

APPENDIX C
BIOLOGICAL RESOURCES EVALUATION

SPECIES OCCURRENCE POTENTIAL EVALUATION

Scientific Name (=Synonym)	Common Name (=Synonym)	Status	General Habitat Description in California	Plant Elevation Range (feet amsl)	BSA Contains Potential Suitable Habitats	BSA is Located Within the Plant Species' Known:		Potential For Occurrence in the BSA
						Elevation Range	General Distribution	
Listed Endangered, Threatened, Candidate and State Rare Plants: Plants with official status under the federal Endangered Species Act (ESA), the California Endangered Species Act (CESA), and/or the Native Plant Protection Act (NPPA). A species may have other sensitive designations in addition to their federal or state listing.								
<i>Ambrosia pumila</i>	San Diego ambrosia (=dwarf burr ambrosia)	FE, CRPR: 1B.1	Lifeform: perennial rhizomatous herb Habitats: creek beds, seasonally dry drainages, and floodplains, open habitats such as chaparral and coastal sage scrub in coarse substrates Soils: alkaline soils, sparse grasslands or marginal wetland habitats Wetlands, Drainages, or Seeps: Yes Bloom Period: April to October	66 - 1,361	Yes	Yes	Yes	Moderate potential to occur. There is a dry creekbed in the northeast corner of the BSA. In addition, the eastern segment of the BSA provides suitable habitat to support this species, such as coastal sage scrub.
<i>Eryngium aristulatum</i> var. <i>parishii</i>	San Diego button-celery	FE, SE, CRPR: 1B.1	Lifeform: annual/perennial herb Habitats: moist depressions surrounded by coastal scrub chaparral, and valley and foothill grasslands Soils: vernal pools and moist clay depressions in poorly-drained adobe soil grasslands Wetlands, Drainages, or Seeps: Yes Bloom Period: April to June	66 - 2,034	No	Yes	Yes	Low potential to occur. There are areas in the BSA and on the project site that provide suitable habitat to support this species such as coastal sage scrub and foothill grasslands. However, the soils of the BSA are not poorly drained and therefore this species was determined to have only a low potential to occur.
<i>Baccharis vanessae</i>	Encinitas baccharis (=Encitias falsewillow)	FT, SE, CRPR: 1B.1	Lifeform: perennial deciduous shrub Habitats: steep slopes usually in sandstone and volcanic substrates Soils: chaparral remnants in relictual Torrey Pine forests Bloom Period: August to November	197 - 2,362	No	Yes	Yes	Moderate potential to occur. The eastern segment of the BSA contains slopes. In addition, there are recent (<15 years) observations of this species within a 10-mile radius of the BSA.
<i>Verbesina dissita</i>	big-leaved crownbeard (=crown-beard)	FT, ST, CRPR: 1B.1	Lifeform: perennial herb Habitats: steep, rocky, north-facing slopes within 1.5 miles of the ocean in gravelly soils of southern maritime chaparral (90%) and coastal sage scrub (10%) plant communities Bloom Period: March to July	148 - 672	Yes	Yes	Yes	Not expected to occur. The BSA is >1.5 miles from the ocean and does not contain sufficient north-facing rocky slopes, which are conditions required to support this species.
<i>Dudleya stolonifera</i>	Laguna Beach dudleya	FT, ST, CRPR: 1B.1	Lifeform: perennial stoloniferous herb Habitats: thin, rocky sedimentary soil (some < ½ inch deep) on sandstone cliffs on steep canyon walls, Found in chaparral, cismontane woodlands, coastal scrub, and valley and foothill grasslands Bloom Period: May to July	33 - 853	No	Yes	Yes	No potential to occur. The BSA does not contain suitable soils to support this species.
<i>Brodiaea filifolia</i>	thread-leaved brodiaea (=threadleaf clusterlily)	FT, SE, CRPR: 1B.1	Lifeform: perennial bulbiferous herb Habitats: gentle hillsides, valleys, and floodplains in semi-alkaline mudflats, vernal pools, mesic southern needlegrass grasslands, mixed native-nonnative grasslands and alkali grasslands plant communities Soils: clay to fine sand Bloom Period: March to June	82 - 3,674	Yes	Yes	Yes	Low potential to occur onsite, High potential to occur in BSA. The soils of the BSA contain clay, creating suitable substrate for this species. There are recent observations (<15 years) of this species within a .5-mile radius of the BSA. In addition, the BSA contains gentle hillsides, a feature preferred by this species.
Sensitive Plants: These plants have no official status under the ESA, the CESA, and/or the NPPA; however they are designated as sensitive or locally important by federal agencies, state agencies, and/or local conservation agencies and organizations.								
<i>Centromadia parryi</i> ssp. <i>australis</i> (=Hemizonia parryi ssp. <i>australis</i>)	southern tarplant	CRPR: 1B.1	Lifeform: annual herb Habitats: margins of marshes and swamps, and in vernal mesic sites within valley and foothill grasslands and vernal pools Bloom Period: May to November	0 - 1,574	Yes	Yes	Yes	Low potential to occur. The eastern segment of the BSA contains foothill grasslands, however there are no marshes or swamps present in the BSA; which are typically suitable conditions to support this species.

<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>	Orcutt's pincushion (=Orcutt's yellow pincushion)	CRPR: 1B.1	Lifeform: annual herb Habitats: sandy sites in coastal bluff scrub and coastal dunes Bloom Period: January to August	0 – 328	Yes	Yes	Yes	Low potential to occur. The soils of the BSA are not optimal to support this species, as they contain clay-loam with a smaller sand fraction and the BSA does not contain coastal dunes. This species typically prefers soils that are primarily sandy. However, there are recent (<15 years) observations of this species within a 10-mile radius of the project.
<i>Isocoma menziesii</i> var. <i>decumbens</i>	decumbent goldenbush	CRPR: 1B.2	Lifeform: perennial shrub Habitats: low-lying alkali habitats along the coast and in inland valleys Soils: alkali scrub, alkali playas, vernal pools, and, alkali grasslands Bloom Period: April to November	33 - 443	Yes	Yes	Yes	High potential to occur. There are recent observations (<15 years) of this species within a 2-mile radius of the project. The BSA and project site provide suitable coastal sage scrub habitat to support this species.
<i>Pentachaeta aurea</i> ssp. <i>allenii</i>	Allen's pentachaeta	CRPR: 1B.1	Lifeform: annual herb Habitats: valley and foothill grasslands, chaparral, cismontane woodlands, riparian woodlands, coastal sage scrub, and lower montane coniferous forests Soils: dry, open or grassy areas and is often associated with clay substrates Wetlands, Drainages, or Seeps: Yes Bloom Period: March to June	246 – 1,706	Yes	Yes	Yes	Moderate potential to occur. There are few observations of this species within a 10-mile radius of the BSA. The nearest recent (<20 years) observation of this species is mapped in approximately 7 miles from the project area. However, the project site and BSA contain coastal sage scrub in the northern and eastern segments with clay soils, which create suitable habitat to support this species.
<i>Pseudognaphalium leucocephalum</i> (=Gnaphalium leucocephalum)	white rabbit-tobacco	CRPR: 2B.2	Lifeform: perennial herb Habitats: chaparral, cismontane woodlands, coastal scrub and riparian woodlands; sandy or gravelly benches, dry stream bottoms, canyon bottoms Soils: sandy and gravelly sites Bloom Period: (July) August to November (December)	0 – 6,888	Yes	Yes	Yes	Moderate potential to occur. There is a mapped streambed in the northeastern portion of the BSA. This area provides suitable habitat to support this species (coastal sage scrub and foothill grasslands).
<i>Senecio aphanactis</i>	chaparral ragwort (=rayless ragwort)	CRPR: 2B.2	Lifeform: annual herb Habitats: rocky limestone slopes and washes in pinyon and juniper woodlands (carbonate) Bloom Period: January to April (May)	49 – 2,624	Yes	Yes	Yes	Moderate potential to occur. There are recent (<15 years) occurrences of this species within a 2-mile radius of the project. The BSA does not contain pinyon and juniper woodlands, and therefore was determined to have a moderate potential to occur.
<i>Harpagonella palmeri</i> (=Pectocarya palmeri)	Palmer's grapplinghook	CRPR: 4.2	Lifeform: annual herb Habitats: open coastal sage scrub, chaparral, valley and foothill grasslands, and scrub oak woodlands Soils: clay and cobbly clay soils Bloom Period: March to May	66 – 3,133	Yes	Yes	Yes	Low potential to occur. The BSA contains suitable soils (clay), and there is coastal sage scrub in the eastern and northern segments which is a suitable habitat for this species.
<i>Lepidium virginicum</i> var. <i>robinsonii</i>	Robinson's peppergrass	CRPR: 4.3	Lifeform: annual herb Habitats: chaparral and coastal sage scrub often around rock outcrops Soils: dry soils Bloom Period: January to July	3 – 2,903	Yes	Yes	Yes	Moderate potential to occur. The eastern segment of the BSA contains coastal sage scrub, which is a suitable habitat type for this species.
<i>Aphanisma blitoides</i>	aphanisma	CRPR: 1B.2	Lifeform: annual herb Habitats: coastal bluff scrub, coastal dunes, and coastal scrub Soils: sandy soils Bloom Period: February to June	3 – 1,000	Yes	Yes	Yes	Low potential to occur in BSA, no potential to occur on project site. The BSA contains coastal scrub, however the soils of the BSA contain clays and are not primarily sandy.

