplant by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
						LACF072	M	Suitable habitat in the form of coastal sage scrub and chaparral are present within 500 feet of the proposed LTE site.	--	N	The following CMRs would eliminate impacts to Santa Susana tarplant by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
Scalloped moonwort	<i>Botrychium crenulatum</i>	--	FSS	CRPR:2B.2	Occurs in bogs and fens, lower and upper montane coniferous forest, meadows and seeps, and marshes and swamps (freshwater). 4,900 to 10,800 feet. Blooms from June to September.	BUR	NA	No suitable habitat within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
						LACFCP09					

## Appendix E-2. Sensitive Species in the Study Area

Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
Short-joint beavertail	<i>Opuntia basilaris</i> var. <i>brachyclada</i>	--	FSS	CRPR:1B.2	Inhabits chaparral, Joshua tree woodland, Mojavean Desert scrub, pinyon-juniper woodland, and riparian woodland.. Occurs on sandy soil or coarse granitic loam. From 1,394-5,904 feet. Flowers from April to June.	BUR	M	There is moderate SOP for this species in southern mixed chaparral within 500 feet of the site.	--	N	The following CMRs would eliminate impacts to short-joint beavertail by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
						LACFCP09	M	There is moderate SOP for this species in coniferous woodlands and chamise chaparral within 500 feet of the site.	--	N	The following CMRs would eliminate impacts to short-joint beavertail by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
Short-sepaled lewisia	<i>Lewisia brachycalyx</i>	--	FSS	CRPR:2B.2	Occurs in mesic locations in lower montane coniferous forest and along meadows and seeps. Found at elevations from 4,500 to 7,550 feet. It flowers from February to July.	BUR	NA	Suitable habitat for this species does not occur within 500 feet of the site.	--	N	There would be no effects to the species because it is presumed to be absent from this site.
						LACFCP09	M	There is moderate SOP for this species in coniferous woodlands within 500 feet of the site.	--	NE	The following CMRs would eliminate impacts to short-sepaled lewisia by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.

Appendix E-2. Sensitive Species in the Study Area											
Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
Slender mariposa lily	<i>Calochrtus clavatus</i> var. <i>gracilis</i>	--	FSS	CRPR:1B.2	It occurs in chaparral, coastal scrub, valley and foothill grassland habitats at elevations of 1,180 to 3,280 feet. Flowers from March to June.	BUR	NA	No suitable habitat occurs within 500 feet of proposed LTE sites.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
						LACFCP09					
Slender-horned spineflower	<i>Dodecahema leptoceras</i>	FE	--	CE	Occurs in sandy soils of coastal sage scrub, chaparral, and cismontane woodland. This species blooms from April to June. This species is found at elevations from 1,280 to 2,400 feet.	All sites	NA	No suitable habitat occurs within 500 feet of proposed LTE sites.	NE	N	There would be no effects to the species because it is presumed to be absent from all sites.
				CRPR:1B.1							
Sonoran maiden fern	<i>Thelypteris puberula</i> (= <i>Thelypteris puberula</i> var. <i>sonorensis</i> )	--	FSS	2B.2	A perennial rhizomatous herb that occurs in streams, meadows, and seeps from 164 to 2000 feet in elevation. Flowers from January to September.	BUR	NA	No suitable habitat within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
						LACFCP09					
Southern alpine buckwheat	<i>Eriogonum kennedyi</i> var. <i>alpigenum</i>	--	FSS	CRPR:1B.3	Occurs in alpine boulder and rock fields, subalpine, granitic gravel, found on high peaks and ridgetops. 8,500 to 11,550 feet. Blooms from July to September.	BUR	NA	No suitable habitat within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
						LACFCP09					
Southern jewel-flower	<i>Streptanthus campestris</i>	--	FSS	CRPR:1B.3	Occurs in open areas on rocky soils in chaparral, coniferous forest and pinyon-juniper woodland, 2950 – 7550'. This species blooms from May to June.	BUR	M	There is moderate SOP for this species in southern mixed chaparral within 500 feet of the site.	--	N	The following CMRs would eliminate impacts to southern jewelflower by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
						LACFCP09	M	There is moderate SOP for this species in coniferous woodlands and chamise chaparral within 500 feet of the site.			The following CMRs would eliminate impacts to southern jewelflower by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.

Appendix E-2. Sensitive Species in the Study Area											
Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
Southern skullcap	<i>Scutellaria bolanderi</i> <i>ssp. austromontana</i>	--	FSS	CRPR:1B.2	Occurs along gravelly stream banks and mesic sites, chaparral, cismontane woodland, lower montane conifer forest from 1,395 to 6,500 feet. Blooms July to August.	BUR	NA	No suitable habitat within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
						LACFCP09					
Spreading navarretia	<i>Navarretia fossalis</i>	FT		CRPR:1B.1	Primarily found in vernal pool, alkali grasslands, alkali playas and alkali sinks. This plant is found at elevations between sea level and 4,250 feet.	All sites	NA	No suitable habitat occurs within 500 feet of proposed LTE sites.	NE	N	There would be no effects to the species because it is presumed to be absent from all sites.
		CH									
Thread-leaved brodiaea	<i>Brodiaea filifolia</i>	FT		CE	Perennial herb with underground bulb-like storage stems. Open areas on clay soils, soils with a clay subsurface, or clay lenses within loamy, silty loam, loamy sand, silty deposits with cobbles, or alkaline soils; they may range in elevation from 100 feet to 2,500 feet. This plant blooms March to June.	All sites	NA	No suitable habitat occurs within 500 feet of proposed LTE sites.	NE	N	There would be no effects to the species because it is presumed to be absent from all sites.
		CH		CRPR:1B.1							
Urn-flowered alumroot	<i>Heuchera caespitosa</i>	--	FSS	CRPR:4.3	Occurs in rocky areas in cismontane woodland at elevations between 3,780 - 8,690 feet. It blooms from from May to August.	BUR	M	There is moderate SOP for this species in southern mixed chaparral within 500 feet of the site.	--	N	The following CMRs would eliminate impacts to urn-flowered alumroot by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
						LACFCP09	M	There is moderate SOP for this species in coniferous woodlands and chamise chaparral within 500 feet of the site.			The following CMRs would eliminate impacts to urn-flowered alumroot by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.

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Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
Valley oak	<i>Quercus lobata</i>	--	MIS	--	Oak woodland and savannah	BUR LACFCP09	NA	Site is above the elevation range of the valley oak.	NE	N	No impacts to the valley oak are anticipated because it is presumed absent from the two ANS sites and survey areas.
Ventura marsh milk-vetch	<i>Astragalus pycnostachyus</i> var. <i>lanosissimus</i>	FE	--	CE CRPR:1B.1	Historically occurred in back dune habitat, coastal meadows and near coastal salt marshes from Ventura County to Orange County. Today, a single population of Ventura marsh milk-vetch is known to exist near the City of Oxnard, Ventura County.	All sites	NA	No proposed LTE sites are located within 500 feet of the one remaining population of this species. Furthermore, no suitable habitat occurs within 500 feet of proposed LTE sites.	NE	N	There would be no effects to the species because it is presumed to be absent from all sites.
Verity's dudleya (=Verity's liveforever)	<i>Dudleya verityi</i>	FT		CRPR:1B.1	Perennial herb that prefers soils composed of volcanic rock found in chaparral, cismontane woodland and coastal scrub. It is found at elevations from 197 to 394 feet. This species blooms from May to June.	All sites	NA	No suitable habitat occurs within 500 feet of proposed LTE sites.	NE	N	There would be no effects to the species because it is presumed to be absent from all sites.
White fir	<i>Abies concolor</i>	--	MIS	--	Mixed coniferous forest	BUR LACFCP09	N M	Dry, south facing slope lacks suitable habitat for white fir.  Suitable habitat is present in coniferous woodland north of project site, within 500 foot survey area.	--	N	No impacts to the valley oak are anticipated because it is presumed absent from the two ANS sites and survey areas.  No suitable habitat is present within the project site boundary for this MIS species. However, suitable habitat is present within the 500-foot survey area. The following CMRs would eliminate impacts to the white fir by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.



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White pygmy poppy	<i>Canbya candida</i>	--	FSS	CRPR:4.2	Occurs in sandy, gravelly, granitic soils of Joshua tree woodland, Mojavean scrub, and pinyon/juniper woodland. From 2,000 to 4,000 feet in elevation. Blooms from March to June.	BUR	NA	No suitable habitat within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
						LACFCP09					
Woolly mountain-parsley	<i>Oreonana vestita</i>	--	FSS	CRPR:1B.3	Occurs in loose rock of lower and upper montane forests and subalpine coniferous forest. High ridges of San Gabriel Mountains from 7,500 to 11,500 feet. Blooms from May to September.	BUR	NA	All proposed LTE sites in the ANF are below the elevation range of this species.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
						LACFCP09					
<b>Invertebrates</b>											
Conservancy fairy shrimp	<i>Branchinecta conservatio</i>	FE	--	--	Endemic to vernal pools in California. This species is restricted to the Central Valley except for one population in the Central Coast in Ventura County (USFWS, 2007).	All sites	NA	No proposed LTE sites are within the range of the conservancy fairy shrimp. Furthermore, vernal pools are absent within 500 feet of proposed LTE sites.	NE	N	There would be no effects to the species because it is presumed to be absent from all sites.
El Segundo blue butterfly	<i>Euphilotes battoides allyni</i>	FE	--	--	Found on a small, dune ecosystem near LAX. Lays its eggs on coast buckwheat ( <i>Eriogonum latifolium</i> ).	All sites	NA	No sites within the range of the El Segundo blue butterfly contain suitable habitats.	NE	N	There would be no effects to the species because it is presumed to be absent from all sites.
Palos Verdes blue butterfly	<i>Glaucopsyche lygdamus palosverdensis</i>	FE	--	--	Coastal sage scrub on the Palos Verdes Peninsula. It prefers sections of coastal sage scrub with open grassy patches which support its early successional host plants: deerweed ( <i>Lotus scoparius</i> ) and Rattlepod ( <i>Astragalus trichopodus lonchus</i> ).	LACF053	L	Proposed LTE site has moderate potential to function as a movement corridor.	NL	NS	The following Bio CMRs would protect host plant for the Palos Verdes blue butterfly from project related effects by requiring the biological monitor to conduct preconstruction surveys for individual host plants in ornamental vegetation and protecting individual host plants by use of signage, flagging, and other highly visible means. Measures to prevent weed infestations would also be employed: 6, 7, 8, 9, 10, 11, and 12.
		CH									Individual Palos Verdes blue butterflies may pass through the site during construction. However, this would only result in slight impacts on the species.

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Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
						LACF056	H	Highly suitable foraging and reproductive habitat is present in coastal sage scrub approximately 415 feet west. The proposed LTE site also appears based on aerial photo analysis to occur within a migration corridor.	NL	NS	<p>The following Bio CMRs would protect host plant for the Palos Verdes blue butterfly from project related effects by requiring the biological monitor to conduct preconstruction surveys for individual host plants in ornamental vegetation and protecting individual host plants by use of signage, flagging, and other highly visible means. Measures to prevent weed infestations would also be employed: 6, 7, 8, 9, 10, 11, and 12.</p> <p>Individual Palos Verdes blue butterflies may pass through the site during construction. However, this would only result in slight impacts on the species.</p>
						LACF083	L	Proposed LTE site is approximately 160 feet east of an area that may function as a movement corridor.	NL	NS	<p>The following Bio CMRs would protect host plant for the Palos Verdes blue butterfly from project related effects by requiring the biological monitor to conduct preconstruction surveys for individual host plants in ornamental vegetation and protecting individual host plants by use of signage, flagging, and other highly visible means. Measures to prevent weed infestations would also be employed: 6, 7, 8, 9, 10, 11, and 12.</p> <p>Individual Palos Verdes blue butterflies may pass through the site during construction. However, this would only result in slight impacts on the species.</p>

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Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
						LACF106	L	Marginally suitable habitat for the Palos Verdes blue butterfly is present in coastal sage scrub approximately 230 feet southwest of the proposed LTE site. Also, the proposed LTE site appears to occur within a migration corridor.	NL	NS	<p>The following Bio CMRs would protect host plant for the Palos Verdes blue butterfly from project related effects by requiring the biological monitor to conduct preconstruction surveys for individual host plants in ornamental vegetation and protecting individual host plants by use of signage, flagging, and other highly visible means. Measures to prevent weed infestations would also be employed: 6, 7, 8, 9, 10, 11, and 12.</p> <p>Individual Palos Verdes blue butterflies may pass through the site during construction. However, this would only result in slight impacts on the species.</p>
						TORFD04	L	Marginally suitable habitat is present in disturbed coastal sage scrub habitats approximately 140 feet northwest of the site.	NL	NS	<p>The following Bio CMRs would protect host plant for the Palos Verdes blue butterfly from project related effects by requiring the biological monitor to conduct preconstruction surveys for individual host plants in ornamental vegetation and protecting individual host plants by use of signage, flagging, and other highly visible means. Measures to prevent weed infestations would also be employed: 6, 7, 8, 9, 10, 11, and 12.</p> <p>Individual Palos Verdes blue butterflies may pass through the site during construction. However, this would only result in slight impacts on the species.</p>

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Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
Quino checkerspot butterfly	<i>Euphydryas editha quino</i>	FE	--	--	Meadows and upland sage scrub/chaparral habitat with <i>Plantago erecta</i> or <i>Castilleja exserta</i> . Occurs in western Riverside County, southern San Diego County and northern Baja California, Mexico (USFWS 2009b).	All sites	NA	Proposed LTE sites are outside of the current range of this species. According to the Quino Checkerspot Butterfly 5-year review: <a href="http://ecos.fws.gov/docs/five_year_review/doc2515.pdf">http://ecos.fws.gov/docs/five_year_review/doc2515.pdf</a> "the Quino checkerspot butterfly ( <i>Euphydryas editha quino</i> ) (Quino) is a member of the family Nymphalidae (brushfooted butterflies) and the subfamily Melitaeinae (checkerspots). It is restricted to Riverside and San Diego Counties in California, and northern areas of Baja California Norte, Mexico (Mexico)". The historical range includes Los Angeles County, but the species has been extirpated in that part of its range.	NE	N	There would be no effects to the species because it is presumed to be absent from all sites.
Riverside fairy shrimp	<i>Streptocephalus woottoni</i>	FE	--	--	Vernal pools and other ephemeral freshwater habitats with depth from 5 inches to 10 feet. Occurs in southwestern Riverside County and western San Diego county and on the coast in Orange County.	All sites	NA	No proposed LTE sites within the range of the Riverside fairy shrimp contain suitable habitats.	NE	N	There would be no effects to the species because it is presumed to be absent from all sites.
San Diego fairy shrimp	<i>Branchinecta sandiegonensis</i>	FE	--	--	Resides strictly in vernal pools. The northernmost population is in Costa Mesa.	All sites	NA	No proposed LTE sites within the range of the San Diego fairy shrimp.	NE	N	There would be no effects to the species because it is presumed to be absent from all sites.
San Emigdio blue butterfly	<i>Plebejus emigdionis</i>	--	FSS	--	Occurs in montane desert regions of southern California from Inyo County southwest through the Mojave Desert and Southern Sierra Nevada to Los Angeles County. The host plant for its caterpillar is four-winged saltbush ( <i>Atriplex canescens</i> ). It is found only in desert canyons where four-winged saltbush grows.	BUR	NA	No suitable habitat within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
						LACFCP09					
San Gabriel Mountains blue butterfly	<i>Plebujuus saepiolus aureoles</i>	--	FSS	--	This species inhabits coastal scrub (northern), Douglas-fir forest, yellow pine forest, red fir forest, mixed evergreen forest, and chaparral, typically in mesic areas. Its host plant is <i>Sedum spathulifolium</i> .	BUR	M	There is moderate SOP for this species in coastal sage scrub and southern mixed chaparral within 500 feet of the site.	--	NS	The following CMRs would eliminate impacts to the San Gabriel Mountains blue butterfly by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.

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						LACFCP09	M	There is moderate SOP for this species in coniferous woodlands and chamise chaparral within 500 feet of the site.	--	NS	The following CMRs would eliminate impacts to the San Gabriel Mountains blue butterfly by providing a biological construction monitor, establishing habitat protection zones, protecting native vegetation, limiting the spread of invasive plants, and conducting a post-construction noxious weed survey. CMRs 6, 9, 10, 11, and 12.
<b>Fishes</b>											
Arroyo chub	<i>Gila orcuttii</i>	--	FSS	SSC	A freshwater fish that prefers slow moving, warm to cool streams with muddy or sandy bottoms. They majority of their diet consists of algae, although insects and small crustaceans are also important food items. This species range is primarily confined to the Santa Margarita river and Trabuco, Malibu and San Juan creeks.	BUR	NA	No suitable habitats within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
						LACFCP09					
Santa Ana sucker	<i>Catostomus santaanae</i>	FT	--	SSC	Inhabits portions of the San Gabriel and Santa Ana rivers, and Big Tujunga Creek, with coarse substrates and bank-side or in-stream vegetation that provides cover.	All sites	NA	No proposed sites are within 500 feet of suitable habitats that occur within the range of the Santa Ana sucker.	NE	N	There would be no effects to the species because it is presumed to be absent from all sites.
		CH									
Steelhead trout	<i>Oncorhynchus mykiss</i>	FE (NMFS)	EFH	SSC	Anadromous fish that can spend up to two years in freshwater and then migrate to the ocean for a few years before returning to spawn.	LACF069	H	CNDDDB reports this species in a deep gorge within Topanga Creek approximately 415 feet east of this proposed LTE site. This reach of Topanga Creek is also listed by NMFS as EFH.	NE	N	The following Bio CMRs would protect steelhead trout by ensuring that fill or contaminants are not accidentally discharged into aquatic habitats and also by ensuring that BMPs are maintained and that no equipment or personnel enter steelhead trout habitat. CMRs 6, 9, 17 and 18.

