

Appendix C3 SPECIAL-STATUS SPECIES

Table 1. Special-Status Plant Species with Potential to Occur in the BSA

Common Name Scientific Name	Listing Status ¹ (Fed/State/CRPR)	Known Habitat and Elevation Range (Feet)	Blooming Period	Potential for Occurrence
Alkali milk-vetch <i>Astragalus tener</i> var. <i>tener</i>	-/-1B.2	Valley and foothill grassland in adobe clay soil; playas and vernal pools with alkaline soil. Elev. 0-200 ft.	Mar-Jun	Absent. The BSA does not contain vernal pools or grassland habitat.
Brittlescale <i>Atriplex depressa</i>	-/-1B.2	Alkaline and clay soils in chenopod scrub, meadows and seeps, playas, valley and foothill grassland, and vernal pools. Elev. 0-1050 ft.	Apr-Oct	Absent. The BSA does not contain scrub, meadow and seep, playa, or grassland habitat.
Lesser saltscale <i>Atriplex minuscula</i>	-/-1B.1	Alkaline and sandy soils in chenopod scrub, playas, and valley and foothill grassland. Elev. 50-655 ft.	May-Oct	Absent. The BSA does not contain scrub, playa, or grassland habitat.
Big-scale balsamroot <i>Balsamorhiza macrolepis</i>	-/-1B.2	Sometimes serpentinite soils in chaparral, cismontane woodland, valley and foothill grassland. Elev. 145-5100 ft.	Mar-Jun	Absent. The BSA does not contain chaparral, woodland, or grassland habitat.
Chaparral harebell <i>Campanula exigua</i>	-/-1B.2	Chaparral in rocky, usually serpentinite soil. Elev. 900-4100 ft.	May-Jun	Absent. The BSA does not contain chaparral habitat.
Congdon's tarplant <i>Centromadia parryi</i> ssp. <i>congdonii</i>	-/-1B.1	Valley foothill grassland in alkaline soil. Elev. 0-755 ft.	May-Nov	Absent. The BSA does not contain grassland habitat.
Point Reyes salty bird's-beak <i>Chloropyron maritimum</i> ssp. <i>palustre</i>	-/-1B.2	Coastal salt marshes and swamps. Elev. 0-30 ft.	Jun-Oct	Absent. The BSA does not contain salt marsh or swamp habitat.

Common Name Scientific Name	Listing Status ¹ (Fed/State/CRPR)	Known Habitat and Elevation Range (Feet)	Blooming Period	Potential for Occurrence
Robust spineflower <i>Chorizanthe robusta</i> var. <i>robusta</i>	FE/-/1B.1	Sandy or gravelly soils in maritime chaparral, openings in cismontane woodland, coastal dunes, and coastal scrub. Elev. 10-985 ft.	Apr-Sep	Absent. The BSA does not contain chaparral, woodland, dune, or scrub habitat.
Mt. Hamilton thistle <i>Cirsium fontinale</i> var. <i>campylon</i>	-/-/1B.2	Serpentinite seeps in chaparral, cismontane woodland, and valley and foothill grassland. Elev. 330-2920 ft.	Apr-Oct	Absent. The BSA does not contain chaparral, woodland, or grassland habitat.
San Francisco collinsia <i>Collinsia multicolor</i>	-/-/1B.2	Sometimes serpentinite soils in closed-cone coniferous forest and coastal scrub. Elev. 100-820 ft.	Mar-May	Absent. The BSA does not contain forest or scrub habitat.
Santa Clara Valley dudleya <i>Dudleya abramsii</i> ssp. <i>setchellii</i>	FE/-/1B.1	Serpentinite, rocky soils in cismontane woodland and valley and foothill grassland. Elev. 195-1490 ft.	Apr-Oct	Absent. The BSA does not contain woodland or grassland habitat.
Hoover's button-celery <i>Eryngium aristulatum</i> var. <i>hooveri</i>	-/-/1B.1	Vernal pools. Elev. 5-150 ft.	Jul	Absent. The BSA does not contain vernal pools.
San Joaquin spearscale <i>Extriplex joaquinana</i>	-/-/1B.2	Chenopod scrub, meadows and seeps, playas, and valley and foothill grassland in alkaline soil. Elev. 0-2740 ft.	Apr-Oct	Absent. The BSA does not contain scrub, meadow and seep, or grassland habitat.
Fragrant fritillary <i>Fritillaria liliacea</i>	-/-/1B.2	Cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland often in serpentinite soil. Elev. 10-1345 ft.	Feb-Apr	Absent. The BSA does not contain woodland, prairie, scrub, or grassland habitat.

