

MEMORANDUM

To: Brian Froelich, City of Capitola

From: Kelsey Higney, Dudek

Subject: Biological Resources Assessment; 723 El Salto Drive Project, Capitola, California

Date: January 13, 2025

cc: Stephanie Strelow, Dudek

Matt Ricketts, Dudek

Attachment(s): A. Photo Log

B. Plant and Wildlife Species Potential to Occur

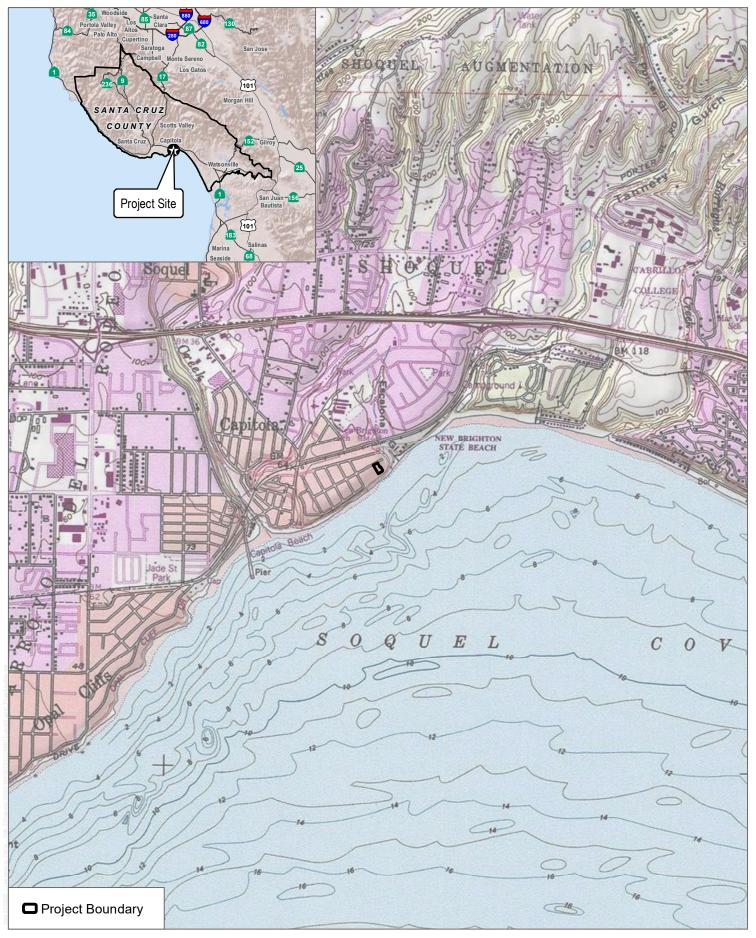
C. Plant and Wildlife Species Observed

1 Introduction

This technical memorandum summarizes Dudek's findings from a reconnaissance-level biological field survey for the 723 El Salto Drive Project (project) in Capitola, California. The proposed project consists of splitting the existing 0.82-acre lot into two lots. Parcel A is proposed to be 28,959 square feet and Parcel B is proposed to be 6,479 square feet. An existing four-unit condominium building with garage will be retained on Parcel A. No additional development, site disturbance or tree removal is proposed, except for the existing cottage that is proposed for demolition. The location is within the R-1 (single-family residential) zoning district.

1.1 Site Location

The site is in a developed residential setting in Capitola and consists primarily of paved surfaces and ruderal vegetation. Ornamental shrubs are planted throughout the site. The northern portion of the site contains a large coast live oak tree and a small patch of willows, as well as a planted Monterey cypress. The site is otherwise surrounded by residential development on three sides and a steep cliff to the ocean on the south side. No natural vegetation communities are present on the site. Elevation ranges from approximately 95 to 150 feet above mean sea level. Topography is generally flat up to the cliff. The region surrounding the site receives an annual average of approximately 29.33 inches of precipitation. Average temperatures range from approximately 45 to 68.9°F (WRCC 2024). Project location and the project site are shown on Figures 1 and 2.



SOURCE: USGS 7.5-Minute Series Soquel Quadrangle

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FIGURE 1 Project Location



SOURCE: Esri Imagery 2022



FIGURE 2 Project Area

2 Methods

2.1 Desktop Literature Review

Prior to 2023 fieldwork, Dudek queried online databases to identify sensitive biological resources (i.e., special-status species or sensitive natural communities) with potential to occur in the site vicinity. For this memorandum, special-status plant and wildlife species are defined as those that are listed, proposed for listing, or candidates for listing as threatened or endangered under the federal Endangered Species Act; listed or candidates for listing as threatened or endangered under the California Endangered Species Act; designated as fully protected under the California Fish and Game Code; designated as a California Species of Special Concern by the California Department of Fish and Wildlife (CDFW); and/or assigned a California Rare Plant Rank (CRPR) of 1 or 2 by the California Native Plant Society (CNPS). Special-status plant and wildlife species known to occur in the vicinity were identified by searching CDFW's California Natural Diversity Database (CDFW 2024a), CNPS's Inventory of Rare and Endangered Plants of California (CNPS 2024) and the U.S. Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (IPaC) online planning tool (USFWS 2024a). The USFWS National Wetland Inventory (NWI) was also queried to assess for the presence of nearby aquatic resources (USFWS 2024b). These database queries comprised the Felton, Laurel, Loma Prieta, Moss Landing, Santa Cruz, Soquel, and Watsonville West U.S. Geological Survey 7.5-minute quadrangles and were used along with observations from the field survey to determine likelihood for sensitive biological resources to occur on the site.

Dudek re-queried the above sources in November 2024 as due diligence after the project changed from new building construction to a lot split. The purpose of this second review was to confirm that no new special-status species needed to be addressed.

2.2 Biological Resources Survey

Dudek biologist Kelsey Higney conducted a reconnaissance-level field survey of the biological study area (BSA)—including the Project site and 100-foot buffer—on September 8, 2023. The focus of the survey was to identify existing biological resources, including vegetation and wildlife habitat values and habitat suitability for special-status plant and wildlife species, as well as to document the presence of aquatic resources or sensitive natural vegetation communities. The site was surveyed on foot with the aid of binoculars. A digital map accessible on a handheld device (ESRI 2023) was used for navigation and observations were recorded in a field notebook.