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Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination		
Tidewater goby	<i>Eucyclogobius newberryi</i>	FE	--	--	Inhabits lagoons, estuaries backwater marshes, and freshwater marshes. Its distribution is limited to the California coast from the California-Oregon border to Cocklebur Canyon in San Diego County. For locations with little precipitation, such as Southern California, this fish can only be found up to a few hundred feet from the coast.	All sites	NA	Suitable habitat for this species does not occur within 500 feet of proposed LTE sites.	NE	N	There would be no effects to the species because it is presumed to be absent from all sites.		
		CH											
Unarmored threespine stickleback	<i>Gasterosteus aculeatus williamsoni</i>	FE	--	CE	Inhabits slow-moving sections of rivers and streams shaded usually shaded by dense vegetation. This species may also seek refuge under algal mats and near barriers such as sand bars. Found in the upper Santa Clara River in Los Angeles County.	LACFCP14	L	CNDDDB records indicate that prior to a 2005 flooding event, a population of this species was present in San Francisquito Canyon approximately 800 feet south of the LTE site. San Francisquito Canyon is a tributary of Santa Clara River, where the CNDDDB reports extant populations of this species approximately 15 miles downstream.	NE	N	The following Bio CMRs would protect steelhead trout by ensuring that fill or contaminants are not accidentally discharged into aquatic habitats and also by ensuring that BMPs are maintained and that no equipment or personnel enter unarmored threespine stickleback habitat. CMRs 6, 9, 17 and 18.		
<b>Amphibians and Reptiles</b>													
Arroyo toad	<i>Anaxyrus californicus</i>	FE	MIS	SSC	Occurs in semi-arid regions near washes or streams, valley foothills, desert riparian or desert washes. Often found near rivers with flowing water with sand and gravel substrate during substantial portions of the rainy season. Habitat normally includes sandy banks, gravelly areas, willows, cottonwoods, sycamores, or a combination of these.	LACF076	L	Suitable habitat is not present within 500 feet of any LTE site. However, there is a slight chance that individuals may pass through during foraging or dispersal at LACF076. The project site is composed of hardscape with no small mammal burrows that could be used as refugia; thereby limiting the potential for the arroyo toad to occur on the site.	NL	N	The following Bio CMRs would protect arroyo toads by ensuring that workers and equipment do not enter arroyo toad habitats and that arroyo toads do not enter the work area during the course of the project: CMRs 6, 8, 9, 15, 17, and 18. Excluding the arroyo toad from the work area is considered a slight impact that is considered not likely to adversely affect the species.		
						BUR							
						LACFCP09	NA	Riparian habitat not present	NE	N	No impacts are anticipated for the arroyo toad at ANF sites because it is presumed absent from the site boundaries and 500-foot survey areas.		

## Appendix E-2. Sensitive Species in the Study Area

Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
California legless lizard	<i>Aniella pulchra pulchra</i>	--	FSS	SSC	From the southern edge of the San Joaquin River south to northwest Baja California. Occurs in moist warm loose soil with plant cover. Habitat includes sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks. Often found in leaf litter under trees and bushes in sunny areas and dunes stabilized with bush lupine and mock heather. Sometimes found in suburban gardens in Southern California. Occurs at elevations from sea level to 5,900 feet.	BUR	M	There is moderate SOP for this species in southern mixed chaparral within 500 feet of the site.	--	NS	The following CMRs would protect the California legless lizard by providing a biological construction monitor, proving protection measures for non-listed reptiles, establishing habitat protection zones, and protecting native vegetation. CMRs 6, 7, 8, and 9.
						LACFCP09	M	There is moderate SOP for this species in coniferous woodlands and chamise chaparral within 500 feet of the site.	--	NS	The following CMRs would protect the California legless lizard by providing a biological construction monitor, proving protection measures for non-listed reptiles, establishing habitat protection zones, and protecting native vegetation. CMRs 6, 7, 8, and 9.
California mountain kingsnake (San Bernardino population)	<i>Lampropeltis zonata parvirubra</i>	--	FSS	SSC	Found in a variety of habitats, especially illuminated canyons with rocky outcrops or talus. Associated with Big Cone Spruce and Canyon Chaparral at low elevations and black oak/pine at high elevations. Also occurs in riparian woodlands, coastal sage scrub and amongst Manzanita. Found from 1,200 to 8,000 feet in elevation.	BUR	M	There is moderate SOP for this species in southern mixed chaparral within 500 feet of the site.	--	NS	The following CMRs would protect the California mountain kingsnake by providing a biological construction monitor, proving protection measures for non-listed reptiles, establishing habitat protection zones, and protecting native vegetation. CMRs 6, 7, 8, and 9.
						LACFCP09	M	There is moderate SOP for this species in coniferous woodlands and chamise chaparral within 500 feet of the site.	--	NS	The following CMRs would protect the California mountain kingsnake by providing a biological construction monitor, proving protection measures for non-listed reptiles, establishing habitat protection zones, and protecting native vegetation. CMRs 6, 7, 8, and 9.

Appendix E-2. Sensitive Species in the Study Area											
Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
California red-legged frog	<i>Rana draytonii</i>	FT	--	SSC	Requires a variety of habitat elements with aquatic breeding areas embedded within a matrix of riparian and upland dispersal habitats. Breeding sites of the California red-legged frog are in aquatic habitats including pools and backwaters within streams and creeks, ponds, marshes, springs, sag ponds, dune ponds and lagoons. Additionally, California red-legged frogs frequently breed in artificial impoundments such as stock ponds. Range is sea level to elevations of about 5,200 feet.	LACFCP14	M	Moderately suitable habitat is present within San Francisquito Canyon approximately 800 feet south (downstream) of this LTE site. AA increased from usual 500-foot radius to 800 feet due to potential for runoff from construction to enter habitat. Critical Habitat for this species is present approximately 0.7 mile downstream.	NE	N	The following Bio CMRs would protect California red-legged frogs by ensuring that contaminants are not accidentally discharged into aquatic habitats: CMRs 17, and 18.
Coastal rosy boa	<i>Lichanura orcuttii</i>	--	FSS		Inhabits arid scrublands, semi-arid shrublands, rocky shrublands, rocky deserts, canyons, and other rocky areas. Appears to be common in riparian areas, but does not require permanent water.	BUR	M	There is moderate SOP for this species in chamise chaparral within 500 feet of the site.	--	NS	The following CMRs would protect the coastal rosy boa by providing a biological construction monitor, proving protection measures for non-listed reptiles, establishing habitat protection zones, and protecting native vegetation. CMRs 6, 7, 8, and 9.
						LACFCP09	M	There is moderate SOP for this species in chamise chaparral within 500 feet of the site.	--	NS	The following CMRs would protect the coastal rosy boa by providing a biological construction monitor, proving protection measures for non-listed reptiles, establishing habitat protection zones, and protecting native vegetation. CMRs 6, 7, 8, and 9.
Desert tortoise	<i>Gopherus agassizii</i>	FT	WEMO	CT	In California, it is found throughout the Mojave Desert south along the Colorado River and along the east side of the Salton Basin. A desert species that needs firm ground in order to dig burrows, or rocks to shelter among. In California it is found in arid sandy or gravelly locations along riverbanks, washes, sandy dunes, alluvial fans, canyon bottoms, desert oases, rocky hillsides, creosote flats and hillsides.	BRK	H	A disused desert tortoise burrow was found during a reconnaissance-level biological site survey, approximately 350 feet north of the site in sandy, friable soils.	NL	NS	The following Bio CMRs would protect the desert tortoise by ensuring that desert tortoises are excluded from the work area and that workers and equipment do not enter areas where the desert tortoise may occur. CMRs 6, 8, 9, and 14.  Excluding the desert tortoise from the work area is considered a slight impact that is considered not likely to adversely affect the species.



Appendix E-2. Sensitive Species in the Study Area											
Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
Mohave fringe-toed lizard	<i>Uma scoparia</i>	--	WEMO BLMS	SSC	Sparsely-vegetated arid areas with fine wind-blown sand, including dunes, flats with sandy hummocks formed around the bases of vegetation, washes, and the banks of rivers. Needs fine, loose sand for burrowing.	BRK	M	Suitable habitat for this species is present in sandy habitat approximately 300 feet north of the site.	--	NS	The following CRS would ensure that this species is not harmed by construction, by providing a biological monitor, ensuring that ditches are covered or provide a means of escape, and that the species is excluded from entering the site to the extent possible. CMRs 6, 7, 8, and 9.
Mountain yellow-legged frog	<i>Rana muscosa</i>	FE	--	CE	High mountain lakes, ponds, tarns, and streams. In the Transverse Ranges, it occurs in scattered locations.	All sites	NA	Suitable habitat is not present within 500 feet of proposed LTE sites.	NE	N	There would be no effects to the species because it is presumed to be absent from all sites.
		CH									
San Bernardino ringneck snake	<i>Diadophis punctatus modestus</i>	--	FSS	--	Occurs in oak woodland, chaparral, brush land, and coniferous forest at elevations from 0 to 6988 feet. Generally found around pools, creeks, and other water sources and often in rocky areas. Also utilizes stock ponds and other aquatic habitats if densely vegetated.	BUR	NA	No suitable habitat within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
						LACFCP09					
San Gabriel Mountains slender salamander	<i>Batrachoseps gabrieli</i>	--	FSS	--	Found in black/blue/canyon oak to pine and fir forests. Prefers north-facing slopes near creeks or streams. Most common in areas with and found under woody debris, especially bark that has fallen off of decaying logs. Feeds upon a wide variety of invertebrates. Breeds mainly in fall and spring.	BUR	NA	Habitats within 500 feet of this proposed LTE site are considered too xeric to support this species.	--	N	There would be no effects to the species because it is presumed to be absent from this site.
						LACFCP09	M	There is moderate SOP for this species in coniferous woodland within 500 feet of the site.	--	NS	The following CMRs would protect the San Gabriel Mountains slender salamander by providing a biological construction monitor, proving protection measures for non-listed reptiles, establishing habitat protection zones, and protecting native vegetation. CMRs 6, 7, 8, and 9.
Two-striped garter snake	<i>Thamnophis hammondi</i>	--	FSS	SSC	Occurs in oak woodland, chaparral, brush land, and coniferous forest at elevations from 0 to 7,000 ft. Generally found around pools, creeks, and other water sources and often in rocky areas. Also utilizes stock ponds and other aquatic habitats if densely vegetated.	BUR	NA	No suitable habitat within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
			BLMS								
			BRK			NA					

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Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
Western pond turtle	<i>Actinemys pallida</i> (syn. <i>Emys pallida</i> )	--	FSS	SSC	Occurs in habitats with permanent, or nearly permanent water bodies at elevations from 0-6,000 feet. It is thoroughly aquatic. It requires basking sites, such as logs, mud flats, sandy banks, or downed vegetation. Active from February to November. May be active throughout the winter if it is warm. If it occurs in a stream which dries out during most years then this species will estivate under dense brush or woodrat nests. The southwestern pond turtle feeds on aquatic plants, invertebrates, worms, and frog and salamander eggs and larvae. Breeding occurs from April to May, egg laying occurs from April to August. May lay eggs up to 0.5 km upland from water.	BUR	NA	No suitable habitat within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
			BLMS			LACFCP09					
			WEMO			BRK	NA	No suitable habitat within 500 feet of proposed LTE sites on BLM managed lands.	--	N	There would be no effects to the species because it is presumed to be absent from this site.
Yellow-blotched salamander	<i>Ensatina escholtzii croceator</i>	--	FSS	SSC	Found in black/blue/canyon oak to pine and fir forests. Prefers north-facing slopes near creeks or streams. Most common in areas with and found under woody debris, especially bark that has fallen off of decaying logs. Feeds upon a wide variety of invertebrates. Breeds mainly in fall and spring.	BUR	NA	No suitable habitat for this species within 500 feet of the site.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
			BLMS			LACFCP09	M	There is moderate SOP for this species in coniferous woodland within 500 feet of the site.	--	NS	The following CMRs would protect the yellow-blotched salamander by providing a biological construction monitor, proving protection measures for non-listed reptiles, establishing habitat protection zones, and protecting native vegetation. CMRs 6, 7, 8, and 9.
						BRK	NA	No suitable habitat is present within 500 feet of proposed LTE sites on BLM managed lands.	--	N	There would be no effects to the species because it is presumed to be absent from this site.
<b>Birds</b>											
Bald eagle	<i>Haliaeetus leucocephalus</i>	FD	BGEPA	CFP	Winters in Southern California near large bodies of water with fish. May forage for small mammals in nearby uplands.	LACFCP14	M	Proposed LTE site is approximately 7.3 miles east of Castaic Lake. Wintering Eagles could forage in uplands within 500 feet of site for small mammals. No suitable nesting habitat occurs within 500 feet.	NL	NS	The project would have at most, slight temporary impacts on the bald eagle, which has a very large home-range and would find suitable foraging habitat elsewhere. The project would not affect the nesting activities of the bald eagle due to the absence of suitable nesting habitat within 0.5 mile.
			MBTA								
			FSS								

## Appendix E-2. Sensitive Species in the Study Area

Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
Bank swallow	<i>Riparia riparia</i>	--	BLMS	CT	Habitat: Occur in areas along rivers, streams, oceans, or reservoirs. Territories can include cliffs and banks where they prefer to nest. As time goes on, they can be found around man-made sites such as quarries or road cuts. Diet: Mainly insects. Geographic Range: Breed over most of central North America from Arkansas northward to Alaska, then eastward to the Atlantic Provinces and south into Virginia. They winter throughout most of South America. Nesting Season: late March-early July. Nest Placement: Nest exclusively in the fresh banks or earthen walls cut by moving water, usually at lower elevations. They prefer meandering streams and rivers. Artificial banks created incidentally by mining are also used. Foraging and migrating occur over fields, streams, wetlands, farmlands, and still water.	BRK	NA	No suitable habitat is present within 500 feet of proposed LTE sites on BLM managed lands.	--	N	There would be no effects to the species because it is presumed to be absent from this site.
			MBTA			All other sites	NA	No suitable habitat is present within 500 feet of proposed LTE sites.	--	N	There would be no effects to the species because it is presumed to be absent from all sites.
			WEMO								
Belding's savannah sparrow	<i>Passerculus sandwichensis beldingi</i>	--	MBTA	CE	Habitat: Year round resident in coastal salt marshes only. Nest Placement: Found amongst dense pickleweed ( <i>Salicornia virginica</i> ) stands or on natural depressions or bare scrapes in the ground.	All Sites	NA	No suitable habitats are present within 500 feet of proposed LTE sites.	--	N	There would be no effects to the species because it is presumed to be absent from all sites.
Burrowing owl	<i>Athene cunicularia</i>	--	MBTA	SSC	Found in open, dry grasslands, agricultural and range lands, and desert habitats often associated with burrowing animals, particularly prairie dogs, ground squirrels and badgers. They can also live in pinyon and ponderosa pine habitats. They commonly perch on fence posts or on top of mounds outside the burrow.	BRK	H	Highly suitable habitats for nesting are located approximately 350 feet north of the site in friable soils. Both resident and seasonal migrants could occur. Therefore, the burrowing owl could be present at any time of year.	--	NS	The following Bio CMRs would reduce or eliminate impacts to the burrowing owl through preconstruction surveys, burrow monitoring, and avoidance. CMRs 3 and 6.