<i>Atriplex coulteri</i>	Coulter's saltbush	CRPR: 1B.2	Lifeform: perennial herb Habitats: coastal bluff scrub; on coastal dunes; and on ridge tops Soils: clay soils and alkaline low places Bloom Period: March to October	10 - 1,508	Yes	Yes	Yes	Low potential to occur. The soils of the BSA are suitable to support this species; however the BSA lacks ridge tops and coastal bluffs. The project site is primarily developed with existing facilities and also contains disturbed areas and therefore offers no potential suitable habitat to support this species.
<i>Atriplex pacifica</i>	South Coast saltscale	CRPR: 1B.2	Lifeform: annual herb Habitats: coastal bluff scrub, coastal dunes, coastal scrub, chenopod scrub and playas Soils: alkaline soils Bloom Period: March to October	0 - 459	Yes	Yes	Yes	Low potential to occur. The BSA contains coastal scrub, however the it lacks dunes, which would create optimal habitat for this species.
<i>Suaeda esteroa</i>	estuary seablite	CRPR: 1B.2	Lifeform: perennial fleshy herb Habitats: coastal salt marshes and swamps often growing with <i>Salicornia subterminalis</i> Bloom Period: May to January	0 - 16	No	No	Yes	Not expected to occur. While the BSA is relatively proximal to the coast, the BSA lacks salt marshes and swamps. It is likely that the areas in the BSA do not contain sufficient moisture to support this species. In addition, this species occurs in areas at sea level. The elevation of the BSA is higher than the elevation range at which this species occurs.
<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>	Blochman's dudleya	CRPR: 1B.1	Lifeform: perennial herb Habitats: valley/foothill grasslands, coastal bluff scrub, chaparral and coastal scrub Soils: open, rocky slopes, often serpentine or clay-dominated Bloom Period: April to June	16 - 1,476	Yes	Yes	Yes	Low potential to occur. The soils of the BSA are suitable (clay) and slopes to support this species. The project site is primarily developed with existing facilities and also contains disturbed areas and therefore offers no potential suitable habitat to support this species.
<i>Dudleya multicaulis</i>	many-stemmed dudleya	CRPR: 1B.2	Lifeform: perennial herb Habitats: barrens, rocky places, and ridgelines as well as thinly vegetated openings in chaparral, valley and foothill grasslands, and coastal sage scrub Soils: clay soils, heavy soils, often clay Bloom Period: April to July	49 - 2,591	Yes	Yes	Yes	Low potential to occur. The eastern segment of the BSA contains valley and foothill grasslands and coastal sage scrub, which create suitable habitat for this species.
<i>Dudleya viscida</i>	sticky dudleya (=sticky-leaved dudleya)	CRPR: 1B.2	Lifeform: perennial herb Habitats: coastal bluff scrub, chaparral, cismontane woodlands, and coastal scrub, mesic, mostly north-facing, and often steep, rocky canyon slopes Soils: exposed gabbroic rock or in very shallow soils and cracks Bloom Period: May to June	33 - 1,804	Yes	Yes	Yes	Low potential to occur in the BSA. A portion of the BSA contains coastal scrub on sloping ground, which creates the low potential to this species to occur.
<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>	summer holly	CRPR: 1B.2	Lifeform: perennial evergreen shrub Habitats: mixed chaparral and cismontane woodlands Bloom Period: April to June	98 - 2,591	Yes	Yes	Yes	Not expected to occur. The BSA lacks suitable habitat types to support this species.
<i>Euphorbia misera</i>	cliff spurge	CRPR: 2B.2	Lifeform: perennial shrub Habitats: Mojavean desert scrub, coastal bluff scrub, and coastal scrub Soils: rocky sites Bloom Period: December to October	33 - 1,640	Yes	Yes	Yes	Low potential to occur. The BSA contains coastal scrub, however the BSA does not contain particularly rocky soils; the soils of the BSA are primarily clay-loam.
<i>Clinopodium chandleri</i> (= <i>Satureja chandleri</i> and = <i>Calamintha chandleri</i>)	San Miguel savory	CRPR: 1B.2	Lifeform: perennial shrub Habitats: chaparral, cismontane woodlands, coastal scrub, riparian woodlands, and valley and foothill grasslands Bloom Period: March to July	394 - 3,526	Yes	Yes	Yes	Low potential to occur in the BSA. The eastern segment of the BSA contains suitable habitat to support this species such as coastal sage scrub and foothill grasslands.
<i>Monardella hypoleuca</i> ssp. <i>intermedia</i>	intermediate monardella	CRPR: 1B.3	Lifeform: perennial rhizomatous herb Habitats: understory of chaparral, cismontane woodlands, and lower montane coniferous forests Bloom Period: April to September	1,312 - 4,100	No	No	Yes	No potential to occur. The BSA does not contain suitable habitats to support this species, including understory of chaparral, cismontane woodlands, and lower montane coniferous forests.
<i>Sidalcea neomexicana</i>	salt spring checkerbloom (=mountain sidalcea)	CRPR: 2B.2	Lifeform: perennial herb Habitats: alkaline, mesic sites in chaparral, coastal scrub, lower montane coniferous forests, Mojavean desert scrub, alkali playas, and brackish marshes Bloom Period: March to June	49 - 5,018	Yes	Yes	Yes	Low potential to occur. A portion of the BSA contains coastal scrub, however it lacks many of the preferred habitat types of this species.