Due to the developed condition of the site, Dudek determined that a second survey in 2024 was unnecessary. Existing habitat conditions are not expected to have substantially changed since September 2023, and the previous observations are therefore sufficient to inform the below analysis.

3 Results

Based on the results of the database search, a total of 96 special-status species (51 plant and 45 wildlife) were identified as potentially occurring in the project region (Attachment B, Plant and Wildlife Species Potential to Occur). Additional information on each species group is provided below.



3.1 Special-Status Plants

A total of 28 plant species, 5 native (18%) and 22 non-native (82%) were recorded in the BSA during the biological field survey (Attachment C, Plant and Wildlife Species Observed). No special-status plant species were identified. The site was previously disturbed and contains mostly herbaceous weeds and non-native grasses characteristic of disturbed habitats, as well as ornamental trees and shrubs.

A total of 51 special-status plants have potential to occur in the vicinity of the BSA (Attachment B.1, Special-Status Plant Species Potential to Occur). However, due to the existing developed and disturbed nature of the site and largely residential setting of the surrounding lands, as well as the absence of suitable native communities and substrates that could support special-status plants, the occurrence of special-status plant species on the site is highly unlikely. Monterey cypress is a CRPR 1B.2 species present in the BSA but is considered ornamental and not protected outside of relict populations in Carmel.

3.2 Special-Status Wildlife

A total of seven (7) native wildlife species were detected during the biological field survey (Attachment C, Plant and Wildlife Species Observed). No bird nests (active or inactive), nor any nesting behavior such as courtship, nest-building, food deliveries, or territorial displays were observed during the survey because most birds in central California complete nesting by August 31. Suitable nesting habitat for numerous native bird species protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGC) occurs in the vicinity, however.

A total of 45 special-status wildlife species have potential to occur in the vicinity of the BSA (Attachment B.2, Special-Status Wildlife Species Potential to Occur). One (1) special-status species, monarch butterfly, was detected within the BSA during the field survey. One individual was detected flying within the BSA, but no signs of winter roosting were observed, nor are any large groves of commonly used trees such as eucalyptus present on the site. There is a known monarch butterfly overwintering site at Escalona Gulch, approximately 200 feet northeast of the site (CDFW 2024a; Occurrence No. 60). Butterflies were last observed at this location in November 2014. The remainder of these wildlife species are not expected or are considered to have a low potential to occur in the BSA due to the absence of suitable habitat conditions, existing developed and disturbed conditions, and associated urban land uses.

3.3 Potentially Jurisdictional Aquatic Resources

No potentially jurisdictional aquatic resources were identified within the BSA during the field survey. Apart from the Pacific Ocean, which directly borders the BSA but is not accessible due to the cliff at the edge of the site, the nearest aquatic resource is an intermittent stream approximately 0.07 miles northeast which enters the ocean at New Brighton State Beach and does not intersect the BSA (USFWS 2024b). The developed nature of the BSA and surrounding vicinity makes it highly unlikely that any aquatic species (e.g., salamanders or frogs) using the intermittent stream would access the BSA.



3.4 Sensitive Natural Communities

No natural communities considered sensitive by CDFW were identified within the BSA during the field survey (CDFW 2023b). The entire site is residential and developed. The City's General Plan identifies "Documented Monarch Butterfly Habitat" approximately 250 northeast of the site (Figure OSC-1, Natural Resources).

4 Conclusions

A Dudek biologist conducted a biological reconnaissance-level field surveys for the project on September 8, 2023, the results of which are summarized below.

- No special-status plant species were identified in the BSA.
- One monarch butterfly was identified in the BSA. Suitable trees for overwintering populations are limited within the BSA, so the site is unlikely to support overwintering monarchs.
- Due to the absence of suitable habitat conditions and existing developed and disturbed conditions on and
 in the vicinity of the project site, no special-status plant or wildlife species are expected to occur.
- The BSA offers potential nesting habitat for native migratory birds.
- No aquatic resources were identified in the BSA.
- No sensitive natural communities were identified on the BSA.
- The proposed project will have no effect on critical habitat since the project site is not located within a designated critical habitat unit (USFWS 2024a).

4.1 Recommendations

Although the site is unlikely to support special-status species, it provides potential nesting habitat for native birds and is near a known monarch butterfly overwintering site. The following best management practices and standard conditions of approval are recommended for any future redevelopment of the site.

Nesting and Migratory Birds

The BSA provides potential nesting habitat for a variety of migratory birds. In California, all native birds and active bird nests (with eggs or young) are protected by the federal MBTA and Sections 3503 and 3503.5 of the CFGC. If conducted during the nesting season (typically defined by CDFW as February 1 to August 31, with peak activity between April and June), Project activities could directly impact active nests in affected trees and ornamental shrubs within the BSA. Implementation of the following measure would avoid impacts on nesting and migratory birds.

Recommendation 1: Pre-construction Surveys for Nesting Birds. Within 14 days prior to any ground-disturbing activities or vegetation clearing during the nesting season (February 1 to August 31), a qualified biologist or biological monitor shall conduct a pre-construction nesting bird survey of all potential nesting habitat within the BSA, including a 100-foot buffer for passerine species and a 300-foot buffer for raptors. If there is a lapse between the survey time and initiation of work activities of 14 days or greater, the nesting bird survey shall be repeated. If active nests are found during the survey, work in that area shall stop and



a qualified biologist or biological monitor shall determine an appropriate no-work buffer around the nest based on the activity and species and mark the buffer using flagging, pin flags, lathe stakes, or similar marking method. No work shall occur within the buffer until the young have fledged or the nest(s) are no longer active, as determined by the biologist or biological monitor.

