

Site Assessment Report

Scotts Valley Hotel

SCOTTS VALLEY, SANTA CRUZ COUNTY, CALIFORNIA

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SECTION 1: Environmental Setting

A. Project Location

The approximately 8.7-acre site is located southeast of Highway 17 and Santa's Village Road, west of Orchard Run, and northeast of Granite Creek Road within Scott's Valley, Santa Cruz County, California (37.065605, -121.997876). The general project location is depicted in figure 1 and the project site and vicinity is depicted in figure 2.

B. Surrounding Land Use

On the northern boundary of the project site is the Santa Cruz Highway (HWY 17). Residential properties have been constructed at a fairly high density north and west of Carbonera Creek. Lower density housing and undeveloped open space exists to the east and southeast of Carbonera Creek. The Vine Hill Elementary School and Siltanen Community Park are northeast of the project area.

C. Study Area Topography and Hydrology

The project site is located within the Carbonera Creek watershed, which is located within the larger San Lorenzo watershed. The average annual precipitation in vicinity of the project site is 85 – 120 centimeters per year. As is typical in California's Mediterranean environment most of the rainfall occurs during the winter between November and April. The only observed aquatic feature on the project site is Carbonera Creek, an intermittent stream with reduced flows during the summer dry months. Carbonera Creek appears as a blue line feature on the USGS 7.5 minute quadrangle. The creek is located within the eastern portion of the project area, eventually flowing south to the San Lorenzo River; approximately 600-ft of Carbonera Creek flows within the project boundary. In total the creek is 10.2 miles in length and originates in the Santa Cruz Mountains. The project site slopes slightly from northeast to southwest

toward Carbonera Creek. Elevations within the Project Area range from approximately 690 feet above mean sea level (AMSL) within the northeastern portion of the Project Area to 650 feet AMSL within the southwestern portion of the Project Area.

D. Study Area Soil

The Project Area is underlain with four soil types, Bonnydoon loam, 5 to 30 percent slopes, Lompico variant loam, 5 to 30 percent slopes, Soquel loam, 0 to 2 percent slopes, and Soquel loam, 2 to 9 percent slopes. Soquel loam, 0 to 2 percent slopes is the most prominent soil type, comprising a large portion of un-vegetated land. Soquel loam, 0 to 2 percent slopes, and Soquel loam, 2 to 9 percent slopes, are both moderately drained soil types. Bonnydoon loam, 5 to 30 percent slopes, and Lompico variant loam, 5 to 30 percent slopes, are somewhat excessively drained to well drained (figure 3). Thus, hydric soils are unlikely to occur within the project site.

For a full description of soil components, please see the attached National Resources Conservation Service Custom Soil Resource for Santa Cruz County, California (Attachment A – NRCS Soils Report).

Approximately 4.2 acres of the site appear to have been previously graded (figure 4) and it is unclear how much of the native soils within this portion of the site remain intact (there is clear evidence of soil import to the site).

E. Vegetation Types

Vegetation in Scotts Valley, California is consistent with that found in a mountain/alluvial environment. There are corridors of riparian vegetation immediately adjacent to watercourses within the valley floors. Hillsides adjacent to the watercourses support redwood stands.

A portion of the project area is highly disturbed by a previous grading effort, this area is now dominated by non-native weedy grassland. The graded area has been flattened (and possibly compacted), and drains to the southern edge of the clearing where a large storm drain structure exists (Attachment B – Representative Site Photographs). Typical grassland community species have established (or were seeded) within the disturbed area, dominated by non-native grasses including seaside barley (*Hordeum marinum*), wild oat (*Avena fatua*), scattered patches of harding grass (*Phalaris aquatica*), sparse chufa (*Cyperus esculentus*), lambs ear (*Stachys byzantina*), Canada horse weed (*Conyza canadensis*), rose clover (*Trifolium hirtum*), and upright yellow wood-sorrel (*Oxalis stricta*).

There is a corridor of riparian vegetation along Carbonera Creek. Observed plant species within the riparian under-story community included: Himalayan blackberry (*Rubus armeniacus*), field horsetail (*Equisetum arvense*), pacific poison-oak (*Toxicodendron diversilobum*), english ivy (*Hedera helix*), and common periwinkle (*Vinca minor*). At the interface with the graded area the understory consists primarily of blackberry and coyote brush (*Baccharis pilularis*).

Observed over-story vegetation within the project area consists of California-laurel (*Umbellularia californica*), California redwood (*Sequoia sempervirens*), Fromont's cottonwood (*Populus fremontii*), silver wattle (*Acacia dealbata*), and coast live oak (*Quercus agrifolia*).

SECTION 2: Methods

A. Site Visit

The project site was visited by Johnson Marigot LLC personnel, Cameron Johnson and Janelle Lesson, on December 5, 2014. The day of the site visit the weather conditions were overcast with light rain – (.35-inches recorded by National Oceanic and Atmospheric Administration at the Scott's Valley 1.7 SW station). Approximately 11.41-inches had fallen in the two-week period preceding the site visit. The entire site was walked and observations were made regarding the site conditions. Notes were taken listing observed plant communities and presence of aquatic features.

Observations of plant communities was used in conjunction with documented occurrences of listed species within the project site vicinity to create a preliminary assessment of the likelihood of occurrences of special status species on the project site and to determine likely regulatory requirements for future development of the site.

Prior to completion of the site visit, the most recent version of the California Department of Fish and Wildlife's Natural Diversity Database, RareFind 3.1 application (CNDDDB 2014) for historic and recent records of special-status plant and animal species (that is, threatened, endangered, rare) known to occur in the region of the project site was reviewed. In addition, the 2014 electronic version of the California Native Plant Society's (CNPS) *Inventory of Rare and Endangered Plants of California* (CNPS 2001) for records of special-status plants known in the region of the project site was also reviewed. All special-status species records were compiled in tables presented below. Staff examined all known record locations and any available biological survey reports to determine if

special-status species would be likely to occur on the project site or within an area of effect of the development project.

B. Study Limits

It should be noted that this is a preliminary assessment based on a single site visit. While all efforts have been made to complete a thorough review of all existing environmental documentation and staff knowledge of the local environment, this report should be appropriately considered as a preliminary review document and further environmental documentation may be warranted. The extent of field investigation included the study site only.

SECTION 3: Results

Specific information is provided below on special status species that are documented by the California Natural Diversity Database (CNDDDB) to occur within a 5-mile radius of the project site. Additional special status species may occur regionally but were determined not likely to occur on the study site, as they have not been documented locally. Many of the species included in this evaluation have not been given formal state or federal protective status. These additional species are included in Attachment C – Special Status Species Table.

A. Federal and State listed plant species

The following species are listed and protected pursuant to the Federal- and / or State Endangered Species Acts. Federal (figure 5) and state (figure 6) listed plant species are documented (by the CNDDDB) to occur within a 5-mile radius of the project site.

- Federally and state endangered white-rayed pentachaeta (*Pentachaeta bellidiflora*)
- Federally and state endangered Scotts Valley polygonum (*Polygonum hickmanii*)
- Federally endangered Scotts Valley spineflower (*Chorizanthe robusta* var. *hartwegii*)
- State endangered San Francisco popcornflower (*Plagiobothrys diffusus*)
- Federally and state endangered Santa Cruz wallflower (*Erysimum teretifolium*)
- Federally endangered Ben Lomond spineflower (*Chorizanthe pungens* var. *hartwegiana*)
- Federally threatened and state endangered Santa Cruz tarweed (*Holocarpha macradenia*)
- Federally and state endangered marsh sandwort (*Arenaria paludicola*)
- Federally and state endangered Santa Cruz cypress (*Hesperocyparis abramsiana* var. *abramsiana*)

B. Federal and State listed animal species

The following federal and / or state listed animal species are documented to occur within a 5-mile radius of the project site.

- Federally endangered Zayante band-winged grasshopper (*Trimerotropis infantilis*) – known to occur within the project area
- Federally endangered ohlone tiger beetle (*Cicindela ohlone*)
- State endangered coho salmon (*Oncorhynchus kisutch*), Central California Coast ESU
- Federally threatened steelhead (*Oncorhynchus mykiss irideus*)
- State and Federally threatened California red-legged frog (*Rana draytonii*)
- Federally endangered Mount Hermon June Beetle (*Polyphylla barbata*)
- Federally endangered Smith’s Blue Butterfly (*Euphilotes enoptes smithi*)

C. Species Occurrence and Natural History Information

1. White-rayed pentachaeta (*Pentachaeta bellidiflora*)

The federally and state endangered white-rayed pentachaeta is a small annual plant of the aster family. The plant bares numerous yellow disk flowers with 8 to 16 white to purple ray petals and narrow, linear leaves from the stems. The flower blooms from March to May and is a known food source for the federally threatened bay checkerspot butterfly (*Euphydryas edithabayensis*). This species is usually associated with serpentine soils ranging from Marin County to Santa Cruz County.

