

Santa Susana Pass State Historic Park

Natural Resource Inventory



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1.0 PROJECT INTRODUCTION

A natural resources inventory was conducted at Santa Susana Pass State Historic Park (SSPSHP) in 2005 to determine the presence and extent of natural resources within the park. This section of the report provides preliminary data on the natural resources located at SSPSHP.

1.1 PROJECT LOCATION

The Park is located 0.9 km (0.56 mi) west of State Route (SR) 27 and immediately south of SR-118 in the Oat Mt, Canoga Park, Calabasas, and Simi Valley East USGS 7.5-minute quadrangles.

1.2 CONSULTATION AND SURVEY DATES

Initial field surveys were conducted 06/14/2005, 06/29/2005, and 08/18/05 by CDPR Environmental Scientist Richard Burg and Research Analyst Michael Bonk to assess existing natural resources. Additional surveys were conducted 05/16/06 and a post fire plant survey was conducted 05/17/06. This survey included CDPR Environmental Scientists and volunteers from the California Native Plant Society, Los Angeles/Santa Monica Mountains Chapter. Prior to conducting field surveys, a list of species and habitats potentially occurring within the PARK was developed based on information compiled from the California Department of Fish and Game (CDFG), California Natural Diversity Database (CNDDDB), California Native Plant Society (CNPS), and from current literature. The Park was field reviewed to identify:

- Vegetation communities;
- Potential wetlands;
- Factors indicating the potential for rare species;
- Rare species present.

2.0 EXISTING CONDITIONS AND ISSUES

2.1 ENVIRONMENTAL SETTING

The Park is located in a rural and unincorporated portion of Los Angeles County in the California Floristic Province, Southwest Region, Western Transverse Ranges Subregion (Hickman 1993). Elevations range from ≈ 305 m (≈ 1000 ft) to ≈ 528 m (≈ 1731 ft). The climate is considered Mediterranean and fluctuates with the seasons with hot dry summers and mild wet winters. Average annual rainfall is ≈ 45.7 cm (≈ 18 in); which falls as rain primarily in the winter. The mean temperature is 16° C (61° F) with an average high of 23.7° C (74.6° F) and average low of 8.8° C (47.9° F). The freeze-free period is from 275 to 325 days (Miles and Goudey 1997).

2.2 HYDROLOGY

The Park is located within the Los Angeles River Hydrologic Unit. The Los Angeles River Hydrologic Unit consists of 74,622 ha (184,395 ac) with the Los Angeles River being the major drainage in the unit. The Santa Susana Pass Wash, flowing west to east along the northern border of the Park, is a first order stream and the only perennial water course flowing through Park. It is generally characterized by a relatively narrow stream channel with a steeply incised bank, as it runs through the Park. Additionally, three unnamed ephemeral drainages, generally running west to east, flow through the Park.

2.3 GEOLOGY AND GEOMORPHOLOGY

The Park is located on the eastern edge of the Simi Hills. The Simi Hills is a small rocky mountain range on the northwestern edge of the San Fernando Valley, located within the Transverse Ranges. While the other coast ranges in California run north-south, the Transverse Ranges run predominantly east-west due to a bend in the San Andreas Fault, which has pushed the mountain ranges up around it. Sedimentary rock are most common on the western slopes while granitic and metamorphic rock dominate in the eastern mountains. Elevations in the Park range from ≈ 305 m ($\approx 1,000$ ft) to ≈ 528 m (≈ 1731 ft). Topographic relief is diverse and in some cases extreme.

The following information on geology and geomorphology was obtained from the *Geological Overview of the Santa Ynez, Topatopa, and Santa Susanna Mountains* (Kim Holtz and R.B. Grannell 1999) and can be found at [HTTP://SEIS.NATSCI.CSULB.EDU/DEPTWEB/SKINNYCAL/SITES/CALFRAMES.HTML](http://seis.natsci.csulb.edu/deptweb/skinnycal/sites/calframes.html). and [HTTP://SEIS.NATSCI.CSULB.EDU/DEPTWEB/SKINNYCAL/SITES/TRNSVERSE/TRANSVERSEOVERVIEW.HTML](http://seis.natsci.csulb.edu/deptweb/skinnycal/sites/transverse/overview.html). Detailed references can be found at the above websites.

The Transverse Ranges of southern California represent one of the most complex, diverse, and enigmatic geological provinces in the United States. They constitute a generally mountainous region that extends some 500 km in an east-westerly trend directly across the prevailing northwesterly structural grain of California. Yet these ranges, stretching from Point Arguello on the west to the Pinto and Eagle Mountains in eastern California, are in aggregate only 16 to 85 kilometers wide in a north-south direction (Dibblee, 1982h). The region contains many extremely young structures, many of these in an active stage of growth, and Recent seismicity is a regional characteristic, much of it located on east-west trending left-lateral bounding faults with strong reverse components. The east-west structure is a product of major crustal rotation, especially in the early Miocene; the rotation amount ranges from 37-40° in the east to more than 90° in the western Transverse Ranges (see, for example, papers by Carter et al., 1987, and Hornafius et al, 1986). The rotation in turn was caused by a gradual transition from a subduction to a transform margin 27-18 Ma, which resulted in a transtensional phase that produced both the rotation and left-lateral shearing (Atwater, 1998). One consequence was the deposition of breccias and conglomerates, followed by the eruption of Miocene volcanics, and the subsequent filling of basins with marine sediments; this transtensional phase lasted from 18-5 ma; about 5 Ma, transpression became dominant, uplift began in the region, and left-lateral faults formed in

the previous transtensional phase began to acquire reverse components(*ibid*). The east-west trend of the Transverse Ranges is so dominant that it transects even the major plate boundary (Pacific-North American plates) dominated by the San Andreas fault system, and it also transects the abrupt transition from oceanic to continental crustal basement that is located, buried under thick sedimentary cover, somewhat west of the San Andreas fault. The lithology is thus far from continuous along the Transverse Ranges trend. Because of this, the Transverse Ranges are conveniently divided into eight subprovinces, each displaying its own geologic signature, and described as follows.

The Santa Susana Mountains lie largely south of the Santa Clara River and the Santa Ynez Uplift, although east of Piru, rocks underlying the range extend north of the river, disappearing beneath the San Cayetano thrust. The major fold, the Santa Clara syncline, separates the Santa Susana Mountains from the Topatopa Mountains, and forms the topographic depression in which the present drainage of the Santa Clara River flows. The rocks underlying the Santa Susana Mountains are largely Miocene and younger, and are exposed in an anticlinal structure that forms the crest of the range.

The Santa Susana Mountains are much younger than the Santa Ynez uplift, having been uplifted fewer than 1 million years ago, based on evidence from the upper Saugus Formation in the Newhall area, which contains an ash bed of probable Bishop tuff (0.7 million years), or, less likely, a little older (0.8-0.9 million years)(Treiman, 1982). The ash bed is believed by Treiman (1982) to either predate, or be contemporaneous with, the onset of Santa Susanna uplift, based on the introduction of, and steady upward increase in, shale and siltstone clasts from Santa Susanna erosion as constituents in the Saugus Formation north of the range, and changes in Saugus lithology on the south flank of the range due to isolation from the Santa Clara River by uplift(Saul, 1973).

Much of the anticlinal uplift of the Santa Susana Mountains is related to south- dipping reverse faulting on the Oak Ridge fault, a major structure found both on and offshore, that does not reach the surface; no offsets shallower than 1250 m have been found in the subsurface (Yeats and others, 1982), but anticlinal ridges mapped by Hall (1982) near Montalvo have been interpreted as Recent pressure ridges formed by the fault and indicate the likelihood of ongoing seismic activity (Yeats and others, 1982).

2.4 SOILS

The information in the following section was obtained from the *Ecological Subregions of California* (Miles and Goudy 1997). The soils in the Simi Hills-Santa Susana Mountains are generally Lithic and shallow Typic Xerorthents; Calcixerollic Xerochrepts; and Lithic, Typic, Pachic, and Calcic Pachic Haploxerolls. Fluventic Haploxerolls are common in recent alluvium. There are Typic Argixerolls, Mollic Haploxeralfs, and Abruptic Durixeralfs on terraces and old alluvial fans. The soils are well drained and carbonates accumulate in some. Soil temperature regimes are thermic and moisture regimes are primarily xeric.