Common Name Scientific Name	Listing Status ¹ (Fed/State/CRPR)	Known Habitat and Elevation Range (Feet)	Blooming Period	Potential for Occurrence
Contra Costa goldfields <i>Lasthenia conjugens</i>	FE-/1B.1	Mesic habitats in cismontane woodland, alkaline playas, valley and foothill grassland, and vernal pools. Elev. 0-1540 ft.	Mar-Jun	Absent. The BSA does not contain woodland, playa, vernal pool, or grassland habitat.
Smooth lessingia <i>Lessingia micradenia</i> var. <i>glabrata</i>	-/-1B.2	Serpentinite soils, often along roadsides, in chaparral, cismontane woodland, and valley and foothill grassland. Elev. 390-1380 ft.	Jul-Nov	Absent. The BSA does not contain chaparral, woodland, or grassland habitat.
Arcuate bush-mallow <i>Malacothamnus arcuatus</i>	-/-1B.2	Chaparral and cismontane woodland. Elev. 45-1165 ft.	Apr-Sep	Absent. The BSA does not contain chaparral or woodland habitat.
Hall's bush-mallow <i>Malacothamnus hallii</i>	-/-1B.2	Chaparral and coastal scrub. Elev. 30-2495 ft.	May-Sep	Absent. The BSA does not contain chaparral or scrub habitat.
prostrate vernal pool navarretia <i>Navarretia prostrata</i>	-/-1B.1	Mesic habitats in coastal scrub, meadows and seeps, valley and foothill grassland with alkaline soils, and vernal pools. Elev. 5-3970 ft.	Apr-Jul	Absent. The BSA does not contain scrub, meadow and seep, vernal pool, or grassland habitat.
Hairless popcornflower <i>Plagiobothrys glaber</i>	-/-1A	Meadows and seeps with alkaline soils and coastal salt marshes and swamps. Elev. 45-590 ft.	Mar-May	Absent. The BSA does not contain meadow and seep or marsh and swamp habitat.
California alkali grass <i>Puccinellia simplex</i>	-/-1B.2	Alkaline soils and vernal mesic habitats including sinks, flats, and lake margins in chenopod scrub, meadows and seeps, valley and foothill grassland, and vernal pools. Elev. 5-3050 ft.	Mar-May	Absent. The BSA does not contain scrub, meadow and seep, vernal pool, or grassland habitat.

Common Name Scientific Name	Listing Status ¹ (Fed/State/CRPR)	Known Habitat and Elevation Range (Feet)	Blooming Period	Potential for Occurrence
Chaparral ragwort <i>Senecio aphanactis</i>	-/-2B.2	Sometimes in alkaline soils in chaparral, cismontane woodland, and coastal scrub. Elev. 45-2625 ft.	Jan-Apr	Absent. The BSA does not contain chaparral, woodland, or scrub habitat.
Metcalf Canyon jewelflower <i>Streptanthus albidus</i> ssp. <i>albidus</i>	FE/-1B.1	Valley and foothill grassland with serpentinite soils. Elev. 145-2625 ft.	Apr-Jul	Absent. The BSA does not contain grassland habitat.
Most beautiful jewelflower <i>Streptanthus albidus</i> ssp. <i>peramoenus</i>	-/-1B.2	Serpentinite soils in chaparral, cismontane woodland, and valley and foothill grassland. Elev. 310-3280 ft.	Apr-Sep	Absent. The BSA does not contain chaparral, woodland, or grassland habitat.
California seablite <i>Suaeda californica</i>	FE/-1B.1	Coastal salt marshes and swamps. Elev. 0-50 ft.	Jul-Oct	Absent. The BSA does not contain salt marsh or swamp habitat.
Saline clover <i>Trifolium hydrophilum</i>	-/-1B.2	Marshes and swamps, valley and foothill grassland in mesic areas with alkaline soil, vernal pools. Elev. 0-985 ft.	Apr-Jun	Absent. The BSA does not contain marsh or swamp, vernal pools, or grassland habitat.