## Appendix E-2. Sensitive Species in the Study Area

Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
California black rail	<i>Laterallus jamaicensis coturniculus</i>	--	MBTA	CT, CFP	Habitat: Shallow freshwater and saltwater marshes and wet meadows. Also found in flooded grassy vegetation. Black Rails breed in salt or freshwater marshes, where the ground is moist but not entirely submerged. They also use grassy wet meadows. Diet: Generalists and consume a variety of insects, spiders, small crustaceans, snails, and seeds. They feed primarily on insects and seeds. Geographic Range: The Black Rail breeds on the eastern seaboard from New Jersey to southern Florida and on the Gulf Coast from Florida to Texas. A small population of California Black Rails, a subspecies once considered lost, resides permanently in the shrinking estuaries of the San Francisco Bay. Black Rails also occur irregularly through northern Central America and into Chile. Nesting Season: February-mid June. Peaks around May 1st. Nest Placement: These birds are ground nesters and prefer shallow water.	BRK	NA	Suitable habitats are not present within 500 feet of proposed LTE sites on BLM managed lands.	--	N	There would be no effects to the species because it is presumed to be absent from this site.
			BLMS			All other sites	NA	Suitable habitats are not present within 500 feet of proposed LTE sites.	--	N	There would be no effects to the species because it is presumed to be absent from all sites.
			WEMO								

Appendix E-2. Sensitive Species in the Study Area											
Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
California condor	<i>Gymnogyps californianus</i>	FE	MBTA	CE	Forages over open grassland regions and nests in a variety of habitats from chaparral to mountain tops up to 6,000 feet. During nesting this species may commute large distances from nesting site to foraging areas.	BMT	M	Site is within range of the condor and potentially suitable foraging habitat in the form of vast open land is present within 500 feet of proposed LTE site. Suitable nesting habitats are not present within 0.5 mile.	NL	NS	The project would have at most, slight temporary impacts on the condor, which has a very large home-range and would find suitable foraging habitat elsewhere. The project would not affect the nesting activities of the condor due to the absence of suitable nesting habitat within 0.5 mile. The following CMR would ensure that condors do not ingest trash or hazardous substances at the site. CMRs 1 and 18.
						BRK	M		NL	NS	
						BUR	M		NL	NS	
		CH				LACFCP09	M	Species occurrence was evaluated for sensitive nesting birds for a radius of 0.5 mile. Site is within range of the condor and potentially suitable foraging habitat in the form of vast open land is present within the FSA of this proposed LTE site. Suitable nesting habitats are not present within 0.5 mile.	NL	NS	
						LACFCP14	M		NL	NS	
						LACF077	M		NL	NS	
California least tern	<i>Sterna antillarum browni</i>	FE	MBTA	CE	Nests in colonies formed on open beaches that are mostly free of vegetation due to tidal scouring. Migrates along the Californian coast during autumn and continues south into Baja California. Prefers sites in the proximity of estuaries. Forages over open water.	All sites	NA	Suitable nesting habitat for this species is not present within one mile of proposed LTE sites. The closest site to a known CLTE colony is LALG-HQ, which is approximately 2 miles north of a colony at Ballona Wetlands. Foraging habitat is approximately 1 mile SE.	NE	N	There would be no effects because no nesting colonies are present within one mile of LTE sites.
CFP											

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Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination		
California spotted owl	<i>Strix occidentalis occidentalis</i>	--	FSS	SSC	This species prefers old growth forests and woodlands with old, mature trees. The stands of forests and woodlands should have greater than 60% canopy coverage. Mature trees provide multiple canopy levels, canopy cover, and downed wood debris for these birds. In southern California, this species prefers sites with canyon live oak ( <i>Quercus chrysolepis</i> ) and big-cone Douglas fir ( <i>Pseudotsuga macrocarpa</i> ) but also occupies pinyon-juniper ( <i>Pinus monophylla-Juniperus occidentalis</i> ) woodlands. This species may forage in areas with more open canopy than in which it nests. The owl hunts rodents, and in southern California, its primary prey item is the dusky-footed woodrat ( <i>Neotoma fuscipes</i> ).	BUR	L	Suitable nesting habitat for this species is not present within 500 feet of this site. However, California spotted owls may occasionally forage within the site or pass through.	NL	NS	There would be no effects to nesting California spotted owls due to the absence of suitable nesting habitat. However, there could be at most, short-term effects to their foraging activities for the duration of construction.		
			MIS										
			BLMS										
			MBTA			LACFCP09	M	Suitable nesting and foraging habitat is present within 500 feet of this site.	NL	NS	California spotted owls may nest in coniferous trees within 500 feet of the site. However, these impacts would be reduced or eliminated by the following Bio CMR, which would include preconstruction nesting surveys and avoidance of nesting birds with specific measures for raptors during the nesting season. CMR 1. There could be at most, short-term effects to their foraging activities for the duration of construction.		
						BRK	NA	Suitable habitat for his species does not occur within 500 feet of proposed LTE sites on BLM managed lands.	--	N	There would be no effects because suitable habitat is not present within 500 feet of this site.		
Coastal California gnatcatcher	<i>Polioptila californica</i>	FT CH	MBTA	SSC	A permanent resident of open scrub habitats, particularly Coastal Sage Scrub, below 2,500 feet in Southern California.	CLM	H	Highly suitable nesting and foraging habitat for the coastal California gnatcatcher in the form of Riversidean alluvial fan sage scrub is present approximately 250 feet east of this proposed LTE site.	NL	NS	The coastal California gnatcatcher may nest in coastal sage scrub vegetation within 500 feet of the site. The following Bio CMRs would reduce or eliminate impacts to nesting gnatcatchers. These CMRs would also protect resident gnatcatchers outside of the nesting season: CMRs: 6, 9, 10, 11, 12, and 19.		

Appendix E-2. Sensitive Species in the Study Area											
Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
						LACF056	H	This proposed LTE site is located within its Critical Habitat and highly suitable nesting and foraging habitat is located approximately 350 feet southwest of the site.	NL	NS	The coastal California gnatcatcher may nest in coastal sage scrub vegetation within 500 feet of the site. The following Bio CMRs would reduce or eliminate impacts to nesting gnatcatchers. These CMRs would also protect resident gnatcatchers outside of the nesting season: CMRs: 6, 9, 10, 11, 12, and 19.
						LACF099	M	Moderately suitable nesting and foraging habitat in the form of coastal sage scrub is present approximately 375 feet northeast of the site.	NL	NS	The coastal California gnatcatcher may nest in coastal sage scrub vegetation within 500 feet of the site. The following Bio CMRs would reduce or eliminate impacts to nesting gnatcatchers. These CMRs would also protect resident gnatcatchers outside of the nesting season: CMRs: 6, 9, 10, 11, 12, and 19.
						LACF194	H	Moderately suitable nesting and foraging habitat in the form of coastal sage scrub is present approximately 280 feet east of this proposed LTE site.	NL	NS	The coastal California gnatcatcher may nest in coastal sage scrub vegetation within 500 feet of the site. The following Bio CMRs would reduce or eliminate impacts to nesting gnatcatchers. These CMRs would also protect resident gnatcatchers outside of the nesting season: CMRs: 6, 9, 10, 11, 12, and 19.
						WCFD004	H	Highly suitable nesting and foraging habitat in the form of coastal sage scrub is present approximately 295 feet east of this proposed LTE site.	NL	NS	The coastal California gnatcatcher may nest in coastal sage scrub vegetation within 500 feet of the site. The following Bio CMRs would reduce or eliminate impacts to nesting gnatcatchers. These CMRs would also protect resident gnatcatchers outside of the nesting season: CMRs: 6, 9, 10, 11, 12, and 19.

Appendix E-2. Sensitive Species in the Study Area														
Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination			
Ferruginous hawk	<i>Buteo Regalis</i>	---	--	WEMO	Winter migrant. Inhabits open country.	BRK	M	Open habitat suitable for winter migrants occurs within the survey area.	--	NS	The project would have at most, slight temporary impacts on the ferruginous hawk, which has a very large home-range and would find suitable foraging habitat elsewhere.			
Golden eagle	<i>Aquila chrysaetos</i>	--	BGEPA	CFP	Found from the tundra, through grasslands, forested habitat and woodland-brush lands, south to arid deserts. They hunt small to mid-sized reptiles, birds, and mammals up to the size of mule deer fawns and coyote pups. They also are known to scavenge and utilize carrion. Golden eagles build nests on cliffs or in the largest trees of forested stands that often afford an unobstructed view of the surrounding habitat.	BUR	M	There is moderate SOP for this species in southern mixed chaparral within 500 feet of the site. Suitable mature nest trees are present within 0.5 mile of the site.	--	NS	The following Bio CMR would reduce or eliminate impacts to nesting golden eagles during the nesting season: CMR 2.			
			MBTA	The project would result in at most, slight temporary impacts to foraging golden eagles, due to the presence of large amounts of suitable foraging habitat outside of the project site.										
			BLMS	The following Bio CMR would reduce or eliminate impacts to nesting golden eagles during the nesting season: CMR 2.										
			LACF078	M							There is moderate SOP for this species to forage in chamise chaparral and rabbitbrush scrub within 500 feet of the site. Mature trees, suitable for nesting are also present within 0.5 mile of the site.	--	NS	The project would result in at most, slight temporary impacts to foraging golden eagles, due to the presence of large amounts of suitable foraging habitat outside of the project site.
			LACF157	M							There is moderate SOP for this species to forage and nest in coastal live oak woodlands within 0.5-mile feet of the site.	--	NS	The following Bio CMR would reduce or eliminate impacts to nesting golden eagles during the nesting season: CMR 2.
			LACFCP09	M							There is moderate SOP for this species to forage and nest in coniferous woodlands and chamise chaparral within 0.5-mile of the site.	--	NS	The project would result in at most, slight temporary impacts to foraging golden eagles, due to the presence of large amounts of suitable foraging habitat outside of the project site.



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						LACFCP14	L	This species has low SOP in disturbed coastal sage scrub within 500 feet of the site that could be used for foraging. Suitable nesting habitat in the form of mature trees is present within 0.5 mile.	--	NS	The following Bio CMR would reduce or eliminate impacts to nesting golden eagles during the nesting season: CMR 2. The project would result in at most, slight temporary impacts to foraging golden eagles, due to the presence of large amounts of suitable foraging habitat outside of the project site.
						BRK	M	Suitable foraging habitat for the golden eagle is present within 500 feet of the site. However, suitable nesting habitat is absent.	--	NS	The following Bio CMR would reduce or eliminate impacts to nesting golden eagles during the nesting season: CMR 2. The project would result in at most, slight temporary impacts to foraging golden eagles, due to the presence of large amounts of suitable foraging habitat outside of the project site.
						BMT	M	Suitable foraging habitats are present within 500 feet of the site. Suitable mature nest trees are present within 0.5 mile.	--	NS	The following Bio CMR would reduce or eliminate impacts to nesting golden eagles during the nesting season: CMR 2. The project would result in at most, slight temporary impacts to foraging golden eagles, due to the presence of large amounts of suitable foraging habitat outside of the project site.

Appendix E-2. Sensitive Species in the Study Area															
Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination				
Gray vireo	<i>Vireo vicinior</i>	--	MBTA	SSC	Found in mixed juniper/pinyon and oak scrub associations, desert scrub, chaparral (in hot, arid mountains), and high plans scrublands. Prey items include insects and fruits that are caught primarily through gleaning, but also by other methods such as range hawking. Its range potentially spans southern California from Santa Barbara down to San Diego, where it is most numerous. In Los Angeles County this species can be found breeding in the Mojave desert and occupying the northern slopes of the San Gabriel Mountains.	BUR	M	There is moderate SOP for this species in southern mixed chaparral within 500 feet of the site.	--	NS	The following Bio CMR would reduce or eliminate impacts to nesting gray vireos during the nesting season: CMR 1.				
			BLMS								The project would result in at most, slight temporary impacts to foraging gray vireos, due to the presence of large amounts of suitable foraging habitat outside of the project site. No impacts would be possible if work takes place outside of the nesting season.				
			FSS												
			LACFCP09			M	There is moderate SOP for this species in coniferous woodlands and chamise chaparral within 500 feet of the site.	--	NS	The following Bio CMR would reduce or eliminate impacts to nesting gray vireos during the nesting season: CMR 1.					
															The project would result in at most, slight temporary impacts to foraging gray vireos, due to the presence of large amounts of suitable foraging habitat outside of the project site. No impacts would be possible if work takes place outside of the nesting season.
			BRK			H	Highly suitable foraging and nesting habitat in the form of Mojave creosote bush scrub is present within 500 feet of the site.	--	NS	The following Bio CMR would reduce or eliminate impacts to nesting gray vireos during the nesting season: CMR 1.					
										The project would result in at most, slight temporary impacts to foraging gray vireos, due to the presence of large amounts of suitable foraging habitat outside of the project site. No impacts would be possible if work takes place outside of the nesting season.					
Least Bell's vireo	<i>Vireo bellii pusillus</i>	FE CH	MBTA	CE	Summer migrant. Breeds in dense riparian and shrub habitats near rivers and lakes.	BUR	NA	No suitable habitats within 500 feet of proposed LTE sites in ANF.	NE	N	There would be no effects to the species because it is presumed to be absent from ANF sites.				
			WEMO			LACFCP09									
						BRK	NA	There is no suitable habitat for this species within 500 feet of proposed LTE sites on BLM managed lands..	NE	N	There would be no effects to the species because it is presumed to be absent from this site.				

Appendix E-2. Sensitive Species in the Study Area											
Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
						LACF069	H	Highly suitable habitat for nesting in the form of riparian habitat exists approximately 310 feet northeast of this proposed LTE site.	NL	NS	Suitable habitat for this species is located across a busy highway from the site and down in a canyon, where noise impacts are highly unlikely to exceed 60 db Leq or background. Project noises may be periodically audible, but would not interfere with the nesting activities of this species.
						LACF076	H	No suitable nesting or foraging habitat for the least Bell's vireo exists within 500 feet of this proposed LTE site, although it is located within its Critical Habitat. However, the site is located between highly suitable foraging habitats associated with the Santa Clara River approximately 870 feet south and Castaic Creek approximately 1,300 feet northwest. Therefore, it is highly likely that least Bell's vireos pass through the site.	NL	NS	The project would have at most, a slight effect on the movements of least Bell's vireos that pass through the site. However, it would not interfere substantially with their foraging, nesting, or migrations.
LeConte's thrasher	<i>Toxostoma lecontei</i>	--	--	SSC	Inhabits desert scrub, mesquite, tall riparian brush and, locally, chaparral. Nests in thick, dense, and thorny desert shrubs or cholla cactus.	BRK	M	Suitable habitat for nesting and foraging is present within the survey area.	NL	NS	The following Bio CMR would reduce or eliminate impacts to nesting LeConte's thrashers during the nesting season: CMR 1. The project would result in at most, slight temporary impacts to LeConte's thrashers if work occurs outside of the nesting season.
Light-footed clapper rail	<i>Rallus longirostris levipes</i>	FE	MBTA	CE CFP	Found exclusively in coastal central to southern California down to Baja California. Resides in coastal salt marshes and occasional brackish marshes.	All sites	NA	Suitable habitat for the light-footed clapper rail is not present within 500 feet of proposed LTE sites.	NE	N	There would be no effects to the species because it is presumed to be absent from all sites.
Mountain plover	<i>Charadrius montanus</i>	--	MBTA BLMS WEMO	SSC	Winter resident in California. Unlike other plovers, not found near water, and will only inhabit areas with sparse vegetation or bare ground. Clay loam soils are preferred over sand.	BRK	NA	The sandy and rocky soils of the site are not suitable nesting substrate for the mountain plover. Furthermore, desert scrub vegetation is not preferred.	--	N	There would be no effects to the species because it is presumed to be absent from this site.
Northern goshawk	<i>Accipiter gentilis</i>	--	MBTA FSS	SSC	Northern goshawk inhabits forests, especially dense, mature forests with high canopy closure. Late-successional stands of forest are preferred for nesting, however it has been found	BUR	M	The northern goshawk could forage within 500 feet of this site in mixed chaparral. However, suitable nesting habitat is absent.	--	N	The project would have at most, temporary impacts on the foraging activities of the northern goshawk for the duration of construction.

Appendix E-2. Sensitive Species in the Study Area											
Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
			BLMS		nesting in relatively open stands as well. Foraging habitat primarily consists of forest, however this species may also forage along forest edges and through openings. It preys upon birds, squirrels, rabbits, and hares.	LACFCP09	M	There is moderate SOP for this species to forage and nest in coniferous woodlands within 500 feet of the site.	--	N	The following Bio CMR would reduce or eliminate impacts to northern goshawks during the nesting season: CMR 1.
			--								The project would result in at most, slight temporary impacts to foraging northern goshawks, due to the presence of large amounts of suitable foraging habitat outside of the project site.
							BRK	NA	There is no suitable habitat for this species within 500 feet of proposed LTE sites on BLM managed lands.	--	N
Prairie falcon	<i>Falco mexicanus</i>	--	WEMO	SCC	The habitat is open country, especially arid, in summer including alpine tundra to shortgrass prairie and high desert. In winter it is more widespread, ranging to low deserts and occasionally to towns. This species nests on cliff ledges	BRK	M	Suitable foraging habitat is present within the survey area. However, nesting habitat is absent.	--	NS	The project would have at most, slight temporary impacts on the prairie falcon, which would find suitable foraging habitat elsewhere. The project would not affect the nesting activities of the prairie falcon.
San Diego (Coastal)cactus wren	<i>Campylorhynchus brunneicapillus sandiegensis</i>	--	FSS	SSC	This bird is an obligate inhabitant of coastal sage scrub, it is primarily found at elevations below 500 feet. It forms nests in dense cactus ( <i>Opuntia littoralis</i> ) and cholla ( <i>Opuntia prolifera</i> ) patches with little to no canopy cover. It forages on the ground or low to the ground.	BUR	NA	No suitable habitats having dense stands of cactus ( <i>Opuntia spp.</i> ) occur within 500 feet of proposed LTE sites in ANF.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
						LACFCP09					
Song sparrow	<i>Melospiza melodia</i>	--	MIS		Southern Riparian Forest	BUR	NA	Riparian habitat is not present.	--	N	There would be no effects to the species because it is presumed to be absent from ANF project sites as well as 500-foot survey areas.
						LACFCP09					
Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	FE	MBTA	CE	Summer migrant. Breeds in dense riparian and shrub habitats near rivers and lakes.	LACF069	H	Highly suitable habitat for nesting in the form of riparian habitat exists approximately 310 feet northeast of this proposed LTE site.	NL	NS	Suitable habitat for this species is located across a busy highway from the site and down in a canyon, where noise impacts are highly unlikely to exceed 60 db Leq or background. Project noises may be periodically audible, but would not interfere with the nesting activities of this species.