2.4.1 Soil Series

The Natural Resource Conservation Service (NRCS) has mapped six soil series in the Park. These soils vary widely in depth, fertility, permeability, and other important characteristics. There are no listed hydric soils found within park boundaries. The following soil series descriptions were obtained from the NRCS website located at [HTTP://SOILS.USDA.GOV/TECHNICAL/CLASSIFICATION/OSD/](http://soils.usda.gov/technical/classification/osd/). Detailed references can be found at the above website.

Anacapa:

The Anacapa series consists of deep, well drained soils that formed in alluvium derived from predominantly sedimentary rock sources. Anacapa soils are in flood plains and on alluvial fans and have slopes of 0 to 9 percent. The mean annual precipitation is about 15 inches and the mean annual air temperature is about 60 F.

Anacapa soils are on smooth flood plains and alluvial fans on gradients up to 9 percent and formed in alluvium from predominantly sedimentary rock sources. They occur at elevations from sea level to 1,000 feet in a subhumid mesothermal climate having warm dry summers and cool moist winters. These soils are well drained; medium runoff; moderately rapid permeability. Depth to carbonates ranges from 20 to 40 inches. The lime is mostly disseminated but there are also filaments and other small soft lime segregations. Between depths of 10 and 40 inches clay averages less than 18 percent. Gravel ranges from 0 to 25 percent. The soils are moist in some part between depths of 8 and 24 inches slightly more than half the year and are continuously dry from mid-May to early November. They are found within the coastal plains and valleys of south-central California. This series is moderately extensive.

Balcom:

The Balcom series consists of moderately deep, well drained soils that formed in material that weathered from soft, calcareous shale and sandstone. Balcom soils are on hills and have slopes of 5 to 75 percent. The mean annual precipitation is about 18 inches and the mean annual air temperature is about 61 degrees F.

Balcom soils are on rounded hills at elevations of 200 to 2,300 feet. Slopes range from 5 to 75 percent. The soils formed in material weathered from gray, soft, calcareous shale and sandstone. The climate is dry subhumid mesothermal with warm dry summers and cool moist winters. Depth to a paralithic contact of soft shale or sandstone is 20 to 40 inches. The mean annual soil temperature is about 64 degrees F. and the soil temperature usually is not below 47 degrees F. at any time. The soil between depths of about 5 and 15 inches is usually dry all of the time from mid-April or May until late November or early December and is moist in some or all parts all the rest of the year.

Rock fragments consist of small pieces of shale that are easily crushed. Fragments are usually less than 10 percent and are no more than 35 percent. The soil profile is loam, silt loam, clay loam or silty clay loam in all parts and has more than 15 percent fine sand or coarser. It is

slightly to violently effervescent throughout except in some pedons the upper few inches are not effervescent. Carbonate segregations range from a few small filaments to many seams, masses and blotches. These soils are well drained; low to high runoff; moderate to moderately slow permeability. This series is moderately extensive.

Chualar:

The Chualar series consist of very deep, well drained soils that formed in alluvial material from mixed rock sources. Chualar soils are on terraces and fans of the coastal areas and have slopes of 0 to 9 percent. The mean annual precipitation is about 18 inches and the mean annual temperature is about 59 degrees F.

The Chualar soils are on alluvial fans and stream terraces at elevations of 50 to 2,000 feet. Slopes are 0 to 9 percent. The climate is dry with 12 to 25 inches of precipitation. The mean annual soil temperature is 59 to 63 degrees F., and the soil temperature usually is not below 47 degrees F. at any time. The difference between mean summer and mean winter temperatures is less than 19 degrees F. The soil from about 6 to 20 inches usually is dry all of the time from late April or May until November or early December and is moist in some or all parts the rest of the year.

Coarse and very coarse angular sand particles make up 20 to 30 percent of the A and C horizons and 20 to 25 percent of the Bt horizon. Rock fragments, mostly fine angular gravel, range from 1 to 2 percent to about 25 percent, but most pedons have less than 15 percent gravel. Also there are numerous mica particles throughout the profile. Base saturation is more than 75 percent throughout. These soils are well drained; slow to medium runoff; moderately slow permeability. This series is moderately extensive.

Gaviota:

The Gaviota series consists of very shallow or shallow, well drained soils that formed in material weathered from hard sandstone or meta-sandstone. Gaviota soils are on hills and mountains and have slopes of 2 to 75 percent. The average annual precipitation is about 20 inches and the mean annual temperature is about 60 degrees F.

Gaviota soils are on hills and mountains. Slope is 2 to 75 percent. These soils formed in material weathered from sandstone and meta-sandstone. Elevation is 200 to 4,400 feet. Rock outcrops are commonly associated with this soil and occupy from less than 2 percent to 50 percent of the surface area. Depth to a lithic contact of hard rock is 6 to 20 inches. The soils become moist below a depth of 6 inches some time between mid-October and mid-December and remain moist all the time in some parts below 6 inches until early April or late May. The mean annual soil temperature is 59 to 64 degrees F. and the soil temperature does not go as low as 41 degrees F. at any time.

Texture throughout is sandy loam, fine sandy loam, loam, gravelly sandy loam, gravelly fine sandy loam, and gravelly loam. Clay content is 10 to 18 percent. Rock fragment content is less than 25 percent. Sand content is more than 40 percent of the fine earth fraction. Coarse and very

coarse sand content is less than 20 percent. These soils are well and excessively well drained; very low to very high runoff; moderately rapid permeability. This series is extensive.

Gazos:

The Gazos series consists of moderately deep to bedrock, well drained soils that formed in material weathered from sandstone and shale. Gazos soils are on hills and have slopes of 9 to 75 percent. The mean annual precipitation is about 22 inches and the mean annual air temperature is about 60 degrees F.

Depth to a lithic contact of shale or sandstone is 20 to 40 inches. The mean annual soil temperature is about 59 degrees to 65 degrees F., and the soil temperature usually is not below 47 degrees F. at any time. The soil between depths of about 5 and 15 inches is usually dry all of the time from late April or May until November or early December and is moist in some or all parts all the rest of the year. Rock fragments of shale usually make up 0 to 10 percent of the soil profile but range to as much as 35 percent in some pedons, particularly in the lower part. The soil is loam, sandy clay loam, silt loam, clay loam or silty clay loam throughout with about 20 to 30 percent clay in most pedons. The Gazos soils are on hills at elevations of 50 to 4,000 feet. Slopes range from 9 to 75 percent. The soils formed in material weathered from shale and sandstone. They are well drained; high to very high runoff; moderately slow permeability. They are found in the Coast Range in central and south-central part of California.

Saugus:

The Saugus series consists of deep, well drained soils that formed from weakly consolidated sediments. Saugus soils are on dissected terraces and foothills and have slopes of 9 to 50 percent. The mean annual precipitation is about 16 inches and the mean annual air temperature is about 63 degrees F.

The Saugus soils are on slopes of dissected terraces and foothills at elevations of 600 to 2,500 feet. Slopes range from 9 to 50 percent. The soils formed in material weathered from weakly consolidated sediments mostly from granitic and closely related rocks. Depth to a paralithic contact is 40 to 56 inches. Saugus soils are on complex slopes of 9 to 50 percent. The mean annual soil temperature at a depth of 20 inches is 60 degrees F. and the soil temperature is not below 47 degrees F. at any time. Soil between depths of about 5 and 15 inches is continuously dry in all parts from late April or May until late October to early December and is moist in some or all parts all the rest of the year.

The soil profile is loam or sandy loam throughout and the 10 to 40 inch control section has less than 18 percent clay. Rock fragments range from 1 to 35 percent and are mostly gravel and a few cobblestones. Usually the amount of rock fragments increases with depth, though in some pedons the immediate surface has a partial layer of fragments. The profile is slightly acid to slightly alkaline and in many pedons the lower part is less acid. These soils are well drained; medium to rapid runoff; moderate permeability. This series is of moderate extent.

2.5 VEGETATION COMMUNITIES

Initial surveys conducted 06/14/2005, 06/29/2005, and 08/18/05 by CDPR Environmental Scientists identified nine vegetation communities within the boundaries of the Park including chamise-redshank chaparral, coastal sage scrub, mixed chaparral, coastal oak woodland, valley foothill riparian (southern coast live oak riparian forest), fresh emergent wetland, annual grassland, eucalyptus, and barren/rock. Further vegetation surveys were scheduled for the cooler winter months but due to the Topanga fire (summer 2005) these were not conducted.