The white-rayed pentachaeta is documented to occur in the vicinity of Santa Cruz, and appears on the CNDDDB. The single occurrence was recorded from 1933, and is noted as “along beach cliffs near Santa Cruz. Exact location unknown.” The white-rayed pentachaeta is known from fewer than twenty occurrences; historical occurrences have been lost to development. The rarity of this species in combination with habitat restrictions makes these plants very unlikely to occur on the project site.

2. Scotts Valley polygonum (*Polygonum hickmanii*)

The federally and state endangered Scotts Valley polygonum is a one- to two-inch tall annual plant of the buckwheat family. Single stemmed, or profusely branching near the base, the species bares single white flowers in the axils of the bracteal leaves. This species is found on gently sloping to nearly level fine-textured soils over outcrops of Santa Cruz mudstone and Purisma sandstone at elevations ranging from 700 to 800 feet above mean sea level (AMSL). It is commonly found with the federally endangered Scott's Valley spineflower (*Chorizanthe robusta* var. *hartwegii*).

The Scotts Valley polygonum is documented to occur 0.2 miles to the northwest of the project site. All documented occurrences of this species occur within a 1.5-mile radius of the project site. The Scotts Valley polygonum is only known from Scotts Valley. Fewer than 3500 individuals were documented as of 1998. Although rare, the close proximity to the project site makes observance of this species possible.

3. Scotts Valley spineflower (*Chorizanthe robusta* var. *hartwegii*)

The federally endangered Scott's Valley spineflower (*Chorizanthe robusta* var. *hartwegii*) is an annual species within the buckwheat family. This species bares leaves in a basal rosette and rose-colored inflorescences within a dense cyme. Common habitat of Scott's Valley spineflower consists of margins of barren or bryophyte dominated patches of sandstone or Santa Cruz mudstone, common to, and often found growing with the Scott's Valley polygonum. The Scotts Valley spineflower can be found in meadows with sandy seeps and in valley and foothill grassland (mudstone and Purisma outcrops). The species flowers from April to July.

The Scotts Valley spineflower is documented to occur 0.2 miles northwest of the site. The nearest occurrence of the species was documented in

1993. All documented occurrences of the species are located within a 1.5-mile radius of the project site. Although the species is restricted in habitat, its relatively recent documentation and close proximity to makes observance of this species possible.

4. San Francisco popcornflower (*Plagiobothrys diffusus*)

The state endangered San Francisco popcornflower is an annual herb that inhabits sparsely vegetated sites in coastal prairie or serpentine bunchgrass grasslands. This species is characterized by alternating leaves on an erect stem supporting loose white or white with yellow inflorescence. Generally San Francisco popcornflower inhabits coastal prairie, valley and foothill grasslands. This species flowers March to June.

The San Francisco popcornflower is documented to occur 0.3 miles east of the site. There is a single documentation of the species dating to 1993; however the population was documented in grazed, disturbed grassland. The relatively recent documentation, reasonably similar habitat type, and close proximity to the site make observance of this species possible.

5. Santa Cruz wallflower (*Erysimum teretifolium*)

The federally and state endangered Santa Cruz wallflower is a perennial herb ranging from 15 centimeters to nearly a meter in height. Few dark green leaves grow along the un-branched dark reddish-purple stem. The species bears clusters flowers with bright to dark yellow or orange petals. Habitat for this species includes chaparral and lower montane coniferous forests. The species blooms between March and July.

The Santa Cruz wallflower is frequently documented within the 5-mile radius of the project site. The nearest occurrence is located 1-mile from the project site. Most occurrences were documented in the mid-1980's. Notes indicate the observed populations were declining. Given the

frequent documentation of the species surrounding the project site, it is possible that this species could be observed near or on the site.

6. Ben Lomond spineflower (*Chorizanthe pungens* var. *hartwegiana*)

The federally endangered Ben Lomond spineflower is an annual herb characterized by maroon flowers in a dense cyme. The Ben Lomond spineflower is restricted to lower montane coniferous forest (maritime ponderosa pine sandhills). The species flowers from April to July.

The Ben Lomond spineflower is documented to occur just beyond the project boundary to the southeast. According to the documentation the exact location of the observance is unknown. This species is only known from sandhill parklands in the Santa Cruz Mountains. The species is threatened by sand mining, development, and non-native plants. The nearest documentation of the species is from 1936. Given the rarity of this species, the date of the documentation, and habitat requirements it is unlikely this species would be observed on the project site.

7. Santa Cruz tarweed (*Holocarpha macradenia*)

The federally threatened and state endangered Santa Cruz tarweed is an annual herb that blooms June through October. It is generally found inhabiting coastal prairie, Coastal scrub, and on Valley and foothill grasslands.

The Santa Cruz tarweed is documented to occur 4.5 miles from the project site. It is believed that the last remaining natural population in the S.F. Bay Area was extirpated by development in 1993. Given the distance between the documented occurrence and the project site and the extreme rarity of the species, it is unlikely the Santa Cruz tarweed will be observed on the project site.

8. Marsh sandwort (*Arenaria paludicola*)

The federally and state endangered marsh sandwort is a perennial stoloniferous herb that occurs in brackish or freshwater marshes and swamps. The plant blooms in May through August.

The marsh sandwort is documented 2.5 miles beyond the project site. According to the 1976 documentation the population was found in a swampy running water of a peat bog. Given the distance between the documented occurrence and the project site and the clear requirement for a perennial wetland (which was not observed on the site), this species is unlikely to be observed on the project site

9. Santa Cruz cypress (*Hesperocyparis abramsiana* var *abramsiana*)

The federally and state endangered Santa Cruz cypress is a perennial evergreen tree that occurs on sandstone or granitic soils in closed-cone coniferous forest, chaparral, or lower montane coniferous forest.

The Santa Cruz cypress was documented to occur 3-miles from the project site in 1940. Given the habitat restrictions of the species and the date of the nearest documentation, it is unlikely this species would be encountered on the project site.

10. Zayante band-winged grasshopper (*Trimerotropis infantilis*)

The federally endangered Zayante band-winged grasshopper inhabits a small area of the Santa Cruz Mountains characterized by sandy substrate with sparse vegetation. The Zayante band-winged grasshopper is a fairly small insect with an overall tan to gray coloration, darker banding on the forewings, pale yellow on the hind wings, and blue on the hind legs. This species is herbivorous and females are known to lay eggs within plants roots. Adults are primarily active from May to August.

The nearest occurrence of the Zayante band-winged grasshopper was documented in 2006 at the Hanson aggregate quarry. The population was monitored and remained viable as of 2006. All documented occurrences of the species occur 3-4 miles west of the project site, in the Santa Cruz Mountains. Generally, the Zayante band-winged grasshopper appears to be restricted to Mountainous areas and does not occur in the valley bottoms. Given the distance from the project site and the restriction to Mountains, it is possible, but unlikely the species will be observed on the project site.

11. Ohlone tiger beetle (*Cicindela ohlone*)

The federally endangered Ohlone tiger beetle are diurnal, predatory insects that prey on small arthropods. Their metallic green coloration, stripes, and spots can identify the species. The species is found within costal terraces characterized by patches of native grassland habitat underlain with Watsonville loam or Bonnydoon soil types. Barren areas within this habitat are used for the construction of larval burrows.

The Ohlone tiger beetle is documented to occur 0.25 miles from the project site. According to the documentation this population was monitored in 2000, 2003, 2004, and 2006. The population seems to be relatively large and stable. Further the population was using bare patches of ground to establish larval burrows. Given the close proximity of the documented occurrence, the recent monitoring of the population, and the use of barren flat areas, it is possible the Ohlone tiger beetle could be encountered on the project site. The grassland area of the project site is however, significantly disturbed (evidence of past grading), has evidence of imported soils, and is not dominated by native grassland species.

12. Coho salmon (*Oncorhynchus kisutch*), Central California Coast ESU

The state endangered coho salmon (*Oncorhynchus kisutch*) are dark with reddish-maroon coloration on the sides during spawning in fresh water

rivers. In their freshwater stages, this species feeds on plankton and insects. The species will spend approximately the first half of their lives within freshwater habitats consisting of stable gravel substrates. The remainder of their lifecycle is spent in marine habitat, only returning to freshwater to spawn and die.

Anadromous fish species can access approximately 14.3 miles (23.0 km) of stream between the estuary and natural upstream barriers of the main stem and the three main tributaries, Little, Big, and Mill creeks. Coho have also been documented in Scott Creek. In 2005 Coho were also observed in Laguna and Bean Creeks. Coho have been known to spawn in Carbonera Creek downstream of the Santa's Village. It is likely that Coho salmon occur in Carbonera Creek during the appropriate time of year.

13. Steelhead (*Oncorhynchus mykiss irideus*), Central CA Coast ESU

The federally threatened steelhead are dark-olive in color, shading to silvery-white on the underside with a heavily speckled body with a pink-red stripe along their sides. Adults migrate into gravel-bottomed, fast-flowing, well-oxygenated freshwater rivers and streams to spawn. This species feeds on zooplankton, aquatic and terrestrial insects, fish eggs, and small fish.