¹Federal and State Status Codes

- = No status, or not applicable

FE = Listed as endangered under the Federal Endangered Species Act (FESA)

FT = Listed as threatened under FESA

SE = Listed as endangered under the California Endangered Species Act (CESA)

SR = Listed as rare under CESA

ST = Listed as threatened under CESA

CE = Listed as candidate endangered under CESA

CT = Listed as candidate threatened under CESA

CR = Listed as candidate rare under CESA

CNPS Ranking

1A = Presumed extinct in California and either rare or extinct elsewhere.

1B = Rare, threatened, or endangered in California and elsewhere.

2A = Presumed extinct in California but common elsewhere.

2B = Rare, threatened, or endangered in California but more common elsewhere.

Threat Ranks

0.1 = Seriously threatened in California (more than 80% of occurrences threatened/high degree and immediacy of threat).

0.2 = Moderately threatened in California (20-80% occurrences threatened/moderate degree and immediacy of threat).

0.3 = Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known).

Table 2. Special-Status Animal Species within Potential to Occur in the BSA

Common Name Scientific Name	Listing Status ¹ (Fed/State)	Known Habitat Requirements	Potential for Occurrence
Invertebrates			
Vernal pool tadpole shrimp <i>Lepidurus packardii</i>	FE/-	Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water. Pools commonly found in grass-bottomed swales of unplowed grasslands.	Absent. The BSA does not contain any vernal pools or grassland habitat.
Bay checkerspot butterfly <i>Euphydryas editha bayensis</i>	FT/-	Restricted to native grasslands on outcrops of serpentine soil in the vicinity of San Francisco Bay. <i>Plantago erecta</i> is the primary host plant; <i>Orthocarpus densiflorus</i> & <i>O. purpurscens</i> are the secondary host plants.	Absent. The BSA does not provide habitat for larval host plants.
San Bruno elfin butterfly <i>Callophrys mossii bayensis</i>	FE/-	Found in coastal, mountainous areas with grassy ground cover, mainly in the vicinity of San Bruno Mountain, San Mateo County. Colonies are located on steep, north-facing slopes. Larval host plant is <i>Sedum spathulifolium</i> .	Absent. The BSA is not within the range of this species.
Crotch bumble bee <i>Bombus crotchii</i>	-/CE	Coastal California east to the Sierra-Cascade crest and south into Mexico. Found in open grassland and scrub habitats. Food plant genera include <i>Antirrhinum</i> spp., <i>Phacelia</i> spp., <i>Clarkia</i> spp., <i>Dendromecon</i> spp., <i>Eschscholzia</i> spp., and <i>Eriogonum</i> spp.	Absent. The BSA does not provide suitable habitat for this species.
Western bumble bee <i>Bombus occidentalis</i>	-/CE	Meadows and grasslands with abundant floral resources throughout the mountains and northern coast of California. Nests in underground cavities including old rodent burrows in open west-southwest slopes bordered by trees.	Absent. No suitable nesting habitat occurs within the BSA.