The following descriptions of major vegetation communities are summaries of detailed accounts presented in *A Guide to Wildlife Habitats in California* (Mayer and Laudenslayer 1988) and *A Manual of California Vegetation* (Sawyer and Keeler-Wolf 1995). Detailed references can be found in the above literature.

Chamise-Redshank Chaparral:

Mature chamise chaparral is single layered, generally lacking well-developed herbaceous ground cover and overstory trees. Shrub canopies frequently overlap, producing a nearly impenetrable canopy of interwoven branches with very little herbaceous understory or litter. It is adapted to repeated fires by stump sprouting.

Chamise-dominated stands average 1 to 2 m (3.3 to 6.6 ft) in height, but can reach 3 m (9.8 ft). Total shrub cover frequently exceeds 80 percent, but may be considerably lower on extremely xeric sites with poor soils.

The dominant over story species in the Park is chamise (*Adenostoma fasciculatum*). Associated species include California buckwheat (*Eriogonum fasciculatum*), eastwood manzanita (*Arctostaphylos glandulosa*), chaparral whitethorn (*Ceanothus leucodermis*), black sage (*Salvia mellifera*), and purple sage (*Salvia leucophylla*). Chamise chaparral is found throughout the Park.

Coastal Sage Scrub:

Coastal sage scrub systems are characterized by low to moderate-sized shrubs with mesophytic leaves, flexible branches, semiwoody stems, and a shallow root system. Southern coastal scrub stands consist of a shrub layer up to 2.0 m (7 ft) tall. Canopy cover usually approaches 100% but can be continuous or intermittent with bare areas present.

The dominant over story species in the Park is laurel sumac (*Malosma laurina*) with lemonade berry (*Rhus integrifolia*) also present. Common understory species include black sage, California sage (*Artemisia californica*), white sage (*S. apiana*), California buckwheat, and deerweed (*Lotus scoparius*). Coastal sage scrub is found throughout the Park.

Mixed Chaparral:

Mixed chaparral (MCH) is structurally homogeneous brushland dominated by shrubs with thick, stiff, heavy cutinized evergreen leaves. Shrub height and crown cover can vary with age, last burn, and precipitation regime. At maturity, MCH is typically very dense with greater than 80 percent absolute shrub cover. Mixed chaparral supports approximately 240 species of woody plants. Composition changes between northern and southern California, precipitation regime, aspect, and soils.

Common shrub species found in Park include chaparral whitethorn, greenbark ceanothus (*C. spinosus*) and Eastwood manzanita. Other associated species include chamise, poison oak, laural sumac, hollyleaf cherry (*Prunus ilicifolia*), California buckthorn (*Rhamnus californica*), yerba-santa (*Eriocictyon crassifolium*), and toyon (*Heteromeles arbutifolia*). Mixed chaparral is found throughout the Park.

Coastal Oak Woodland:

Coastal oak woodlands occupy a variety of Mediterranean type climates and are extremely variable. The overstory consists of deciduous and evergreen hardwoods occasionally mixed with conifers. In drier sites, trees are widely spaced and form an open woodland or savannah. Understory species vary depending on habitat conditions (soil, moisture regimes, etc.) and habitats juxtaposition to oak woodlands. Understory specie composition is typically composed of grasses with scattered shrubs. Coast live oak (*Q. agrifolia*) is usually found on moisture sites and extends further inland in southern California.

In the Park, coastal oak woodlands are dense to open woodlands dominated by coast live oak. The shrub layer is poorly developed and includes poison oak (*Toxicodendron diversilobum*) and laurel sumac, toyon (*Heteromeles arbutifolia*), gooseberry (*Ribes* sp.), and occasionally Mexican elderberry (*Sambucus mexicana*).

Valley Foothill Riparian (Southern Coast Live Oak Riparian Forest):

Southern coast live oak riparian forest is an open to dense evergreen forest with coast live oak either the sole or dominant overstory species. They are commonly found on steep slopes or raised stream banks and terraces. They occur from sea level to 1525 m (5,000 ft). The shrub layer is usually sparse while the forb layer ranges from sparse to dense.

The overstory is dominated by coast live oak with a scattering of California sycamore (*Platanus racemosa*), Fremont's cottonwood (*Populus fremontii*), and white alder (*Alnus rhombifolia*) also present. The shrub layer is moderate dense and dominated by poison oak with coffeeberry (*Rhamnus californica*) and arroyo willow (*Salix lasiolepis*), and black willow (*S. gooddingii*), are also present in small numbers. Common species found in the forb layer include umbrella sedge (*Cyperus eragrostis*), purple nightshade (*Solanum xanti*), and California everlasting (*Gnaphalium californicum*). Southern coast live oak forest occurs within the Santa Susana Pass Wash along the northern border of the Park.

Fresh Emergent Wetland:

Fresh emergent wetlands (FEW) are characterized by erect, rooted herbaceous hydrophytes. The roots of FEW vegetation thrive in an anaerobic environment and dominant vegetation is generally perennial monocots. They are among the productive wildlife habitats in California. Common species found in FEW within the PARK include umbrella sedge, mule fat (*Baccharis salicifolia*), spike sedge (*Eleocharis montevidensis*), cattail (*Typha latifolia*). Fresh emergent wetland is found in the northeast corner of the Park.

California Annual Grassland:

Non-native grassland is dense to sparse cover composed primarily of introduced annual plant species. Many of these species also occur as understory in other habitats. Species composition is influenced by seasonal and annual fluctuations in weather patterns. Fall and winter rain causes germination of annual plant seeds, which grow slowly and low to the ground during cool winter months. Warmer spring temperature cause rapid growth and large amounts of standing dead plant material can be found during the summer months. Nonnative grassland is disturbance-related and usually prevails in old fields or openings in native scrub habitats.

Typical non-native grasses within the PARK include wild oat (*Avena fatua*), ripgut grass (*Bromus diandrus*), foxtail fescue (*Vulpia myuros*), and fountain grass (*Pennisetum setaceum*). Other species include red-stem filaree (*Erodium cicutarium*), short-pod mustard (*Hirschfeldia incana*), tocalote (*Centaurea melitensis*), fennel (*Foeniculum vulgare*) and Russian thistle (*Salsola tragus*) and tarweed (*Deinandra fasciculata*). This vegetation appears to replace native grassland and coastal sage scrub habitat (most likely after regular fire events) within the Park and are very dense in some areas of the Park.

Eucalyptus:

Eucalyptus habitat range from monotypic thickets with little or no understory to scattered trees over a well-developed herbaceous and shrubby understory. It is more typically found in monotypic stands with very little understory due to the allelopathic nature of eucalyptus.

Stand structure varies considerably due to planting regimes (row for wind protection or dense stands for hardwood production). Tree heights range from 26 to 40 m (87 to 133 ft). The understory is typically composed of introduced annual grasses and forbs. The shrub understory is usually very sparse or nonexistent due to the allelopathic nature of eucalyptus.

Eucalyptus is an important roost, perch, and nest tree for raptors. Eucalyptus habitat occurs along the northern border of the Park just south of the Rock Creek Church caretaker's residence. Additionally, there are scattered eucalyptus trees throughout Park, primarily along the borders.

2.6 FIRE

Vegetation play an important role in the fire regime of the Park. Fire regime refers to the patterns of fire that occur over long periods of time, and the immediate effects of fire in the ecosystem in which it occurs. Fire regime is a function of the frequency of fire occurrence, fire intensity and the amount of fuel consumed. The frequency is determined largely by the ecosystem characteristics, the duration and character of the weather (whether the season is drier or wetter than normal, etc.) and ignition sources. The intensity of a fire is determined by the quantity of fuel available, the fuel's combustion rates and existing weather conditions. Interactions between frequency and intensity are influenced by wind, topography and fire history.

Plant species and vegetation have evolved to survive repeated fires. Some of these communities, such as chaparral and coastal scrub rely on occasional fires as part of their regeneration process even though the short-term impacts of fire in these communities can appear to be severe. On September 28, 2005, the Topanga fire burned through the Park. The entire park burned except for small areas juxtaposed to Chatsworth Park South city park.