<i>Nama stenocarpa</i>	mud nama	CRPR: 2B.2	Lifeform: annual/perennial herb Habitats: Marshes and swamps (lake margins, riverbanks) Bloom Period: January to July	16 - 1,640	No	Yes	Yes	No potential to occur. The BSA does not contain features preferable to this species, such as lake margins and riverbanks.
<i>Navarretia prostrata</i>	prostrate vernal pool navarretia (=prostrate navarretia)	CRPR: 1B.1	Lifeform: annual herb Habitats: coastal scrub, valley and foothill grasslands (alkaline washes), meadows and seeps, and vernal pools Wetlands, Drainages, or Seeps: Yes Bloom Period: April to July	49 - 3,969	Yes	Yes	Yes	Low potential to occur. The eastern segment of the BSA provides suitable habitat to support this species such as coastal scrub.
<i>Chorizanthe polygonoides</i> var. <i>longispina</i>	long-spined spineflower (=knotweed spineflower)	CRPR: 1B.2	Lifeform: annual herb Habitats: ernal pools, meadows and seeps, valley and foothill grasslands, and openings in coastal scrub, and chaparral Soils: heavy, often rocky, clay soils Wetlands, Drainages, or Seeps: Yes Bloom Period: April to July	98 - 5,018	Yes	Yes	Yes	Moderate potential to occur. The eastern segment of the BSA contains coastal scrub, and therefore provides suitable habitat to support this species.
<i>Myosurus minimus</i> ssp. <i>apus</i>	little mousetail	CRPR: 3.1	Lifeform: annual herb Habitats: alkaline vernal pools and in valley and foothill grasslands, alkali annual grasslands components Bloom Period: March to June	66 - 2,099	Yes	Yes	Yes	Low potential to occur. The eastern segment of the BSA contains some foothill grasslands, which create suitable habitat to support this species.
<i>Horkelia cuneata</i> var. <i>puberula</i> (=Horkelia cuneata ssp. <i>puperula</i>)	mesa horkelia	CRPR: 1B.1	Lifeform: perennial herb Habitats: maritime chaparral, coastal scrub, and cismontane woodlands Soils: sandy or gravelly sites Bloom Period: February to September	230 - 2,657	Yes	Yes	Yes	Low potential to occur. The BSA contains coastal scrub, however the soils of the BSA are primarily clay-loam, and this species typically prefers soils with a higher sand fraction than is present in the BSA.
<i>Calochortus weedii</i> var. <i>intermedius</i>	intermediate mariposa lily (=Weeds mariposa lily)	CRPR: 1B.2	Lifeform: perennial bulbiferous herb Habitats: dry, rocky open slopes and rock outcrops in coastal scrub and chaparral Bloom Period: May to July	344 - 2,804	Yes	Yes	Yes	Moderate potential to occur. The eastern segment of the BSA contains rocky slopes with coastal sage scrub, therefore creating suitable habitat to support this species.
<i>Imperata brevifolia</i>	California satintail	CRPR: 2B.1	Lifeform: perennial rhizomatous herb Habitats: mesic sites within chaparral, coastal scrub, Mojavean desert scrub, meadows and seeps (often alkali), and riparian scrub Wetlands, Drainages, or Seeps: Yes Bloom Period: September to May	0 - 3,985	Yes	Yes	Yes	Low potential to occur. The BSA contains coastal scrub in the eastern segment, and therefore provides suitable habitat to support this species. However, recorded observations of this species are >20 years old.
<i>Nolina cismontana</i>	chaparral nolina (=Peninsular nolina and =California beargrass)	CRPR: 1B.2	Lifeform: perennial evergreen shrub Habitats: chaparral and coastal scrub Soils: sandstone or gabbro soils Bloom Period: March to July	459 - 4,182	Yes	Yes	Yes	Low potential to occur. The BSA does contain some coastal scrub which provides suitable habitat to support this species, however recorded observations of this species within a 10-mile radius of the project are >20 years old.

Legend and Notes

Federal Endangered Species Act (ESA) Listing Codes: the ESA is administered by the USFWS and NMFS. The USFWS has primary responsibility for terrestrial and freshwater organisms, while the responsibilities of NMFS are mainly marine wildlife such as whales and anadromous fish such as salmon. For the purposes of the ESA, Congress defined species to include subspecies, varieties, and, for vertebrates, distinct population segments. The official federal listing of Endangered and Threatened plants is published in 50 CFR § 17.12.

- FE** = federally listed as endangered: any species of plant or animal that is in danger of extinction throughout all or a significant portion of their range.
- FT** = federally listed as threatened: any species of plant or animal that is considered likely to become endangered throughout all or a significant portion of its range within the foreseeable future.
- FC** = federal candidate for listing: candidate species are plants and animals for which the USFWS has sufficient information on their biological status and threats to propose them for listing as endangered or threatened under the ESA, but for which development of a proposed listing regulation is precluded by higher priority listing actions to address species in greater need. A proposed regulation has not yet been published in the Federal Register for these species.

California Endangered Species Act (CESA) and California Native Plant Protection Act (NPPA) Listing Codes: the CESA and NPPA are administered by CDFW. The official listing of Plants of California Declared to Be Endangered, Threatened or Rare is contained in the California Code of Regulations, Title 14, § 670.2. Species, subspecies and varieties of California native plants are declared to be endangered, threatened as defined by § 2062 and § 2067 of the Fish and Game Code or rare as defined by § 1901 of the Fish and Game Code.

- SE** = state-listed as endangered: "endangered species" means a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease (Fish and Game Code § 2062).
- ST** = state-listed as threatened: "threatened species" means a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts (Fish and Game Code § 2067).
- SCE** = state candidate for listing as endangered: a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Fish and Game Commission has formally noticed published in the California Regulatory Notice Register as being under review by CDFW for addition to the list of endangered species, or a species for which the Fish and Game Commission has published a notice of proposed regulation to add the species to the list (Fish and Game Code § 2068).

California Rare Plant Ranks (Formerly known as CNPS Lists): the CNPS is a statewide, nonprofit organization that maintains, with CDFW, an Inventory of Rare and Endangered Plants of California. In the spring of 2011, CNPS and CDFW officially changed the name “CNPS List” or “CNPS Ranks” to “California Rare Plant Rank” (or CRPR). This was done to reduce confusion over the fact that CNPS and CDFW jointly manage the Rare Plant Status Review Groups and the rank assignments are the product of a collaborative effort and not solely a CNPS assignment.

- **CRPR: 1A** = California Rare Plant Rank 1A - plants presumed extirpated in California and either rare or extinct elsewhere: the plants with a CRPA of 1A are presumed extirpated because they have not been seen or collected in the wild in California for many years. This rank includes plants that are both presumed extinct as well as those plants which are presumed extirpated in California. All of the plants constituting CRPR 1A meet the definitions of § 2062 and § 2067 (CESA) of the Fish and Game Code, and are eligible for state listing. Should these taxa be rediscovered, it is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.
- **CRPR 1B** = California Rare Plant Rank 1B - plants rare, threatened, or endangered in California and elsewhere: plants with a CRPR of 1B are rare throughout their range with the majority of them endemic to California. Most of the plants that are ranked 1B have declined significantly over the last century. All of the plants constituting CRPR 1B meet the definitions of § 2062 and § 2067 (CESA) of the Fish and Game Code, and are eligible for state listing. It is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.
- **CRPR 2A** = California Rare Plant Rank 2A - plants presumed extirpated in California, but more common elsewhere: the plant taxa of CRPR 2A are presumed extirpated because they have not been observed or documented in California for many years. This list includes only those plant taxa that are presumed extirpated in California, but more common elsewhere in their range. All of the plants on List 2A meet the definitions of § 2062 and § 2067 (CESA) of the Fish and Game Code, and are eligible for state listing. Should these taxa be rediscovered, it is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.
- **CRPR 2B** = California Rare Plant Rank 2B - plants rare, threatened, or endangered in California, but more common elsewhere: except for being common beyond the boundaries of California, plants with a CRPR of 2B would have been ranked 1B. From the federal perspective, plants common in other states or countries are not eligible for consideration under the provisions of the ESA. All of the plants constituting CRPR 2B meet the definitions of § 2062 and § 2067 (CESA) of the Fish and Game Code, and are eligible for state listing. It is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.
- **CRPR 3** = California Rare Plant Rank 3 - plants about which more information is needed - a review list: the plants that comprise CRPR 3 are united by one common theme – CNPS and CDFW lack the necessary information to assign them to one of the other ranks or to reject them. Nearly all of the plants constituting CRPR 3 are taxonomically problematic. Some of the plants constituting CRPR 3 meet the definitions of § 2062 and § 2067 (CESA) of the Fish and Game Code, and are eligible for state listing. CNPS strongly recommends that CRPR 3 plants be evaluated for consideration during preparation of environmental documents relating to CEQA.
- **CRPR 4** = California Rare Plant Rank 4 - plants of limited distribution - a watch list: the plants in this category are of limited distribution or infrequent throughout a broader area in California. While CNPS and CDFW cannot call these plants "rare" from a statewide perspective, they are uncommon enough that their status should be monitored regularly. Should the degree of endangerment or rarity of a CRPR 4 plant change, CNPS and CDFW will transfer it to a more appropriate rank. Some of the plants constituting CRPR 4 meet the definitions of § 2062 and § 2067 (CESA) of the Fish and Game Code, and few, if any, are eligible for state listing. Nevertheless, many of them are significant locally, and CNPS strongly recommends that CRPR 4 plants be evaluated for consideration during preparation of environmental documents relating to CEQA.

California Native Plant Society (CNPS) Threat Ranks: The CNPS Threat Rank is an extension added onto the California Rare Plant Rank (CRPR) (as a decimal code) and designates the level of threats by a 1 to 3 ranking with 1 being the most threatened and 3 being the least threatened. A Threat Rank is present for all CRPR 1B's, 2B's, 4's, and the majority of CRPR 3's. CRPR 4 plants are seldom assigned a Threat Rank of .1, as they generally have large enough populations to not have significant threats to their continued existence in California; however, certain conditions exist to make the plant a species of concern and hence be assigned a CRPR. In addition, all CRPR 1A and 2A (presumed extirpated in California), and some CRPR 3 (need more information) plants, which lack threat information, do not have a Threat Rank extension.