Like Coho salmon, steelhead is known to use the San Lorenzo watershed for migration and spawning successfully. There are no known barriers to fish migration as far as the Bean Creek tributary to the Carbonera Creek. It is likely that Steelhead would be observed within the portion of Carbonera Creek on the project site during the appropriate time of year.

14. California red-legged frog (CRLF, *Rana draytonii*)

The CRLF is a highly aquatic species typically found in cold-water ponds and stream pools. Ideal breeding habitat includes still water with depths

exceeding 0.7 meters and overhanging vegetation such as willows, as well as submergent and emergent vegetation created by downed logs and exposed root masses. The CRLF have been found in less than ideal habitats and a combination of these factors is more important than an individual habitat component. This species of frog breeds along aquatic vegetation in deep, slow water (<2% gradient) environments during the months of November through March in most of their current range. As adults, they may also utilize moist, sheltered, terrestrial habitats near streams.

CRLF was documented in 2002, by the City of Santa Cruz, 2.6-miles west of the project site. Carbonera Creek is not known to maintain populations of CRLF, however it does present suitable habitat requirements. It is therefore possible that CRLF could be encountered in Carbonera Creek.

15. Mount Hermon June Beetle (*Polyphylla barbata*)

The Mount Hermon June Beetle federally listed as endangered. The beetle is generally associated with sandy soils. It is thought that the Zayante Sand Hills formation, may be the primary, if not the only habitat for the beetle. Most observed populations tend to be located near sand mines.

The beetle has been documented to occur 1.8-miles from the project site in 1993. Given the species is largely restricted to Zayante Sand Hills formation and the distance from the site to the documentation, it is unlikely the beetle would be encountered on the project site.

16. Smith's Blue Butterfly (*Euphilotes enoptes smithi*)

The Smith's Blue Butterfly is associated with coastal dune, coastal scrub, chaparral, and grassland habitats. They spend their entire lives in association with two buckwheat plants in the genus *Eriogonum*.

The nearest occurrence of Smith's blue butterfly is located 3.14 miles from the project site and was documented in 1983. Presence of the Smith's Blue Butterfly can be determined based on a survey for the host plant.

17. Marbled murrelet (*Brachyramphus mamoratus*)

The marbled murrelet is a small Pacific seabird belonging to the family Alcidae. They are fast fliers with rapid wingbeats and short wings. Males and females have sooty-brown upperparts with dark bars. Underparts are light, mottled brown. Winter adults have brownish-gray upperparts and white scapulars. The plumage of fledged young is similar to that of adults in winter. Chicks are downy and tan colored with dark speckling. They generally nest in old-growth forests, characterized by large trees, multiple canopy layers, and moderate to high canopy closure. In California, nests are typically found in coastal redwood and Douglas-fir forests. These forests are located close enough to the marine environment for the birds to fly to and from nest sites.

The initial site survey did not identify any nest sites, however the visit was conducted outside of the expected nesting season, and coastal redwood are present on the site. Marble murrelets have not been recorded to occur within 5 miles of the study site, and are unlikely to occur.

D. Critical Habitat

There are five species with designated critical habitat within 5-mile radius of the project site (figure 7). Marbled murrelet critical habitat has been designated approximately 2-miles to the southwest; however there are no documented observations of this species within a 5-mile radius of the project site. Santa Cruz tarplant critical habitat has been designated 2.25-miles southwest of the project site. Scott's Valley polygonum critical habitat has been designated on the property immediately to the east of Cabonera Creek. Zayante band-winged grasshopper is located 1.2-miles to the west of the project site. There is also

designated critical habitat for steelhead downstream of Carbonera Creek, although the designation does not extend into Carbonera Creek to the study area.

E. Bird Species with Additional Regulatory Protection

All raptors or birds of prey (owls, hawks, falcons), including common species, and their nests, are protected from take pursuant to the Fish and Game Code of California Section 3503.5, as well as the Federal Migratory Bird Treaty Act. Although most are not listed pursuant to either the State or federal Endangered Species Acts, the raptor species described below may be considered during the CEQA review process.

Tree nesting special-status raptor species that may occur on-site are white-tailed kite (*Elanus leucurus*, Fish and Game Code §3511- fully protected and USFWS bird of management concern) and Cooper's hawk (*Accipiter cooperii*, CDFG species of special concern). In addition to these special-status raptors, other tree nesting raptors, such as red-shouldered hawk (*Buteo lineatus*), red-tailed hawk (*Buteo jamaicensis*), and great-horned owl (*Bubo virginianus*) also have potential to nest within the project area. The corridor adjacent to Carbonera Creek may provide nesting habitat for multiple song birds.

SECTION 4: Conclusions and Regulatory Recommendations

A. Recommended additional surveys

Based on the information provided above collected both by direct observation the day of the site visit and based on a review of available information the following further studies are recommended:

1. Due to the observance of hydrophytic plant species within the project site there are potentially areas meeting the U.S. Army Corps of Engineers

three parameter wetland within the project vicinity. One area in particular located within the central to eastern portion of the (graded) project area could potentially be considered a water of the U.S. In addition, Carbonera Creek, a tributary to San Lorenzo River, crosses the southeastern portion of the project site. For these reasons, a Jurisdictional Determination Report is recommended.

The report should describe the extent and location of waters of the United States subject to the U.S. Army Corps of Engineers (USACE) jurisdiction pursuant to Section 404 of the Clean Water Act (CWA) (33 U.S.C. Section 1344) and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. Section 403). The report should summarize all potentially jurisdictional waters of the U.S., including wetlands, and should follow the methods described in the *U.S. Army Corps of Engineers Wetlands Delineation Manual* (USACE 1987), supplemented with guidance as directed by the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008). Maps presented should also meet standard requirements as outlined in the August 6, 2012, *Final Map and Drawing Standards for the South Pacific Division Regulatory Program*.

2. Rare plant surveys should be conducted on the project site. The rare plant surveys should specifically focus on the possibility for occurrence of Scotts Valley polygonum, Scotts Valley spineflower, San Francisco popcornflower, and Santa Cruz wallflower. In addition, during rare plant surveys information on the host plant for the Smith's blue butterfly should be collected. Further, characterization of the plant composition within the disturbed (graded) area of the site will serve to characterize whether this part of the site may represent habitat for the Ohlone tiger beetle.
3. A California red-legged frog habitat assessment should be completed.

4. A spring survey for nesting birds should be completed.

B. Potential Regulatory Requirements

Regulatory requirements for the project site would vary based on the proposed project impacts. If work would require placement of fill in Carbonera Creek the following authorizations would be required.

- a. A California Department of Fish and Wildlife, 1602, Streambed Alteration Agreement.
- b. A Regional Water Quality Control Board, Section 401, Water Quality Certification
- c. A U.S. Army Corps of Engineers, Section 404, Clean Water Act Permit
 - Section 7 Consultation with the National Marine Fisheries Service
 - Section 7 Consultation with the U.S. Fish and Wildlife Service

C. Conclusions

Completion of a rare-plant survey and a CRLF habitat assessment will provide further information on the need for a section 7 consultation with the USFWS and/or the need for a take permit from the California Department of Fish and Game. Of the species documented to occur within the 5-mile radius of the project site, appropriate habitat elements exist for: Coho, Steelhead, CRLF, and Ohlone Beetle. Rare plant studies would provide additional information dictating the potential need for section 7 consultation reviewing project affects to plants.