2.7 AIR QUALITY

Air pollutant emissions sources are typical grouped into two categories: stationary (point and area sources) and mobile sources (motorized vehicles). The U.S. Environmental Protection Agency (USEPA) has established ambient air quality standards for the following air pollutants:

- ozone (O₃),
- nitrogen dioxide (NO₂),
- carbon monoxide (CO),
- sulfur dioxide (SO₂),
- lead (Pb),
- inhalable particulate matter (PM10), and
- fine particulate matter (PM2.5)¹.

Additionally, the California Air Resources Board has also established ambient air quality standards for the six pollutants regulated by the USEPA. Some of the California ambient air quality standards are more stringent than the national ambient air quality standards. In addition, California has established ambient air quality standards for the following pollutants or air quality conditions:

- sulfates,
- vinyl chloride, and

¹ In May, 1999, the Federal Court of Appeals in Washington, D.C. overturned the PM2.5 standard. Pending the court decision on the rehearing, the new standard cannot be implemented. It is possible for the USEPA to re-promulgate the standard with a more adequate explanation, if the appeal is denied.

- visibility.

The Park is within the South Coast Air Basin. Because of its location and close approximation from major urban pollution sources, the Park often has poor air quality. A major portion of the air pollution affecting the Park is wind-transported and likely arises from urban sources in the greater Los Angeles area. As of June 15, 2005, the South Coast Air Basin is in non-attainment for particulate matter (both PM-2.5 and PM-10), 1-hour ozone (extreme), 8-hour ozone (severe), and carbon monoxide (serious) (EPA, 2006).

2.8 BIOCORRIDORS

Biocorridors or linkages are interconnected tracts of land characterized by significant natural resource value through which native species can disperse. Corridors provide pathways for gene flow, seed dispersal, daily movement between habitats (home range movements), migration (seasonal or altitudinal), and dispersal habitat for juveniles. Corridors can function at various temporal and spatial scales. Temporally, it allows for both daily and seasonal movements as well as movements over many generations. Spatially, corridors can function on regional, landscape/ecosystem (landscape size can vary) or at smaller scale such as home range.

Though natural landscapes have an inherent degree of connectivity, recent (past 50 years) habitat alteration has greatly reduced this connectivity (Penrod et al 2005). Establishing connections between isolated or fragmented habitat patches is essential for sustaining natural ecological processes, population viability, and biological diversity (Noss and Cooperrider 1994). The Park functions as part of a regional bio-corridor complex. South Coast Wildlands, working with CSP and other Federal, State, and local agencies has identified the Santa Susanna Pass as a major dispersal corridor for numerous wildlife and plant species (Penrod et al 2005).

Only two locations exist where undeveloped land occurs on opposite sides of SR-118 (California Department of Transportation 2004). One is at the west end of Simi valley and the second with Rocky Peak Park located north of SR-118 and Corriganville Regional Park and Santa Susanna Pass State Historical Park located south of SR-118 (California Department of Transportation 2004).

Mountain lions are known to use the Corriganville equestrian tunnel to cross SR-118 from Rocky Peak County Park (RCCP) into Corriganville Park and potentially east into the Park. Two lions were collared and monitored by the National Park Service and both of these lions were observed (via radio telemetry) using the Corriganville wildlife tunnel at least 18 times (pers comm. Seth Riley).

To maintain the function of this passageway as a wildlife linkage, any improvements to park facilities need to be low impact such as no night lighting, retaining dirt parking lots, no fencing that block large mammal movements through Park, and limit day use facilities. Currently, the only improvements done at the RCCP was installation of temporary restrooms, security fence, water fountains, information booths, caretaker living quarters, storage building, parking lot grading, and general clean-up (California Department of Transportation 2004). Additionally, a

youth campground in the east end of the RCCP is used by scout troops. Overnight camping at this site can disrupt wildlife movement through the Park. No further work is planned, since funding is not available at this time.

The Santa Susanna Pass Wash is culverted under SR-118 just east of The Church at Rocky Peak caretaker's residence and is approximately 500 ft long. This wildlife passageway is used frequently by raccoons to cross under SR-118 but is not appropriate to accommodate large mammals (California Department of Transportation 2004). This site would be an excellent corridor if improvements were to be made such as removal of the current corrugated metal pipe culvert and replacement with a large natural bottomed box culvert which would allow for passage of mid to large size mammals.

Facilitating the movement of plants and animals within Park and throughout the region outside of Park is imperative to preserving natural ecosystem dynamics and regional bio-diversity. California Department of Parks and Recreation will continue to support and work towards the preservation, protection, enhancement, and identification of regional landscape linkages that connect the Park to other wildland areas. California Department of Parks and Recreation will advocate the protection of key parcels within identified landscape linkages through acquisition or other conservation mechanisms, and incorporate departmental defensive planning policies for projects that decrease the viability of such landscape linkages. It is a standard practice of California Department of Parks and Recreation to acquire property from willing sellers.

2.9 BIOLOGICAL RESOURCES

2.9.1 Botanical Resources

Research was conducted prior to field surveys to determine the vegetation communities in the project area and the associated specific plants. This research involved querying the CDFG CNDDDB Rarefind Database Version 3.0.5 (CDFG 2003) and CNPS Inventory of Rare and Endangered Plants electronic database Version 6.3 (CNPS 2005) database for sensitive plants and natural communities, reviewing published and unpublished material, and contacting knowledgeable individuals. The Oat Mt, Canoga Park, Calabasas, and Simi Valley East USGS 7.5-minute quadrangles were used to query all databases and other sources.

Emphasis was placed on the special status species that may occur. Some of the plants, which were considered, though not formally listed as rare or endangered under the California Endangered Species Act, meet the definitions of Section 1901, Chapter 10 (Native Plant Protection) of the California Fish and Game Code, and are eligible for State listing. These plant species were given equal consideration during the assessment as if they were already listed species.

Field surveys to locate and identify plant species located within the Park (Table 1) followed the floristic survey protocol recommended by CDFG (CDFG 2000) and field survey schedules were determined based on the known blooming periods of those species. Known occurrences for any

special status plant species were obtained from the CDFG CNDDDB Rarefind Database and from CDPR files personnel.

2.9.1.1 Sensitive Botanical Resources

A total of 14 special status plant species and 9 rare natural communities were identified as potentially occurring in Oat Mt, Canoga Park, Calabasas, and Simi Valley East USGS 7.5-minute quadrangles (Table 2). Southern coast live oak riparian forest was the only sensitive vegetation series observed within park boundaries during surveys. Additionally, Plummer's mariposa lily (*Calochortus plummerae*) and Santa Susana tarplant (*Deinandra minithornii*) were observed during surveys. These occurrences were mapped (GIS) and sent to the CDFG, Wildlife Habitat Data Analysis Branch for addition into the CNDDDB. An expanded discussion is provided for those sensitive or protected species with known occurrences or where habitat may exist within the Park.

Santa Susana tarplant:

The Santa Susana tarplant is a deciduous shrub occurring cismontane woodlands, valley and foothill grassland, and alkali grassland plant communities associated with clay, loamy sand, or alkaline silty-clay soils from 280 to 760 meters (919 to 2493 ft). The flowers bloom from July to November.

Potential Presence in Park:

There are numerous known occurrences of Santa Susana tarplant within the Park. During initial surveys, numerous locations were identified and mapped.

Plummer's mariposa lily:

The Plummer's mariposa lily is a bulbiferous herb occurring in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forests, and valley and foothill grassland habitats. They are associated with rocky and sandy sites, usually of granitic or alluvial material and can be very common after fire. They are found from 100 to 1700 m (328 to 5577 ft). The flowers bloom from May to July.

Potential Presence in Park:

There are known occurrences of Plummer's Mariposa lily within the Park. During initial surveys, three locations were identified and mapped. All locations were on a south facing slope within a coastal sage scrub vegetation community.

Slender mariposa lily:

The slender mariposa lily (*Calochortus clavatus* var. *gracilis*) is a bulbiferous herb occurring in chaparral, coastal scrub, and shaded foothill canyon habitats. They are often found on grassy slopes within other plant communities from 360 to 1,000 m (1,181 to 3,281 ft). The flowers bloom from March to June.

Potential Presence in Park:

There are no known occurrences of slender mariposa lily within the Park and no occurrence was noted during surveys but habitat does exist within park boundaries.