## Appendix E-2. Sensitive Species in the Study Area

Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
			WEMO			LACF076	H	No suitable nesting or foraging habitat for the southwestern willow flycatcher exists within 500 feet of this proposed LTE site. However, the site is located between highly suitable foraging habitats associated with the Santa Clara River approximately 870 feet south and Castaic Creek approximately 1,300 feet northwest. Therefore, it is highly likely that southwestern willow flycatchers pass through the site.	NL	NS	The project would have at most, a slight effect on the movements of least Bell's vireos that pass through the site. However, it would not interfere substantially with their foraging, nesting, or migrations.
Swainson's hawk	<i>Buteo swainsoni</i>	--	BLMS	CT	Nesting and foraging habitat is prairie and dry grasslands in western North America. Builds a stick nest in a tree or shrub or on a cliff edge. This species is a long-distance migrant, wintering in Argentina.	BUR	NA	Suitable nesting habitat for the Swainson's hawk is not present within 500 feet of proposed LTE sites on the ANF.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
						LACFCP09					
						BRK	L	The site has low suitability for Swainson's hawks, which prefer grassland areas with abundant small mammals. However, this would not preclude the species from occasionally foraging within 500 feet of the site. Suitable nesting habitat is absent.	--	NS	The project would result in at most, slight temporary impacts to foraging Swainson's hawks, which would find higher quality foraging habitats elsewhere.
						LACF072	L	An agricultural field is present approximately 350 feet west of the site and has moderate potential for foraging. Nesting habitats are not present within 500 feet of this site.	--	NS	The project would result in at most, slight temporary impacts to foraging Swainson's hawks, which would find higher quality foraging habitats elsewhere.
			WEMO			LACF076	M	Moderately suitable foraging habitat is present within 500 feet of this proposed LTE site. However, there are only a few mature trees and these are clustered around the fire station and nearby houses. Therefore, nesting is not expected.	--	NS	The project would result in at most, slight temporary impacts to foraging Swainson's hawks, due to the presence of large amounts of suitable foraging habitat outside of the project site.

## Appendix E-2. Sensitive Species in the Study Area

Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
Western snowy plover	<i>Charadrius alexandrinus nivosus</i>	FT CH	MBTA	SSC	Inhabits a variety of coastal habitats with high saline conditions such as salt ponds and alkali lakes and is also found on sandy and rocky substrates in coastal strands and coastal dunes.	LALG-HQ	L	Marginally suitable foraging and breeding habitat for this species occurs on Venice Beach approximately 50 feet southwest and southeast of this proposed LTE site.	NL	NS	The following Bio CMR would reduce or eliminate impacts to nesting western snowy plovers during the nesting season: CMR 4. No impacts would occur if work takes place outside of the nesting season.
						LALG100	L	Marginally suitable foraging and breeding habitat for this species occurs on Hermosa Beach approximately 50 feet southwest of this proposed LTE site.	NL	NS	The following Bio CMR would reduce or eliminate impacts to nesting western snowy plovers during the nesting season: CMR 4. No impacts would occur if work takes place outside of the nesting season.
						LALG300	M	Moderately suitable habitat for breeding activities occurs on the sandy beaches 150 feet south of this proposed LTE site. Critical Habitat for this species occurs on Zuma Beach approximately 155 feet south of this LTE site.	NL	NS	The following Bio CMR would reduce or eliminate impacts to nesting western snowy plovers during the nesting season: CMR 4. No impacts would occur if work takes place outside of the nesting season.

Appendix E-2. Sensitive Species in the Study Area																						
Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination											
White-tailed kite	<i>Elanus leucurus</i>	--	MBTA	CFP	The white-tailed kite is found throughout southern California in grasslands, open country, farmlands, foothills, and river valleys. They nest in tall trees near water in open country.	BRK	L	The site has low suitability for white-tailed kites, which prefer grassland areas with abundant small mammals. However, this would not preclude the species from occasionally foraging within 500 feet of the site. Suitable nesting habitat is absent.	--	NS	The following Bio CMR would reduce or eliminate impacts to white-tailed kites during the nesting season: CMR 1.											
											The project would result in at most, slight temporary impacts to foraging white-tailed kites, which would find higher quality foraging habitats elsewhere.											
											BLMS	LACF071	M	Suitable foraging and nesting habitat are present within 500 feet of this site.	--	NS	The following Bio CMR would reduce or eliminate impacts to white-tailed kites during the nesting season: CMR 1.					
																	The project would result in at most, slight temporary impacts to foraging northern goshawks, due to the presence of large amounts of suitable foraging habitat outside of the project site.					
																	LACF088	M	Suitable foraging and nesting habitat are present within 500 feet of this site.	--	NS	The following Bio CMR would reduce or eliminate impacts to white-tailed kites during the nesting season: CMR 1.
																						The project would result in at most, slight temporary impacts to foraging northern goshawks, due to the presence of large amounts of suitable foraging habitat outside of the project site.
LAFD029	M	Suitable foraging and nesting habitat are present within 500 feet of this site.	--	NS	The following Bio CMR would reduce or eliminate impacts to white-tailed kites during the nesting season: CMR 1.																	
					The project would result in at most, slight temporary impacts to foraging northern goshawks, due to the presence of large amounts of suitable foraging habitat outside of the project site.																	

Appendix E-2. Sensitive Species in the Study Area											
Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
						LAFD049	M	Suitable foraging and nesting habitat are present within 500 feet of this site.	--	NS	<p>The following Bio CMR would reduce or eliminate impacts to white-tailed kites during the nesting season: CMR 1.</p> <p>The project would result in at most, slight temporary impacts to foraging white-tailed kites, due to the presence of large amounts of suitable foraging habitat outside of the project site.</p>
						LAFD099	M	Suitable foraging and nesting habitat are present within 500 feet of this site.	--	NS	<p>The following Bio CMR would reduce or eliminate impacts to white-tailed kites during the nesting season: CMR 1.</p> <p>The project would result in at most, slight temporary impacts to foraging white-tailed kites, due to the presence of large amounts of suitable foraging habitat outside of the project site.</p>
						LAFD101	M	Suitable foraging and nesting habitat are present within 500 feet of this site.	--	NS	<p>The following Bio CMR would reduce or eliminate impacts to white-tailed kites during the nesting season: CMR 1.</p> <p>The project would result in at most, slight temporary impacts to foraging white-tailed kites, due to the presence of large amounts of suitable foraging habitat outside of the project site.</p>
						LALG100	M	Suitable foraging and nesting habitat are present within 500 feet of this site.	--	NS	<p>The following Bio CMR would reduce or eliminate impacts to white-tailed kites during the nesting season: CMR 1.</p> <p>The project would result in at most, slight temporary impacts to foraging white-tailed kites, due to the presence of large amounts of suitable foraging habitat outside of the project site.</p>



## Appendix E-2. Sensitive Species in the Study Area

Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
						LALG300	M	Suitable foraging and nesting habitat are present within 500 feet of this site.	--	NS	<p>The following Bio CMR would reduce or eliminate impacts to white-tailed kites during the nesting season: CMR 1.</p> <p>The project would result in at most, slight temporary impacts to foraging white-tailed kites, due to the presence of large amounts of suitable foraging habitat outside of the project site.</p>
						LALGHQ	M	Suitable foraging and nesting habitat are present within 500 feet of this site.	--	NS	<p>The following Bio CMR would reduce or eliminate impacts to white-tailed kites during the nesting season: CMR 1.</p> <p>The project would result in at most, slight temporary impacts to foraging white-tailed kites, due to the presence of large amounts of suitable foraging habitat outside of the project site.</p>
						LBFD021	M	Suitable foraging and nesting habitat are present within 500 feet of this site.	--	NS	<p>The following Bio CMR would reduce or eliminate impacts to white-tailed kites during the nesting season: CMR 1.</p> <p>The project would result in at most, slight temporary impacts to foraging white-tailed kites, due to the presence of large amounts of suitable foraging habitat outside of the project site.</p>
						SCH	M	Suitable foraging and nesting habitat are present within 500 feet of this site.	--	NS	<p>The following Bio CMR would reduce or eliminate impacts to white-tailed kites during the nesting season: CMR 1.</p> <p>The project would result in at most, slight temporary impacts to foraging white-tailed kites, due to the presence of large amounts of suitable foraging habitat outside of the project site.</p>

Appendix E-2. Sensitive Species in the Study Area											
Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
Western yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>	Candidate	MBTA	CE	Summer migrant, known to breed in riparian habitats along the Santa Clara River near Santa Clarita, Los Angeles County (Laymon, 1998).	All Sites	NA	No suitable habitats occur within 500 feet of proposed LTE sites.	NE	N	There would be no effects to the species because it is presumed to be absent from all sites.
			FSS								
			WEMO								
<b>Mammals</b>											
bottlenose dolphin	<i>Tursiops truncatus</i>	--	MMPA		Bottlenose dolphin are common at harbor entrances and coastal nearshore areas, especially surf zones, and less commonly found within the harbors and marine impoundments. This species does not venture out of its aquatic habitat.	LAFD049	L	The bottlenose dolphin do not preferentially use harbors and bays, such as Long Beach Harbor. This site contains vertical walls at water's edge in the FSA. Suitable marine habitat is absent within the LTE Site Boundary, but is present within the FSA.	--	N	Impacts are not anticipated to occur on the bottlenose dolphin, as work will not occur within any marine water. CMRs 17 & 18 will reduce or eliminate potential to affect this species through sediment and runoff impacts. Noise impacts and vibration impacts are not anticipated due to distance from construction activities to marine waters. No effects on bottlenose dolphins are expected as a result of this project.
						LALG100	M	Located at Hermosa Beach Pier and Lifeguard Tower at a busy, maintained beach. Suitable marine habitat is absent within the LTE Site Boundary, but is present within the FSA.	--	N	
						LALG300	M	Located at Zuma Beach in Malibu at a busy, maintained beach. Suitable marine habitat is absent within the LTE Site Boundary, but is present within the FSA.	--	N	
						LALG-HQ	M	Located at a busy, maintained beach. Suitable marine habitat is absent within the LTE Site Boundary, but is present within the FSA.	--	N	
						LBFD006	L	The bottlenose dolphin does not preferentially use harbors and bays, such as Long Beach Harbor. Suitable marine habitat is absent within the LTE Site Boundary, but is present within the FSA.	--	N	
						LBFD021	L	The bottlenose dolphin do not preferentially use harbors and bays, such as Los Alamitos Bay. Suitable marine habitat is absent within the LTE Site Boundary, but is present within the FSA.	--	N	
						SCH	L	The bottlenose dolphin do not preferentially use harbors, such as San Pedro Harbor. Suitable marine habitat is absent within the LTE Site Boundary, but is present within the FSA.	--	N	

Appendix E-2. Sensitive Species in the Study Area											
Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
California sea lion	Zalophus californianus	--	MMPA	--	Reside in shallow coastal and estuarine waters, they haul out on sandy beaches, marina docks, jetties, and buoys.	LAFD049	M	Located in Long Beach Harbor, contains vertical walls at water's edge in the FSA. This is not accessible as a pinniped haul out location. Suitable marine habitat is absent within the LTE Site Boundary, but is present within the FSA.	--	N	Impacts are not anticipated to occur on the California sea lion as work will not occur on the beach, within any marine water, or near any known pinniped rookery site. CMRs 17 & 18 will reduce or eliminate potential to affect this species through sediment and runoff impacts. Noise impacts and vibration impacts are not anticipated due to distance from construction activities to marine waters. No effects on California sea lion are expected as a result of this project.
						LALG100	M	Located at Hermosa Beach Pier and Lifeguard Tower at a busy, maintained beach; noise and activity may deter individuals from lengthy beach haul outs. Suitable marine habitat is absent within the LTE Site Boundary, but marginal habitat is present within the FSA.	--	N	
						LALG300	M	Located at Zuma Beach in Malibu at a busy, maintained beach; noise and activity may deter individuals from lengthy beach haul outs. Suitable marine habitat is absent within the LTE Site Boundary, but marginal habitat is present within the FSA.	--	N	
						LALG-HQ	M	Located at a busy, maintained beach; noise and activity may deter individuals from lengthy beach haul outs. Suitable marine habitat is absent within the LTE Site Boundary, but marginal habitat is present within the FSA.	--	N	
						LBFD006	M	The California sea lion may be attracted to this area due to presence of food waste, although large boat traffic from Carnival Cruise Lines and the Queen Mary may discourage lengthy haul outs in Long Beach harbor. California sea lion has potential to haul out on rock jetties and manmade structures near the edge of the LTE Site Boundary and within the FSA.	--	N	
						LBFD021	M	The California sea lion may use this area of Alamitos Bay for movement and to haul out on rock jetties and manmade structures near the edge of the LTE Site Boundary and within the FSA.	--	N	
						SCH	M	The California sea lion may move through this area of San Pedro Harbor, this area lacks haul out locations, and the harbor is across the street from the LTE site.	--	N	
common dolphin	Delphinus delphis	--	MMPA	--	Common dolphins are primarily oceanic and offshore in waters 650-6,500 ft (200-2,000 m) deep.	LAFD049	L	The common dolphin do not preferentially use harbors and bays, such as Long Beach Harbor. Suitable marine habitat is absent within the LTE Site Boundary, but is present within the FSA.	--	N	Impacts are not anticipated to occur on the common dolphin, as work will not occur within any marine water. CMRs 17 & 18 will reduce or eliminate potential to affect this species through sediment and runoff impacts. Noise impacts and vibration impacts are not
						LALG100	L	Located at Hermosa Beach Pier and Lifeguard Tower at a busy, maintained beach. Suitable marine habitat is absent within the LTE Site Boundary, but is present within the FSA.	--	N	

## Appendix E-2. Sensitive Species in the Study Area

Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
						LALG300	L	Located at Zuma Beach in Malibu at a busy, maintained beach. Suitable marine habitat is absent within the LTE Site Boundary, but is present within the FSA.	--	N	anticipated due to distance from construction activities to marine waters. No effects on common dolphin are expected as a result of this project.
						LALG-HQ	L	Located at a busy, maintained beach. Suitable marine habitat is absent within the LTE Site Boundary, but is present within the FSA.	--	N	
						LBFD006	L	The common dolphin does not preferentially use harbors and bays, such as Long Beach Harbor. Suitable marine habitat is absent within the LTE Site Boundary, but is present within the FSA.	--	N	
						LBFD021	L	The common dolphin do not preferentially use harbors and bays, such as Los Alamitos Bay. Suitable marine habitat is absent within the LTE Site Boundary, but is present within the FSA.	--	N	
						SCH	L	The common dolphin do not preferentially use harbors, such as San Pedro Harbor. Suitable marine habitat is absent within the LTE Site Boundary, but is present within the FSA.	--	N	
harbor seal	Phoca vitulina	--	MMPA	--	Harbor seals live in temperate coastal habitats and use rocks, reefs, beach, and drifting glacial ice as haul out and pupping sites. Harbor seals haul out on land for rest, thermal regulation, social interaction, to give birth, and to avoid predators.	LAFD049	L	Located in Long Beach Harbor, contains vertical walls at water's edge in the FSA. This is not accessible as a pinniped haul out location. Suitable marine habitat is absent within the LTE Site Boundary, but is present within the FSA.	--	N	Impacts are not anticipated to occur on the harbor seal as work will not occur within any marine water or near any known pinniped rookery site. CMRs 17 & 18 will reduce or eliminate potential to affect this species through sediment and runoff impacts. Noise impacts and vibration impacts are not anticipated due to distance from construction activities to marine waters. No effects on harbor seal are expected as a result of this project.
						LALG100	L	Located at Hermosa Beach Pier and Lifeguard Tower at a busy, maintained beach. Suitable marine habitat is absent within the LTE Site Boundary, but marginal habitat is present within the FSA.	--	N	
						LALG300	L	Located at Zuma Beach in Malibu at a busy, maintained beach. Suitable marine habitat is absent within the LTE Site Boundary, but marginal habitat is present within the FSA.	--	N	
						LALG-HQ	L	Located at a busy, maintained beach. Suitable marine habitat is absent within the LTE Site Boundary, but marginal habitat is present within the FSA.	--	N	
						LBFD006	L	The harbor seal may be attracted to this area due to presence of food waste, although large boat traffic from Carnival Cruise Lines and the Queen Mary may discourage lengthy haul outs in Long Beach harbor. The harbor seal has potential to haul out on rock jetties and manmade structures near the edge of the LTE Site Boundary and within the FSA,	--	N	

## Appendix E-2. Sensitive Species in the Study Area

Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination				
						Lbfd021	L	The harbor seal may use this area of Alamitos Bay. Harbor seal has minimal potential to haul out on rock jetties and manmade structures near the edge of the LTE Site Boundary and within the FSA,	--	N					
						SCH	L	The harbor seal may use this area of San Pedro Harbor. Suitable marine habitat is absent within the LTE Site Boundary, but marginal habitat is present within the FSA. No suitable haul out areas are present.	--	N					
Fringed myotis	<i>Myotis thysanoides</i>	--	FSS	--	This bat occurs in a variety of habitats but is most commonly associated with oak, pinyon, and juniper woodlands or ponderosa pine forest at middle elevations. They also appear to use deserts, grasslands, and other types of woodlands. They are most found in dry open areas interspersed with some mature stands of forest, and are ideally located near an open water source. They roost primarily in caves, mines, and buildings. They may also roost under bridges, in crevices, under tree bark or in the hollows of tree snags.	BUR	L	There is marginally suitable foraging and roosting habitat within 500 feet of this site in mixed chaparral habitat.	--	NS	The following Bio CMR would reduce or eliminate effects to roosting fringed myotis. CMR 1.				
			BLMS								The project would have at most slight temporary impacts to the foraging activities of the species.				
			LACFCP09								M	There is moderately suitable foraging and roosting habitat within 500 feet of this proposed LTE site in coniferous woodlands.	--	NS	The following Bio CMR would reduce or eliminate effects to roosting fringed myotis. CMR 1.
			BRK								L	There is marginally suitable foraging habitat within 500 feet of this site. However, roosting habitat is absent.	--	NS	The project would have at most slight temporary impacts to the foraging activities of the species.
Mohave ground squirrel	<i>Spermophilus mohavensis</i>	--	BLMS	CT	The Mohave ground squirrel occupies portions of Inyo, Kern, Los Angeles and San Bernardino counties in the western Mojave Desert. The species ranges from near Palmdale on the southwest to Lucerne Valley on the southeast, Olancho on the northwest and the Avawatz Mountains on the northeast (Gustafson, 1993). The Mohave ground squirrel occupies all major desert scrub habitats in the western Mojave Desert. The Mohave ground squirrel inhabits flat to moderate terrain and is not generally found in steep contours.	BRK	M	The site was examined by permitted biologist Dr. Phil Brylski during July of 2013, who determined that suitable habitat in the form of Mojave creosote bush scrub with sandy soils is present approximately 350 feet north of the site.	--	NS	The following Bio CMRs would reduce or eliminate effects to the Mohave ground squirrel. CMRs 6, 8, 9, 10, 11, 12, and 13.				
			LACF092								M	Suitable habitat in the form of Mojave creosote bush scrub with sandy soils is present within 500 feet of the project site in the south across E Avenue. However, the surrounding area is bounded by development.	--	NS	The following Bio CMRs would reduce or eliminate effects to the Mohave ground squirrel. CMRs 6, 8, 9, 10, 11, 12, and 13.
			LACF093								M	Suitable habitat in the form of high desert scrub with sandy soils is present within 500 feet of the project site in the north across Avenue R. However, the surrounding area is bounded by development and landscaping.	--	NS	The following Bio CMRs would reduce or eliminate effects to the Mohave ground squirrel. CMRs 6, 8, 9, 10, 11, 12, and 13.
			LACF114								L	Only marginal suitable habitat present. Disturbed desert scrub present within 500 feet northwest to the project site.	--	NS	The following Bio CMRs would reduce or eliminate effects to the Mohave ground squirrel. CMRs 6, 8, 9, 10, 11, 12, and 13.