Section 5: References

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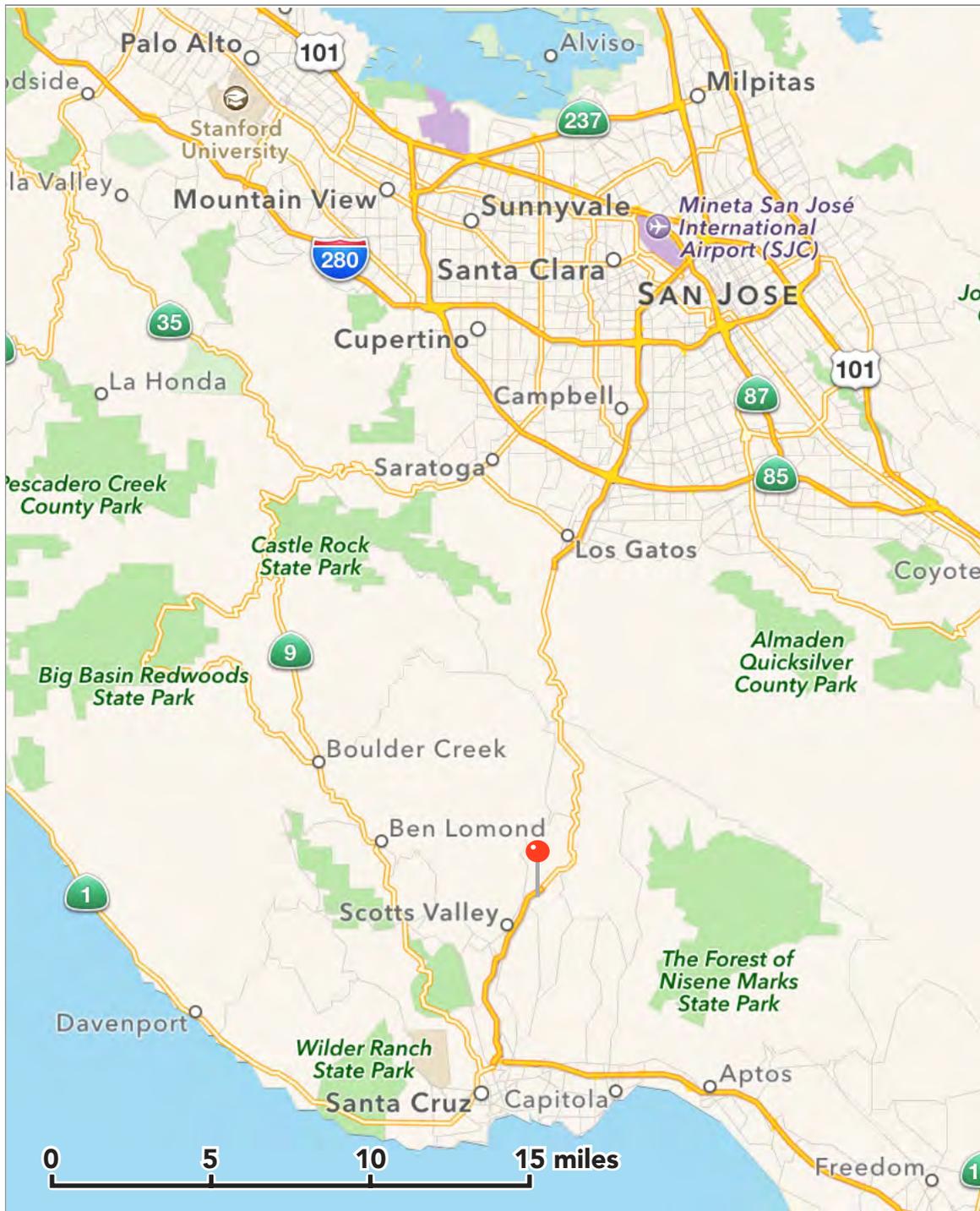
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Figure 1. General Project Vicinity

near California — United States



Scotts Valley Hotel

Project Area and Vicinity
Santa Cruz, California

Legend
Project Site



Google earth

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Figure 2: Project Site and Vicinity

2000 ft



Figure 3. NRCS Soils Map

Soil Map—Santa Cruz County, California



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Santa Cruz County, California
 Survey Area Data: Version 8, Sep 16, 2014

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 12, 2010—Sep 17, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Santa Cruz County, California (CA087)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
116	Bonnydoon loam, 5 to 30 percent slopes	0.4	4.7%
145	Lompico variant loam, 5 to 30 percent slopes	0.2	2.3%
170	Soquel loam, 0 to 2 percent slopes	4.7	49.9%
171	Soquel loam, 2 to 9 percent slopes	4.1	43.0%
Totals for Area of Interest		9.5	100.0%