Monarch Butterfly

California overwintering populations of monarch butterfly are considered sensitive by CDFW and the species is also proposed for listing as threatened under the federal Endangered Species Act (89 FR 100662 et seq.). One monarch butterfly was detected during the Dudek reconnaissance survey. Overwintering monarch butterflies occur in forested groves along the Pacific coast between October and March. Such groves are limited within the BSA, but a few large trees are present in the northern portion of the project site, and more suitable overwintering habitat occurs in Escalona Gulch directly adjacent to the BSA.

Recommendation 2: Pre-construction Surveys for Monarch Butterfly. If ground-disturbing activities or vegetation clearing occurs during the monarch butterfly overwintering period (October to March), a qualified biologist or biological monitor shall conduct a pre-construction survey for clusters of overwintering monarchs within the BSA. All large trees shall be inspected for butterflies clustering in dense groups on branches, leaves, and trunks. If any overwintering monarch clusters are found during the survey, the qualified biologist or biological monitor shall establish a 100-foot no-construction buffer around the occupied tree and mark the buffer using flagging, pin flags, lathe stakes, or similar marking method. No construction activity shall occur within the buffer until the end of the overwintering period, with confirmation by the biologist that roosting has concluded.

After reviewing special-status species occurrences in the site vicinity and evaluating proposed project activities in the context of existing conditions and land uses, the proposed project is not expected to have significant impacts on special-status plant or wildlife species or other sensitive biological resources.

5 References

- 89 FR 100662–100716. Endangered and Threatened Wildlife and Plants; Threatened Species Status With Section 4(d) Rule for Monarch Butterfly and Designation of Critical Habitat. Proposed rule. December 12, 2024.
- CDFW (California Department of Fish and Wildlife). 2024a. California Natural Diversity Database. CDFW, Biogeographic Data Branch. Accessed October 2024. https://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp.
- CDFW. 2023b. "California Sensitive Natural Communities." June 1, 2023. Accessed October 2024. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153609&inline.
- CNPS (California Native Plant Society, Rare Plant Program). 2024. Inventory of Rare and Endangered Plants (online edition, v9.5). California Native Plant Society, Sacramento, California. Accessed October 2024. http://www.rareplants.cnps.org.



- ESRI. 2023. ArcGIS Field Maps (Version 22.3.0) [Mobile app]. App Store. https://apps.apple.com/us/app/arcgis-field-maps/id1515671684.
- USFWS. 2024a. IPaC (Information for Planning and Consultation) Search. Accessed October 31, 2024. http://www.fws.gov/data.
- USFWS. 2024b. National Wetlands Inventory Wetlands Mapper. Washington, D.C.: U.S. Department of the Interior, Fish and Wildlife Service. Accessed October 2024. https://www.fws.gov/program/national-wetlands-inventory/wetlands-mapper
- WRCC (Western Regional Climate Center). 2024. "Santa Cruz, California (047916)." Period of Record Monthly Climate Summary. Accessed October 2024. https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca7916.



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Attachment APhoto Log



Photo 1. Ornamental and ruderal vegetation adjacent to the house at the center of the BSA.



Photo 3. Coast live oak and willow at the northwest side of the BSA.

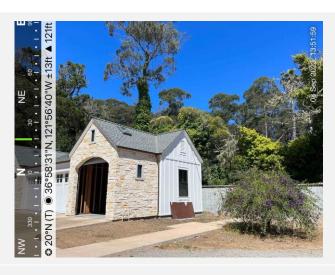


Photo 2. Northern boundary of the BSA garage and ornamental shrubs.



Photo 4. Shrub and coast live oak habitat on the north side of the BSA.

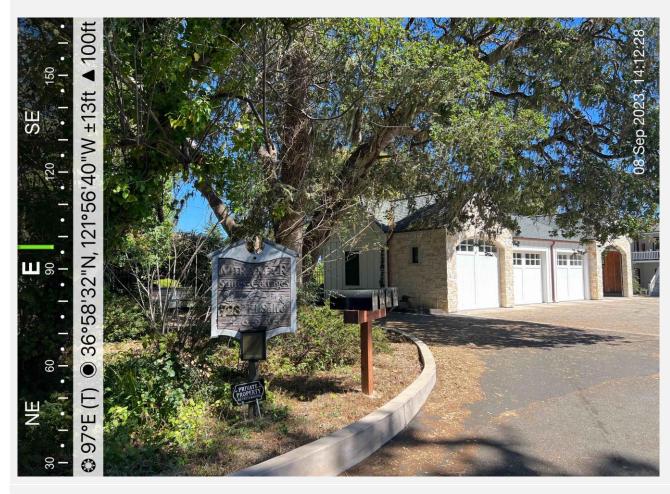


Photo 5. Large coast live oak on the northeast side of the BSA and view of developed portions of the project site.

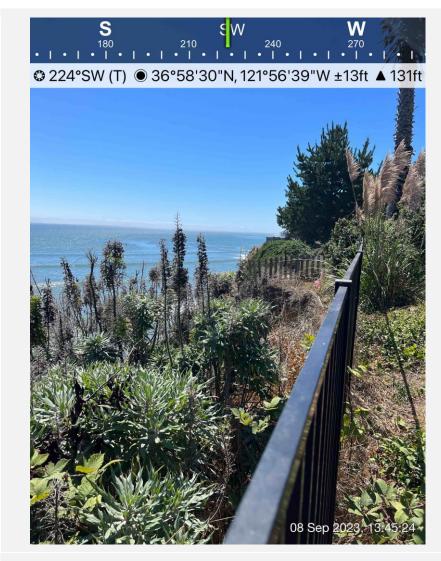


Photo 6. West side of the BSA with ornamental vegetation, facing southwest.