Common Name Scientific Name	Listing Status ¹ (Fed/State)	Known Habitat Requirements	Potential for Occurrence
Fish			
Steelhead - Central California Coast DPS <i>Oncorhynchus mykiss irideus</i>	FT/-	DPS includes all naturally spawned populations of steelhead (and their progeny) in streams from the Russian River to Aptos Creek, Santa Cruz County, California (inclusive). Also includes the drainages of San Francisco and San Pablo Bays.	Absent. The BSA does not provide suitable aquatic habitat for this species.
Delta smelt <i>Hypomesus transpacificus</i>	FT/SE	Inhabits Sacramento-San Joaquin Delta, seasonally in Suisun Bay, Carquinez Strait, and San Pablo Bay. Seldom found at salinities greater than 10 ppt. Most often at salinities less than 2 ppt.	Absent. The BSA does not provide suitable aquatic habitat for this species.
Longfin smelt <i>Spirinchus thaleichthys</i>	C/ST	Euryhaline, nektonic, and anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column. Prefers salinities of 15 to 30 ppt, but can be found in completely freshwater to almost pure seawater.	Absent. The BSA does not provide suitable aquatic habitat for this species.
Amphibians			
California tiger salamander <i>Ambystoma californiense</i>	FE,FT/ST	Central Valley DPS federally listed as threatened. Santa Barbara County and Sonoma County DPS federally listed as endangered. Needs underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	Absent. The BSA does not provide suitable aquatic or terrestrial habitat for this species.
California red-legged frog <i>Rana draytonii</i>	FT/SSC	Requires perennial or near-perennial aquatic habitats, especially for breeding; often slow-moving streams, freshwater pools and ponds over 1-foot deep, often with overhanging vegetation; adjacent upland habitats are often used for temporary refuges or dispersal movements.	Absent. The BSA does not provide suitable aquatic or terrestrial habitat for this species.

Common Name Scientific Name	Listing Status ¹ (Fed/State)	Known Habitat Requirements	Potential for Occurrence
Foothill yellow-legged frog <i>Rana boylei</i>	-/SE, ST, SSC	Inhabits partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Needs cobble-sized substrate for egg-laying and at least 15 weeks of water to attain metamorphosis. Listing status for this species has been determined by the California Fish and Game Commission as the following: Southwest/South Coast, West/Central Coast, and East/Southern Sierra clades are now endangered; Northeast/Northern Sierra and Feather River clades are now threatened; and Northwest/North Coast clade is a SSC.	Absent. The BSA does not provide suitable aquatic or terrestrial habitat for this species.
Reptiles			
Northern California legless lizard <i>Anniella pulchra</i>	-/SSC	Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with a high moisture content.	Absent. The BSA does not provide suitable habitat for this species.
Alameda whipsnake <i>Masticophis lateralis euryxanthus</i>	FT/ST	Typically found in chaparral and scrub habitats but will also use adjacent grassland, oak savanna and woodland habitats. Mostly south-facing slopes and ravines, with rock outcrops, deep crevices or abundant rodent burrows, where shrubs form a vegetative mosaic with oak trees and grasses.	Absent. The BSA does not provide suitable habitat for this species.
Western pond turtle <i>Emys marmorata</i>	-/SSC	Slow water aquatic habitat with available basking sites. Hatchlings require shallow water with dense submergent or short emergent vegetation. Require an upland oviposition site near the aquatic site.	Absent. The BSA does not provide suitable aquatic or terrestrial habitat for this species.
Birds			
White-tailed kite <i>Elanus leucurus</i>	-/FP	Rolling foothills and valley margins with scattered oaks & river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	Absent. The BSA does not provide suitable nesting or foraging habitat for this species.

Common Name Scientific Name	Listing Status ¹ (Fed/State)	Known Habitat Requirements	Potential for Occurrence
Swainson's hawk <i>Buteo swainsoni</i>	-/ST	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranchlands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	Absent. The BSA does not provide suitable nesting or foraging habitat for this species.
Golden eagle <i>Aquila chrysaetos</i>	-/FP	Found in rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	Absent. The BSA does not provide suitable nesting or foraging habitat for this species.
American peregrine falcon <i>Falco peregrinus anatum</i>	-/FP	Found near wetlands, lakes, rivers or other water; on cliffs, banks, dunes, mounds; also human-made structures. Nests consist of a scrape or a depression or ledge in an open site.	Absent. The BSA does not provide suitable nesting or foraging habitat for this species.
California Ridgway's rail <i>Rallus obsoletus obsoletus</i>	FE/SE,FP	Found in salt and brackish marshes traversed by tidal sloughs in the vicinity of San Francisco Bay. Associated with abundant growths of pickleweed, but feeds away from cover on invertebrates from mud-bottomed sloughs.	Absent. The BSA does not provide suitable nesting or foraging habitat for this species.
Yellow rail <i>Coturnicops noveboracensis</i>	-/SSC	Breeds in sedge marshes/meadows with moist soil or shallow standing water within the northeastern interior California (Modoc County). Winter resident on the coast and in the Suisun marsh region. Inhabits wet meadows and coastal tidal marshes during winter.	Absent. The BSA does not provide suitable nesting or foraging habitat for this species.
California black rail <i>Laterallus jamaicensis contumiculus</i>	-/ST,FP	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	Absent. The BSA does not provide suitable nesting or foraging habitat for this species.
Western snowy plover <i>Charadrius alexandrinus nivosus</i>	FT/SSC	Sandy beaches, salt pond levees & shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting.	Absent. The BSA does not provide suitable nesting or foraging habitat for this species.