Vegetation type

Legend

- Graded / disturbed
- Project Site
- Riparian vegetation



Figure 4. Vegetation Type

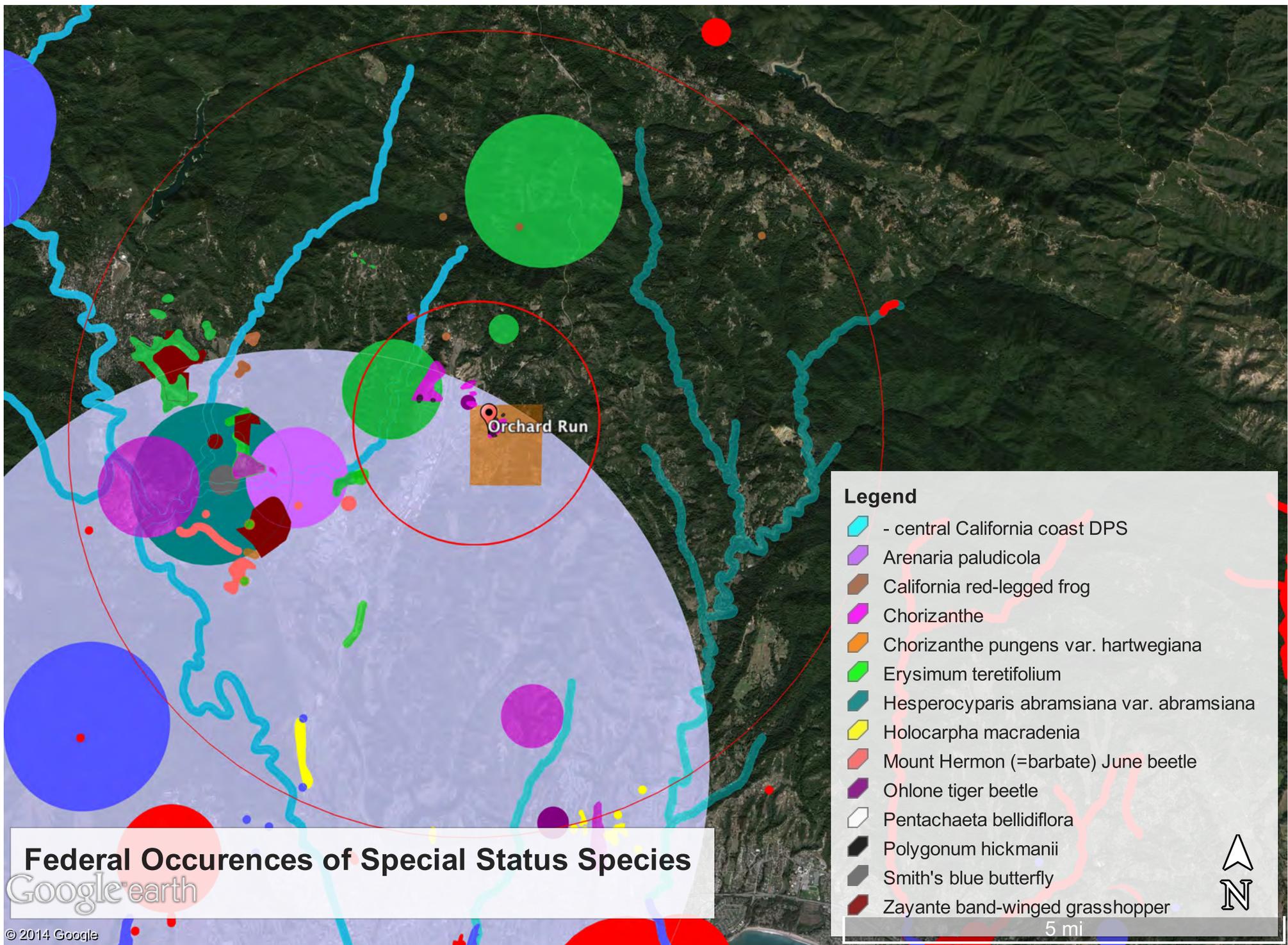


Figure 5: Federal CNDDDB Map

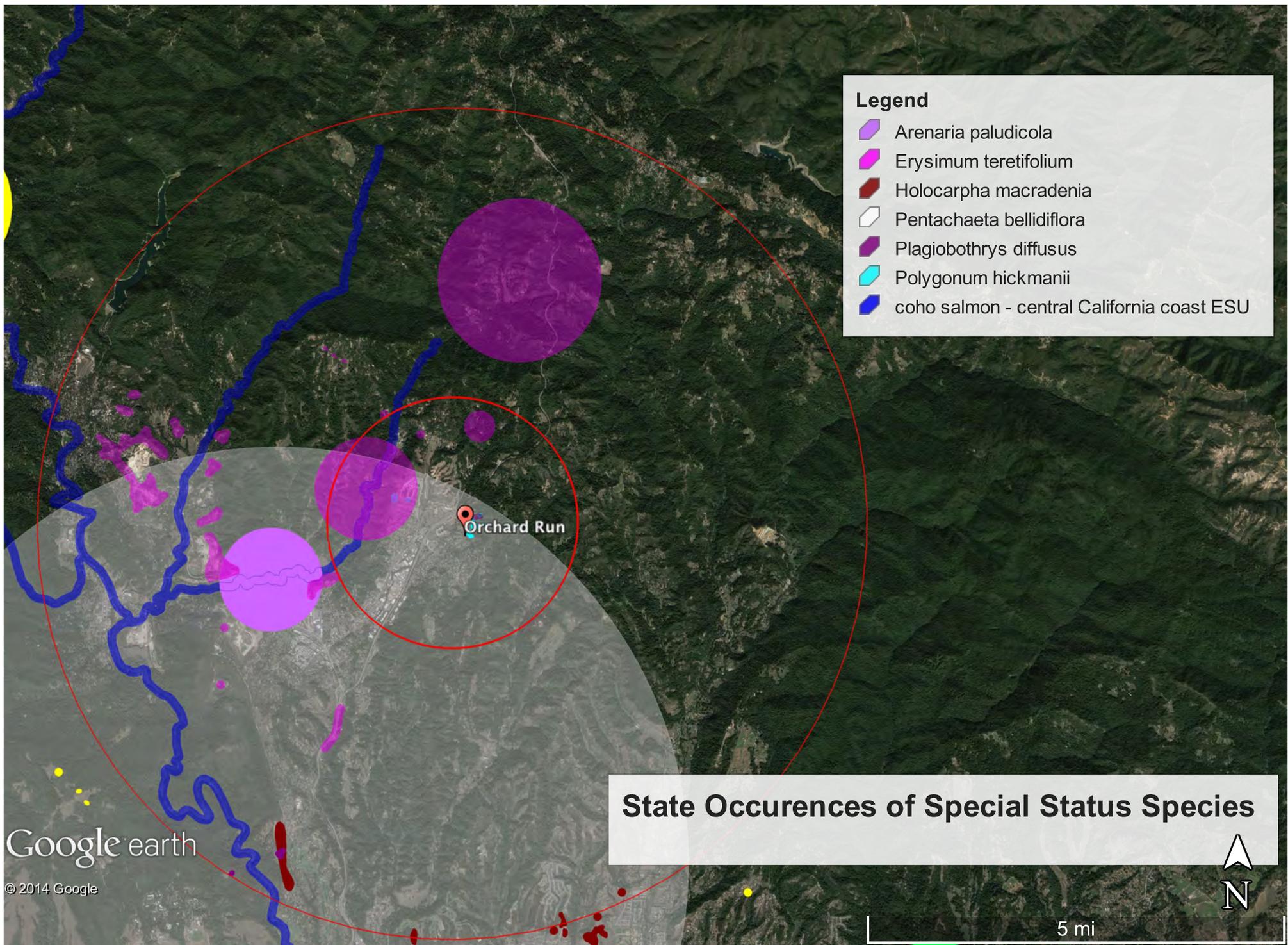


Figure 6. State CNDDDB Map

Critical Habitat

location of designated critical habitat within 5-miles of project site

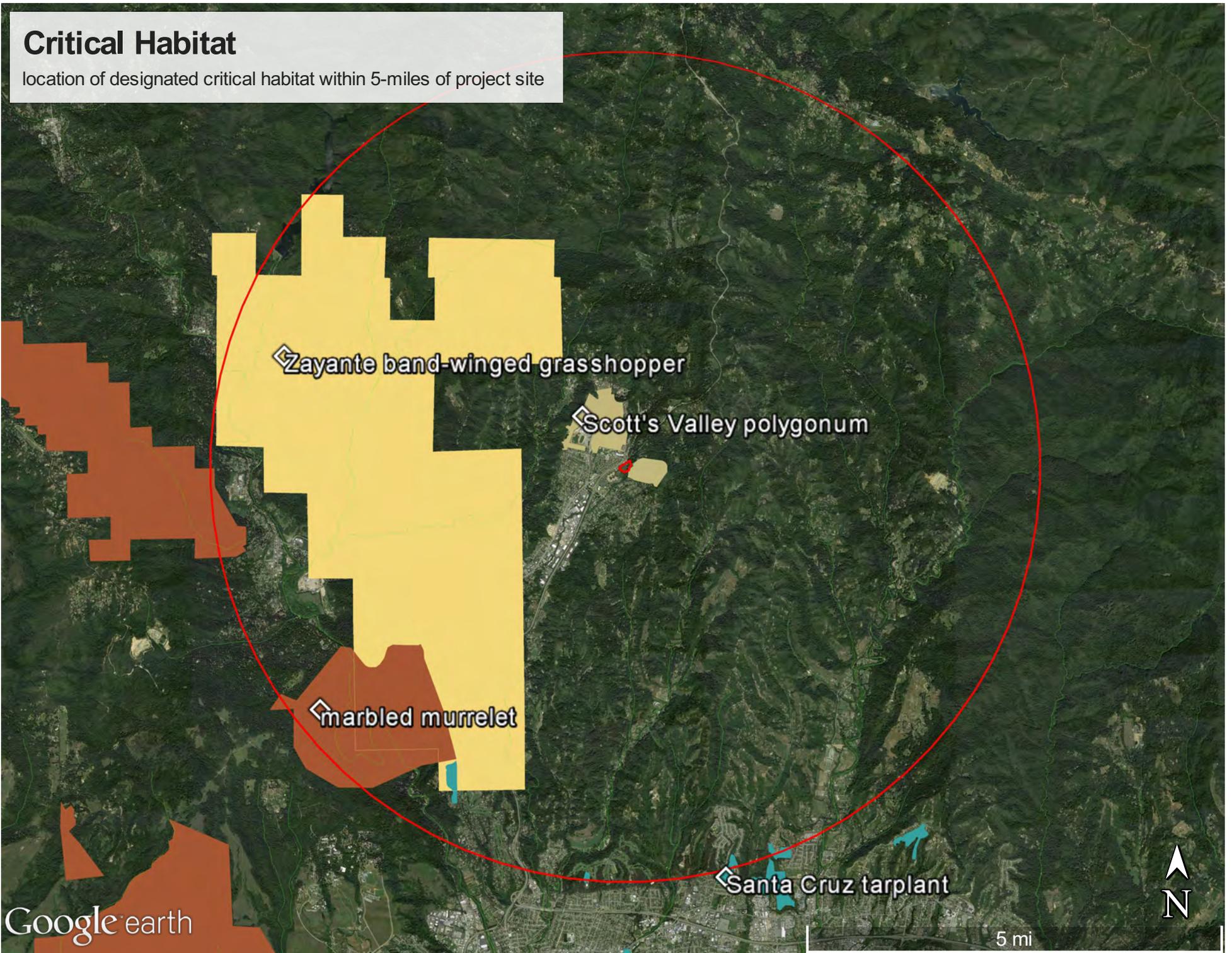


Figure 7: Critical Habitat Map

ATTACHMENTS

Santa Cruz County, California

116—Bonnydoon loam, 5 to 30 percent slopes

Map Unit Setting

National map unit symbol: h9d6

Elevation: 100 to 2,100 feet

Mean annual precipitation: 25 to 40 inches

Mean annual air temperature: 54 to 57 degrees F

Frost-free period: 220 to 245 days

Farmland classification: Not prime farmland

Map Unit Composition

Bonnydoon and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Bonnydoon

Setting

Landform: Hills, mountains

Landform position (two-dimensional): Summit, backslope

Landform position (three-dimensional): Mountainflank, side slope

Down-slope shape: Convex, concave

Across-slope shape: Convex

Parent material: Residuum weathered from mudstone and/or
residuum weathered from sandstone and shale

Typical profile

A1 - 0 to 6 inches: loam

A2 - 6 to 11 inches: loam

Cr - 11 to 60 inches: bedrock

Properties and qualities

Slope: 5 to 30 percent

Depth to restrictive feature: 10 to 20 inches to paralithic bedrock

Natural drainage class: Somewhat excessively drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat):

Moderately low to moderately high (0.03 to 0.28 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Very low (about 1.8 inches)

Interpretive groups

Land capability classification (irrigated): 4e

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: D

Ecological site: Shallow coarse loamy (R004XC030CA)

Minor Components

Aptos

Percent of map unit: 4 percent
Landform: Mountains, hills
Landform position (two-dimensional): Backslope, summit
Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Concave, convex
Across-slope shape: Convex
Other vegetative classification: LOAMY (015XD047CA_1)

Elkhorn

Percent of map unit: 3 percent
Landform: Terraces, plains, alluvial fans
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread, talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Fine loamy (R014XD034CA)

Los osos

Percent of map unit: 3 percent
Landform: Mountains, hills
Landform position (two-dimensional): Backslope, summit
Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Concave, convex
Across-slope shape: Convex
Ecological site: Fine loamy (R015XD024CA)

Tierra

Percent of map unit: 3 percent
Landform: Marine terraces, fan terraces
Landform position (two-dimensional): Toeslope, footslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Claypan (R015XD115CA)

Watsonville

Percent of map unit: 2 percent
Landform: Marine terraces, fan terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Claypan (R014XD089CA)

Data Source Information

Soil Survey Area: Santa Cruz County, California
Survey Area Data: Version 8, Sep 16, 2014

Santa Cruz County, California

171—Soquel loam, 2 to 9 percent slopes

Map Unit Setting

National map unit symbol: h9fz

Elevation: 20 to 1,000 feet

Mean annual precipitation: 30 inches

Mean annual air temperature: 57 degrees F

Frost-free period: 220 to 250 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Soquel and similar soils: 85 percent