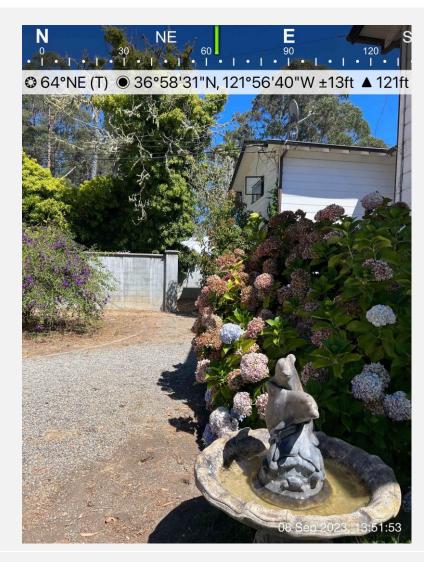


Photo 7. Ornamental vegetation and human structures on the northeast side of the BSA.

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Attachment B

Special-Status Plant and Wildlife Species Potential to Occur

Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
Amphibians				
Ambystoma californiense pop. 1	California tiger salamander - central California DPS	FT/ST, WL	Annual grassland, valley-foothill hardwood, and valley-foothill riparian habitats; vernal pools, other ephemeral pools, and (uncommonly) along stream courses and manmade pools if predatory fishes are absent.	Not expected to occur. The BSA does not support suitable habitat for this species.
Ambystoma macrodactylum croceum	Santa Cruz long- toed salamander	FE/FP, SE	Dense riparian vegetation, thick coastal scrub, and oak woodland.	Not expected to occur. The BSA does not support suitable habitat for this species.
Aneides flavipunctatus niger	Santa Cruz black salamander	None/SSC	Restricted to mesic forests in the fog belt of the outer Coast Range of San Mateo, Santa Cruz, and Santa Clara counties. Mixed deciduous and coniferous woodlands and coastal grasslands. Occurs in moist streamside microhabitats and is found under rocks, talus, and damp woody debris.	Not expected to occur. The BSA does not support suitable habitat for this species.
Dicamptodon ensatus	California giant salamander	None/SSC	Known from wet coastal forests and chaparral near streams and seeps from Mendocino Co. south to Monterey Co. and east to Napa Co. Aquatic larvae found in cold, clear streams, occasionally in lakes and ponds. Adults known from wet forests under rocks and logs near streams and lakes.	Not expected to occur. The BSA does not support suitable habitat for this species.
Rana boylii pop. 4	foothill yellow- legged frog - central coast DPS	FPT/SE	Rocky streams and rivers with open banks in forest, chaparral, and woodland	Not expected to occur. The BSA does not support suitable habitat for this species.
Rana draytonii	California red- legged frog	FT/SSC	Lowland streams, wetlands, riparian woodlands, livestock ponds; dense, shrubby or emergent vegetation associated with deep, still or slow-moving water; uses adjacent uplands.	Not expected to occur. The BSA does not support suitable habitat for this species.



Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
Reptiles				
Anniella pulchra	northern California legless lizard	None/SSC	Coastal dunes, stabilized dunes, beaches, dry washes, valley-foothill, chaparral, and scrubs; pine, oak, and riparian woodlands; associated with sparse vegetation and sandy or loose, loamy soils	Not expected to occur. The BSA does not support suitable habitat for this species. There are no CNDDB occurrences within 5 miles (CDFW 2024).
Actinemys marmorata	northwestern pond turtle	FPT/SSC	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter.	Not expected to occur. The BSA does not support suitable habitat for this species.
Thamnophis sirtalis tetrataenia	San Francisco garter snake	FE/FP, SE	Wide range of habitats including grasslands or wetlands adjacent to ponds, marshes, and sloughs	Not expected to occur. The BSA does not support suitable habitat for this species.
Birds				
Agelaius tricolor (nesting colony)	tricolored blackbird	BCC/SSC, ST	Nests near freshwater, emergent wetland with cattails or tules, but also in Himalayan blackberrry; forages in grasslands, woodland, and agriculture.	Not expected to nest or forage. The BSA does not support suitable habitat for this species.
Aquila chrysaetos (nesting & wintering)	golden eagle	None/FP, WL	Nests and winters in hilly, open/semi-open areas, including shrublands, grasslands, pastures, riparian areas, mountainous canyon land, open desert rimrock terrain; nests in large trees and on cliffs in open areas and forages in open habitats.	Not expected to nest or forage. The BSA does not support suitable habitat for this species.
Asio flammeus (nesting)	short-eared owl	BCC/SSC	Grassland, prairies, dunes, meadows, irrigated lands, and saline and freshwater emergent wetlands	Not expected to nest or forage. The BSA does not support suitable habitat for this species.
Athene cunicularia (burrow sites & some wintering sites)	burrowing owl	BCC/SSC, SC	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows	Not expected to nest or forage. The BSA does not support suitable habitat for this species.
Brachyramphus marmoratus (nesting)	marbled murrelet	FT/SE	Nests in old-growth coastal forests, forages in subtidal and pelagic habitats	Not expected to nest or forage. The BSA does not support suitable habitat for this species.



Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
Charadrius nivosus nivosus (nesting)	western snowy plover	FT, BCC/SSC	On coasts nests on sandy marine and estuarine shores; in the interior nests on sandy, barren or sparsely vegetated flats near saline or alkaline lakes, reservoirs, and ponds.	Not expected to nest or forage. The BSA does not support suitable habitat for this species.
Coccyzus americanus occidentalis (nesting)	western yellow- billed cuckoo	FT/SE	Nests in dense, wide riparian woodlands and forest with well-developed understories.	Not expected to nest or forage. The BSA is outside of the known range for this species.
Coturnicops noveboracensis	yellow rail	BCC/SSC	Nesting requires wet marsh/sedge meadows or coastal marshes with wet soil and shallow, standing water	Not expected to nest or forage. The BSA does not support suitable habitat for this species.
Cypseloides niger (nesting)	black swift	BCC/SSC	Nests in moist crevices, caves, and cliffs behind or adjacent to waterfalls in deep canyons; forages over a wide range of habitats	Not expected to nest or forage. The BSA does not support suitable habitat for this species.
Elanus leucurus (nesting)	white-tailed kite	None/FP	Nests in woodland, riparian, and individual trees near open lands; forages opportunistically in grassland, meadows, scrubs, agriculture, emergent wetland, savanna, and disturbed lands	Not expected to nest or forage. The BSA does not support suitable habitat for this species.
Empidonax traillii extimus (nesting)	southwestern willow flycatcher	FE/SE	Nests in dense riparian habitats along streams, reservoirs, or wetlands; uses variety of riparian and shrubland habitats during migration.	Not expected to nest or forage. The BSA is outside of the known range for this species.
Falco peregrinus anatum (nesting)	American peregrine falcon	FPD/SCD	Nests on cliffs, buildings, and bridges; forages in wetlands, riparian, meadows, croplands, especially where waterfowl are present	Not expected to nest or forage. The BSA does not support suitable habitat for this species.
Gymnogyps californianus	California condor	FE/FP, SE	Nests in rock formations, deep caves, and occasionally in cavities in giant sequoia trees (Sequoiadendron giganteus); forages in relatively open habitats where large animal carcasses can be detected.	Not expected to nest or forage. The BSA is outside of the known range for this species.
Laterallus jamaicensis coturniculus	California black rail	None/FP, ST	Tidal marshes, shallow freshwater margins, wet meadows, and flooded grassy vegetation; suitable habitats are often supplied by canal leakage in Sierra Nevada foothill populations	Not expected to nest or forage. The BSA does not support suitable habitat for this species.



Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
Rallus obsoletus obsoletus	California Ridgway's rail	FE/FP, SE	Coastal salt or brackish marshes.	Not expected to nest or forage. The BSA does not support suitable habitat for this species.
Riparia riparia (nesting)	bank swallow	None/ST	Nests in riparian, lacustrine, and coastal areas with vertical banks, bluffs, and cliffs with sandy soils; open country and water during migration	Not expected to nest or forage. The BSA does not support suitable habitat for this species.
Sternula antillarum browni (nesting colony)	California least tern	FE/FP, SE	Forages in shallow estuaries and lagoons; nests on sandy beaches or exposed tidal flats.	Not expected to nest or forage. The BSA is outside of the known range for this species.
Vireo bellii pusillus (nesting)	least Bell's vireo	FE/SE	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season.	Not expected to nest or forage. The BSA does not support suitable habitat for this species.
Fishes				
Eucyclogobius newberryi	tidewater goby	FE/SE	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County, to the mouth of the Smith River.	Not expected to occur. The BSA does not support suitable habitat for this species.
Oncorhynchus kisutch pop. 4	coho salmon - central California coast ESU	FE/SE	Streams and small freshwater tributaries during first half of life cycle and estuarine and marine waters of the Pacific Ocean during the second half of life cycle. Spawns in small streams with stable gravel substrates.	Not expected to occur. The BSA does not support suitable habitat for this species.
Oncorhynchus mykiss irideus pop. 10	southern steelhead - southern California DPS	FE/SCE	Clean, clear, cool, well-oxygenated streams; needs relatively deep pools in migration and gravelly substrate to spawn.	Not expected to occur. The BSA does not support suitable habitat for this species.
Oncorhynchus mykiss irideus pop. 9	steelhead - south- central California coast DPS	FT/SSC	Coastal basins from Redwood Creek south to the Gualala River, inclusive; does not include summer-run steelhead	Not expected to occur. The BSA does not support suitable habitat for this species.
Spirinchus thaleichthys	longfin smelt	FPE/ST	Aquatic, estuary.	Not expected to occur. The BSA does not support suitable habitat for this species.
Thaleichthys pacificus	eulachon	FT/None	Found in Klamath River, Mad River, and Redwood Creek and in small numbers in Smith River and Humboldt Bay tributaries.	Not expected to occur. The BSA does not support suitable habitat for this species.



Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
Mammals				
Antrozous pallidus	pallid bat	None/SSC	Grasslands, shrublands, woodlands, forests; most common in open, dry habitats with rocky outcrops for roosting, but also roosts in manmade structures and trees.	Unlikely to occur. The BSA supports marginal suitable habitat for this species. There is one CNDDB occurrence within 5 miles, a historic occurrence from 1928 (Occ. 258) (CDFW 2024).
Corynorhinus townsendii	Townsend's big- eared bat	None/SSC	Mesic habitats characterized by coniferous and deciduous forests and riparian habitat, but also xeric areas; roosts in limestone caves and lava tubes, man-made structures, and tunnels.	Unlikely to occur. The BSA supports marginal suitable habitat for this species. There is one CNDDB occurrences within 5 miles, a historic occurrence from 1945(Occ. 361) (CDFW 2024).
Neotoma fuscipes annectens	San Francisco dusky-footed woodrat	None/SSC	Forest habitats with a moderate canopy and moderate to dense understory.	Unlikely to occur. The BSA supports low quality habitat for this species which sometimes occurs near residential areas. There is one recent CNDDB occurrence within 5 miles, a 2014 occurrence approximately 4.7 miles north of the BSA (Occ. 15) (CDFW 2024).
Sorex ornatus salarius	Monterey shrew	None/SSC	Saltmarsh, riparian, wetlands, uplands of Salinas River Delta.	Not expected to occur. The BSA does not support suitable habitat for this species.
Taxidea taxus	American badger	None/SSC	Dry, open, treeless areas; grasslands, coastal scrub, agriculture, and pastures, especially with friable soils	Not expected to occur. The BSA does not support suitable habitat for this species.
Invertebrates				
Bombus crotchii	Crotch's bumble bee	None/SCE	Open grassland and scrub communities supporting suitable floral resources.	Not expected to occur. The BSA does not support suitable habitat for this species. There are no CNDDB occurrences within 5 miles of the BSA (CDFW 2024).
Bombus occidentalis	western bumble bee	None/SCE	Once common and widespread, species has declined precipitously from central California to southern British Columbia, perhaps from disease.	Unlikely to occur. This species no longer regularly occurs in central California. There are floral resources present within/adjacent to the BSA and a historic 1935 occurrence overlaps the BSA (CDFW 2024). There are 3 historic CNDDB occurrences within 5 miles, the most a



Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
				recent a 1992 occurrence approximately 2.5 miles away (Occ. 299) (CDFW 2024).
Cicindela ohlone	Ohlone tiger beetle	FE/None	Remnant native grasslands with California oatgrass (Danthonia californica) and purple needlegrass (Stipa pulchra) in Santa Cruz County.	Not expected to occur. The BSA does not support suitable habitat for this species.
Euphilotes enoptes smithi	Smith's blue butterfly	FE/None	Sand dunes, scrub, chaparral, grassland, and their ecotones	Not expected to occur. The BSA does not support suitable habitat for this species.
Polyphylla barbata	Mount Hermon (=barbate) June beetle	FE/None	Known only from sand hills in vicinity of Mount Hermon, Santa Cruz County	Not expected to occur. The BSA does not support suitable habitat for this species.
Trimerotropis infantilis	Zayante band- winged grasshopper	FE/None	Isolated sandstone deposits in the Santa Cruz Mountains (the Zayante Sand Hills ecosystem).	Not expected to occur. The BSA does not support suitable habitat for this species.
Danaus plexippus plexippus pop. 1	monarch - California overwintering population	FPT/None	Wind-protected tree groves with nectar sources and nearby water sources.	Known to occur. There are 13 CNDDB occurrences within 5 miles, the closest a 2014 occurrence that overlaps the BSA (Occ. 60) (CDFW 2024). This species was observed during Dudek's 2023 survey.

Status Legend Federal

BCC: USFWS Bird of Conservation Concern

FE: Federally listed as endangered

FPD: Federally proposed for delisting

FPT: Federally proposed for listing as threatened FPE: Federally proposed for listing as endangered

FT: Federally listed as threatened

State

FP: CDFW Fully Protected species

SCD: State candidate for delisting

SCE: State candidate for listing as endangered

SE: State listed as endangered

SSC: California Species of Special Concern

ST: State listed as threatened WL: California Watch List species



Scientific Name	Common Name	Status (Federal/State /CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Agrostis blasdalei	Blasdale's bent grass	None/None/1B. 2	Coastal bluff scrub, Coastal dunes, Coastal prairie/perennial rhizomatous herb/May-July/0-490	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Amsinckia lunaris	bent-flowered fiddleneck	None/None/1B. 2	Cismontane woodland, Coastal bluff scrub, Valley and foothill grassland/annual herb/Mar-June/10-1,640	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Aphyllon robbinsii	Robbins' broomrape	None/None/1B.	Coastal bluff scrub, Coastal dunes (possibly); Rocky, Sandy/annual herb (achlorophyllous)/Apr-July/0-330	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Arctostaphylos andersonii	Anderson's manzanita	None/None/1B. 2	Broadleafed upland forest, Chaparral, North Coast coniferous forest; Edges, Openings/perennial evergreen shrub/Nov-May/195-2,490	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Arctostaphylos hookeri ssp. hookeri	Hooker's manzanita	None/None/1B. 2	Chaparral, Cismontane woodland, Closed- cone coniferous forest, Coastal scrub; Sandy/perennial evergreen shrub/Jan- June/150-1,755	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Arctostaphylos pajaroensis	Pajaro manzanita	None/None/1B.	Chaparral (sandy)/perennial evergreen shrub/Dec-Mar/100-2,490	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Arctostaphylos silvicola	Bonny Doon manzanita	None/None/1B. 2	Chaparral, Closed-cone coniferous forest, Lower montane coniferous forest/perennial evergreen shrub/Jan– Mar/395–1,965	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Arenaria paludicola	marsh sandwort	FE/SE/1B.1	Marshes and swamps (brackish, freshwater); Openings, Sandy/perennial stoloniferous herb/May-Aug/10-560	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Astragalus agnicidus	Humboldt County milk-vetch	None/SE/1B.1	Broadleafed upland forest, North Coast coniferous forest; Disturbed areas, Openings, Roadsides (sometimes)/perennial herb/Apr–Sep/395–2,620	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.



Scientific Name	Common Name	Status (Federal/State /CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Calyptridium parryi var. hesseae	Santa Cruz Mountains pussypaws	None/None/1B.	Chaparral, Cismontane woodland; Gravelly (sometimes), Openings, Sandy (sometimes)/annual herb/May– Aug/1,000–5,015	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Carex comosa	bristly sedge	None/None/2B.	Coastal prairie, Marshes and swamps (lake margins), Valley and foothill grassland/perennial rhizomatous herb/May-Sep/0-2,050	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Carex saliniformis	deceiving sedge	None/None/1B. 2	Coastal prairie, Coastal scrub, Marshes and swamps (coastal salt), Meadows and seeps; Mesic/perennial rhizomatous herb/(May)June(July)/10-755	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Ceanothus ferrisiae	Coyote ceanothus	FE/None/1B.1	Chaparral, Coastal scrub, Valley and foothill grassland; Serpentinite/perennial evergreen shrub/Jan-May/395-1,505	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Centromadia parryi ssp. congdonii	Congdon's tarplant	None/None/1B.	Valley and foothill grassland (alkaline)/annual herb/May-Oct(Nov)/0-755	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Chorizanthe pungens var. hartwegiana	Ben Lomond spineflower	FE/None/1B.1	Lower montane coniferous forest (maritime ponderosa pine sandhills)/annual herb/Apr-July/295- 2,000	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Chorizanthe pungens var. pungens	Monterey spineflower	FT/None/1B.2	Chaparral (maritime), Cismontane woodland, Coastal dunes, Coastal scrub, Valley and foothill grassland; Sandy/annual herb/Apr-June(July-Aug)/10-1,475	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Chorizanthe robusta var. hartwegii	Scotts Valley spineflower	FE/None/1B.1	Meadows and seeps (sandy), Valley and foothill grassland (mudstone, Purisima outcrops)/annual herb/Apr–July/755–805	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Chorizanthe robusta var. robusta	robust spineflower	FE/None/1B.1	Chaparral (maritime), Cismontane woodland (openings), Coastal dunes, Coastal scrub; Gravelly (sometimes),	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.