- **1** = seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
- **2** = moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
- **3** = not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

Notes:

The BSA contains approximate elevations of 381 to 768 feet above mean sea level (amsl).

Yes = the BSA is located within the plant species' known distribution, elevation range, and/or the BSA contains suitable habitats and/or soils to support the plant species. The plant species has a potential to occur within the BSA. Further evaluation is needed.

No = the BSA is located outside the plant species' known distribution, elevation range, and/or the BSA lacks suitable habitats and/or soils to support the plant species. It is highly unlikely for the plant species to have a potential to occur within the BSA. No further evaluation is needed.

Present = observed within the BSA during surveys.

A CNPS elevation range is provided for each taxon in feet. The stated range is for the California portion of a plant's range only (if the taxon also occurs outside the state). These CNPS elevation range data are accumulated from literature, herbarium specimens, and field survey information.

Resources

- *The Jepson Desert Manual (Baldwin et al., 2002);*
- *The Jepson Manual: Vascular Plants of California, second edition (Baldwin et al., 2012);*
- *BLM Special Status Plants under the jurisdiction of the California State Office as of October 30, 2013 (BLM, 2013);*
- *The Final Environmental Impact Report and Statement (Final EIR/S) for the West Mojave Plan (BLM, 2005);*
- *Final Environmental Impact Statement. Proposed Northern and Eastern Colorado Desert Coordinated Management Plan (NECO) (BLM and CDFG, 2002);*
- *(Calflora website);*
- *The Status of Rare, Threatened, and Endangered Plants and Animals of California, 2000–2004 (CDFG, 2005);*
- *CNDDB ;*
- *Special Vascular Plants, Bryophytes, and Lichens List (CDFW, 2016);*
- *State and Federally Listed Endangered, Threatened, and Rare Plants of California (CDFW, 2016);*
- *(CNPS website);*
- *(eFloras.org website);*
- *(NatureServe Explorer website);*
- *Rare Plants of San Diego County (Reiser, 2001);*
- *USDA Forest Service, Pacific Southwest Region, Sensitive Plant Species List by Forest (USFS, 2013).*
- *UltraSystems in-house records.*

Scientific Name (=Synonym)	Common Name (=Synonym)	Status	General Habitat Descriptions in California	The BSA:		Potential For Occurrence in the BSA
				Located Within Species' Distribution and/or Elevation Range (if known)	Contains Suitable Foraging, Roosting, and/or Breeding Habitats	
Listed Endangered, Threatened, and Candidate Wildlife: Wildlife with official status under the federal Endangered Species Act (ESA) and/or the California Endangered Species Act (CESA). A species may have other sensitive designations in addition to their federal or state listing.						
Listed Invertebrates						
<i>Branchinecta sandiegonensis</i>	San Diego fairy shrimp	FE	Habitats: small, shallow vernal pools, which range in depth from 2 to 12 inches and in water temperature from 10 to 20 degrees Celsius ☺, ditches and road cuts	Yes	No	Low potential to occur. The BSA does not contain suitable vernal pool or vernal pool like aquatic environments to support this species.
<i>Streptocephalus woottoni</i>	Riverside fairy shrimp	FE	Habitats: deep, long-lived, cool lowland vernal pools, vernal pool like ephemeral ponds, and stock ponds that retain water, minimum depth of 30 cm at maximum filling and the water is usually moderately turbid. seasonal grasslands	Yes	No	Low potential to occur. The BSA does not contain suitable vernal pool or vernal pool like aquatic environments to support this species.
<i>Bombus crotchii</i>	Crotch bumble bee	candidate endangered	Habitats: grasslands and shrublands. Hotter and drier environment than other bumblebee species. Prefers milkweeds, dusty maidens, lupines, medics, phacelias, sages, clarkias, poppies, and wild buckwheats: This species occurs primarily in California, including the Mediterranean region, Pacific Coast, Western Desert, Great Valley, and adjacent foothills through most of southwestern California. It has also been documented in southern Nevada, near the California border.	Yes	No	Moderate potential to occur. The BSA contains scrub habitat that creates suitable habitat to support this species. The site lacks deep ponding areas remaining for several months.
Listed Fish						
<i>Oncorhynchus mykiss irideus</i>	steelhead – southern California DPS	FE, SSC	Habitats: cool, clear, well-oxygenated streams Characteristics: higher-elevation headwaters are primary spawning and rearing areas	Yes	No	No potential to occur. The BSA does not contain suitable aquatic habitats to support this fish.
<i>Eucyclogobius newberryi</i>	tidewater goby	FE, SSC	Habitats: still waters of coastal lagoons, marshes, and creeks, coastal lagoons where freshwater runoff and salt water mix to yield the requisite brackish waters Characteristics: avoid areas of dense plant growth, avoid open areas where there is strong wave action or strong currents	Yes	No	No potential to occur. The BSA does not contain suitable aquatic habitats to support this fish.
Listed Amphibians						
<i>Anaxyrus californicus (=Bufo californicus)</i>	arroyo toad	FE, SSC	Habitats: sandy riverbanks, streams, washes, and arroyos, breeds in and near streams Characteristics: nearby sandy terraces, dampened in places by capillary action, and with some scattered vegetation providing surface sheltering and burrowing sites and foraging areas	Yes	No	No potential to occur. The BSA lacks suitable aquatic breeding sites to support this toad. The BSA also does not contain sandy riverbanks, which create suitable habitat for this species. Due to lack of available water on site, amphibians are not expected.
Listed Birds						
<i>Rallus obsoletus levis (=Rallus longirostris levis)</i>	light-footed rail (=light-footed clapper rail)	FE, SE, fully protected	Habitats: coastal southern California, freshwater marshes, although this is not common Characteristics: require shallow water and mudflats for foraging	No	No	No potential to occur. The BSA does not contain suitable breeding coastal salt marsh or freshwater marsh habitats and aquatic mudflat foraging habitats to support this species.
<i>Sterna antillarum browni (=Sterna antillarum browni)</i>	California least tern	FE, SE, fully protected Season of Concern: nesting colony	Habitats: bare or sparsely vegetated flat substrates, beaches or sandbars near the coast, nearby shallow water Characteristics: near estuaries, bays, or harbors where small fish are abundant	No	No	No potential to occur. The BSA does not contain suitable undisturbed coastal beach or sandbar breeding habitats or aquatic/pelagic feeding grounds to support this species. The BSA is located approximately 2.75 miles east from the coast; occurrence of this species would likely be restricted to passage to the coast.
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo	FT, SE, BCC	Habitats: relatively dense growths of trees and shrubs in riparian habitats that lines rivers and streams Characteristics: Cuckoos have large home ranges, often exceeding 50 acres, and sometimes approaching 100 acres	Yes	No	Not expected to occur. The BSA does not contain suitable breeding and foraging dense, wide riparian blocks with aquatic habitats to support this species. The BSA lacks shrub-lined streams, which are favorable to this species.
<i>Empidonax traillii extimus</i>	southwestern willow flycatcher	FE, SE, Season of Concern: nesting	Habitats: dense riparian tree and shrub communities associated with rivers, swamps, and other wetlands, including lakes, surface water, saturated soil, or herbaceous wetland plants present during the early summer months; woody riparian vegetation is present	Yes	No	Low potential to occur. The BSA does not contain suitable breeding and foraging dense riparian and aquatic habitats to support this species. The SWFL arrives in spring usually in early May and in the fall, the adults depart mainly during the last half of August. Juveniles remain later in September, but all have departed by 1 October.
<i>Vireo bellii pusillus</i>	least Bell's vireo	FE, SE, Season of Concern: nesting	Habitats: dry, intermittent streams, on the desert slopes mesquite (Prosopis sp.) and sandbar willow in canyon locations, willow-dominated riverine riparian habitats with well-developed overstories, understories, and low densities of aquatic and herbaceous cover	Yes	Yes	Low potential to occur. The northeast section of the BSA contains intermittent stream(s), and the BSA contains sloping areas that could result in this species having a low potential to occur in the BSA.
<i>Riparia riparia</i>	bank swallow	ST, Season of Concern: nesting	Habitats: naturally eroding habitats of major lowland river systems, sandy, vertical bluffs or riverbanks Characteristics: birds build nests within two to three-foot deep burrows that are dug perpendicularly into near vertical earthen banks along streams, coastal bluffs, and sand and gravel pits	Yes	No	Not expected to occur. The BSA does not contain features typically preferred by this species, such as vertical bluffs, riverbanks, and lowland river systems.
<i>Poliophtila californica californica</i>	coastal California gnatcatcher	FT, SSC	Habitats: small, non-migratory, permanent resident of coastal sage scrub, small, non-migratory, permanent resident of coastal sage scrub	Yes	Yes	Moderate potential to occur. The project site and BSA contain coastal sage scrub habitat. Numerous observations of CAGN are recorded adjacent to the site. In addition, the BSA is within designated critical habitat.
<i>Agelaius tricolor</i>	tricolored blackbird	ST, SSC, BCC, Season of Concern: nesting colony	Habitats: fresh water, preferably in emergent wetland with tall, dense cattails (Typha sp.) or tules, natural grassland, woodland, or agricultural cropland Characteristics: species is not migratory, but is nomadic and highly colonial	Yes	No	Not expected to occur. The BSA does not contain suitable aquatic habitats such as freshwater emergent wetlands to support this species.
Listed Mammals						
<i>Dipodomys stephensi</i>	Stephens' kangaroo rat	FT, ST	Habitats: open annual and perennial grasslands or sparse shrublands such as coastal sage scrub Soil: well drained, gravelly or sandy and sandy loam soils	Yes	Yes	Low potential to occur. The BSA contains suitable soils (sandy-clay-loam) to support this species.
<i>Perognathus longimembris pacificus</i>	Pacific pocket mouse	FE, SSC	Habitats: open, shrubby vegetation, including coastal strand, coastal dunes, weedy vegetation on river alluvium, and open coastal sage scrub Soil: fine-grained, sand soil and alluvial sands near the ocean	Yes	No	Low potential to occur. The BSA does contain coastal sage scrub, however the soils of the BSA have a relatively high clay fraction with some sand, however it do not contain adequate fine sands.
Sensitive Wildlife: These animals have no official status under the ESA and/or the CESA; however they are designated as sensitive or locally important by federal agencies, state agencies, and/or local conservation agencies and organizations						
Sensitive Invertebrates						
<i>Danaus plexippus</i> pop. 1	monarch butterfly	FC: California overwintering population	Habitats: wind-protected tree groves (eucalyptus [Eucalyptus sp.], Monterey pine [Pinus radiata], cypress), with nectar and water sources nearby	Yes	No	Low potential to occur. The BSA does not contain vegetation preferable to this species, however some flowering shrubs in the BSA vicinity could provide suitable habitat for this species.
Sensitive Fish						
<i>Gila arcuttii</i>	arroyo chub	SSC	Habitats: slow-moving or backwater sections of warm to cool (10-24 C) streams with mud or sand substrates	Yes	No	No potential to occur. The BSA does not contain suitable aquatic habitats to support this fish.
Sensitive Amphibians						
<i>Rana boylei</i>	foothill yellow-legged frog	SSC	Habitats: Stream or river frog of woodlands, chaparral, and forests, rocky streams in a variety of habitats, including valley-foothill hardwood, valley-foothill hardwood-conifer, valley-foothill riparian, Ponderosa pine (Pinus ponderosa), mixed conifer, coastal scrub, mixed chaparral, and wet meadow types Characteristics: foothill yellow-legged frogs are infrequent or absent in habitats where introduced aquatic predators	Yes	No	No potential to occur. The BSA does not contain suitable aquatic breeding habitats within woodlands, chaparrals, or forests to support this frog. This frog requires a permanent water source, which is not present in the BSA.
<i>Spea hammondi</i>	western spadefoot	SSC	Habitats: coastal sage scrub, open chaparral, pine-oak woodlands and grassland habitats, grasslands with vernal pools or mixed grassland/coastal sage scrub areas Characteristics: upland habitats adjacent to potential breeding sites in burrows approximating 1 meter in depth	Yes	Yes	Moderate potential to occur. The BSA contains suitable clay soils that may support ponding, within elements of coastal scrub and grassland habitats.
Sensitive Reptiles						
<i>Actinemys marmorata (=Actinemys marmorata marmorata) (=Emys marmorata)</i>	northern western pond turtle (=northern western pond turtle)	SSC	Habitats: stagnant or slow-moving water in aquatic habitats, ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, and either rocky or muddy bottoms, in woodland, forest, and grassland	Yes	No	No potential to occur. The BSA does not contain suitable aquatic habitats or basking sites to support this turtle. Any occurrence would most likely be restricted to passing through the BSA.