Braunton's milk vetch

The Braunton's milk vetch (*Astragalus brauntonii*) is a perennial herb occurring in chaparral, coastal scrub, closed-cone coniferous forest, and valley and foothill grassland habitats. They are often associated with recent burned or disturbed areas in gravelly clay soils overlying granite or limestone from 4 to 640 m (13 to 2,100 ft). The flowers bloom from February to July.

Potential Presence in Park:

There are no known occurrences of Braunton's milk vetch within the Park and no occurrence was noted during surveys but habitat does exist within park boundaries.

San Fernando Valley spineflower:

The San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina*) is an annual herb occurring in coastal scrub habitats. They are often associated with sandy soils from 150 to 1,220 m (492 to 4,003 ft). The flowers bloom from April to June.

Potential Presence in Park:

There are no known occurrences of valley spineflower within the Park and no occurrence was noted during surveys but habitat does exist within park boundaries.

Agoura Hills dudleya:

The Agoura Hills dudleya (*Dudleya cymosa* ssp. *Agourensis*) is a perennial herb occurring in chaparral and cismontane woodland habitats. They are often associated with rocky volcanic soils and are found from 200 to 500 m (656 to 1,640 ft). The flowers bloom from May to June.

Potential Presence in Park:

There are no known occurrences of Agoura Hills dudleya within the Park and no occurrence was noted during surveys but habitat does exist within park boundaries.

Many-stemmed dudleya:

The many-stemmed dudleya (*Dudleya multicaulis*) is a perennial herb occurring in chaparral, coastal scrub, and valley and foothill grassland habitats. They are often associated with clay soils or grassy slopes from 15 to 790 m (49 to 2,592 ft). The flowers bloom from April to July.

Potential Presence in Park:

There are no known occurrences of many-stemmed dudleya within the Park and no occurrence was noted during surveys but habitat does exist within park boundaries.

Conejo dudleya:

The Conejo dudleya (*Dudleya parva*) is a perennial herb occurring in coastal scrub and valley and foothill grassland habitats. It is often associated with rocky or gravelly and clay soils from 60 to 450 m (197 to 1,476 ft). The flowers bloom from May to June.

Potential Presence in Park:

There are no known occurrences of Conejo dudleya within the Park and no occurrence was noted during surveys but habitat does exist within park boundaries.

Blochman's dudleya:

The Blochman's dudleya (*Dudleya blochmaniae* ssp. *blochmaniae*) is a perennial herb occurring in coastal scrub, chaparral, coastal bluff scrub, and valley and foothill grassland habitats. It is often found on open rocky slopes, shallow clay soils over serpentinite, or on rocky areas with little soil from 5 to 450 m (16 to 1,476 ft). The flowers bloom from April to June.

Potential Presence in Park:

There are no known occurrences of Blochman's dudleya within the Park and no occurrence was noted during surveys but habitat does exist within park boundaries.

Chaparral nolina:

The chaparral nolina (*Nolina cismontana*) is a evergreen shrub occurring in chaparral and coastal scrub habitats. It is often associated with sandstone and shale substrates, but is also known from to occur on gabbro soils from 140 to 1,275 m (459 to 4,183 ft). The flowers bloom from May to July.

Potential Presence in Park:

There are no known occurrences of chaparral nolina within the Park and no occurrence was noted during surveys but habitat does exist within park boundaries.

Lyon's pentachaeta:

The Lyon's pentachaeta (*Pentachaeta lyonii*) is an annual herb occurring in chaparral, coastal scrub, and valley and foothill grassland habitats. It is often found at the edges of clearings or firebreaks from 30 to 630 m (98 to 2,067 ft). The flowers bloom from March to August.

Potential Presence in Park:

There are no known occurrences of Lyon's pentachaeta within the Park and no occurrence was noted during surveys but habitat does exist within park boundaries.

California Orcutt grass:

The California Orcutt grass (*Orcuttia californica*) is an annual herb occurring in vernal pools. It is found from 15 to 660 m (49 to 2,165 ft). The flowers bloom from April to August.

Potential Presence in Park:

There are known vernal pools within the Park and there is no know habitat within park boundaries.

Round-leaved filaree:

The round-leaved filaree (*Erodium macrophyllum*) is an annual herb occurring in cismontane woodland and valley and foothill grassland habitats. It is often associated with clay soils from 15 to 1,200 m (49 to 3,937 ft). The flowers bloom from March to May.

Potential Presence in Park:

There are no known occurrences of round-leaved filaree within the Park and no occurrence was noted during surveys but habitat does exist within park boundaries.

Slender-horned spineflower:

The slender-horned spineflower (*Dodecahema leptoceras*) is an annual herb occurring in chaparral, coastal scrub (alluvial fan sage scrub) and cismontane woodland habitats. It is often found on sandy flood deposited terraces and washes from 200 to 760 m (656 to 2,493 ft). The flowers bloom from April to June.

Potential Presence in Park:

There are no known occurrences of slender-horned spineflower within the Park and no occurrence was noted during surveys but habitat does exist within park boundaries.

2.9.2 Wildlife Resources

A query of the California Wildlife Habitat Relationships Program (CDFG 2002) using coastal oak woodland, coastal sage scrub, chamise-redshank chaparral, mixed chaparral, valley foothill riparian, annual grassland, eucalyptus, and barren habitats identified 391 wildlife species (Table 3) as potentially occurring in these habitats (and thus occurring in the Park) in Los Angeles County, California. This includes 252 avian species, 77 mammals, 46 reptiles, and 16 amphibians.

2.9.2.1 Sensitive Wildlife Resources

The California Natural Diversity Database Version 3.0.5 (CDFG 2003) was queried to compile a list of possible special status wildlife and fish species present in the project area. A total of 14 special status wildlife species and one invertebrate specie were identified as potentially

occurring in the Oat Mt, Canoga Park, Calabasas, and Simi Valley East USGS 7.5-minute quadrangles (**Table 4**). No special status wildlife or invertebrate species was observed during any survey.

California Department of Parks and Recreation Environmental Scientists compared specific habitat requirements, life history notes, elevation, species distribution, and species lists to determine if any special status species may be present in the Park. An expanded discussion is provided for those sensitive or protected species where habitat may exist within the Park. The following accounts were obtained from CWHR (Zeiner et al. 1990a, b, c) unless otherwise cited and include generalized habitat associations, food habits, cover, and reproduction requirements, seasonal movements, and any known locations in the project area. All known occurrences for any special status wildlife species were obtained from the CNDDDB Rarefind Database.

Mountain Lion

The following account was obtained from the South Coast Missing Linkages Project- Santa Monica-Sierra Madre Connection (Penrod et al. 2005). The South Coast Wildlands website and can be found at: <HTTP://WWW.SCWILDLANDS.ORG/MISSINGLINKS/REPORTS/> and detailed references can be found at this website.

Mountain lions are widely distributed throughout the western hemisphere (Chapman and Feldhamer 1982, Currier 1983, Maehr 1992, Tesky 1995). The subspecies *F. c. californica* occurs in southern Oregon, California, and Nevada (Hall 1981), typically between 1,980 and 5,940 ft (590-1,780 m) (CDFG 1990). In 1990, the mountain lion population in California was estimated to be between 2,500-5,000 individuals (CDFG). That same year, Proposition 117 was passed which prohibits hunting and granted puma the status of a California Specially Protected species, though depredation permits are still issued (Torres 2000).

The mountain lion is considered a habitat generalist, utilizing brushy stages of a variety of habitat types with good cover (Spowart and Samson 1986, CDFG1990). Within these habitats, mountain lions prefer rocky cliffs, ledges, and vegetated ridgetops that provide cover when hunting prey (Chapman and Feldhamer 1982, Spowart and Samson 1986), which is primarily mule deer, *Odocoileus hemionus* (Lindzey 1987). Den sites may be located on cliffs, rocky outcrops, caves, in dense thickets or under fallen logs (Ingles 1965, Chapman and Feldhamer 1982). In southern California, most cubs are reared in thick brush (Beier et al. 1995). They prefer vegetated ridgetops and stream courses as travel corridors and hunting routes (Spotwart and Samson 1986, Beier and Barrett 1993).