Appendix E-2. Sensitive Species in the Study Area											
Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
Mountain lion	<i>Puma concolor</i>	--	MIS	--	Chaparral, Coast Live Oak Woodland, Coastal Sage Scrub, Foothill Pine Woodland, Non-native Grassland, Southern Riparian Forest	BUR	H	Suitable habitats include disturbed coastal sage scrub and southern mixed chaparral within 500 foot survey area.	--	NS	Construction activities could cause one or more mountain lions to forage elsewhere for the duration of the project. This would be considered to be not significant, since abundant foraging habitat would remain in the vicinity of the project site.
						LACFCP09	H	Suitable habitats include chamise chaparral and coniferous woodland within 500 foot survey area.			
Mule deer	<i>Odocoileus hemonius</i>	--	MIS	--	Chaparral, Coast Live Oak Woodland, Coastal Sage Scrub, Foothill Pine Woodland, Non-native Grassland, Southern Riparian Forest	BUR	H	Suitable habitats include disturbed coastal sage scrub and southern mixed chaparral within 500 foot survey area.	--	NS	Construction activities could cause one or more mule deer to forage elsewhere for the duration of the project. This would be considered to be not significant, since abundant foraging habitat would remain in the vicinity of the project site.
						LACFCP09	H	Suitable habitats include chamise chaparral and coniferous woodland within 500 foot survey area.			
Pacific pocket mouse	<i>Perognathus longimembris pacificus</i>	FE	--	SSC	Inhabits the narrow coastal plains from the Mexican border north to El Segundo, Los Angeles County and seems to prefer soils of fine alluvial sands near the ocean. May inhabit coastal dunes and open coastal sage scrub with sandy soils. Primarily feeds on seeds but also some insects and vegetation. Found at altitudes from 0 to 1,132 feet.	All sites	NA	Suitable habitat for Pacific pocket mouse is not present within 500 feet of proposed LTE sites.	NE	N	There would be no effects to the species because it is presumed to be absent from all sites.
Pallid bat	<i>Antrozous pallidus</i>	--	FSS	SSC	Occupies a wide variety of habitats, including grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests. The species is most common in open, dry habitats with rocky areas for roosting. A yearlong resident in most of the range. This species is commonly found inhabiting bridges.	BUR	M	Suitable foraging habitat is present within 500 feet of this site in the form of southern mixed chaparral and disturbed coastal sage scrub. Roosting habitat is absent.	--	NS	The project would have at most slight temporary impacts to the foraging activities of the species.
			BLMS			LACFCP09	M	Suitable foraging habitat is present within 500 feet of this site in the form of chamise chaparral and coniferous woodlands. Moderately suitable roosting habitat is present in the form of rocky areas within the chamise chaparral.			
						BRK	M	Suitable foraging habitat is present within 500 feet of the site in Mojave creosote bush scrub habitat. Roosting habitat is absent.			

Appendix E-2. Sensitive Species in the Study Area											
Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
San Bernardino kangaroo rat	<i>Dipodomys merriami parvus</i>	FE	--	SSC	Closely associated with alluvial fans. This species inhabits alluvial fans with sandy loam but not rocky soil in sage scrub and chaparral. Range is western Riverside and San Bernardino Mountains.	All sites	NA	Suitable habitat for San Bernardino kangaroo rat is not present within 500 feet of proposed LTE sites.	NE	N	There would be no effects to the species because it is presumed to be absent from all sites.
San Gabriel Mountains bighorn sheep	<i>Ovis canadensis nelsoni</i>	--	FSS	CFP	Steep slopes (>80%) with abundant rock outcrops and sparse shrubs for escape terrain. Ranges in rocky/mountainous areas in proximity to the desert. Escarpment Chaparral w/ Ceanothus (Mountain Mahogany) associations for foraging, also grasses. Range from 3,000 to 10,000 feet. This species' geographic range starts in eastern San Gabriel mountains and spreads eastward.	BUR	NA	BUR and LACFCP09 are outside of the range of this species. Furthermore, none of the sites have abundant rocky outcrops within 500 feet.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
			BLMS			LACFCP09					
			WEMO			BRK	NA	BRK is outside of the range of this species. Furthermore, none of the sites have abundant rocky outcrops within 500 feet.	--	N	There would be no effects to the species because it is presumed to be absent from this site.
Tehachapi pocket mouse	<i>Perognathus alticolus inexpectatus</i>	--	FSS	SSC	Primarily found in arid grass/scrub, Pine Woodland, Joshua Tree woodlands, and Oak Savannah, less common in chaparral and coastal sage scrub communities. Likely is granivorous, similar to other members of its genus. 3,500 feet to 6,000 feet. Tehachapi Pass to Elizabeth Lake in San Gabriel Mountains.	BUR	NA	Suitable habitats are not present within 500 feet of BUR and LACFCP09.	--	N	There would be no effects to the species because it is presumed to be absent from ANF sites.
			BLMS			LACFCP09					
			WEMO			BRK	NA	Suitable habitats are not present within 500 feet of this site.	--	N	There would be no effects to the species because it is presumed to be absent from this site.
Townsend's big-eared bat	<i>Corynorhynchus townsendii</i>	--	FSS	SSC	Townsend's big-eared bat is found throughout California, but the details of its distribution are not well known. This species is found in all but subalpine and alpine habitats, and may be found at any season throughout its range. Once considered common, Townsend's big-eared bat now is considered uncommon in California. It is most abundant in mesic habitats.	BUR	M	There is moderate SOP for this species in southern mixed chaparral within 500 feet of the site. Roosting sites are absent.	--	NS	The project would have at most slight temporary impacts to the foraging activities of the species.
			BLMS	Candidate-s		LACFCP09	M	There is moderate SOP for this species in coniferous woodlands and chamise chaparral within 500 feet of the site. Roosting sites are absent.	--	NS	The project would have at most slight temporary impacts to the foraging activities of the species.
			WEMO			BRK	M	The species may forage within 500 feet of the site. However, suitable roosting sites are absent.	--	NS	The project would have at most slight temporary impacts to the foraging activities of the species.

Appendix E-2. Sensitive Species in the Study Area											
Common Name (synonym[s])	Scientific Name (synonym[s])	Federal ESA Status	Other Conservation Status (federal)	Other Conservation Status (state)	Habitat	Applicable Site(s)	SOP	Rationale for SOP	Effects (ESA)	Effects (NEPA)	Rationale for Effects Determination
<b>KEY</b>											
<b>FESA Listing Status</b>		<b>FESA Effects Codes</b>			<b>NEPA Effects Codes</b>		<b>Other Federal Listing Status</b>		<b>SOP Status</b>		<b>CESA Listing Status</b>
FESA = Federal Endangered Species Act		NE = No Effect			NA = Not Applicable		BGEPA = Bald and Golden Eagle Protection Act		NA = Not Applicable		1B.1, 1B.2, 2B.1, 2B.2, etc = California Rare Plants ranking
Candidate = Federal Candidate for listing		NL = Not Likely to Adversely Affect			N = None		BLMS = Bureau of Land Management Sensitive		L = Low		CE = California Endangered
CH = USFWS Designated Critical Habitat		LA = Likely to Adversely Affect			B = Beneficial		FSS = Forest Service Sensitive		M = Medium		CFP = California Fully Protected
FC = Federal species of concern (no formal status)		NJ = Not Likely to Jeopardize			NS = Not Significant		MBTA = Migratory Bird Treaty Act		H = High		CR=California Rare
FD = Federal Delisted		J = Likely to Jeopardize					MIS = Forest Service Management Indicator Species				CT = California Threatened
FE = Federal Endangered							WEMO = Western Mojave Plan				SSC = California Species of Special Concern
FT = Federal Threatened		LA, NJ, and J were not identified for any species									Candidate-s = State Candidate for listing
<b>Species Names:</b> <i>ssp.</i> = subspecies; <i>var.</i> = variety											

### References

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- USFWS 2009a. *Dudleya cymosa ssp. ovatifolia* (Santa Monica Mountains Dudleya) Five Year Review: Summary and Evaluation. United States Fish and Wildlife Service, Ventura Fish and Wildlife Office, Ventura, California 2009.
- USFWS 2009b. Quino Checkerspot Butterfly (*Euphydryas editha quino*) 5 Year Review: Summary and Evaluation. United States Fish and Wildlife Service, Ventura Fish and Wildlife Office, Ventura, California 2009.



**APPENDIX E-3**  
**BIOLOGICAL SURVEYS BY SURVEY PERIOD**

**Appendix E-3****LTE BIOLOGICAL SITE VISITS BY SURVEY PERIOD**

Facility Name	Site ID	2011 Visit	2012 Visit	2013 Visit
		1/24 to 4/5	1/18 to 2/8	6/30 to 7/26
Alhambra Police Department	ALHPD01	N	N	N
Arcadia Police Department	ARCPD01	N	N	N
Azusa Police Department	AZPD001	N	N	N
Bell Gardens Police Department	BGPD001	N	N	N
Beverly Hills Rexford Drive	BHR	N	N	N
Bald Mountain	BMT	Y	N	N
Baldwin Park Police Department	BPPD001	N	N	N
Blue Rock	BRK	Y	N	N
Burnt Peak	BUR	Y	N	N
Burbank Police Department	BURPD01	N	N	N
Criminal Courts Building	CCT	N	N	N
Century Sheriff's Station	CEN	N	N	N
Carlton J. Peterson Park	CJP	N	N	Y
Claremont Microwave Tower	CLM	N	Y	N
Claremont Police Department	CLRMPD1	N	N	N
Compton Fire Station 2	CPTFD02	N	N	N
Compton Fire Station 4	CPTFD04	N	N	N
Culver City Communications Tower	CULV001	N	N	Y
Downey Police Department	DWNYPD1	N	N	N
El Monte Police Department	ELMNTPD	N	N	N
El Segundo Police Department	ELSGDPD	N	N	N
Freeman Command and Control Facility Headquarters	FCCF	N	Y	N
Long Beach Fire Station 5	FS5	N	Y	N
Gardena	GARD001	N	N	N
Glendale Civic Center	GCC	N	N	N
Glendale Water & Power Utility Operations Center	GDWP001	N	N	N
Glendale Fire Station 23	GLNDL23	N	N	N
Glendale Fire Station 24	GLNDL24	N	Y	N
Glendale Fire Station 28	GLNDL28	N	N	N
Los Angeles County Fire Station 3	LACF003	N	N	N
Los Angeles County Fire Station 4	LACF004	N	N	N
Los Angeles County Fire Station 16	LACF016	N	N	N
Los Angeles County Fire Station 21	LACF021	N	N	N
Los Angeles County Fire Station 23	LACF023	N	N	N

Facility Name	Site ID	2011 Visit	2012 Visit	2013 Visit
		1/24 to 4/5	1/18 to 2/8	6/30 to 7/26
Los Angeles County Fire Station 24	LACF024	Y	N	N
Los Angeles County Fire Station 28	LACF028	N	N	N
Los Angeles County Fire Station 30	LACF030	N	N	N
Los Angeles County Fire Station 31	LACF031	N	N	N
Los Angeles County Fire Station 38	LACF038	N	N	N
Los Angeles County Fire Station 44	LACF044	N	N	N
Los Angeles County Fire Station 48	LACF048	N	N	N
Los Angeles County Fire Station 50	LACF050	N	N	N
Los Angeles County Fire Station 53	LACF053	N	Y	N
Los Angeles County Fire Station 56	LACF056	N	Y	N
Los Angeles County Fire Station 58	LACF058	N	N	N
Los Angeles County Fire Station 59	LACF059	N	N	N
Los Angeles County Fire Station 61	LACF061	N	Y	N
Los Angeles County Fire Station 65	LACF065	N	N	Y
Los Angeles County Fire Station 68	LACF068	Y	N	N
Los Angeles County Fire Station 69	LACF069	N	N	Y
Los Angeles County Fire Station 71	LACF071	Y	N	N
Los Angeles County Fire Station 72	LACF072	Y	N	N
Los Angeles County Fire Station 73	LACF073	Y	N	N
Los Angeles County Fire Station 76	LACF076	Y	N	N
Los Angeles County Fire Station 77	LACF077	Y	N	N
Los Angeles County Fire Station 78	LACF078	Y	N	N
Los Angeles County Fire Station 79	LACF079	Y	N	N
Los Angeles County Fire Station 80	LACF080	Y	N	N
Los Angeles County Fire Station 81	LACF081	Y	N	N
Los Angeles County Fire Station 83	LACF083	N	N	Y
Los Angeles County Fire Station 84	LACF084	N	N	N
Los Angeles County Fire Station 85	LACF085	N	N	N
Los Angeles County Fire Station 86	LACF086	N	N	N
Los Angeles County Fire Station 87	LACF087	N	N	N
Los Angeles County Fire Station 88	LACF088	N	N	N
Los Angeles County Fire Station 90	LACF090	N	N	N
Los Angeles County Fire Station 91	LACF091	N	Y	N
Los Angeles County Fire Station 92	LACF092	Y	N	N
Los Angeles County Fire Station 93	LACF093	N	Y	N
Los Angeles County Fire Station 95	LACF095	N	N	N
Los Angeles County Fire Station 96	LACF096	N	N	N
Los Angeles County Fire Station 98	LACF098	N	N	N

Facility Name	Site ID	2011 Visit	2012 Visit	2013 Visit
		1/24 to 4/5	1/18 to 2/8	6/30 to 7/26
Los Angeles County Fire Station 99	LACF099	Y	N	N
Los Angeles County Fire Station 102	LACF102	N	N	N
Los Angeles County Fire Station 105	LACF105	N	N	N
Los Angeles County Fire Station 106	LACF106	N	Y	N
Los Angeles County Fire Station 107	LACF107	N	N	N
Los Angeles County Fire Station 108	LACF108	N	N	Y
Los Angeles County Fire Station 111	LACF111	Y	N	N
Los Angeles County Fire Station 114	LACF114	N	Y	N
Los Angeles County Fire Station 117	LACF117	Y	N	N
Los Angeles County Fire Station 118	LACF118	N	N	N
Los Angeles County Fire Station 120	LACF120	Y	N	N
Los Angeles County Fire Station 123	LACF123	Y	N	N
Los Angeles County Fire Station 129	LACF129	Y	N	N
Los Angeles County Fire Station 132	LACF132	N	N	Y
Los Angeles County Fire Station 140	LACF140	N	Y	N
Los Angeles County Fire Station 141	LACF141	N	N	N
Los Angeles County Fire Station 144	LACF144	N	N	Y
Los Angeles County Fire Station 146	LACF146	N	N	N
Los Angeles County Fire Station 149	LACF149	Y	N	N
Los Angeles County Fire Station 151	LACF151	N	N	N
Los Angeles County Fire Station 153	LACF153	N	N	N
Los Angeles County Fire Station 154	LACF154	N	N	N
Los Angeles County Fire Station 157	LACF157	Y	N	N
Los Angeles County Fire Station 159	LACF159	N	N	N
Los Angeles County Fire Station 161	LACF161	N	N	N
Los Angeles County Fire Station 162	LACF162	Y	N	N
Los Angeles County Fire Station 163	LACF163	Y	N	N
Los Angeles County Fire Station 164	LACF164	N	N	N
Los Angeles County Fire Station 169	LACF169	N	N	N
Los Angeles County Fire Station 171	LACF171	N	N	N
Los Angeles County Fire Station 173	LACF173	N	N	Y
Los Angeles County Fire Station 181	LACF181	N	N	N
Los Angeles County Fire Station 183	LACF183	N	N	N
Los Angeles County Fire Station 184	LACF184	N	N	N
Los Angeles County Fire Station 187	LACF187	N	Y	N
Los Angeles County Fire Station 188	LACF188	N	N	N
Los Angeles County Fire Station 192	LACF192	N	N	N
Los Angeles County Fire Station 194	LACF194	N	Y	N