Scientific Name (=Synonym)	Common Name (=Synonym)	Status	General Habitat Descriptions in California	The BSA:		Potential For Occurrence in the BSA
				Located Within Species' Distribution and/or Elevation Range (if known)	Contains Suitable Foraging, Roosting, and/or Breeding Habitats	
<i>Phrynosoma blainvilli</i> (=Phrynosoma coronatum) (=Phrynosoma coronatum blainvilli)	Blainville's horned lizard (=coast horned lizard) (=San Diego horned lizard)	SSC	Habitats: wide variety of vegetation types including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland and coniferous forest, habitats are loose, fine soils with a high sand fraction; an abundance of native ants or other insects; and open areas with limited overstory for basking and low	Yes	Yes	Low potential to occur. The BSA does contain coastal sage scrub, however the soils of the BSA have a relatively high clay fraction with some sand, however it do not contain adequate loose, fine sands
<i>Plestiodon skiltonianus interparietalis</i>	Coronado skink (=Coronado Island skink)	WL	Habitats: grassland, broken chaparral, piñon-juniper and juniper-sage woodland, and open pine-oak and pine forests, prefer rocky habitats near streams, creeks and rivers with abundant plant cover Characteristics: found in sunnier parts of clearings	Yes	No	No potential to occur. The BSA contains suitable coastal scrub and grassland habitats; however it lacks suitable aquatic and vernal pool breeding sites to support this toad. Any occurrence would most likely be restricted to passing through the BSA.
<i>Aspidoscelis hyperythra</i> (=Cnemidophorus hyperythrus beldingi)	orange-throated whiptail	WL	Habitats: semi-arid brushy areas typically with loose soil and rocks, including washes, stream sides, rocky hillsides, and coastal chaparral Characteristics: friable soil appears to be a necessary requirement for excavating burrows and hiding eggs	Yes	Yes	Low potential to occur. The BSA contains coastal scrub and brushy vegetation that could potentially support this species. However, observations of this species within a 10-mile radius of the project are greater >20 years old.
<i>Aspidoscelis tigris stephensi</i> (=Cnemidophorus tigris multicutatus)	San Diegan whiptail (=coast whiptail)	SSC	Habitats: variety of ecosystems, primarily hot and dry open areas with sparse foliage such as deserts, chaparral and semiarid, found in open, often rocky areas with little vegetation or sunny microhabitats within shrub or grassland Characteristics: ground may be firm soil, sandy, or rocky	Yes	Yes	No potential to occur. The BSA is not located in a particularly arid region. The BSA also contains vegetative cover that may be considered too dense to support this species.
<i>Crotalus ruber</i>	red diamond rattlesnake	SSC	Habitats: desert, through dense chaparral in the foothills (It avoids the mountains above around 4,000 feet), to warm inland mesas and valleys, all the way to the cool ocean shore Characteristics: nest rodent burrows, cracks in rocks or surface cover objects	Yes	Yes	Moderate potential to occur. The scrub habitat in a foothill setting in the BSA provides suitable habitat to support this species.
<i>Thamnophis hammondi</i>	two-striped garter snake	SSC	Habitats: aquatic and it is rarely found far from water, permanent or semi-permanent bodies of freshwater and adjacent riparian habitat, oak woodlands, chaparral and coniferous forests on the coastal slopes of mountains and foothills to sea level	Yes	No	Not expected to occur. The BSA does not contain suitable aquatic habitats, vegetation, or basking sites to support this snake.
Sensitive Birds						
<i>Pelecanus occidentalis californicus</i>	California brown pelican	fully protected, Season of Concern: nesting colony and communal roosts	Habitats: colonies or rookeries, shallow coastal waters or inland seas (Salton Sea) Characteristics: they do not roost overnight on water	Yes	No	No potential to occur. The BSA does not contain suitable undisturbed coastal island breeding habitats, roosting sites, or large aquatic/pelagic feeding grounds to support this species.
<i>Ardea herodias</i>	great blue heron	Season of Concern: nesting colony	Habitats: shallow estuaries and fresh and saline emergent wetlands, riverine and rocky marine shores, in croplands, pastures, and in mountains above foothills Characteristics: nests in colonies in tops of secluded large snags or live trees	Yes	No	Low potential to occur. Occurrence of this species in the BSA would likely be restricted to passage, as this species requires the habitats provided at nearby coastline. The BSA itself does not provide suitable habitat for this species.
<i>Ardea alba</i>	great egret	Season of Concern: nesting colony	Habitats: fresh and saline emergent wetlands, along the margins of estuaries, lakes, and slow-moving streams, on mudflats and salt ponds, and in irrigated croplands and pastures Characteristics: roosts communally in trees	Yes	No	Low potential to occur. Occurrence of this species in the BSA would likely be restricted to passage, as this species requires the habitats provided at nearby coastline. The BSA does not contain suitable aquatic/wetland habitats for foraging. In addition, suitable roosting sites and breeding habitats are absent from the BSA.
<i>Nycticorax nycticorax</i>	black-crowned night-heron	Special Animals List	Habitats: margins of lacustrine, large riverine, and fresh and saline emergent habitats and, rarely, on kelp beds in marine subtidal habitats Characteristics: nests are built of twigs and/or marsh plants	Yes	No	Not expected to occur. The BSA does not provide margins of lacustrine, large riverine, and fresh and saline emergent habitats and, rarely, on kelp beds in marine subtidal habitats
<i>Pandion haliaetus</i>	osprey	WL, Season of Concern: nesting	Habitats: rivers, large streams, lakes, reservoirs, marshes, bays, estuaries, and surf zones Characteristics: nests are usually within 1,312 feet of fish-producing water	Yes	No	Low potential to occur. Occurrence of this species would likely be restricted to passage to the coast, which is approximately 2.5 miles from the BSA. The proximity of the BSA to the coast could result in occurrence of this species, however there is no suitable nesting habitat present in the BSA.
<i>Elanus leucurus</i>	white-tailed kite	fully protected, Season of Concern: nesting	Habitats: undisturbed, open grasslands, meadows, emergent wetlands, farmlands, crops, pastures, and other cultivated habitats Characteristics: adjacent to their nesting woodland must be open foraging grasslands	Yes	Yes	Moderate potential to occur. This species may utilize the areas surrounding the BSA for foraging, and would likely only occur in the project area for passage.