Minor components: 6 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Soquel

Setting

Landform: Plains

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Alluvium

Typical profile

H1 - 0 to 21 inches: loam

H2 - 21 to 37 inches: loam, silt loam

H2 - 21 to 37 inches: clay loam, silty clay loam

H3 - 37 to 51 inches: loam

H3 - 37 to 51 inches:

H4 - 51 to 62 inches:

Properties and qualities

Slope: 2 to 9 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat):

Moderately high (0.20 to 0.57 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Very high (about 14.9 inches)

Interpretive groups

Land capability classification (irrigated): 3e

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: C

Minor Components

Fluaquentic haploxerolls

Percent of map unit: 2 percent

Landform: Flood plains

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Aquic xerofluvents

Percent of map unit: 2 percent

Unnamed

Percent of map unit: 2 percent

Data Source Information

Soil Survey Area: Santa Cruz County, California

Survey Area Data: Version 8, Sep 16, 2014

Santa Cruz County, California

170—Soquel loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: h9fy
Elevation: 20 to 1,000 feet
Mean annual precipitation: 30 inches
Mean annual air temperature: 57 degrees F
Frost-free period: 220 to 250 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Soquel and similar soils: 85 percent
Minor components: 6 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Soquel

Setting

Landform: Plains, valleys
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear, concave
Across-slope shape: Linear
Parent material: Alluvium

Typical profile

H1 - 0 to 21 inches: loam
H2 - 21 to 37 inches: loam, silt loam
H2 - 21 to 37 inches: clay loam, silty clay loam
H3 - 37 to 51 inches: loam
H3 - 37 to 51 inches:
H4 - 51 to 62 inches:

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat):
Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Very high (about 14.9 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 3c
Hydrologic Soil Group: C

Minor Components

Unnamed

Percent of map unit: 2 percent

Aquic xerofluvents

Percent of map unit: 2 percent

Fluaquentic haploxerolls

Percent of map unit: 2 percent

Landform: Flood plains

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Data Source Information

Soil Survey Area: Santa Cruz County, California

Survey Area Data: Version 8, Sep 16, 2014

Santa Cruz County, California

145—Lompico variant loam, 5 to 30 percent slopes

Map Unit Setting

National map unit symbol: h9f4

Elevation: 400 to 2,000 feet

Mean annual precipitation: 40 inches

Mean annual air temperature: 55 degrees F

Frost-free period: 220 to 250 days

Farmland classification: Not prime farmland

Map Unit Composition

Lompico variant and similar soils: 85 percent

Minor components: 12 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lompico Variant

Setting

Landform: Terraces, mountains

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Mountainflank, tread

Down-slope shape: Linear, concave

Across-slope shape: Linear, convex

Parent material: Residuum weathered from sandstone and shale and/or residuum weathered from mudstone

Typical profile

H1 - 0 to 10 inches: loam

H2 - 10 to 14 inches: clay loam

H3 - 14 to 28 inches: clay

H4 - 28 to 59 inches: weathered bedrock

Properties and qualities

Slope: 5 to 30 percent

Depth to restrictive feature: 20 to 40 inches to paralithic bedrock

Natural drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat):

Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): 4e

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: D

Minor Components

Aptos, fine sandy loam

Percent of map unit: 5 percent

Felton, sandy loam

Percent of map unit: 4 percent

Madonna, loam

Percent of map unit: 1 percent

Nisene, loam

Percent of map unit: 1 percent

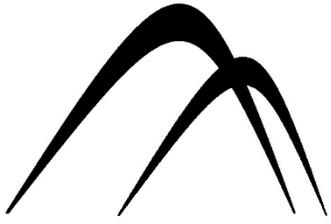
Lompico, loam

Percent of map unit: 1 percent

Data Source Information

Soil Survey Area: Santa Cruz County, California

Survey Area Data: Version 8, Sep 16, 2014



Representative Site Photos

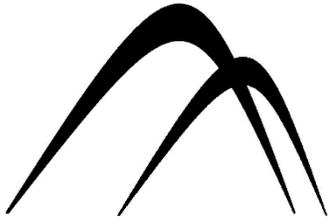
Scotts Valley, CA

Site Photos showing area of disturbance (graded)

Graded area – photo taken from western boundary – facing east. Tree line identifies the approximate top of bank for Carbonara Creek

Graded area – photo taken from within graded area – facing North.





Representative Site Photos

Scotts Valley, CA

Photos of Scotts Valley Site – Riparian Area

Southern edge of graded area –
riparian margin – facing South



Large manhole – southwestern corner
of site



Large manhole – southern
boundary of graded area



Attachment C: Special Status Species Table

Master Special-Status Species							
	* Indicates species observed on the CNDDDB within a 5-mile radius of the site. These species are addressed in the text of the document.						
			Federal	California			
			ESA	ESA	Other	Approximate	
Common Name	Scientific Name	Status	Status	Status	Habitat Description	Survey Dates	
Plants							
Blasdale's bent grass	<i>Agrostis blasdalei</i>	-	-	1B.2	coastal bluff scrub, coastal dunes, coastal prairie	May - July	
bent-flowered fiddleneck	<i>Amsinckia lunaris</i>	-	-	1B.2	Coastal bluff scrub, cismontane woodland, valley and foothill grassland		
slender silver moss	<i>Anomobryum julaceum</i>	-	-	4.2	Damp rock and soil outcrops, broadleaved upland forest, lower montane coniferous forest and north Coast coniferous forest	N/A	
coast rockcress	<i>Arabis blepharophylla</i>	-	-	4.3	Rocky, broadleaved upland forest, coastal scrub, prairie, and bluff scrub	February - May	
Anderson's manzanita	<i>Arctostaphylos andersonii</i>	-	-	1B.2	Openings, edges; broadleaved upland forest, chaparral, North Coast coniferous forest	November - May	
Schreiber's manzanita	<i>Arctostaphylos glutinosa</i>	-	-	1B.2	Diatomaceous shale, coniferous forest, chaparral	November - April	
Hooker's manzanita	<i>Arctostaphylos hookeri ssp. hookeri</i>	-	-	1B.2	Sandy; closed-cone coniferous forest, chaparral, cismontane woodland, coastal scrub	January - June	
Ohlone manzanita	<i>Arctostaphylos ohloneana</i>	-	-	1B.1	Siliceous shale; closed-cone coniferous forest, coastal scrub	February - March	
Pajaro manzanita	<i>Arctostaphylos pajaroensis</i>	-	-	1B.1	Sandy Chaparral	December - March	
Kings Mountain manzanita	<i>Arctostaphylos regismontana</i>	-	-	1B.2	Granitic or sandstone, Broadleaved upland forest, chaparral, North Coast coniferous forest	January - April	
Bonny Doon manzanita	<i>Arctostaphylos silvicola</i>	-	-	1B.2	inland marine sands, closed-cone coniferous forest, chaparral, lower montane coniferous forest	January - March	
*	marsh sandwort	<i>Arenaria paludicola</i>	FE	CE	1B.1	sandy openings, marshes and swamps / freshwater or brackish	May - August
	Brewer's calandrinia	<i>Calandrinia breweri</i>	-	-	4.2	sandy or loamy, disturbed sites and burns, chaparral, coastal scrub	March - June
	Oakland star-tulip	<i>Calochortus umbellatus</i>	-	-	4.2	Often Serpentine, Broadleaved upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland	March - May