Facility Name	Site ID	2011 Visit	2012 Visit	2013 Visit
		1/24 to 4/5	1/18 to 2/8	6/30 to 7/26
Los Angeles County Fire Department Camp 2	LACFCP02	N	Y	N
Los Angeles County Fire Department Camp 9	LACFCP09	N	Y	N
Los Angeles County Fire Department Camp 14	LACFCP14	N	Y	N
Harbor UCLA Medical Center	LACHAR	N	N	N
Olive View UCLA Medical Center	LACOLV	N	N	N
USC Medical Center	LACUSC	N	N	N
Los Angeles Fire Station 005	LAFD005	N	N	Y
Los Angeles Fire Station 012	LAFD012	N	N	N
Los Angeles Fire Station 015	LAFD015	N	N	N
Los Angeles Fire Station 16	LAFD016	N	N	N
Los Angeles Fire Station 019	LAFD019	N	N	N
Los Angeles Fire Station 029	LAFD029	N	N	N
Los Angeles Fire Station 035	LAFD035	N	N	N
Los Angeles Fire Station 042	LAFD042	N	N	N
Los Angeles Fire Station 044	LAFD044	N	N	N
Los Angeles Fire Station 47	LAFD047	N	N	N
Los Angeles Fire Station 049	LAFD049	N	Y	N
Los Angeles Fire Station 055	LAFD055	N	N	N
Los Angeles Fire Station 061	LAFD061	N	N	N
Los Angeles Fire Station 066	LAFD066	N	N	N
Los Angeles Fire Station 074	LAFD074	N	N	N
Los Angeles Fire Station 76	LAFD076	N	N	N
Los Angeles Fire Station 077	LAFD077	N	N	N
Los Angeles Fire Station 079	LAFD079	N	N	N
Los Angeles Fire Station 080	LAFD080	N	N	N
Los Angeles Fire Station 081	LAFD081	N	N	N
Los Angeles Fire Station 082	LAFD082	N	N	N
Los Angeles Fire Station 084	LAFD084	Y	N	N
Los Angeles Fire Station 085	LAFD085	N	N	N
Los Angeles Fire Station 088	LAFD088	N	N	N
Los Angeles Fire Station 093	LAFD093	N	N	N
Los Angeles Fire Station 094	LAFD094	N	N	N
Los Angeles Fire Station 095	LAFD095	N	N	N
Los Angeles Fire Station 096	LAFD096	N	N	N
Los Angeles Fire Station 097	LAFD097	N	N	N
Los Angeles Fire Station 101	LAFD101	N	Y	N
Los Angeles Fire Station 105	LAFD105	N	N	N
Los Angeles Fire Station 114	LAFD114	N	N	N

Facility Name	Site ID	2011 Visit	2012 Visit	2013 Visit
		1/24 to 4/5	1/18 to 2/8	6/30 to 7/26
Hermosa Headquarter	LALG100	N	N	N
Zuma Lifeguard Headquarter	LALG300	N	Y	N
Lifeguard Division	LALG-HQ	N	N	N
Lancaster Sheriff's Station	LAN	N	N	N
77th Street Area Complex	LAPD077	N	N	N
Central Area Complex	LAPDCEN	N	N	N
Devonshire Area Station	LAPDDVN	N	N	N
Foothill Area Station	LAPDFTH	N	N	N
Hollenbeck Area Station	LAPDHLB	N	N	N
Hollywood Area Station	LAPDHWL	N	N	N
Mission Area Station	LAPDMIS	N	N	N
Northeast Area Station	LAPDNED	N	N	N
North Hollywood Area Station	LAPDNHD	N	N	N
Newton Police Department	LAPDNWT	N	N	N
Olympic Area Station	LAPDOLY	N	N	N
Pacific Area Station	LAPDPAC	N	N	N
Rampart Area Station	LAPDRAM	N	N	N
Topanga Area Station	LAPDTOP	N	N	N
Valley Dispatch Center	LAPDVDC	N	Y	N
Van Nuys Area Station	LAPDVNS	N	N	N
Wilshire Area Station	LAPDWIL	N	N	N
West Los Angeles Area Station	LAPDWLA	Y	N	N
West Valley Area Facility	LAPDWVD	Y	N	N
Altadena Sheriff's Station	LASDALD	N	N	N
Carson Sheriff's Station	LASDCSN	N	N	N
Crescenta Valley Sheriff's Station	LASDCVS	Y	N	N
Industry Sheriff's Station	LASDIDT	N	N	N
Lakewood Sheriff's Station	LASDLKD	N	N	N
Lennox Sheriff's Station (Closed)	LASDLNX	N	N	N
North County Correctional Facility	LASDNCC	N	Y	N
Norwalk Sheriff's Station	LASDNWK	N	N	N
Pico Rivera Sheriff's Station	LASDPRV	N	N	N
Santa Clarita Valley Sheriff's Station	LASDSCV	N	N	N
San Dimas Sheriff's Station	LASDSDM	Y	N	N
Temple Sheriff's Station	LASDTEM	N	N	N
Long Beach Fire Station 2	LBFD002	N	N	N
Long Beach Fire Station 6	LBFD006	N	Y	N
Long Beach Fire Station 9	LBFD009	N	N	N

Facility Name	Site ID	2011 Visit	2012 Visit	2013 Visit
		1/24 to 4/5	1/18 to 2/8	6/30 to 7/26
Long Beach Fire Station 12	LBFD012	N	N	N
Long Beach Fire Station 13	LBFD013	N	N	N
Long Beach Fire Station 21	LBFD021	N	Y	N
Long Beach Fire Department Headquarter	LBFD026	N	N	N
Long Beach Police Department Headquarter	LBPDHQ	N	N	N
Sylmar Converter Station - E	LDWP220	N	N	N
Lost Hills/Malibu Sheriff's Station	LHS	Y	N	N
La Verne Fire Station 2	LVFD002	N	N	N
La Verne Police Department	LVRNPD	N	N	N
Manhattan Beach Fire Station 1	MBFD001	N	N	N
Mira Loma Detention Facility	MLM	Y	N	Y
Monrovia Police Department	MNRVPD	N	N	N
Montebello Police Department	MNTBLPD	N	N	N
Monterey Park Police Department	MNTPKPD	N	N	N
Mount Olivet Reservoir	MOR	N	N	N
Monrovia Fire Station 2	MRFD002	N	N	N
Montebello Fire Station 3	MTBFD03	N	N	N
Mount Washington	MTW	Y	N	N
Goodrich	PASA001	N	Y	N
Pasadena Fire Station 33	PASFD33	N	N	N
Puente Hills Internal Service Department	PHN	N	Y	N
Palmdale Sheriff's Station	PLM	N	N	N
Rancho Los Amigos National Rehabilitation Center	RANCHO	N	N	N
Redondo Beach Fire Station 2	RDBFD02	N	N	N
Redondo Beach Police Department	RDNBPD	N	N	N
Reservoir Hill	REH	N	N	N
San Pedro City Hall	SCH	Y	N	N
Southeast Area Station	SEP	N	N	N
Santa Fe Springs Fire Station 3	SFSFD03	N	N	N
Santa Fe Springs Fire Station 4	SFSFD04	Y	N	N
South Los Angeles Sheriff's Station	SLA	N	N	N
Santa Monica Fire Station 2	SMFD002	N	N	N
South Gate Police Department	SOGTPD	Y	N	N
San Vicente Peak	SVP	Y	N	N
Southwest Area Station	SWP	N	N	N
City Hall Radio Tower	TORC001	N	N	N
Torrance Fire Station 2	TORFD02	N	N	N

Facility Name	Site ID	2011 Visit	2012 Visit	2013 Visit
		1/24 to 4/5	1/18 to 2/8	6/30 to 7/26
Torrance Fire Station 3	TORFD03	Y	N	N
Torrance Fire Station 4	TORFD04	Y	N	N
Vernon Fire Station 1	VEFD001	N	N	N
Vernon Fire Station 3	VEFD003	N	N	N
Walnut/Diamond Bar Sheriff's Station	WAL	Y	N	N
West Covina Fire Station 4	WCFD004	N	Y	N
West Covina Fire Station 5	WCFD005	N	N	N
West Hollywood Sheriff's Station	WHD	N	N	N



**APPENDIX E-4**  
**BIOLOGICAL ASSESSMENT**

\*Appendix E-4 contains the BA and Revisions resulting from USFWS review

## **BA SECTION REVISIONS**

**Table 1.0-1**  
**Evaluated Federal Endangered, Threatened, and Candidate Species (Based on a List Received from U.S. Fish and Wildlife Service Ventura Office in December 2013)\***

<b>Species</b>	<b>Status</b>
<b>Plants</b>	
Brand's phacelia ( <i>Phacelia stellaris</i> )	Candidate
Braunton's milkvetch ( <i>Astragalus brauntonii</i> )	Endangered
California Orcutt grass ( <i>Orcuttia californica</i> )	Endangered
Coastal dunes milkvetch ( <i>Astragalus tener</i> var. <i>titi</i> )	Endangered
Conejo dudleya ( <i>Dudleya parva</i> )	Threatened
Gambel's watercress ( <i>Rorippa gambellii</i> )	Endangered
Lyon's pentachaeta ( <i>Pentachaeta lyonii</i> )	Endangered
Marcrescent dudleya ( <i>Dudleya cymosa</i> ssp. <i>marcescens</i> )	Threatened
Marsh sandwort ( <i>Arenaria paludicola</i> )	Endangered
Nevin's barberry ( <i>Berberis nevini</i> )	Endangered
Salt marsh bird's beak ( <i>Cordylanthus maritimus</i> ssp. <i>maritimus</i> )	Endangered
San Fernando Valley spineflower ( <i>Chorizanthe parryi</i> var. <i>fernandina</i> )	Candidate
Santa Monica Mountains live-forever ( <i>Dudleya cymosa</i> ssp. <i>ovatifolia</i> )	Threatened
Slender-horned spineflower ( <i>Dodecahema leptocerus</i> )	Endangered
Spreading navarretia ( <i>Navarretia fossalis</i> )	Threatened
Thread-leaved brodiaea ( <i>Brodiea filifolia</i> )	Threatened
Ventura marsh milkvetch ( <i>Astragalus pycnostachys</i> var. <i>lanosissimus</i> )	Endangered
Verity's dudleya ( <i>Dudleya verity</i> )	Threatened
<b>Invertebrates</b>	
El Segundo blue butterfly ( <i>Euphilotes battoides allyni</i> )	Endangered
Palos Verdes blue butterfly ( <i>Glaucopsyche lygdamus palosverdensis</i> )	Endangered
Quino checkerspot butterfly ( <i>Endangeredyphydryas editha quino</i> )	Endangered
Conservancy fairy shrimp ( <i>Branchinecta conservatio</i> )	Endangered
Riverside fairy shrimp ( <i>Streptocephalus woottoni</i> )	Endangered
San Diego fairy shrimp ( <i>Branchinecta sandiegonensis</i> )	Endangered
<b>Fishes</b>	
Tidewater goby ( <i>Eucyclogobius newberryi</i> )	Endangered
Unarmored threespine stickleback ( <i>Gasterosteus aculeatus williamsoni</i> )	Endangered
Santa Ana sucker ( <i>Catostomus santaanae</i> )	Threatened
Steelhead trout ( <i>Oncorhynchus mykiss irideus</i> )**	Endangered
<b>Amphibians</b>	
California red-legged frog ( <i>Rana draytonii</i> )	Threatened
Mountain yellow-legged frog ( <i>Rana muscosa</i> )	Endangered
Arroyo toad ( <i>Anaxyrus californicus</i> )	Endangered

**Table 1.0-1 (continued)**  
**Evaluated Federal Endangered, Threatened, and Candidate Species (Based on a List Received from U.S. Fish and Wildlife Service Ventura Office in December 2013)\***

<b>Species</b>	<b>Status</b>
<b>Reptiles</b>	
Desert tortoise ( <i>Gopherus agassizii</i> )	Threatened
<b>Birds</b>	
California condor ( <i>Gymnogyps californianus</i> )	Endangered
<b>Birds</b>	
Coastal California gnatcatcher ( <i>Polioptila californica</i> )	Threatened
California least tern ( <i>Sterna antillarum browni</i> )	Endangered
Southwestern willow flycatcher ( <i>Empidonax trailli extimus</i> )	Endangered
Least Bell's vireo ( <i>Vireo bellii pusillus</i> )	Endangered
Western snowy plover ( <i>Charadrius alexandrinus nivosus</i> )	Threatened
Yellow-billed cuckoo ( <i>Coccyzus americanus</i> )	Candidate
Light-footed clapper rail ( <i>Rallus longirostris levipes</i> )	Endangered
<b>Mammals</b>	
San Bernardino kangaroo rat ( <i>Dipodomys merriami parvus</i> )	Endangered
Pacific pocket mouse ( <i>Perognathus longimembris pacificus</i> )	Endangered

\*Table 1.0-1 presents the species on the list received from the USFWS Ventura Office, December 2013.

\*\*USFWS list for the LTE project Section 7 Consultation refers to full species (*Oncorhynchus mykiss*). However, *Oncorhynchus mykiss irideus* is the subspecies occurring in the Action Area and is listed as endangered

**Table 5.1-1**  
**Evaluated Species Occurrence Potential**

Name	ESA Status	Habitat	Applicable Site(s)	SOP	Rationale for SOP
<b>Plants</b>					
Brand's phacelia <i>Phacelia stellaris</i>	C	Occurs in open habitats on sandy soils, coastal dunes and washes, coastal scrub, or river floodplains (Wilken et al., 1993). Occurs from southwestern California and adjacent Baja California, Mexico.	All	NA	The CNDDDB lists three extant populations of Brand's phacelia within Los Angeles County on coastal dune habitats. No proposed LTE sites are located within the FSA of these populations. Furthermore, suitable habitats do not occur within of the FSA of proposed LTE sites.
Braunton's milkvetch <i>Astragalus brauntonii</i>	E	Found in closed-cone coniferous forest, chaparral, coastal scrub, valley and foothill grassland, especially in areas that have been recently burnt or disturbed. Prefers stiff gravelly clay soils overlying granite or limestone. It is found from 12 to 2,100 feet. Blooms from January to August.	CULV01	L	CNDDDB indicates Braunton's milkvetch historically occurred within one mile of the proposed LTE site. Marginally suitable habitat is present in disturbed coastal sage scrub within the FSA of the proposed LTE site.
			LACF068	M	Potentially suitable habitats in chaparral occur within the FSA for this site.
			LAFD097	L	Marginally suitable habitats in non-native grasslands occur within the FSA of proposed LTE site.
California Orcutt grass <i>Orcuttia californica</i>	E	Vernal pools are preferred habitat. Riverside County, San Diego County; Baja California, Mexico.	All	NA	No suitable habitat is present within the FSA of proposed LTE sites.
Coastal dunes milkvetch <i>Astragalus tener</i> var. <i>titi</i>	E	Annual herb found in sandy soils of coastal bluff scrub, coastal dunes, and coastal prairie. Often found in vernal mesic areas. Blooms from March to May. It has been extirpated in most of Southern California. The remaining occurrence is in the Beverly Hills quad. It is found at elevations from 3 to 164 feet.	All	NA	No suitable habitat is present within the FSA of proposed LTE sites.

**Table 5.1-1 (continued)**  
**Evaluated Species Occurrence Potential**

Name	ESA Status	Habitat	Applicable Site(s)	SOP	Rationale for SOP
<b>Plants</b>					
Conejo dudleya <i>Dudleya parva</i>	T	Inhabits coastal sage scrub and valley grasslands. It prefers soils that are either rocky or gravelly or clay or volcanic. It is found at elevations from 200 to 1,480 feet. It blooms from May to June. This species' geographic range is in the western Santa Monica mountains.	All	NA	No suitable habitats are present for this species within the FSA of proposed LTE sites that occur within the species' range.
Gambel's watercress <i>Rorippa gambellii</i>	E	Aquatic, herbaceous perennial, producing floating and emergent stems. Occurs naturally in open or semi-shaded sites along the edges of permanent, slow-moving streams and at the edges of freshwater marshes or lakes.	All	NA	CNDDDB and IPaC Systems lists report that Gambel's watercress has been extirpated from Los Angeles County and western Orange County. Furthermore, no suitable habitat for this species is present within the FSA of proposed LTE sites.
Lyon's pentachaeta <i>Pentachaeta lyonii</i>	E	Rocky or clay-based soils in the openings in chaparral and coastal sage scrub, and in valley grasslands.	LACF065	M	Moderately suitable habitat is present in adjacent non-native grassland habitats within the FSA.
			LACF083	L	Marginally suitable habitat is present within disturbed coastal sage scrub habitats in the FSA, although on the opposite side of a paved street.
Marcescent dudleya <i>Dudleya cymosa</i> ssp. <i>marcescens</i>	T	Perennial herb that grows in rocky, volcanic soils in chaparral of the western Santa Monica mountains. Blooms from April to July. Found at the elevations from 490 to 1,700 feet.	LACF069	H	Highly suitable habitat occurs on north-facing slopes and shady riparian habitats within Topanga Canyon east of this proposed LTE site within the FSA.
Marsh sandwort <i>Arenaria paludicola</i>	E	Coastal species that was historically known to occur in wetlands and in freshwater marshes.	All	NA	No proposed potentially suitable habitats are present within the FSA of proposed LTE sites.