<i>Accipiter cooperii</i>	Cooper's hawk	WL, Season of Concern: nesting	Habitats: broken woodland and habitat edges Characteristics: tolerant of human activities near the nest and is seen more often nesting in urban/residential areas	Yes	Yes	High potential to occur. The BSA is located in areas of habitat edges. The BSA contains suitable foraging habitat for this species.
<i>Aquila chrysaetos</i>	golden eagle	fully protected, WL, BCC, Season of Concern: nesting and wintering	Habitats: mountainous canyon land, rimrock terrain of open desert and grassland areas, open rolling foothills of grasslands, oak savannas, oak and juniper woodlands, chaparral, mountain areas, and desert, open habitats including grasslands, deserts, savannas, and shrublands Characteristics: hilly or mountainous country, deeply cut canyons rising to open mountain slopes and crags are ideal habitat	Yes	No	Low potential to occur. The BSA is adjacent to open areas where this species could occur; occurrence of this species in the BSA would likely be limited to occasional passage as the BSA itself does not offer suitable nesting or foraging habitat for this species
<i>Charadrius montanus</i>	mountain plover	SSC, BCC, Season of Concern: wintering	Habitats: southern California- short grasslands and agricultural areas in the interior, such as freshly plowed fields, newly sprouting grain fields, and sometimes sod farms Characteristics: prefer short vegetation, bare ground, flat topography, and areas with burrowing rodents	Yes	Yes	Low potential to occur. The mountain plover does not nest in California. The BSA is located within this plover's distribution and contains suitable foraging grassland/open areas. This species has a low potential to occur in the eastern segment of the BSA.
<i>Larus californicus</i>	California gull	WL, Season of Concern: nesting colony	Habitats: winter habitats along the coast are sandy beaches, mudflats, rocky intertidal, and pelagic areas of marine and estuarine habitats, as well as fresh and saline emergent wetlands Characteristics: alkali and freshwater lacustrine habitats east of the Sierra Nevada and Cascades	Yes	No	No potential to occur. The BSA does not contain suitable aquatic habitats to support this gull. Occurrence of this species would likely be restricted to passage to nearby coastal areas.
<i>Hydroprogne caspia</i> (=Sterna caspia)	Caspian tern	BCC	Habitats: freshwater lakes, estuaries, salt ponds, lacustrine, riverine, and fresh and saline emergent wetland habitats Characteristics: nests are scraped, unlined depressions in soil near water	Yes	No	No potential to occur. The BSA does not contain suitable aquatic habitats to support this tern. Occurrence of this species would likely be restricted to passage to nearby coastal areas.
<i>Thalasseus elegans</i> (=Sterna elegans)	elegant tern	WL, Season of Concern: nesting colony	Habitats: inshore coastal waters, bays, estuaries, and harbors; rarely occurs far offshore, and never inland Characteristics: nest is a shallow scrape in sand	Yes	No	No potential to occur. The BSA does not contain suitable aquatic habitats to support this tern. This species is rarely found inland, and the BSA is approximately 2.75 miles east from the coastline.
<i>Athene cucularia</i>	burrowing owl	SSC, BCC, Season of Concern: burrowing sites and some wintering sites	Habitats: open, dry, flat ground or low rolling hills with sparse vegetation and available burrows Characteristics: dig their own burrows in the soft banks of irrigation canals and ditches	Yes	Yes	Moderate potential to occur. There is suitable habitat for this species in the eastern segment of the BSA. This area contains slight slopes with friable soils.
<i>Asio otus</i>	long-eared owl	SSC, Season of Concern: nesting	Habitats: conifer, oak, riparian, piñon-juniper, and desert woodlands Characteristics: long-eared owl appears to be more associated with forest edge habitat	Yes	No	Low potential to occur. The BSA is adjacent to areas containing riparian areas, it likely occurrence of this species would be restricted to passage as the BSA does not contain conifer or desert woodlands.
<i>Calypte costae</i>	Costa's hummingbird	BCC	Habitats: desert and in coastal southern California, desert wash, edges of desert riparian and valley foothill riparian, coastal scrub, desert scrub, desert succulent shrub, lower-elevation chaparral, and palm oasis Characteristics: nest is placed in a wide variety of trees, cacti, shrubs, woody forbs	Yes	Yes	Moderate potential to occur. The BSA contains suitable shrubs that may be utilized for nesting.
<i>Selasphorus rufus</i>	rufous hummingbird	BCC	Habitats: riparian areas, open woodlands, chaparral, mountain meadows, and other habitats rich in nectar-producing flowers, including gardens and orchards, lowland riparian, open woodlands, scrub, and chaparral, also mountain meadows extending to and above treeline	Yes	Yes	Moderate potential to occur. The BSA provides suitable nesting and foraging scrub habitat to support this species.
<i>Selasphorus sasin</i>	Allen's hummingbird	BCC	Habitats: sparse to dense scrub habitats and sparse to open woodlands Characteristics: nest on twig or fork of tree or shrub	Yes	Yes	Moderate potential to occur. The BSA is adjacent to areas containing suitable scrub habitats to support this species. Occurrence of this species in the BSA would likely be restricted to passage.
<i>Dryobates nuttalli</i> (=Picoides nuttalli)	Nuttall's woodpecker	BCC	Habitats: low-elevation oak (any species) woodlands, especially where mixed with California sycamore (Platanus racemosa) and deciduous riparian habitats Characteristics: nests are located mostly in riparian habitat	Yes	No	Low potential to occur. There is suitable habitat for this species in areas around the BSA.
<i>Falco columbarius</i>	merlin	WL, Season of Concern: nesting	Habitats: Alaska and Canada, Merlins winter in California from September to May, annual grasslands to open ponderosa pine and montane hardwood-conifer habitats, and coastlines, savannas, woodlands, lakes, and wetlands Characteristics: dense tree stands may be used for cover and are frequently close to bodies of water	Yes	No	Low potential to occur. The BSA is located adjacent to areas of suitable habitat for this species, however the BSA itself does not contain suitable habitat for this species. Occurrence of this species would likely be restricted to passage.
<i>Falco peregrinus anatum</i>	American peregrine falcon	fully protected, BCC,	Habitats: open habitats, including tundra, marshes, seacoasts, savannas and high mountains, woodland, forest, wetlands, cities, agricultural areas and coastal habitats Characteristics: riparian areas and coastal and inland wetlands are important habitats year-round, non-breeding seasons	Yes	No	Low potential to occur. The BSA is proximal to the coast, it is likely this species would occur in the BSA during passage to other suitable areas.