Scientific Name	Common Name	Status (Federal/State /CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
			Sandy (sometimes)/annual herb/Apr- Sep/10-985	
Collinsia multicolor	San Francisco collinsia	None/None/1B. 2	Closed-cone coniferous forest, Coastal scrub; Serpentinite (sometimes)/annual herb/(Feb)Mar-May/100-900	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Cordylanthus rigidus ssp. littoralis	seaside bird's-beak	None/SE/1B.1	Chaparral (maritime), Cismontane woodland, Closed-cone coniferous forest, Coastal dunes, Coastal scrub; Disturbed areas (often), Sandy/annual herb (hemiparasitic)/Apr-Oct/0-1,685	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Dacryophyllum falcifolium	tear drop moss	None/None/1B.	North Coast coniferous forest; Carbonate/moss//165-900	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Eastwoodiella californica	swamp harebell	None/None/1B. 2	Bogs and fens, Closed-cone coniferous forest, Coastal prairie, Marshes and swamps (freshwater), Meadows and seeps, North Coast coniferous forest; Mesic/perennial rhizomatous herb/June–Oct/5–1,325	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Eriogonum nudum var. decurrens	Ben Lomond buckwheat	None/None/1B.	Chaparral, Cismontane woodland, Lower montane coniferous forest (maritime ponderosa pine sandhills); Sandy/perennial herb/June-Oct/165-2,620	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Erysimum ammophilum	sand-loving wallflower	None/None/1B. 2	Chaparral (maritime), Coastal dunes, Coastal scrub; Openings, Sandy/perennial herb/Feb-June(July- Aug)/0-195	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Erysimum teretifolium	Santa Cruz wallflower	FE/SE/1B.1	Chaparral, Lower montane coniferous forest/perennial herb/Mar-July/395-2,000	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.



Scientific Name	Common Name	Status (Federal/State /CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Fissidens pauperculus	minute pocket moss	None/None/1B. 2	North Coast coniferous forest (damp coastal soil)/moss//35-3,355	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Gilia tenuiflora ssp. arenaria	Monterey gilia	FE/ST/1B.2	Chaparral (maritime), Cismontane woodland, Coastal dunes, Coastal scrub; Openings, Sandy/annual herb/Apr- June/0-150	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Hesperocyparis abramsiana var. abramsiana	Santa Cruz cypress	FT/SE/1B.2	Chaparral, Closed-cone coniferous forest, Lower montane coniferous forest; Granitic (sometimes), Sandstone (sometimes)/perennial evergreen tree//920-2,620	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Hoita strobilina	Loma Prieta hoita	None/None/1B.	Chaparral, Cismontane woodland, Riparian woodland; Mesic, Serpentinite (usually)/perennial herb/May-July(Aug- Oct)/100-2,820	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Holocarpha macradenia	Santa Cruz tarplant	FT/SE/1B.1	Coastal prairie, Coastal scrub, Valley and foothill grassland; Clay (often), Sandy/annual herb/June-Oct/35-720	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Horkelia cuneata var. sericea	Kellogg's horkelia	None/None/1B.	Chaparral (maritime), Closed-cone coniferous forest, Coastal dunes, Coastal scrub; Gravelly (sometimes), Openings, Sandy (sometimes)/perennial herb/Apr–Sep/35–655	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Horkelia marinensis	Point Reyes horkelia	None/None/1B.	Coastal dunes, Coastal prairie, Coastal scrub; Sandy/perennial herb/May-Sep/15-2,475	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Lasthenia californica ssp. macrantha	perennial goldfields	None/None/1B. 2	Coastal bluff scrub, Coastal dunes, Coastal scrub/perennial herb/Jan- Nov/15-1,705	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Lessingia micradenia var. glabrata	smooth lessingia	None/None/1B. 2	Chaparral, Cismontane woodland, Valley and foothill grassland; Roadsides (often),	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.



Scientific Name	Common Name	Status (Federal/State /CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
			Serpentinite/annual herb/(Apr- June)July-Nov/395-1,375	
Malacothamnus arcuatus	arcuate bush- mallow	None/None/1B. 2	Chaparral, Cismontane woodland, Valley and foothill grassland; Roadsides (often), Serpentinite/annual herb/(Apr-June)July-Nov/395-1,375	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Microseris paludosa	marsh microseris	None/None/1B. 2	Cismontane woodland, Closed-cone coniferous forest, Coastal scrub, Valley and foothill grassland/perennial herb/Apr-June(July)/15-1,160	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Monardella sinuata ssp. nigrescens	northern curly- leaved monardella	None/None/1B. 2	Chaparral (SCR Co.), Coastal dunes, Coastal scrub, Lower montane coniferous forest (SCR Co., ponderosa pine sandhills); Sandy/annual herb/(Apr)May– July(Aug-Sep)/0-985	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Monolopia gracilens	woodland woollythreads	None/None/1B. 2	Broadleafed upland forest (openings), Chaparral (openings), Cismontane woodland, North Coast coniferous forest (openings), Valley and foothill grassland; Serpentinite/annual herb/(Feb)Mar– July/330–3,935	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Pedicularis dudleyi	Dudley's lousewort	None/SR/1B.2	Chaparral (maritime), Cismontane woodland, North Coast coniferous forest, Valley and foothill grassland/perennial herb/Apr-June/195-2,950	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Penstemon rattanii var. kleei	Santa Cruz Mountains beardtongue	None/None/1B. 2	Chaparral, Lower montane coniferous forest, North Coast coniferous forest/perennial herb/May-June/1,310-3,605	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Pentachaeta bellidiflora	white-rayed pentachaeta	FE/SE/1B.1	Cismontane woodland, Valley and foothill grassland (often serpentinite)/annual herb/Mar–May/115–2,030	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.