**Table 5.1-1 (continued)**  
**Evaluated Species Occurrence Potential**

Name	ESA Status	Habitat	Applicable Site(s)	SOP	Rationale for SOP
<b>Plants</b>					
Nevin's barberry <i>Berberis nevinii</i>	E	Occurs in washes, chaparral, cismontane woodland, riparian scrub, and coastal scrub habitats. Generally found in lowlands or drainages in sandy to gravelly soils at elevations of 900 to 2,870 feet. Blooms from March to June.	CLM	L	Marginally suitable habitat in the form of Riversidean alluvial fan scrub is present within the FSA.
Salt marsh bird's beak <i>Chloropyron maritimum</i> ssp. <i>maritimum</i>	E	Annual hemiparasitic herb that grows in coastal dunes and coastal salt marshes. It blooms from May to October. It is found at elevations between 0 and 100 feet.	All	NA	No suitable habitat for salt marsh bird's beak occurs within the FSA of proposed LTE sites.
San Fernando Valley spineflower <i>Chorizanthe parryi</i> var. <i>fernandina</i>	C	Perennial herb that prefers soils composed of volcanic rock found in chaparral, cismontane woodland and coastal scrub. It is found at elevations from 197 to 394 feet. This species blooms from May to June. Its range is in the western Santa Monica mountains.	LACF078	M	Moderately suitable habitat in the form of rabbitbrush scrub is north of this proposed LTE site within the FSA.
Santa Monica Mountains liveforever <i>Dudleya cymosa</i> ssp. <i>ovatifolia</i>	T	Perennial herb that grows in rocky soils composed of sedimentary or volcanic rock, amongst chaparral and coastal sage scrub in the Santa Monica and Santa Ana mountains. This herb blooms from March to June. It is found at elevations ranging from 490 to 5,500 feet.	LACF069	M	Highly suitable habitat for this species appears to be present in Topanga Canyon east of this proposed LTE site within the FSA.

**Table 5.1-1 (continued)**  
**Evaluated Species Occurrence Potential**

Name	ESA Status	Habitat	Applicable Site(s)	SOP	Rationale for SOP
<b>Plants</b>					
Slender-horned spineflower <i>Dodecahema leptoceras</i>	E	Annual herb that grows in sandy soils of coastal sage scrub, chaparral, and cismontane woodland. Blooms from April to June. This species is found at elevations from 1,280 to 2,400 feet. Recorded to occur primarily on the coastal and southern faces of the San Gabriel, San Bernardino, San Jacinto and Santa Ana mountains.	All	NA	No suitable habitat occurs within the FSA of proposed LTE sites.
Spreading navarretia <i>Navarretia fossalis</i>	T	Primarily found in vernal pool, alkali grasslands, alkali playas and alkali sinks. This plant is found in vernal pool habitats in portions of Los Angeles, Riverside, Orange and San Diego counties, California at elevations between sea level and 4,250 feet.	All	NA	No suitable habitat occurs within the FSA of proposed LTE sites.
Thread-leaved brodiaea <i>Brodiea filifolia</i>	T	Perennial herb with underground bulb-like storage stems. Occurrences are distributed across southern California from the foothills of the San Gabriel Mountains at Glendora (Los Angeles County), east to Arrowhead Hot Springs in the western foothills of the San Bernardino Mountains (San Bernardino County), and south through eastern Orange and western Riverside Counties to Rancho Santa Fe in central San Diego County, California. Open areas on clay soils, soils with a clay subsurface, or clay lenses within loamy, silty loam, loamy sand, silty deposits with cobbles, or alkaline soils; they may range in elevation from 100 feet to 2,500 feet.	All	NA	No suitable habitat occurs within the FSA of proposed LTE sites.



**Table 5.1-1 (continued)**  
**Evaluated Species Occurrence Potential**

Name	ESA Status	Habitat	Applicable Site(s)	SOP	Rationale for SOP
<b>Plants</b>					
Ventura marsh milkvetch <i>Astragalus pycnostachyus</i> var. <i>lanosissimus</i>	E	Historically occurred in back dune habitat, coastal meadows and near coastal salt marshes from Ventura County to Orange County. Today, a single population of Ventura marsh milkvetch is known to exist near the City of Oxnard, Ventura County.	All	NA	No suitable habitat occurs within the FSA of proposed LTE sites.
Verity's dudleya <i>Dudleya verity</i>	T	Perennial herb that prefers soils composed of volcanic rock found in chaparral, cismontane woodland and coastal scrub. It is found at elevations from 197 to 394 feet. This species blooms from May to June. This species' range is in the western Santa Monica mountains.	All	NA	No suitable habitat occurs within the FSA of proposed LTE sites.
<b>Invertebrates</b>					
Conservancy fairy shrimp <i>Branchinecta conservation</i>	E	Relatively large and turbid vernal pools called playa pools (Helm 1998; Eriksen and Belk 1999; Vollmar 2002, Service 2005a).	All	NA	No suitable habitats within FSA of LTE sites. Furthermore, no sites are within species range.
El Segundo blue butterfly <i>Euphilotes battoides allyni</i>	E	Found on a small, dune ecosystem near LAX. Lays its eggs on coast buckwheat ( <i>Eriogonum latifolium</i> ).	All	NA	No sites that are within the range of the El Segundo blue butterfly contain suitable habitats.

**Table 5.1-1 (continued)**  
**Evaluated Species Occurrence Potential**

Name	ESA Status	Habitat	Applicable Site(s)	SOP	Rationale for SOP
<b>Invertebrates</b>					
Palos Verdes blue butterfly <i>Glaucopsyche lygdamus palosverdensis</i>	E	Coastal sage scrub on the Palos Verdes Peninsula. It prefers sections of CSS with open grassy patches which support its early successional host plants: deerweed ( <i>Lotus scoparius</i> ) and Rattlepod ( <i>Astragalus trichopodus lonchus</i> ).	LACF053	L	Proposed LTE site has moderate potential to function as a movement corridor. However, no suitable habitats are within the FSA.
			LACF056	H	Highly suitable foraging and reproduction habitat is present in coastal sage scrub approximately 415 feet west of the center of the FSA (within the FSA). The proposed LTE site also appears based on aerial photo analysis to occur within a migration corridor.
			LACF083	L	An area east of the LTE site but within the FSA may function as a movement corridor.
			LACF106	L	Marginally suitable habitat for the Palos Verdes blue butterfly is present in coastal sage scrub approximately 230 feet southwest of the center of the FSA (within the FSA). This habitat may function as a migration corridor.
			TORFD04	L	Marginally suitable habitat is present in disturbed coastal sage scrub habitats approximately 140 feet northwest of the center of the FSA (within the FSA).
Quino checkerspot butterfly <i>Euphydryas editha quino</i>	E	Meadows and upland sage scrub/chaparral habitat with <i>Plantago erecta</i> or <i>Castilleja exserta</i> . Occurs in western Riverside County, southern San Diego County and northern Baja California, Mexico.	All	NA	Proposed LTE sites are outside of the range of this species.

**Table 5.1-1 (continued)**  
**Evaluated Species Occurrence Potential**

Name	ESA Status	Habitat	Applicable Site(s)	SOP	Rationale for SOP
<b>Invertebrates</b>					
Riverside fairy shrimp <i>Streptocephalus woottoni</i>	E	Relatively large vernal pools and vernal pool-like ephemeral ponds, livestock ponds, and other man-made depressions in southeastern Orange County, western San Diego County, and western Riverside County.	All	NA	Proposed LTE sites and their FSAs are outside of the range of this species. Furthermore, suitable habitats are not present within the FSA of LTE sites.
San Diego fairy shrimp <i>Branchinecta sandiegonensis</i>	E	Resides in vernal pools. The northernmost population is in Costa Mesa.	All	NA	Proposed LTE sites and their FSAs are outside of the range of this species. Furthermore, suitable habitats are not present within the FSA of LTE sites.
<b>Fish</b>					
Santa Ana sucker <i>Catostomus santaanae</i>	T	Inhabits portions of the San Gabriel and Santa Ana rivers, and Big Tujunga Creek, with coarse substrates and bank-side or in-stream vegetation that provides cover.	All	NA	No proposed sites within the range of the Santa Ana sucker contain suitable habitats within the FSA.
Steelhead trout (NMFS) <i>Oncorhynchus mykiss</i>	E	Anadromous fish that can spend up to two years in freshwater and then migrate to the ocean for a few years before returning to spawn.	LACF069	H	CNDDDB reports this species in a deep gorge within Topanga Creek approximately 415 feet east of the center of the FSA (within the FSA). This reach of Topanga Creek is also listed by NMFS as essential fish habitat (EFH).
Tidewater goby <i>Eucyclogobius newberryi</i>	E	Inhabits lagoons, estuaries, backwater marshes, and freshwater marshes. Its distribution is limited to the California coast from the California-Oregon border to Cockleburr Canyon. For locations with little precipitation, such as Southern California, this fish can only be found up to a few hundred feet from the coast.	All sites	NA	Suitable habitat for this species does not occur within the FSA of proposed LTE sites.

**Table 5.1-1 (continued)**  
**Evaluated Species Occurrence Potential**

Name	ESA Status	Habitat	Applicable Site(s)	SOP	Rationale for SOP
<b>Fish</b>					
Unarmored threespine stickleback <i>Gasterosteus aculeatus williamsoni</i>	E	Inhabits slow-moving sections of rivers and streams shaded usually shaded by dense vegetation. This species may also seek refuge under algal mats and near barriers such as sand bars. Found in the upper Santa Clara River in Los Angeles County.	LACFCP14	L	CNDDDB records indicate that prior to a 2005 flooding event, a population of this species was present in San Francisquito Canyon approximately 800 feet south (downslope) of center of the FSA (outside the 500-foot radius). San Francisquito Canyon is a tributary of Santa Clara River, where the CNDDDB reports extant populations of this species approximately 15 miles downstream.
<b>Amphibians</b>					
Arroyo toad <i>Anaxyrus californicus</i>	T	Occurs in semi-arid regions near washes or streams, valley foothills, desert riparian or desert washes. Often found near rivers with flowing water with sand and gravel substrate during substantial portions of the rainy season. Habitat normally includes sandy banks, gravelly areas, willows, cottonwoods, sycamores, or a combination of these.	LACF076	L	Critical Habitat for this species is present along the Santa Clara River approximately 1,000 feet to the south, and Castaic Creek approximately 1,260 feet southeast of the center of the FSA of this proposed LTE site. This LTE site appears to occur within a dispersal corridor between these two suitable habitats and therefore, although the site itself does not have suitable habitat such as refugia or foraging habitat, the species has a low potential to pass through.
California red-legged frog <i>Rana draytonii</i>	T	Requires a variety of habitat elements with aquatic breeding areas embedded within a matrix of riparian and upland dispersal habitats. Breeding sites of the California red-legged frog are in aquatic habitats including pools and backwaters within streams and creeks, ponds, marshes, springs, sag ponds, dune ponds and lagoons. Additionally, California red-legged frogs frequently breed in artificial impoundments such as stock ponds. Range is sea level to elevations of about 1,500 meters (5,200 feet).	LACFCP14	M	Moderately suitable habitat is present within San Francisquito Canyon approximately 800 feet south (downslope) of this LTE site, outside of the FSA. Suitable habitat for upland dispersal between this area and the LTE site does not occur. Critical Habitat for this species is present approximately 0.7 mile downstream.

**Table 5.1-1 (continued)**  
**Evaluated Species Occurrence Potential**

Name	ESA Status	Habitat	Applicable Site(s)	SOP	Rationale for SOP
<b>Amphibians</b>					
Mountain yellow-legged frog <i>Rana muscosa</i>	H	High mountain lakes, ponds, tarns, and streams. In the Transverse Ranges, it occurs in scattered locations.	All	NA	Suitable habitat is not present within the FSA of proposed LTE sites.
<b>Reptiles</b>					
Desert tortoise <i>Gopherus agassizii</i>	T	Prefers sandy or gravelly locations along riverbanks, washes, sandy dunes, alluvial fans, canyon bottoms, desert oases, rocky hillsides, Creosote/cactus /shadscale scrub, and Joshua tree woodland.	BRK	H	An old desert tortoise burrow was observed within the FSA during a habitat survey by a biologist with a Section 10(a) permit for conducting surveys for the desert tortoise during July 2013.
<b>Birds</b>					
California condor <i>Gymnogyps californianus</i>	E	Forages over open grassland regions and nests in a variety of habitats from chaparral to mountain tops up to 6,000 feet. During nesting this species may commute large distances from nesting site to foraging areas.	BMT	M	Species occurrence was evaluated for sensitive nesting birds for a radius of 0.5 mile. Site is within range of the condor and potentially suitable foraging habitat in the form of vast open land is present within the FSA of this proposed LTE site. Suitable nesting habitats are not present within 0.5 mile.
			BRK	M	Species occurrence was evaluated for sensitive nesting birds for a radius of 0.5 mile. Site is within range of the condor and potentially suitable foraging habitat in the form of vast open land is present within the FSA of this proposed LTE site. Suitable nesting habitats are not present within 0.5 mile.
			BUR	M	Species occurrence was evaluated for sensitive nesting birds for a radius of 0.5 mile. Site is within range of the condor and potentially suitable foraging habitat in the form of vast open land is present within the FSA of this proposed LTE site. Suitable nesting habitats are not present within 0.5 mile.

**Table 5.1-1 (continued)**  
**Evaluated Species Occurrence Potential**

Name	ESA Status	Habitat	Applicable Site(s)	SOP	Rationale for SOP
<b>Birds</b>					
California condor <i>Gymnogyps californianus (cont.)</i>	E	Forages over open grassland regions and nests in a variety of habitats from chaparral to mountain tops up to 6,000 feet. During nesting this species may commute large distances from nesting site to foraging areas.	LACFCP09	M	Species occurrence was evaluated for sensitive nesting birds for a radius of 0.5 mile. Site is within range of the condor and potentially suitable foraging habitat in the form of vast open land is present within the FSA of this proposed LTE site. Suitable nesting habitats are not present within 0.5 mile.
			LACFCP14	M	Species occurrence was evaluated for sensitive nesting birds for a radius of 0.5 mile. Site is within range of the condor and potentially suitable foraging habitat in the form of vast open land is present within the FSA of this proposed LTE site. Suitable nesting habitats are not present within 0.5 mile.
			LACF077	M	Species occurrence was evaluated for sensitive nesting birds for a radius of 0.5 mile. Site is within range of the condor and potentially suitable foraging habitat in the form of vast open land is present within the FSA of this proposed LTE site. Suitable nesting habitats are not present within 0.5 mile.
California least tern <i>Sterna antillarum browni</i>	E	Nests in colonies formed on open beaches that are mostly free of vegetation due to tidal scouring. Migrates along the Californian coast during autumn and continues south into Baja California. Prefers sites in the proximity of estuaries. Forages over open water.	All	NA	Species occurrence was evaluated for sensitive nesting birds for a radius of 0.5 mile. Suitable nesting habitat for this species is not present within 0.5 mile of proposed LTE sites.

**Table 5.1-1 (continued)**  
**Evaluated Species Occurrence Potential**

Name	ESA Status	Habitat	Applicable Site(s)	SOP	Rationale for SOP
<b>Birds</b>					
Coastal California gnatcatcher <i>Polioptila californica</i>	T	A permanent resident of open scrub habitats, particularly Coastal Sage Scrub, below 2,500 feet in Southern California.	CLM	H	Highly suitable nesting habitat for the coastal California gnatcatcher in the form of Riversidean alluvial fan sage scrub is present approximately 250 feet east of the center of the FSA (within the FSA).
			LACF056	H	This proposed LTE site is located within its Critical Habitat and highly suitable nesting habitat is located approximately 350 feet southwest of the center of the FSA (within the FSA).
			LACF099	M	Moderately suitable habitat in the form of coastal sage scrub is present approximately 375 feet northeast of the center of the FSA (within the FSA).
			LACF194	H	Moderately suitable habitat in the form of coastal sage scrub is present approximately 280 feet east of the center of the FSA (within the FSA).
			WCFD004	H	Highly suitable habitat in the form of coastal sage scrub is present approximately 295 feet east of the center of the FSA (within the FSA).
Least Bell's vireo <i>Vireo bellii pusillus</i>	E	Summer migrant. Breeds in dense riparian and shrub habitats near rivers and lakes.	LACF069	H	Highly suitable habitat for nesting in the form of riparian habitat exists approximately 310 feet northeast of the center of the FSA (within the FSA).
			LACF076	H	No suitable nesting or foraging habitat for the least Bell's vireo exists within the FSA of this proposed LTE site, although it is located within its Critical Habitat. However, the site is located between highly suitable foraging habitats associated with the Santa Clara River, approximately 870 feet south, and Castaic Creek approximately 1,300 feet northwest of the center of the FSA. Therefore, it is highly likely that least Bell's vireos pass through the site, but would not stay for nesting or foraging.