Scientific Name (=Synonym)	Common Name (=Synonym)	Status	General Habitat Descriptions in California	The BSA:		Potential For Occurrence in the BSA
				Located Within Species' Distribution and/or Elevation Range (if known)	Contains Suitable Foraging, Roosting, and/or Breeding Habitats	
<i>Lanius ludovicianus</i>	loggerhead shrike	SSC, BCC, Season of Concern nesting	Habitats: agricultural fields, pastures with fence rows, old orchards, savannas, prairies mowed roadsides, cemeteries, golf courses, riparian areas, open woodland, agricultural fields, desert washes, desert scrub, grassland, broken chaparral and beach with scattered shrubs Characteristics: nest in isolated trees or large shrubs	Yes	No	Moderate potential to occur. The BSA is located adjacent to areas of suitable habitat for this species, however the BSA itself does not contain suitable habitat for this species. Occurrence of this species would likely be restricted to passage.
<i>Eremophila alpestris actia</i>	California horned lark	WL	Habitats: grasslands along the coast and deserts near sea level to alpine dwarf-shrub habitat above treeline Characteristics: birds forage on the ground in either bare areas	Yes	No	Low potential to occur. The eastern segment of the BSA contains some grasslands in a coastal setting that create suitable foraging habitat for this species. The project site also contains some bare areas with compacted dirt that this species may occasionally pass through.
<i>Campylorhynchus brunneicapillus sandiegensis</i>	coastal cactus wren (=San Diego cactus wren)	. BCC	Habitats: coastal sage scrub plant community in which cacti are prominent Characteristics: usually absent from areas where only low, sprawling cacti grow	Yes	No	Low potential to occur in the BSA, not expected to occur on the project site. The eastern segment of the BSA contains some suitable coastal scrub habitat.
<i>Aimophila ruficeps canescens</i>	southern California rufous-crowned sparrow	WL	Habitats: dry, steep sloping land and hillsides with a moderate density of low, scattered shrubs, coastal sage scrub, interspersed with grasses and forbs and occasional rock outcrops for song perches Characteristics: nests are placed in small depressions on the ground	Yes	Yes	High potential to occur. The BSA contains coastal sage scrub habitat with appropriate vegetation density and sloping topography to create optimal habitat for this species.
Sensitive Mammals						
<i>Chaetodipus californicus femoralis</i>	Dulzura pocket mouse (=California pocket mouse)	SSC	Habitats: coastal scrub, chaparral and grassland, dense patches of chaparral with only small openings Characteristics: edges between shrubs and open areas with sparse herbaceous plants show high use	Yes	No	Moderate potential to occur in the BSA, low potential to occur on the project site. The eastern segment of the BSA provides suitable habitat to support this species such as coastal scrub; this species also typically utilizes areas with sparse herbaceous cover, which is present in the eastern segment of the BSA.
<i>Chaetodipus fallax fallax</i>	northwestern San Diego pocket mouse	SSC	Habitats: open, sandy areas of both the Upper and Lower Sonoran life-zones of southwestern California and northern Baja California Characteristics: grassland and open sage scrub vegetation with sandy-loam to loam soils	Yes	Yes	Low potential to occur. The eastern segment of the BSA contains suitable shrubs that may be utilized for nesting. The BSA also contains suitable soils (primarily sandy-loam) to support this species.
<i>Chaetodipus fallax pallidus</i>	pallid San Diego pocket mouse	SSC	Habitats: sandy herbaceous areas, usually in association with rocks or coarse gravel in southwestern California Characteristics: mainly in arid coastal and desert border areas	Yes	No	Moderate potential to occur. The BSA is located in a coastal setting that experiences arid conditions.
<i>Choeronycteris mexicana</i>	Mexican long-tongued bat	SSC	Habitats: urban areas with abundant flowers and fruit trees, montane woodlands, riparian areas, tropical forests, arid scrubland and deserts with dominant succulents Characteristics: uses caves, mines, and probably buildings as nursery sites	Yes	Yes	Not expected to occur. The BSA does not contain areas dominated by succulent species. In addition, recorded observations of this species within a 10-mile radius of the project are >20 years old.
<i>Eumops perotis californicus</i>	western mastiff bat	SSC, WBWG,H	Habitats: low-lying desert areas of southern California, desert riparian, desert wash, desert scrub, desert succulent shrub, alkali desert scrub, palm oasis, conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, chaparral, urban. Roosts in crevices in cliff faces, high buildings, trees, and tunnels Characteristics: bats often are found in large groups	Yes	Yes	Low potential to occur in the BSA, not expected to occur on the project site. There is coastal scrub and open landscaped areas in the eastern and northern segments of the BSA. This species roosts in high buildings and trees, however these conditions are limited within the BSA.
<i>Nyctinomops femorosaccus</i>	pocketed free-tailed bat	SSC	Habitats: piñon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, chaparral, and palm oasis Characteristics: prefer rock crevices in cliffs as roosting sites	Yes	Yes	Not expected to occur. The BSA lacks suitable habitat types for this bat such as piñon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, and Joshua tree.
<i>Lasiorus cinereus</i>	hoary bat	ND	Habitats: near open grassy areas in coniferous and deciduous forest or near lakes, open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding Characteristics: winter roosts include sides of buildings and tree trunks	Yes	No	Low potential to occur. The BSA does not provide coniferous forest and is not proximal to lakes.
<i>Lasiorus xanthinus</i>	western yellow bat	SSC, WBWG,H	Habitats: valley foothill riparian, desert riparian, desert wash, and palm oasis habitats Characteristics: occurs year-round in California	Yes	Yes	Not expected to occur. The BSA does not provide palm oasis in a desert setting, which are conditions typically preferred by this species.
<i>Antrozous pallidus</i>	pallid bat	SSC	Habitats: variety of habitats is occupied by pallid bats, including deserts, grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests Characteristics: night roosts may be in more open sites, such as porches and open buildings	Yes	Yes	Low potential to occur. The BSA is located within this bat's distribution and contains suitable grassland and shrubland, habitats; however they are most common in deserts, preferring areas of open, dry habitats, with rocky areas for roosting and water nearby.
<i>Myotis yumanensis</i>	Yuma myotis (=Yuma bat)	Special Animals List	Habitats: open forests and woodlands Characteristics: forage around marshes on moist shorelines	Yes	No	Not expected to occur. The BSA does not contain suitable habitat types for this species such as open forests and woodlands. Any occurrence of this species would likely be restricted to passage.
<i>Puma concolor</i>	mountain lion (=cougar) (Southern California/Central Coast ESU)	SC, CFGC §§ 4800 - 4810	Habitats: coastal, cismontaine, montaine, desert scrub, chaparral, swamps, and forests Characteristics: use rocky areas, cliffs, and ledges that provide cover within open woodlands and chaparral	Yes	Yes	Moderate potential to occur. Escalating displacement of this species due to urbanization and associated habitat fragmentation has resulted in this species being observed proximal to areas with significant human activity. Occurrence of this species would likely be limited to passage.
<i>Taxidea taxus</i>	American badger	SSC	Habitats: alpine meadows to elevations as low as Death Valley Characteristics: requirements - sufficient food, friable soils, and relatively open, uncultivated ground	Yes	Yes	Not expected to occur. The BSA does not contain expansive open, undisturbed space to support this species.