Home range size varies by sex, age, and the distribution of prey. A recent study in the Sierra Nevada documented annual home range sizes between 250 and 817 km² (Pierce et al. 1999). Home ranges in southern California averaged 93 km² (SD = 50) for 12 adult female and 363 km² (SD = 63) for 2 adult male cougars (Dickson and Beier in press). Male home ranges appear to reflect the density and distribution of females (Maehr 1992). Males occupy distinct areas and are tolerant of transients of both sexes, while the home range of females may overlap completely (CDFG 1990, Beier and Barrett 1993). Regional population counts have not been conducted but in the Santa Ana Mountain Range, Beier (1993) estimated about 1.05-1.2 adults per 100 sq km.

Mountain lions are capable of making long-distance movements, and can have multiple strategies of migration that allow them to take advantage of changing prey availability (Pierce et al. 1999). Beier et al. (1995) found mountain lions moved 6 km per night and dispersed up to 65 km. Dispersal plays a crucial role in cougar population dynamics because recruitment into a local population occurs mainly by immigration of juveniles from adjacent populations, while the population's own offspring emigrate to other areas (Beier 1995, Sweanor et al. 2000). Juvenile dispersal distances average 32 km (range 9-140 km) for females and 85 km (range 23-274 km) for males (Anderson et al. 1992). Dispersing lions may cross large expanses of nonhabitat, though they prefer not to do so (Logan and Sweanor 2001). To allow for dispersal of juveniles and the immigration of transients, lion management should be on a regional basis (Sweanor et al. 2000).

Potential Presence in Park:

Mountain lion are known to occur in Rocky Peak County Park immediately north (across SR-118) of PARK. Two lions were collared and monitored by the National Park Service and both of these lions were observed using the Corriganville wildlife tunnel (approx 400 m (0.25 mi) west) under SR-118 at least 18 times (pers comm. Seth Riley). Both of these lions subsequently died. It is very likely that those lions were using the Park for foraging and/or dispersal.

A fresh deer kill was observed in the northern section of the Park during botanical surveys on 05/17/06. It is assumed that a mountain lion made this kill since it is the only mammal (found in the Park) large enough to kill an adult deer. Though, a small pack of coyotes may occasionally stalk deer. Breeding, foraging, and dispersal habitat does exist within park boundaries.

Western Spadefoot:

The western spadefoot (*Scaphiopus hammondi*) is a California Species of Special Concern. It is found throughout the Central Valley and surrounding foothills and in the Coast Ranges from Santa Barbara south to the Mexico border primarily in grasslands, but also in valley-foothill hardwood woodlands.

Most Western spadefoot eat a variety of insects, worms and other invertebrates. Breeding and egg laying occur from late winter to the end of March in shallow, temporary pools. Egg masses are attached to plant material and hatch within two weeks usually. Juveniles and tadpoles are preyed upon by a variety of vertebrate predators including bullfrogs, wading birds, garter snakes, and mammals. *Scaphiopus* are rarely found on the surface spending most of the year in underground burrows. No seasonal movements have been noted but may move locally due to food resources.

Potential Presence in Park:

There are no known occurrences of western spadefoot within the Park and no occurrence was noted during surveys but, breeding egg lying, and dispersal habitat does exist within Park boundaries.

Arroyo Toad:

The following account was obtained from the U.S. Fish and Wildlife Service, Ventura Fish and Wildlife Office website and can be found at [HTTP://WWW.FWS.GOV/PACIFIC/VENTURA/ES/SPPLISTS/SPECIES_AMPHIBS.CFM](http://www.fws.gov/pacific/ventura/es/spplists/species_amphibs.cfm). Detailed references can be found at the above website.

The arroyo toad (*Bufo californicus*) was listed as endangered under the Endangered Species Act on December 16, 1994 and is a CDFG Species of Concern. On April 13, 2005, 4,733 ha (11,695 ac) in five counties were proposed as critical habitat for the species (Fed Reg 2005).

The arroyo toad is endemic to the coastal plain and mountains of central and southern California and northwestern Baja California from near sea level to about 2,440 meters in elevation. Within these areas, arroyo toads are found both perennial and intermittent rivers and streams that have shallow, sandy to gravelly pools adjacent to sand or fine gravel terraces. Breeding habitat requirements are highly specialized; specifically, arroyo toads require shallow slow-moving stream and riparian habitats that are disturbed naturally on a regular basis, primarily by flooding. Arroyo toad juveniles, subadults, and adults use the surrounding upland areas (up to two kilometers from a stream) for foraging and wintering. The arroyo toad has evolved in a system that is inherently dynamic, with marked seasonal and annual fluctuations in rainfall and flooding.

The breeding period occurs from late January or February to early July, although it can be extended in some years, depending on weather conditions. When water temperatures reach 14 Celsius, adult males advertise with a soft, high whistled trill. Receptive females seek out calling males based on the size of the male and the sound of his call. Although males may breed with several females in a season, female arroyo toads release their entire clutch of eggs as a single breeding effort and probably do not produce a second clutch during the mating season. Eggs are deposited and larvae develop in shallow pools with minimal current, little or no emergent vegetation and sand or pea gravel substrate. Embryos usually hatch in four to six days; the larval period lasts approximately 65 to 85 days. After metamorphosis from June to August, the juveniles remain on the bordering gravel bars until the pool no longer persists. Sexual maturity is reached in one to two years; arroyo toads may live for as few as five years (Sweet 1993). Little is known about movements or other behavior in the non-breeding season.

Larvae feed by inserting their heads into the substrate and ingesting loose organic material such as detritus, interstitial algae, bacteria, and diatoms. Juveniles and adults forage for insects, especially ants and small beetles, on sandy stream terraces. Juveniles spend more time exposed on these terraces during the daytime than do adults, and are thus vulnerable to diurnal predators.

Once juveniles are of sufficient size to dig burrows and bury themselves in sand, they become nocturnal. All ages classes of post-metamorphic arroyo toads tend to be active on rainy nights with moderate temperatures (above 7 Celsius). Adults excavate shallow burrows for shelter during the day when the surface is damp or during longer intervals in the dry season.

Urbanization, agriculture, dam construction, water manipulation, mining, livestock grazing, and recreational activities in riparian areas have caused extensive habitat degradation leading to the decline and isolation of the remaining populations of arroyo toads. The introduction of bullfrogs and exotic fish may have severe impacts on arroyo toad populations due to predation. Exotic plant species degrade arroyo toad habitat, making it unsuitable, and may cause changes in the invertebrate fauna upon which it feeds. Changes in hydrologic regimes and loss of overwintering habitat as streamside areas are developed are probably the most important factors in the decline of arroyo toads.

Potential Presence in Park:

There are no known occurrences of arroyo toad within the Park and no occurrence was noted during surveys but breeding, foraging, and dispersal habitat may exist within Park boundaries.

California Red-Legged Frog:

The following account was obtained from the U.S. Fish and Wildlife Service, Ventura Fish and Wildlife Office website and can be found at [HTTP://WWW.FWS.GOV/PACIFIC/VENTURA/ES/SPPLISTS/SPECIES AMPHIBS.CFM](http://www.fws.gov/pacific/ventura/es/spplists/species_amphibs.cfm). Detailed references can be found at the above website.

The California red-legged frog (*Rana aurora draytonii*) was federally listed as threatened on May 23, 1996, (Fed Reg 1996). A recovery plan was issued in 2002 (U.S. Fish and Wildlife Service 2002) and critical habitat was designated on March 13, 2001 (Fed Reg 2001).

California red-legged frogs spend most of their lives in and near sheltered backwaters of ponds, marshes, springs, streams, and reservoirs. Deep pools with dense stands of overhanging willows and an intermixed fringe of cattails are considered optimal habitat. California red-legged frog eggs, larvae, transformed juveniles, and adults also have been found in ephemeral creeks and drainages and in ponds that do not have riparian vegetation. Accessibility to sheltering habitat is essential for the survival of California red-legged frogs within a watershed, and can be a factor limiting population numbers and distribution. Individual California red-legged frogs are known to move long distances over land between water sources during winter rains.

California red-legged frogs breed from November through March with earlier breeding records occurring in southern localities. California red-legged frogs are often prolific breeders, typically laying their eggs during or shortly after large rainfall events in late winter and early spring. Embryos hatch 6 to 14 days after fertilization, and larvae require 3.5 to 7 months to attain metamorphosis. Larvae probably experience the highest mortality rates of all life stages, with less than one percent of eggs laid reaching metamorphosis. Sexual maturity normally is reached

at three to four years of age; California red-legged frogs may live eight to ten years. Juvenile frogs have been observed to be active diurnally and nocturnally, whereas adult frogs are mainly nocturnal.