	pink star-tulip	<i>Calochortus uniflorus</i>	-	-	4.2	Coastal prairie and scrub, meadows and seeps, and North Coast coniferous forest	April - June
	Santa Cruz Mountains pussypaws	<i>Calyptidium parryi</i> var. <i>hesseae</i>	-	-	1B.1	sandy or gravelly, openings; chaparral, cismontane woodland	May - August
	swamp harebell	<i>Campanula californica</i>	-	-	1B.2	Bogs and fens, Closed-cone coniferous forest, Coastal prairie, Meadows and seeps, Marshes and swamps (freshwater), North Coast coniferous forest	June - October
	bristly sedge	<i>Carex comosa</i>	-	-	2B.1	Coastal prairie, marshes and swamps (lake margins), Valley and foothill grassland	May - September
	deceiving sedge	<i>Carex saliniformis</i>	-	-	1B.2	Mesic; coastal prairie and scrub, meadows and seeps, marshes and swamps (coastal salt)	June - July
	johnny-nip	<i>Castilleja ambigua</i> var. <i>ambigua</i>	-	-	4.2	Coastal bluff scrub, prairie, and scrub, marshes and swamps, Valley and foothill grassland, and Vernal pools margins	March - August
	Monterey Coast paintbrush	<i>Castilleja latifolia</i>	-	-	4.3	Sandy; Closed-cone coniferous forest , Cismontane woodland (openings), Coastal dunes and scrub	February - September
	Monterey ceanothus	<i>Ceanothus rigidus</i>	-	-	4.2	Sandy; Closed-cone coniferous forest, Chaparral, and Coastal scrub	February - June
	Congdon's tarplant	<i>Centromadia parryi</i> ssp. <i>congdonii</i>	-	-	1B.1	Valley and foothill grassland (alkaline)	May - November
*	Ben Lomond spineflower	<i>Chorizanthe pungens</i> var. <i>hartwegiana</i>	FE	-	1B.1	Lower montane coniferous forest (maritime ponderosa pine sandhills)	April - July
	Monterey spineflower	<i>Chorizanthe pungens</i> var. <i>pungens</i>	FT	-	1B.2	Sandy; Chaparral (maritime), Cismontane woodland, Coastal dunes and scrub, Valley and foothill grassland	April - August
*	Scotts Valley spineflower	<i>Chorizanthe robusta</i> var. <i>hartwegii</i>	FE	-	1B.1	Meadows and seeps (sandy), Valley and foothill grassland (mudstone and Purisima outcrops)	April - July
	robust spineflower	<i>Chorizanthe robusta</i> var. <i>robusta</i>	FE	-	1B.1	Meadows and seeps (sandy), Valley and foothill grassland (mudstone and Purisima outcrops)	April - September
	Santa Clara red ribbons	<i>Clarkia concinna</i> ssp. <i>automixa</i>	-	-	4.3	chaparral and cismontane woodland	April - July
	San Francisco collinsia	<i>Collinsia multicolor</i>	-	-	1B.2	sometimes serpentinite, Closed-cone coniferous forest, Coastal scrub	March - May
	branching beach aster	<i>Corethrogyne leucophylla</i>	-	-	3.2	Closed-cone coniferous forest, Coastal dunes	May - December
	clustered lady's-slipper	<i>Cypripedium fasciculatum</i>	-	-	4.2	usually serpentinite seeps and streambanks, Lower montane coniferous forest, and North Coast coniferous forest	March - August
	mountain lady's-slipper	<i>Cypripedium montanum</i>	-	-	4.2	Broadleaved upland forest, Cismontane woodland, Lower montane coniferous forest, and North Coast coniferous forest	March - August

	tear drop moss	<i>Dacryophyllum falcifolium</i>	-	-	1B.3	Carbonate, North Coast coniferous forest	N/A
	Norris' beard moss	<i>Didymodon norrisii</i>	-	-	2B.2	intermittently mesic, rock, Cismontane woodland, Lower montane coniferous forest	N/A
	California bottle-brush grass	<i>Elymus californicus</i>	-	-	4.3	Broadleaved upland forest, Cismontane woodland, North Coast coniferous forest, Riparian woodland	May - November
	Ben Lomond buckwheat	<i>Eriogonum nudum var. decurrens</i>	-	-	1B.1	Sandy, Chaparral, Cismontane woodland, Lower montane coniferous forest (maritime ponderosa pine sandhills)	June - October
	sand-loving wallflower	<i>Erysimum ammophilum</i>	-	-	1B.2	Sandy, openings, Chaparral (maritime), and Coastal dunes and scrub	February - June
	San Francisco wallflower	<i>Erysimum franciscanum</i>	-	-	4.2	Often serpentinite or granitic, sometimes roadsides, Chaparral, Coastal dunes and scrub, and Valley and foothill grassland	March - June
*	Santa Cruz wallflower	<i>Erysimum teretifolium</i>	FE	CE	1B.1	inland marine sands, Chaparral, Lower montane coniferous forest	March - July
	minute pocket moss	<i>Fissidens pauperculus</i>	-	-	1B.2	North Coast coniferous forest (damp coastal soil)	N/A
	stinkbells	<i>Fritillaria agrestis</i>	-	-	4.2	Clay, sometimes serpentinite, Chaparral, Cismontane woodland, Pinyon and juniper woodland, and Valley and foothill grassland	March - June
	Monterey gilia	<i>Gilia tenuiflora ssp. arenaria</i>	FE	CT	1B.2	Sandy, openings, Chaparral (maritime), Cismontane woodland, and Coastal dunes and scrub	April - June
	Toren's grimmia	<i>Grimmia torenii</i>	-	-	1B.3	Openings, rocky, boulder and rock walls, carbonate, volcanic, Chaparral, Cismontane woodland, and Lower montane coniferous forest	N/A
	vaginulate grimmia	<i>Grimmia vaginulata</i>	-	-	1B.1	Rocky, boulder and rock walls, carbonate, Chaparral (openings)	N/A
	San Francisco gumplant	<i>Grindelia hirsutula var. maritima</i>	-	-	3.2	sandy or serpentinite; Coastal bluff scrub and scrub, and Valley and foothill grassland	June - September
	short-leaved evax	<i>Hesperevax sparsiflora var. brevifolia</i>	-	-	1B.2	Coastal bluff scrub (sandy), dunes, and prairie	March - June
*	Santa Cruz cypress	<i>Hesperocyparis abramsiana var. abramsiana</i>	FE	CE	1B.2	Sandstone or granitic; closed-cone coniferous forest, chaparral, and lower montane coniferous forest	N/A
	Loma Prieta hoita	<i>Hoita strobilina</i>	-	-	1B.1	Usually serpentinite, mesic; Chaparral, Cismontane woodland, and Riparian woodland	May - October
*	Santa Cruz tarplant	<i>Holocarpha macradenia</i>	FT	CE	1B.1	Often clay, sandy, Coastal prairie and scrub, and Valley and foothill grassland	June - October
	Kellogg's horkelia	<i>Horkelia cuneata var. sericea</i>	-	-	1B.1	Sandy or gravelly, openings; Closed-cone coniferous forest, Chaparral (maritime), Coastal dunes and scrub	April - September
	Point Reyes horkelia	<i>Horkelia marinensis</i>	-	-	1B.2	Sandy; Coastal dunes, prairie, and scrub	May - September

	harlequin lotus	<i>Hosackia gracilis</i>	-	-	4.2	Wetlands, roadsides, Broadleaved upland forest , Coastal bluff scrub, Closed-cone coniferous forest, Cismontane woodland, Coastal prairie and scrub, Meadows and seeps, Marshes and swamps, North Coast coniferous forest, and Valley and foothill grassland	March - July
	serpentine leptosiphon	<i>Leptosiphon ambiguus</i>	-	-	4.2	Usually serpentinite; Cismontane woodland, Coastal scrub, and Valley and foothill grassland	March - June
	large-flowered leptosiphon	<i>Leptosiphon grandiflorus</i>	-	-	4.2	Usually sandy; Coastal bluff scrub, Closed-cone coniferous forest, Cismontane woodland, Coastal dunes, prairie, and Coastal scrub, Valley and foothill grassland	April - August
	redwood lily	<i>Lilium rubescens</i>	-	-	4.2	Sometimes serpentinite, sometimes roadsides; Broadleaved upland forest, Chaparral, Lower montane coniferous forest, North Coast coniferous forest, and Upper montane coniferous forest	April - September
	small-leaved lomatium	<i>Lomatium parvifolium</i>	-	-	4.2	Serpentinite; Closed-cone coniferous forest, Chaparral, Coastal scrub, and Riparian woodland	January - June
	arcuate bush-mallow	<i>Malacothamnus arcuatus</i>	-	-	1B.2	chapparrel and cismontane woodland	April - September
	Mt. Diablo cottonweed	<i>Micropus amphibolus</i>	-	-	3.2	Rocky; Broadleaved upland forest, Chaparral, Cismontane woodland, and Valley and foothill grassland	March - May
	marsh microseris	<i>Microseris paludosa</i>	-	-	1B.2	Closed-cone coniferous forest, Cismontane woodland, Coastal scrub, and Valley and foothill grassland	April - July
	elongate copper moss	<i>Mielichhoferia elongata</i>	-	-	2B.2	Cismontane woodland (metamorphic, rock, usually vernal mesic)	N/A
	Santa Cruz County monkeyflower	<i>Mimulus rattanii ssp. decurtatus</i>	-	-	4.2	Margins, gravelly; Chaparral and Lower montane coniferous forest	May - July
	northern curly-leaved monardella	<i>Monardella sinuata ssp. nigrescens</i>	-	-	1B.2	Sandy; Chaparral (SCR Co.), Coastal dunes and scrub, Lower montane coniferous forest (SCR Co., ponderosa pine sandhills)	April - September
	woodland woolythreads	<i>Monolopia gracilens</i>	-	-	1B.2	Serpentine; Broadleaved upland forest (openings), Chaparral (openings), Cismontane woodland, North Coast coniferous forest (openings), and Valley and foothill grassland	February - July
	Kellman's bristle moss	<i>Orthotrichum kellmanii</i>	-	-	1B.2	Sandstone, carbonate; Chaparral and Cismontane woodland	January - February
	Dudley's lousewort	<i>Pedicularis dudleyi</i>	-	CR	1B.2	Chaparral (maritime), Cismontane woodland, North Coast coniferous forest, and Valley and foothill grassland	April - June