PLANT AND WILDLIFE SPECIES OBSERVED

Table 1 contains the list of vascular plant taxa recorded during the biological field survey conducted within the BSA. Plant nomenclature and taxonomic order is based on *The Jepson Manual: Vascular Plants of California*, second Edition (Baldwin et al., 2012), and/or the Calflora website (Calflora, 2022).

Table 1
Plant Species Observed during the Field Surveys

Scientific Name	Common Name	Cal-IPC Rating
DICOTS		
Anacardiaceae	Cashew/Sumac Family	
<i>Malosma laurina</i>	laurel sumac	
<i>Rhus integrifolia</i>	lemonade berry	
<i>Rhus ovata</i>	sugar bush	
<i>Schinus molle</i> *	Peruvian pepper tree	Cal-IPC: limited
<i>Schinus terebinthifolius</i> *	Brazilian pepper tree	Cal-IPC: limited
Apocynaceae	Dogbane Family	
<i>Vinca major</i> *	greater periwinkle	Cal-IPC: moderate
Asteraceae (=Compositae)	Sunflower Family	
<i>Artemisia californica</i>	California sagebrush	
<i>Encelia californica</i>	California sunflower	
<i>Baccharis pilularis</i> *	coyote brush	
<i>Heterotheca grandiflora</i>	telegraph weed	
<i>Cirsium vulgare</i> *	bull thistle	Cal-IPC: moderate
<i>Ericameria</i> sp.	goldenbush	
Brassicaceae	Mustard Family	
<i>Hirschfeldia incana</i> *	short-pod mustard	Cal-IPC: moderate
<i>Brassica nigra</i> *	black mustard	Cal-IPC: moderate
Euphorbiaceae	Spurge Family	
<i>Ricinus communis</i> *	castor bean	Cal-IPC: limited
Fabaceae	Legume Family	
<i>Robinia pseudoacacia</i> *	black locust	Cal-IPC: limited
Fagaceae	Oak/Beech Family	
<i>Acacia redolens</i> *	vanilla-scented wattle	
<i>Quercus agrifolia</i>	coast live oak	
Magnoliaceae	Magnolia Family	
<i>Magnolia grandiflora</i> *	magnolia	

Scientific Name	Common Name	Cal-IPC Rating
Myrtaceae	Myrtle Family	
<i>Eucalyptus camaldulensis</i> *	red gum	Cal-IPC: limited
<i>Eucalyptus globulus</i> *	blue gum	Cal-IPC: limited
<i>Psidium guajava</i> *	guava	
Nyctaginaceae	Four o’Clock Family	
<i>Bougainvillea</i> sp.*	paperflower	
Pinaceae	Pine Family	
<i>Pinus</i> sp.	pine species	
Podocarpaceae	Podocarp Family	
<i>Podocarpus macrophyllus</i> *	yew plum pine	
Polygonaceae	Knotweed Family	
<i>Eriogonum fasciculatum</i>	California buckwheat	
Plumbaginaceae	Leadwort Family	
<i>Limonium perezii</i> *	Canarian sea lavender	
MONOCOTS		
Areaceae	Palm Family	
<i>Washingtonia robusta</i> *	Mexican fan palm	Cal-IPC: moderate
Poaceae	Grass Family	
<i>Cortaderia jubata</i> *	pampas grass	Cal-IPC: high

*Non-native species

California Invasive Plant Council (Cal-IPC) Ratings: Cal-IPC is a nonprofit organization that is dedicated to protecting California’s lands and waters from ecologically-damaging invasive plants. Cal-IPC maintains the Cal-IPC Inventory (Cal-IPC, 2006), a comprehensive list of invasive plants based on ecological impacts and assigns the designation of High, Moderate, Limited, or Watch to species based on the criteria listed below

- **High:** These species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically
- **Moderate:** these species have substantial and apparent-but generally not severe-ecological impacts on physically processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, though establishment is generally dependent upon ecological disturbance. Ecological amplitude and distribution may range from limited to widespread.
- **Limited:** these species are invasive but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are

Scientific Name	Common Name	Cal-IPC Rating
generally limited, but these species may be locally persistent and problematic.		

Table 2 contains the list of wildlife species observed and/or detected during the biological field surveys. Wildlife nomenclature and taxonomic order is based on the following treatments according to class of species:

- **Birds.** *Check-list of North American Birds*. Seventh Edition and Supplements (Chesser et al., 2022)
- **Mammals.** *Complete List of Amphibian, Reptile, Bird and Mammal Species in California* (CDFW, 2016).
- **Native Wildlife.** *California's Life History Accounts and Range Maps* (accessed, 10/28/2022), CDFW 2022)

Table 2
Wildlife Species Observed/Detected during the Field Surveys

Scientific Name	Common Name	Status
Mammals		
Canidae	Canine Family	
<i>Canis latrans</i>	coyote	
Leporidae	Cottontail Rabbit Family	
<i>Sylvilagus sp.</i>	cottontail rabbit	
Sciuridae	Ground Squirrel Family	
<i>Otospermophilus beecheyi</i>	California ground squirrel	
Birds		
Aegithalidae	Long-Tailed Tit Family	
<i>Psaltriparus minimus</i>	bushtit	
Corvidae	Corvid Family	
<i>Aphelocoma californica</i>	California scrub-jay	
<i>Corvus brachyrhynchos</i>	American crow	
<i>Corvus corax</i>	common raven	
Cuculidae	Cuckoo Family	
<i>Geococcyx californianus</i>	greater roadrunner	
Hirundinidae	Swallow Family	
<i>Petrochelidon pyrrhonota</i>	cliff swallow	
Fringillidae	Finch Family	

Scientific Name	Common Name	Status
<i>Haemorhous mexicanus</i>	house finch	
<i>Spinus psaltria</i>	lesser goldfinch	
Mimidae	Mimid Family	
<i>Mimus polyglottos</i>	northern mockingbird	
<i>Toxostoma redivivum</i>	California thrasher	BCC
Parulidae	New World Warbler Family	
<i>Setophaga petechia</i>	yellow warbler	
Passerellidae	New World Sparrow Family	
<i>Melospiza crissalis</i>	California towhee	
<i>Pipilo maculatus</i>	spotted towhee	
<i>Zonotrichia leucophrys</i>	white-crowned sparrow	
Passeridae Family	Old World Sparrow Family	
<i>Passer domesticus</i>	house sparrow	
Picidae	Woodpecker Family	
<i>Colaptes auratus</i>	northern flicker	
<i>Melanerpes formicivorus</i>	acorn woodpecker	
Poliophtilidae	Gnatcatcher Family	
<i>Poliophtila caerulea</i>	blue-gray gnatcatcher	
Sylviidae	Old World Warbler Family	
<i>Chamaea fasciata</i>	wrentit	
Trochilidae	Hummingbird Family	
<i>Calypte anna</i>	Anna's hummingbird	

Scientific Name	Common Name	Status
Troglodytidae	Wren Family	
<i>Thryomanes bewickii</i>	Bewick's wren	
Turdidae	Turdidaethrush Family	
<i>Turdus migratorius</i>	American robin	
Tyrannidae	Tyrant Flycatchers Family	
<i>Tyrannus vociferans</i>	Cassin's kingbird	

- BCC = bird of conservation concern: a bird of conservation concern is listed in the USFWS' 2008 Birds of Conservation Concern report. The report identifies species, subspecies, and populations of all migratory and non-migratory bird species (beyond those already designated as federally threatened or endangered) that, without additional conservation actions, are likely to become candidates for listing under the ESA. While all of the bird species included in the report is priorities for conservation action, the list makes no finding with regard to whether they warrant consideration for ESA listing.

SITE PHOTOGRAPHS



Photo 1: View of part of the project site from the eastern segment of the BSA. Photo date: November 4, 2022.



Photo 2: Coastal sage scrub in offsite areas within the eastern segment of the BSA. Date: July 11, 2022.



Photo 3: Disturbed areas within the southern portion of the BSA. Photo date: July 28, 2022.



Photo 4: Photo of ornamental vegetation (Eucalyptus with acacia understory) in the western segment of the BSA. Date: September 10, 2022.



Photo 5: Ribbon drain located in the western segment of the BSA.
Photo date: November 4, 2022.



Photo 6: Pepper tree groves in the western segment of the BSA.
Photo date: November 4, 2022.



Photo 7: Skatepark facility within the project area. Photo date: July 11, 2022.



Photo 8: Areas of disturbed California buckwheat scrub within the eastern segment of the BSA. Photo date: November 4, 2022.