The diet of California red-legged frogs is highly variable. Invertebrates are the most common food items, although vertebrates such as Pacific tree frogs and California mice can constitute over half of the prey mass eaten by larger frogs (Hayes and Tennant 1985). Larvae likely eat algae.

Over-harvesting, habitat loss, non-native species introduction, and urban encroachment are the primary factors that have negatively affected the California red-legged frog throughout its range (Jennings and Hayes 1985, Hayes and Jennings 1988). Ongoing causes of decline include direct habitat loss due to stream alteration and disturbance to wetland areas, indirect effects of expanding urbanization, and competition or predation from non-native species.

Potential Presence in Park:

There are no known occurrences of California red-legged frog within the Park and no occurrence was noted during surveys but breeding, foraging, and dispersal habitat does exist along the Santa Susana Pass Wash within Park boundaries.

San Diego Coast Horned Lizard:

The San Diego coast horned lizard (*Phrynosoma coronatum blainvillei*) is a USFWS category 2 candidate for listing as endangered, and a California Species of Special Concern. This species is found only in southwestern California from the coast to the foothills and valleys of the Peninsular ranges. It occurs in annual grassland, coastal sage scrub, valley-foothill hardwood, and conifer habitats. They require open areas of sandy soil within these habitats for foraging.

Diet consist primarily on ants of the genus *Pogonomyrmex* (harvester ants). Additionally, small beetles, wasps, grasshoppers, flies, and caterpillars are also eaten. It is active during early morning and late afternoon and foregoes and forage by sitting and waiting, often near an ant nest. Breeds from late May through June. Clutch size varies from 6-16 with a mean of 13 eggs.

No seasonal movements have been noted but may move locally due to food resources. Predators include leopard lizards, sidewinders, loggerhead shrikes, and various hawks. Populations have been reduced by loss of habitat, and past commercial or hobby collection.

Potential Presence in Park:

There are no known occurrences of San Diego coast horned lizard within the Park and no occurrence was noted during surveys but breeding and foraging habitat exists within Park boundaries.

Coastal Western Whiptail:

The coastal western whiptail lizard (*Cnemidophorus tigris multiscutatus*) is a candidate species for listing as threatened or endangered by the USFWS. It occurs in chamise-redshank chaparral, mixed chaparral, desert scrub, desert wash, and alkali wash habitats. Within such areas, these lizards may occupy loose sandy or rocky soil.

It forages actively on the surface and scratches through surface debris. Diet consists of a variety of small invertebrates including grasshoppers, beetles, ants termites, insect larvae, and spiders. Reproduction season varies depending on local conditions but generally occurs between May and August. Clutch size varies from 1-5 eggs with an average of 3. Whiptails digs burrows in the soil or will use existing burrows of other small animals. Juveniles have been reported to frequent grassy areas.

No seasonal movements have been noted but may move locally due to food resources. Common predators include diurnal snakes, larger lizards, and various birds. The coastal western whiptail has declined within its range as a result of habitat loss.

Potential Presence in Park:

There are no known occurrences of coastal western whiptail within the Park and no occurrence was noted during surveys but breeding and foraging habitat does exist within Park boundaries.

California legless lizard:

The California legless lizard (*Anniella pulchra pulchra*) is a CDFG Species of Special Concern. This species of legless lizards is found from Contra County, California south into northwestern Baja California, Mexico in the Coast Ranges, Transverse and Peninsular Ranges into from sea level to 1830 m (6,000 ft).

It frequents the sparse vegetation of coastal sunes, chaparral, pine-oak woodland and streamside sycamore, cottonwood, and oak riparian forests. They are often found in moist substrates.

This lizard burrows in washes, dune sand of beaches; and loose soil near the bases of slopes and near permanent or temporary streams. Diet consists of insect larvae, insects, and spiders. It forages at the base of shrubs and other vegetation in leaf litter or sandy soils. Mating occurs in late spring and early summer with live young born in the fall. Litter size ranges from 1 – 4 with a mean of two.

Potential Presence in Park:

There are no known occurrences of California legless lizards within the Park and no occurrence was noted during surveys. Breeding and foraging habitat does exist within park boundaries. There are known occurrences within Sand Canyon and the vicinity of

Stony Point approximately 1.0 km (0.62 miles east of the Park (pers. comm. Chris Delith, USFWS).

Two-Striped Garter Snake:

The two-striped garter snake (*Thamnophis hammondi*) is distributed in the Coast and Transverse ranges from Kern county to the Mexican border, and on Santa Catalina Island. It is associated with permanent or semi-permanent bodies of water bordered by dense vegetation in a variety of habitats from sea level to 2,400 m (8,000 ft).

It forages primarily in and along streams with the diet consisting of fishes, amphibians, and amphibian larvae, with leeches and earthworms also eaten. Breeding occurs in spring and young are born live in late summer. Two-striped garter snakes are diurnal and can be found basking on streamside rocks or on densely vegetated stream banks. When disturbed it retreats rapidly to water. No seasonal movements have been noted but may move locally due to food resources. Little is known about this snake.

Potential Presence in Park:

There are no known occurrences of two-striped garter snake within the Park and no occurrence was noted during surveys but breeding and foraging habitat does exist along the Santa Susana Pass Wash within Park boundaries.

Golden Eagle:

The golden eagle (*Aquila chrysaetos*) is a CDFG Species of Special Concern. It is a year-round resident in southern California and can be found from sea level up to 3833 m (0 to 11,500 ft) in rolling foothills, open mountain slopes with cliffs and rocks, sage-juniper flats, and desert vegetation communities.

Diet consists primarily of lagomorphs (rabbits) and rodents but also takes other mammals, birds, reptiles, and carrion. It nests on cliffs and in large trees. Breeds from late January to August with the peak occurring in March to July. Clutch size is 1-3 with an average clutch of 2. Eggs are incubated for 43–45 days. It may desert the nest in early incubation if disturbed by humans. Seasonally, Golden eagles may move up/downslope and some migrate into California for winter.

Potential Presence in Park:

There are no known occurrences of golden eagles within the Park and no occurrence was noted during surveys but breeding and foraging habitat does exist within Park boundaries.

Burrowing Owl:

The burrowing owl (*Athene cunicularia*) is a CDFG Species of Special Concern. It is a year-round resident in southern California and can be found from sea level up to 1600 m (0 to 5,300

ft) in open dry grassland, deserts, open stages of pinyon-juniper and ponderosa pine vegetation communities. It is associated with open grasslands and shrublands with perches and burrows.

Diet consists primarily of insects but also small mammals, reptiles, birds, and carrion. It uses rodent and other burrows for roosting and nesting. Breeds from march to August with the peak in April and May. Clutch size is 2–10 with an average of 5-6 eggs. Conversion of grassland to agriculture, urbanization, and poisoning of ground squirrels has reduced burrowing owl numbers in recent decades. Burrowing owls are primarily resident but there may be some downslope movement and some winter as far south as Central America.

Potential Presence in Park:

There are no known occurrences of burrowing owls within the Park and no occurrence was noted during surveys but breeding and foraging habitat may exist within Park boundaries.

Coastal California Gnatcatcher:

The California gnatcatcher (*Poliophtila californica californica*) was federally listed as threatened on March 23, 1993 (Fed Reg 1993). On April 24, 2003, the USFWS amended the critical habitat ruling for the coastal California gnatcatcher (Fed Reg 2003). The coastal California gnatcatcher is associated with California sagebrush and flat-topped buckwheat in coastal sage scrub habitats in coastal southern California and in northwestern Baja California, Mexico. Coastal sage scrub provides roosting, nesting, and cover habitat.

California gnatcatcher gleans for insects and spiders from shrubs. Territory size varies with habitat quality and is maintained year round. They breed between early March and mid-June with peak egg laying occurring in April and May. Clutch size averages four eggs with a range of 3-5.

The primary cause of this species' decline is the cumulative loss of coastal sage scrub vegetation to urban and agricultural development. California gnatcatchers can be adversely impacted by introduced predators (e.g., domestic cats), livestock grazing, human disturbance, off-road vehicle activity, and brown-headed cowbird (*Molothrus ater*) parasitism.