**Table 5.1-1 (continued)**  
**Evaluated Species Occurrence Potential**

Name	ESA Status	Habitat	Applicable Site(s)	SOP	Rationale for SOP
<b>Birds</b>					
Light-footed clapper rail <i>Rallus longirostris levipes</i>	E	Found exclusively in coastal central to southern California down to Baja California. Resides in coastal salt marshes and occasional brackish marshes.	All	NA	Suitable habitat for the light-footed clapper rail is not present within the FSA of proposed LTE sites, or within 0.5 miles of any proposed LTE site.
Southwestern willow flycatcher <i>Empidonax traillii extimus</i>	E	Summer migrant. Breeds in dense riparian and shrub habitats near rivers and lakes.	LACF069	H	Highly suitable habitat for nesting in the form of riparian habitat exists approximately 310 feet northeast of the center of the FSA (within the FSA).
			LACF076	H	No suitable nesting or foraging habitat for the southwestern willow flycatcher exists within the FSA of this proposed LTE site. However, the site is located between highly suitable foraging habitats associated with the Santa Clara River approximately 870 feet south and Castaic Creek approximately 1,300 feet northwest of the center of the FSA. Therefore, it is highly likely that southwestern willow flycatchers pass through the site but do not stay for nesting or foraging.
Western snowy plover <i>Charadrius nivosus nivosus</i>	T	Inhabits a variety of coastal habitats with high saline conditions such as salt ponds and alkali lakes and is also found on sandy and rocky substrates in coastal strands and coastal dunes.	LALG-HQ	L	Marginally suitable foraging and breeding habitat for this species occurs on Venice Beach approximately 50 feet southwest and southeast of the center of the FSA (within the FSA).
			LALG100	L	Marginally suitable foraging and breeding habitat for this species occurs on Hermosa Beach, approximately 50 feet southwest of the center of the FSA (within the FSA).
			LALG300	M	Moderately suitable habitat for breeding activities occurs on the sandy beaches 150 feet south of the center of the FSA. Critical Habitat for this species occurs on Zuma Beach approximately 155 feet south of the center of the FSA (within the FSA).



**Table 5.1-1 (continued)**  
**Evaluated Species Occurrence Potential**

Name	ESA Status	Habitat	Applicable Site(s)	SOP	Rationale for SOP
<b>Birds</b>					
Yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	C	Summer migrant, known to breed in riparian habitats along the Santa Clara River near Santa Clarita, Los Angeles County (Laymon, 1998).	All	NA	Suitable habitat for the yellow-billed cuckoo is not present within the FSA of proposed LTE sites.
<b>Mammals</b>					
Pacific pocket mouse <i>Perognathus longimembris pacificus</i>	E	Inhabits the narrow coastal plains from the Mexican border north to El Segundo, Los Angeles County and seems to prefer soils of fine alluvial sands near the ocean. May inhabit coastal dunes and open coastal sage scrub with sandy soils. Primarily feeds on seeds but also some insects and vegetation. Found at altitudes from 0 to 1,132 feet	All	NA	Suitable habitat for Pacific pocket mouse is not present within the FSA of proposed LTE sites.
San Bernardino kangaroo rat <i>Dipodomys merriami parvus</i>	E	Closely associated with alluvial fans. This species inhabits alluvial fans with sandy loam but not rocky soil in sage scrub and chaparral. Range is western Riverside and San Bernardino Mountains.	All	NA	Suitable habitat for San Bernardino kangaroo rat is not present within the FSA of proposed LTE sites.
Key ESA = Endangered Species Act E = Endangered T = Threatened C = Candidate		CNDDDB = California Natural Diversity Database FSA = Field Survey Area LTE = Long-Term Evolution			SOP = Species Occurrence Potential NA = Not Anticipated L = Low M = Moderate H = High

**Table 6.2-1**  
**Evaluated Species - “No Effect” Determination**

Common Name <i>Scientific Name</i>	ESA Status	Applicable Site(s)	SOP	Project BIO CMRs	Rationale for No Effect Determination
<b>Plants</b>					
Brand’s phacelia <i>Phacelia stellaris</i>	C	All	NA		There would be no effects to the species because it is determined absent from all sites.
Braunton’s milkvetch <i>Astragalus brauntonii</i>	E	CULV01	L	6, 10, 11, 12	There would be no effects due to BIO CMRs listed.
		LACF068	M		
		LAFD097	L		
California Orcutt grass <i>Orcuttia californica</i>	E	All	NA		There would be no effects to the species because it is determined absent from all sites.
Coastal dunes milkvetch <i>Astragalus tener</i> var. <i>titi</i>	E	All	NA		There would be no effects to the species because it is determined absent from all sites.
Conejo dudleya <i>Dudleya parva</i>	T	All	NA		There would be no effects to the species because it is determined absent from all sites.
Gambel’s watercress <i>Rorippa gambellii</i>	E	All	NA		There would be no effects to the species because it is determined absent from all sites.
Lyon’s pentachaeta <i>Pentachaeta lyonii</i>	E	LACF065 LACF083	M	6, 10, 11, 12	There would be no effects due to BIO CMRs listed.
Marcrescent dudleya <i>Dudleya cymosa</i> ssp. <i>marcescens</i>	T	LACF069	H	6, 10, 11, 12	There would be no effects due to BIO CMRs listed.
Marsh sandwort <i>Arenaria paludicola</i>	E	All	NA		There would be no effects to the species because it is determined absent from all sites.
Nevin’s barberry <i>Berberis nevinii</i>	E	CLM	L	6, 10, 11, 12	There would be no effects due to BIO CMRs listed.
Salt marsh bird’s beak <i>Chloropyron maritimum</i> ssp. <i>maritimum</i>	E	All	NA		There would be no effects to the species because it is determined absent from all sites.
San Fernando Valley spineflower <i>Chorizanthe parryi</i> var. <i>fernandina</i>	C	LACF078	M	6, 10, 11, 12	There would be no effects due to BIO CMRs listed.
Santa Monica Mountains liveforever <i>Dudleya cymosa</i> ssp. <i>ovatifolia</i>	T	LACF069	M	6, 10, 11, 12	There would be no effects due to BIO CMRs listed.
Slender-horned spineflower <i>Dodecahema leptoceras</i>	E	All	NA		There would be no effects to the species because it is determined absent from all sites.
Spreading navarretia <i>Navarretia fossalis</i>	E	All	NA		There would be no effects to the species because it is determined absent from all sites.
Thread-leaved brodiaea <i>Brodiea filifolia</i>	T	All	NA		There would be no effects to the species because it is determined absent from all sites.

**Table 6.2-1 (continued)**  
**Evaluated Species - “No Effect” Determination**

Common Name <i>Scientific Name</i>	ESA Status	Applicable Site(s)	SOP	Project BIO CMRs	Rationale for No Effect Determination
<b>Plants</b>					
Ventura Marsh milkvetch <i>Astragalus pycnostachyus</i> var. <i>lanosissimus</i>	E	All	NA		There would be no effects to the species because it is determined absent from all sites.
Verity's dudleya <i>Dudleya verity</i>	T	All	NA		There would be no effects to the species because it is determined absent from all sites.
<b>Invertebrates</b>					
Conservancy fairy shrimp <i>Branchinecta conservation</i>	E	All	NA		There is no overlap between of FSAs and geographic range of the species. Also, vernal pool habitats are not located within any sites or FSAs.
El Segundo blue butterfly <i>Euphilotes battoides allyni</i>	E	All	NA		No suitable habitats are present within FSA of any site
Quino checkerspot butterfly <i>Euphydryas editha quino</i>	E	All	NA		There is no overlap between FSAs and geographic range of the species.
Riverside fairy shrimp <i>Streptocephalus woottoni</i>	E	All	NA		There is no overlap between FSAs and geographic range of the species. Also, vernal pool habitats are not located within any sites of their FSAs.
San Diego fairy shrimp <i>Branchinecta sandiegonensis</i>	E	All	NA		There is no overlap between FSAs and geographic range of the species. Also, vernal pool habitats are not located within any sites of their FSAs.
<b>Fishes</b>					
Santa Ana sucker <i>Catostomus santaanae</i>	T	All	NA		No suitable habitats are present within FSA of any site.
Steelhead trout (NMFS) <i>Oncorhynchus mykiss</i>	E	LACF069	H	6, 9, 17, 18	Impacts to the species are not expected. BIO CMRs identified would prevent any unexpected impacts occurrence.
Tidewater goby <i>Eucyclogobius newberryi</i>	E	All	NA		No suitable habitats are present within FSA of any site.
Unarmored threespine stickleback <i>Gasterosteus aculeatus williamsoni</i>	E	LACFCP14	L	6, 9, 17, 18	There are no suitable habitats within the FSA of this site and therefore, the species is not expected to occur within the FSA. However the species may inhabit a stream that is downslope, approximately 800-foot south of the site. BIO CMRs listed would prevent stormwater runoff impacts to habitats.

**Table 6.2-1 (continued)**  
**Evaluated Species - “No Effect” Determination**

Common Name <i>Scientific Name</i>	ESA Status	Applicable Site(s)	SOP	Project BIO CMRs	Rationale for No Effect Determination
<b>Amphibians</b>					
California red-legged frog <i>Rana draytonii</i>	T	LACFCP14	M	6, 9, 17, 18	There are no suitable habitats within the FSA of this site and therefore, the species is not expected to occur within the FSA. However the species may inhabit a stream that is downslope, approximately 800-feet south of the site. BIO CMRs listed would prevent stormwater runoff impacts to habitats.
Mountain yellow-legged frog <i>Rana muscosa</i>	E	All	NA		No suitable habitats are present within FSA of any site
<b>Birds</b>					
California least tern <i>Sterna antillarum browni</i>	E	All	NA		There would be no effects to this species because nesting habitat does not occur within 0.5 mile of proposed LTE sites.
Light-footed clapper rail <i>Rallus longirostris levipes</i>	E	All	NA		There would be no effects to this species because nesting habitat does not occur within 0.5 mile of proposed LTE sites.
Yellow-billed cuckoo <i>Coccyzus americanus</i>	C	All	NA		There would be no effects to this species because nesting habitat does not occur within the FSA of proposed LTE sites.
<b>Mammals</b>					
Pacific pocket mouse <i>Perognathus longimembris pacificus</i>	E	All	NA		Suitable habitat is not present at any sites within the geographic range of this species
San Bernardino kangaroo rat <i>Dipodomys merriami parvus</i>	E	All	NA		Suitable habitat is not present at any sites within the geographic range of this species
Key ESA = Endangered Species Act E = Endangered T = Threatened C = Candidate		FSA = Field Survey Area LTE = Long-Term Evolution			SOP = Species Occurrence Potential NA = Not Anticipated L = Low M = Moderate H = High

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**Table 6.2-2**  
**Evaluated Species – “May Affect, but is Not Likely to Adversely Affect” Determination**

Common Name <i>Scientific Name</i>	ESA Status	Applicable Site(s)	SOP	Project BIO CMRs	Rationale for “May Affect, but is Not Likely to Adversely Affect” Determination
Invertebrates					
Palos Verdes blue butterfly <i>Glaucopsyche lygdamus palosverdensis</i>	E	LACF053	L	6, 10, 11, 12	Individual Palos Verdes blue butterflies may pass through the site during construction. However, impacts would be insignificant for LACF056 and discountable for the other four sites.  For host plants including deerweed and rattlepod, There would be no effects due to BIO CMRs listed
		LACF056	H		
		LACF083	L		
		LACF106	L		
		TORFD04	L		
Amphibians					
Arroyo toad <i>Anaxyrus californicus</i>	T	LACF076	L	6, 8, 9, 15	Although no suitable habitat is present within the FSA or site, the species may pass through during times of dispersal. BIO CMRs for the arroyo toad, will greatly reduce the potential for project-related impacts. Impacts would be discountable.
Reptiles					
Desert tortoise <i>Gopherus agassizii</i>	T	BRK	H	6, 8, 9, 14	BIO CMRs listed, will greatly reduce the potential for project-related impacts. Impacts would be insignificant.

**Table 6.2-2 (continued)**  
**Evaluated Species – “May Affect, but is Not Likely to Adversely Affect” Determination**

Common Name <i>Scientific Name</i>	ESA Status	Applicable Site(s)	SOP	Project BIO CMRs	Rationale for “May Affect, but is Not Likely to adversely Affect” Determination
Birds					
California condor <i>Gymnogyps californianus</i>	E	BMT	M	1, 18	At most, the project would have slight temporary impacts on the condor, which has a very large home range and would find suitable foraging habitat elsewhere. The project would not affect the nesting activities of the condor due to the absence of suitable nesting habitat within 0.5 mile. There would be some slight concern that a condor could ingest trash or hazardous substances generated at the site. In addition to BIO CMR 1, BIO CMR 18 requires that best management practices be selected by the monitor to prevent condors from ingesting trash or hazardous substances to preclude this occurrence. Impacts would be insignificant.
		BRK	M		
		BUR	M		
		LACFCP09	M		
		LACFCP14	M		
LACF077	M				
Coastal California gnatcatcher <i>Polioptila californica</i>	T	CLM	H	1, 9, 10, 19	BIO CMRs listed, will greatly reduce the potential for project-related impacts. Impacts would be insignificant.
		LACF056	H		
		LACF099	M		
		LACF194	H		
		WCFD004	H		
Least Bell’s vireo <i>Vireo bellii pusillus</i>	E	LACF069	H	1, 6, 9, 10	Suitable habitat for this species is located across a busy highway from the site and down in a canyon, where noise impacts are highly unlikely to exceed 60 dB Leq or background. Project noises may be periodically audible, but would not interfere with the nesting activities of this species. Impacts would be insignificant.
		LACF076	H		The project would have at most, a slight effect on the movements of least Bell’s vireos that pass through the site. However, it would not interfere substantially with their foraging, nesting, or migrations. Impacts would be insignificant.
Southwestern willow flycatcher <i>Empidonax trailli extimus</i>	E	LACF069	H	1, 6, 9, 10	Suitable habitat for this species is located across a busy highway from the site and down in a canyon, where noise impacts are highly unlikely to exceed 60 dB Leq or background. Project noises may be periodically audible, but would not interfere with the nesting activities of this species. Impacts would be insignificant.
		LACF076	H		The project would have at most, a slight effect on the movements of through the site. However, it would not interfere substantially with their foraging, nesting, or migrations. Impacts would be insignificant.

**Table 6.2-2 (continued)**  
**Evaluated Species – “May Affect, but is Not Likely to Adversely Affect” Determination**

Common Name <i>Scientific Name</i>	ESA Status	Applicable Site(s)	SOP	Project BIO CMRs	Rationale for “May Affect, but is Not Likely to adversely Affect” Determination
Birds					
Western snowy plover <i>Charadrius nivosus nivosus</i>	T	LALG-HQL	L	1, 4, 6, 9	The following Bio CMR would reduce or eliminate impacts to nesting western snowy plovers during the nesting season: BIO CMR 4. If works takes place during the nesting season, specific measures would be taken to avoid or reduce impacts. Impacts would be insignificant for LALG 300 and discountable for the other two sites.
		LALG100	L		
		LALG300	M		
<b>KEY</b> Species Names: ssp. = subspecies; var. = variety CH = USFWS Designated Critical Habitat C = Candidate E = Endangered ESA = Endangered Species Act T = Threatened FSA = field survey area SOP = species occurrence potential (NA = not anticipated, L = low, M = moderate, H = high)					

A determination of “may effect, but is not likely to adversely affect” is warranted for eight evaluated species that are on the USFWS list. As shown in Table 6.2-2, a determination of “may affect, but is not likely to adversely affect” is warranted for the following species: Palos Verdes blue butterfly, arroyo toad, desert tortoise, California condor, coastal California gnatcatcher, least Bell’s vireo, southwestern willow flycatcher, and western snowy plover. The BIO CMRs listed below would reduce the potential impacts at these sites to discountable or insignificant. The full text of the BIO CMRs is provided in Appendix B.

- BIO CMR 1. Pre-construction Survey for Nesting Birds.
- BIO CMR 4 Pre-Construction Surveys and Avoidance Measures for Western Snowy Plovers
- BIO CMR 6 Construction Monitoring
- BIO CMR 8 Open Trenches and Ditches
- BIO CMR 9 Establish Habitat Protection Zones
- BIO CMR 10 Protect Native Vegetation
- BIO CMR 11 Limit the Spread of Invasive Plants
- BIO CMR 12 Post-construction Noxious Weed Survey
- BIO CMR 14: Desert Tortoise Preconstruction Surveys and Monitoring
- BIO CMR 15 Avoidance Measures for Arroyo Toad

- BIO CMR 18 Hazardous Substance Management
- BIO CMR 19: Coastal California Gnatcatcher

Palos Verdes blue butterfly has low SOP within the FSA's of sites LACF053, LACF083, LACF106, and TORFD04 and high SOP within the FSA of site LACF056. However, due to BIO CMRs 6, 10, 11, and 12, vegetation that may include suitable host plants for the species would be protected and impacts would be insignificant for Site LACF056 and discountable for Sites LACF053, LACF083, LACF106, and TORFD04.

The arroyo toad has low SOP within the FSA of site LACF076. However, due to Bio CMRs 6, 8, 9, and 15 arroyo toads would be prevented from entering the site during periods when toads are active and any that inadvertently manage to access the site would result in a stop work order that would be enforced until the individual left the site or could be removed by appropriate personnel. Therefore, impacts to arroyo toads would be discountable.

The desert tortoise has high SOP within the FSA of site BRK. However, due to Bio CMRs 6, 8, 9, and 14, desert tortoises would be prevented from entering the site and any tortoises that inadvertently access the site would result in a stop work order that would be enforced until the individual left the site or could be safely removed by appropriate personnel. Therefore, impacts to desert tortoise would be insignificant.

The California condor has moderate SOP for foraging within the FSA of sites BMT, BRK, BUR, LACFCP09, LACFCP14, and LACF077. However, nesting habitat does not appear to be present within 0.5 mile of these sites. Nonetheless, Bio CMR 1 will include preconstruction nesting surveys for California condor at these sites. Bio CMR 18 will ensure that foraging California condors do not accidentally ingest any harmful substances related to the project. Therefore, impacts to the California condor would be insignificant.



## **BA APPENDIX B REVISIONS**

## **BA APPENDIX H REVISIONS**

**Draft Biological Assessment**  
**May 2014**