Scientific Name	Common Name	Status (Federal/State /CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Piperia candida	white-flowered rein orchid	None/None/1B. 2	Broadleafed upland forest, Lower montane coniferous forest, North Coast coniferous forest; Serpentinite (sometimes)/perennial herb/(Mar-Apr)May-Sep/100-4,295	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Piperia yadonii	Yadon's rein orchid	FE/None/1B.1	Chaparral (maritime), Closed-cone coniferous forest, Coastal bluff scrub; Sandy/perennial herb/(Feb)May–Aug/35–1,670	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Plagiobothrys chorisianus var. chorisianus	Choris' popcornflower	None/None/1B.	Chaparral, Coastal prairie, Coastal scrub; Mesic/annual herb/Mar-June/10-525	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Plagiobothrys diffusus	San Francisco popcornflower	None/SE/1B.1	Coastal prairie, Valley and foothill grassland/annual herb/Mar-June/195-1,180	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Polygonum hickmanii	Scotts Valley polygonum	FE/SE/1B.1	Valley and foothill grassland (mudstone, sandstone)/annual herb/May-Aug/690-820	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Senecio aphanactis	chaparral ragwort	None/None/2B. 2	Chaparral, Cismontane woodland, Coastal scrub; Alkaline (sometimes)/annual herb/Jan- Apr(May)/50-2,620	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Stebbinsoseris decipiens	Santa Cruz microseris	None/None/1B. 2	Broadleafed upland forest, Chaparral, Closed-cone coniferous forest, Coastal prairie, Coastal scrub, Valley and foothill grassland; Openings, Serpentinite (sometimes)/annual herb/Apr-May/35- 1,640	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Trifolium buckwestiorum	Santa Cruz clover	None/None/1B.	Broadleafed upland forest, Cismontane woodland, Coastal prairie; Gravelly/annual herb/Apr-Oct/115-2,000	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.
Trifolium hydrophilum	saline clover	None/None/1B.	Marshes and swamps, Valley and foothill grassland (mesic, alkaline), Vernal pools/annual herb/Apr-June/0-985	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.



Scientific Name	Common Name	Status (Federal/State /CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Trifolium polyodon	Pacific Grove clover	None/SR/1B.1	Closed-cone coniferous forest, Coastal prairie, Meadows and seeps, Valley and foothill grassland; Granitic (sometimes), Mesic/annual herb/Apr-June(July)/15-1,390	Not expected to occur. The BSA is developed and does not contain suitable habitat for this species.

Status Legend

Federal

- FE: Federally listed as endangered
- FT: Federally listed as threatened
- FC: Federal Candidate for listing
- FD: Federally delisted

State

- SE: State listed as endangered
- ST: State listed as threatened
- SC: State Candidate for listing
- SR: State Rare

CRPR: California Rare Plant Rank

- 1A: Plants presumed extirpated in California and either rare or extinct elsewhere
- 1B: Plants rare, threatened, or endangered in California and elsewhere
- 2A: Plants presumed extirpated in California but common elsewhere
- 2B: Plants rare, threatened, or endangered in California but more common elsewhere
- 3: Review List: Plants about which more information is needed
- 4: Watch List: Plants of limited distribution

Threat Rank

- .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)



Attachment C

Plant and Wildlife Species Observed

Plant Species

Eudicots

ANACARDIACEAE—SUMAC OR CASHEW FAMILY

Toxicodendron diversilobum—poison oak

ARALIACEAE—GINSENG FAMILY

Hedera helix—English ivy*

ASTERACEAE—SUNFLOWER FAMILY

Delairea odorata—Cape-ivy*

Hypochaeris glabra—smooth cat's ear*

Taraxacum officinale—common dandelion*

BORAGINACEAE—BORAGE FAMILY

Echium candicans—pride of Madeira*

CARYOPHYLLACEAE—PINK FAMILY

Spergularia rubra—red sandspurry*

CONVOLVULACEAE—MORNING-GLORY FAMILY

Convolvulus arvensis—field bindweed*

ESCALLONIACEAE—

Escallonia rubra—redclaws

FABACEAE—LEGUME FAMILY

Acacia sp. -no common name*

Lycianthes rantonnetii—blue potatobush*

FAGACEAE—OAK FAMILY

Quercus agrifolia—coast live oak

MALVACEAE—MALLOW FAMILY

Malva parviflora—cheeseweed mallow*

Modiola caroliniana—Carolina bristlemallow*

MYRTACEAE—MYRTLE FAMILY

Eucalyptus globulus—Tasmanian bluegum*

OLEACEAE—OLIVE FAMILY

Jasminum officinale—common jasmine*



ROSACEAE—ROSE FAMILY

Cotoneaster pannosus—silverleaf cotoneaster*
Rubus armeniacus—Himalayan blackberry*

SALICACEAE—WILLOW FAMILY

Salix lasiolepis—arroyo willow

Gymnosperms and Gnetophytes

CUPRESSACEAE—CYPRESS FAMILY

Hesperocyparis macrocarpa—Monterey cypress

Monocots

AMARYLLIDACEAE—AMARYLLIS FAMILY

Amaryllis belladonna-belladonna lily*

ARACEAE—ARUM FAMILY

Arum italicum—Italian lords and ladies*

POACEAE-GRASS FAMILY

Avena fatua—wild oat*

Bromus hordeaceus—soft brome*

Cortaderia selloana—Uruguayan pampas grass*

Elymus caput-medusae—medusahead*

Festuca perennis—perennial rye grass*

Hordeum murinum—mouse barley*



Wildlife Species

Birds

FINCHES

FRINGILLIDAE-FRINGILLINE & CARDUELINE FINCHES & ALLIES

Spinus psaltria—lesser goldfinch

FLYCATCHERS

TYRANNIDAE—TYRANT FLYCATCHERS

Sayornis nigricans-black phoebe

HUMMINGBIRDS

TROCHILIDAE—HUMMINGBIRDS

Calypte anna-Anna's hummingbird

TERNS & GULLS

GULLS, TERNS, & SKIMMERS

gull sp.

NEW WORLD SPARROWS

PASSERELLIDAE—NEW WORLD SPARROWS

Junco hyemalis—dark-eyed junco

Melospiza melodia—song sparrow

Invertebrates

BUTTERFLIES

NYMPHALIDAE—BRUSH-FOOTED BUTTERFLIES

Danaus plexippus-monarch

signifies introduced (non-native) species