Common Name Scientific Name	Listing Status ¹ (Fed/State)	Known Habitat Requirements	Potential for Occurrence
California least tern <i>Sternula antillarum browni</i>	FE/SE,FP	Nests along the coast from San Francisco Bay south to northern Baja California. Colonial breeder on bare or sparsely vegetated, flat substrates: sand beaches, alkali flats, landfills, or paved areas.	Absent. The BSA does not provide suitable nesting or foraging habitat for this species.
Burrowing owl <i>Athene cunicularia</i>	-/SSC	Grasslands and ruderal habitats. Uses mammal burrows or other suitable underground cavities.	Absent. The BSA does not provide suitable nesting or foraging habitat for this species.
Western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	FT/SE	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	Absent. The BSA does not provide suitable nesting or foraging habitat for this species.
San Francisco (saltmarsh) common yellowthroat <i>Geothlypis trichas sinuosa</i>	-/SSC	Resides in fresh and saltwater marshes and creeks of the San Francisco Bay region. Requires thick, continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting.	Absent. The BSA does not provide suitable nesting or foraging habitat for this species.
Alameda song sparrow <i>Melospiza melodia pusillula</i>	-/SSC	Resident of salt marshes bordering south arm of San Francisco Bay. Inhabits <i>Salicornia</i> marshes; nests low in <i>Grindelia</i> bushes (high enough to escape high tides) and in <i>Salicornia</i> sp.	Absent. The BSA does not provide suitable nesting or foraging habitat for this species.
Tricolored blackbird <i>Agelaius tricolor</i>	-/ST, SSC	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey near the colony.	Absent. The BSA does not provide suitable nesting or foraging habitat for this species.
Mammals			
Salt-marsh wandering shrew <i>Sorex vagrans halicoetes</i>	-/SSC	Salt marshes of the south arm of San Francisco Bay. Medium high marsh 6-8 ft above sea level where abundant driftwood is scattered among <i>Salicornia</i> sp.	Absent. The BSA does not provide suitable habitat for this species.

Common Name Scientific Name	Listing Status ¹ (Fed/State)	Known Habitat Requirements	Potential for Occurrence
Pallid bat <i>Antrozous pallidus</i>	-/SSC	Found in deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting.	Absent. The BSA does not provide suitable roosting habitat for this species.
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	-/SSC	Occurs throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in man-made structures such as old buildings and bridge crevices.	Absent. The BSA does not provide suitable roosting habitat for this species.
San Francisco dusky-footed woodrat <i>Neotoma fuscipes annectens</i>	-/SSC	Occurs in forest habitats of moderate canopy and moderate-to-dense understory. May prefer chaparral and redwood habitats. Constructs nests of shredded grass, leaves, and other material.	Absent. The BSA does not provide suitable habitat for this species.
Salt-marsh harvest mouse <i>Reithrodontomys raviventris</i>	FE/SE, FP	Occurs only in the saline emergent wetlands of San Francisco Bay and its tributaries. Primary habitat is pickleweed.	Absent. The BSA does not provide suitable habitat for this species.

¹**Federal and State Status Codes**

- = No status, or not applicable

FE = Listed as endangered under the Federal Endangered Species Act (FESA)

FT = Listed as threatened under FESA

SE = Listed as endangered under the California Endangered Species Act (CESA)

ST = Listed as threatened under CESA

SSC = Designated as a Species of Special Concern by CDFW under the California Environmental Quality Act (CEQA)

FP = Fully Protected under the California Fish and Game Code (F.G.C.)

C = Candidate for listing as either endangered or threatened under FESA

CE = Candidate for listing as endangered under CESA

CT = Candidate for listing as threatened under CESA