	Santa Cruz Mountains beardtongue	<i>Penstemon rattanii</i> var. <i>kleei</i>	-	-	1B.2	Chaparral, Lower montane coniferous forest, and North Coast coniferous forest	May - June
*	white-rayed pentachaeta	<i>Pentachaeta bellidiflora</i>	FE	CE	1B.1	Cismontane woodland and Valley and foothill grassland (often serpentinite)	March - May
	Gairdner's yampah	<i>Perideridia gairdneri</i> ssp. <i>gairdneri</i>	-	-	4.2	Vernally mesic; Broadleaved upland forest, Chaparral, Coastal prairie, Valley and foothill grassland, and Vernal pools	June - October
	Monterey pine	<i>Pinus radiata</i>	-	-	1B.1	Closed-cone coniferous forest and Cismontane woodland	N/A
	white-flowered rein orchid	<i>Piperia candida</i>	-	-	1B.2	Sometimes serpentinite, Broadleaved upland forest, Lower montane coniferous forest, and North Coast coniferous forest	March - Septemeber
	Michael's rein orchid	<i>Piperia michaelii</i>	-	-	4.2	Coastal bluff scrub, Closed-cone coniferous forest, Chaparral, Cismontane woodland, Coastal scrub, and Lower montane coniferous forest	April - August
	Choris' popcorn-flower	<i>Plagiobothrys chorisianus</i> var. <i>chorisianus</i>	-	-	1B.2	Chaparral, Coastal prairie and scrub	March - June
	Hickman's popcorn-flower	<i>Plagiobothrys chorisianus</i> var. <i>hickmanii</i>	-	-	4.2	Closed-cone coniferous forest, Chaparral, Coastal scrub, Marshes and swamps, and Vernal pools	April - June
*	San Francisco popcorn-flower	<i>Plagiobothrys diffusus</i>	-	CE	1B.1	Coastal prairie and Valley and foothill grassland	March - June
*	Scotts Valley polygonum	<i>Polygonum hickmanii</i>	FE	CE	1B.1	Valley and foothill grassland (mudstone and sandstone)	May - August
	Lobb's aquatic buttercup	<i>Ranunculus lobbii</i>	-	-	4.2	Mesic; Cismontane woodland, North Coast coniferous forest, Valley and foothill grassland, and Vernal pools	February - May
	pine rose	<i>Rosa pinetorum</i>	-	-	1B.2	Closed-cone coniferous forest and Cismontane woodland	May - July
	Hoffmann's sanicle	<i>Sanicula hoffmannii</i>	-	-	4.3	Often serpentinite or clay; Broadleaved upland forest, Coastal bluff scrub, Chaparral, Cismontane woodland, Coastal scrub, and Lower montane coniferous forest	March - May
	chaparral ragwort	<i>Senecio aphanactis</i>	-	-	2B.2	Sometimes alkaline, Chaparral, Cismontane woodland, and Coastal scrub	January - April
	maple-leaved checkerbloom	<i>Sidalcea malachroides</i>	-	-	4.2	Often in disturbed areas; Broadleaved upland forest, Coastal prairie and scrub, North Coast coniferous forest, and Riparian woodland	March - August
	San Francisco campion	<i>Silene verecunda</i> ssp. <i>verecunda</i>	-	-	1B.2	Sandy; Coastal bluff scrub, Chaparral, Coastal prairie and scrub, Valley and foothill grassland	March - August
	Santa Cruz microseris	<i>Stebbinsoseris decipiens</i>	-	-	1B.2	Open areas, sometimes serpentinite; Broadleaved upland forest, Closed-cone coniferous forest, Chaparral, Coastal prairie and scrub, and Valley and foothill grassland	April - May

	marsh zigadenus	<i>Toxicoscordion fontanum</i>	-	-	4.2	Vernally mesic, often serpentinite; Chaparral, Cismontane woodland, Lower montane coniferous forest, Meadows and seeps, and Marshes and swamps	April - July
	Santa Cruz clover	<i>Trifolium buckwestiorum</i>	-	-	1B.1	Gravelly, margins; Broadleaved upland forest, Cismontane woodland, and Coastal prairie	April - October
	saline clover	<i>Trifolium hydrophilum</i>	-	-	1B.2	Marshes and swamps, Valley and foothill grassland (mesic, alkaline), and Vernal pools	April - June
	Methuselah's beard lichen	<i>Usnea longissima</i>	-	-	4.2	Broadleaved upland forest and North Coast coniferous forest	N/A
Invertebrates							
	Zayante band-winged grasshopper	<i>Trimerotropis infantilis</i>	FE	-	-	sandy substrate with sparse vegetation	N/A
	Ohlone tiger beetle	<i>Cicindela ohlone</i>	FE	-	-	costal terraces characterized by patches of native grassland, Watsonville loam or Bonnydoon soil	N/A
	Mount Hermon June Beetle	<i>Polyphylla barbata</i>	FE	-	-	sandy soils, Zayante Sand Hills formation	N/A
	Smith's Blue Butterfly	<i>Euphilotes enoptes smithi</i>	FE	-	-		
Fish							
	Coho salmon (Central California ESU)	<i>Oncorhynchus kisutch</i>	FT	CE	-	undammed rivers, streams, creeks	
	Steelhead (Central CA Coast ESU)	<i>Oncorhynchus mykiss</i>	FT	-	-	undammed rivers, streams, creeks	
Amphibians							
	California red-legged frog	<i>Rana aurora draytonii</i>	FT	-	CSC	streams, marshes, ponds	May 1- November 1
Reptiles							
	Southwestern pond turtle	<i>Clemmys marmorata pallida</i>	-	-	CSC	creeks, ponds	April-October
Birds							
	Great blue heron (rookery)	<i>Ardea herodias</i>	-	-	CNDDB	rookery sites (marsh, riparian)	February-July
	Great egret (rookery)	<i>Ardea alba</i>	-	-	CNDDB	rookery sites (marsh, riparian)	March-July
	Snowy egret (rookery)	<i>Egretta thula</i>	-	-	CNDDB	rookery sites (marsh, riparian)	March-July
	Black-crowned night heron (rookery)	<i>Nycticorax nycticorax</i>	-	-	CNDDB	rookery sites (marsh, riparian)	February-July
	White-tailed kite (nesting)	<i>Elanus leucurus</i>	-	-	CFP	woodland, grassland	March-June
	Northern harrier (nesting)	<i>Circus cyaneus</i>	-	-	CSC	marsh, grassland	April- September
	Sharp-shinned hawk (nesting)	<i>Accipiter striatus</i>	-	-	CSC	woodland	nest (April- August); winter CV (September- April)

	Cooper's hawk (nesting)	<i>Accipiter cooperii</i>	-	-	CSC	woodland	April-July
	Northern goshawk (nesting)	<i>Accipiter gentilis</i>	-	-	CSC	coniferous forests	April-August
	Golden eagle (nesting and wintering)	<i>Aquila chrysaetos</i>	-	-	BCC, CSC, CFP	grassland	nest (February- August); winter CV (October- February)
	Yellow-breasted chat (nesting)	<i>Icteria virens</i>	-	-	CSC	riparian	May-July
	Yellow warbler	<i>Setophaga petechia</i>				Bushes, swamp edges, streams, gardens	
Mammals							
	San Francisco dusky-footed woodrat	<i>Neotoma fuscipes annectans</i>	-	-	CSC		
	American badger	<i>Taxidea taxus</i>	-	-	CSC	annual grassland	any season
Status Codes:							
FE	- Federal ESA listed, Endangered.						
FT	- Federal ESA listed, Threatened.						
FPE	- Formally Proposed for federal ESA listing as Endangered.						
FPT	- Formally Proposed for federal ESA listing as Threatened.						
FPD	- Listed under Federal ESA, but formally proposed for delisting.						
Fd	- Formally Delisted (delisted species are monitored for 5 years).						
FC	- Candidate for federal ESA listing as Threatened or Endangered.						
BCC	- U. S. Fish and Wildlife Service Bird of Conservation Concern (USFWS, 2002).						
CE	- California ESA or Native Plant Protection Act listed, Endangered.						
CT	- California ESA or Native Plant Protection Act listed, Threatened.						
CR	- California ESA or Native Plant Protection Act listed, Rare.						
CC	- Candidate for California ESA listing as Endangered or Threatened.						
CFP	- Fish and Game Code of California Fully Protected Species (§3511-birds, §4700-mammals, §5050-reptiles/amphibians).						
CSC	- California Department of Fish and Game Species of Special Concern (CDFG, updated August 2004).						
1A	- California Native Plant Society/Presumed extinct.						
1B	- California Native Plant Society/Rare or Endangered in California and elsewhere.						
2	- California Native Plant Society/Rare or Endangered in California, more common elsewhere.						
4	- California Native Plant Society/Plants of Limited Distribution.						
CNDDDB	- Species that is tracked by CDFG's Natural Diversity Database but does not have any of the above special-status designations otherwise.						