Potential Presence in Park:

There are no known occurrences of coastal California gnatcatcher within the Park and no occurrence was noted during surveys but breeding and foraging habitat does exist within Park boundaries.

Southern California Rufous-Crowned Sparrow:

The southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*) is a California species of Special Concern. They are associated with grass-covered hillsides, coastal sage scrub, and mixed chaparral habitats. They often occur near the edges of the denser scrub and chaparral communities.

Diet consists of seeds, insects, spiders, and grass and forb shoots. They forage primarily on the ground in herbage and litter but will glean from foliage. They are primarily groundnesters and nests are placed at the base of grass tussock or shrub. They breed from mid-March to mid-June with a peak in May. The average clutch size is 3-4 and are incubated by the female only. Eggs and nestlings are preyed upon by snakes, and small mammals.

Although they are somewhat adaptable to disturbance, populations have been declining due to the rapid destruction of coastal sage scrub in the coastal lowlands (Unitt 1984). Nests are preyed upon by snakes and small mammals.

Potential Presence in Park:

There are no known occurrences of Southern California rufous-crowned sparrow within the Park and no occurrence was noted during surveys but breeding and foraging habitat may exist within Park boundaries.

San Diego Desert Woodrat:

The desert woodrat (*Neotoma lepida* ssp. *intermedia*) is a CDFG Species of Concern. It is found in coastal southern California from San Luis Obispo County to San Diego County and is associated with rock outcrops and rocky cliffs and slopes with moderate to dense canopy cover.

Diet consists of buds, fruits, seeds, bark, leaves, and young shoots of numerous plant species. It prefers chamise, live oak, and buckwheat in coastal scrub habitats. Large houses are constructed of twigs, sticks, and rocks usually against a rock crevice. It breeds from October to May with a litter of 1 to 5 common. Predators include snakes, owls, and various mammals. No seasonal movements have been noted but may move locally due to food resources. Threats to the species include habitat destruction from development in the coastal plain.

Potential Presence in Park:

There are no known occurrences of San Diego desert woodrat within the Park and no occurrence was noted during surveys but breeding and foraging habitat does exist within Park boundaries.

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4.0 TABLES

Table 1. Plant species identified within the boundaries of Santa Susana Pass State Historic Park, Los Angeles County, California.

COMMON NAME	SCIENTIFIC NAME
giant ricegrass	<i>Achnatherum coronatum</i>
white yarrow	<i>Achillea millefolium</i>
perezia	<i>Acourtia microcephala</i>
chamise	<i>Adenostoma fasciculatum</i>
pink false gilia	<i>Allophyllum divaricatum</i>
white alder	<i>Alnus rhombifolia</i>
western ragweed	<i>Ambrosia psilostachya</i>
false indigo	<i>Amorpha californica</i>
fiddleneck	<i>Amsinkia menziesii</i>
scarlet pimpernel	<i>Anagallis arvensis</i>
white snapdragon	<i>Antirrhinum coulterianum</i>
twining snapdragon	<i>Antirrhinum kelloggii</i>
Eastwood manzanita	<i>Arctostaphylos glandulosa</i>
California sagebrush	<i>Artemisia californica</i>
narrow-leaf milkweed	<i>Asclepias fascicularis</i>
California lace fern	<i>Aspidotis californica</i>
wild oat	<i>Avena fatua</i>
coyote brush	<i>Baccharis pilularis</i>
mule's fat	<i>Baccharis salicifolia</i>
black mustard	<i>Brassica nigra</i>
California brickellbush	<i>Brickellia californica</i>
California brome	<i>Bromus carinatus</i>
ripcut brome	<i>Bromus diandrus</i>
red brome	<i>Bromus madritensos ssp. rubens</i>
foxtail brome	<i>Bromus rubens</i>
Catalina Mariposa lily	<i>Calochortus catalinae</i>
clubhair Mariposa lily	<i>Calochortus clavatus</i>
Plummer's Mariposa lily	<i>Calochortus plummerae</i>
wild morning glory	<i>Calystegia macrostegia</i>
California sun cup	<i>Camissonia californica</i>
Italian thistle	<i>Carduus pycnocephalus</i>
hottentot fig	<i>Carpobrotus edulis</i>
greenbark redheart	<i>Ceanothus spinosus</i>
tocalote (star thistle)	<i>Centaurea melitensis</i>
California mountain mahogany	<i>Cercocarpus betuloides</i>
white pincushion	<i>Chaenactis artemisiifolia</i>
soap plant	<i>Chlorogalum pomeridianum</i>
Turkish rugging	<i>Chorizanthe staticoides</i>
western thistle	<i>Cirsium occidentale</i>

rock rose	<i>Cistus creticus</i>
winecup fairyfan	<i>Clarkia purpurea</i>
elegant clarkia	<i>Clarkia unguiculata</i>
miner's lettuce	<i>Claytonia perfoliata</i>
Chinese houses	<i>Collinsia heterophylla</i>
poison hemlock	<i>Conium maculatum</i>
horseweed	<i>Conyza canadensis</i>
sand pygmyweed	<i>Crassula connata</i>
minute popcorn flower	<i>Cryptantha micromeres</i>
California dodder	<i>Cuscuta californica</i>
umbrella sedge	<i>Cyperus eragrostis</i>
western jimson weed	<i>Datura wrightii</i>
wild carrot	<i>Daucus pusillus</i>
scarlet larkspur	<i>Delphinium cardinale</i>
San Bernardino larkspur	<i>Delphinium parryi</i>
blue dicks	<i>Dichelostemma capitatum</i>
wood fern	<i>Dryopteris arguta</i>
lance-leaved dudleya	<i>Dudleya lanceolata</i>
chalk liveforever	<i>Dudleya puoverulenta</i>
spike sedge	<i>Eleocharis montevidensis</i>
yellow whispering bells	<i>Emmenanthe penduliflora</i>
bush sunflower	<i>Encelia californica</i>
California fuchsia	<i>Epilobium canum</i>
turkey mullein	<i>Eremocarpus setigerus</i>
Yerba Santa	<i>Eriodictyon crassifolium</i>
longstem buckwheat	<i>Eriogonum elongatum</i>
California buckwheat	<i>Eriogonum fasciculatum</i>
golden yarrow	<i>Eriophyllum confertiflorum</i>
golden yarrow	<i>Eriophyllum confertiflorum</i>
red-stem filaree	<i>Erodium cicutarium</i>
eucalyptus	<i>Eucalyptus spp.</i>
spotted hideseed	<i>Eucrypta chrysanthemifolia</i>
California cottonrose	<i>Filago californica</i>
narrowleaf cottonrose	<i>Filago gallica</i>
sweet fennel	<i>Foeniculum vulgare</i>
flowering ash	<i>Fraxinus dipetala</i>
narrow-leaved bedstraw	<i>Galium angustifolium</i>
chaparral gilia	<i>Gilia angelensis</i>
California everlasting	<i>Gnaphalium californicum</i>
fragrant everlasting	<i>Gnaphalium canescens</i>
cotton-batting plant	<i>Gnaphalium stramineum</i>
cudweed everlasting	<i>Gnaphalium sp.</i>
common rush-rose	<i>Helianthemum scoparium</i>
western sunflower	<i>Helianthus annuus</i>

slender sunflower	<i>Helianthus gracilentus</i>
slender tarweed	<i>Hemizonia fasciculata</i>
Santa Susana tarplant	<i>Hemizonia minthornii</i>
toyon	<i>Heteromeles arbutifolia</i>
telegraphweed	<i>Heterotheca grandiflora</i>
shortpod mustard	<i>Hirschfeldia incana</i>
barley	<i>Hordeum spp.</i>
smooth cat's ear	<i>Hypochaeris glabra</i>
Menzies' goldenbush	<i>Isocoma menziesii</i>
California walnut	<i>Juglans californica</i>
heart-leaved penstemon	<i>Keckiella cordifolia</i>
prickly lettuce	<i>Lactuca serriola</i>
goldentop grass	<i>Lamarckia aurea</i>
wild pea	<i>Lathyrus vestitus</i>
California prickly phlox	<i>Leptodactylon californicum</i>
cudweed-aster	<i>Lessingia filaginifolia</i>
giant wildrye	<i>Leymus condensatus</i>
honeysuckle	<i>Lonicera subspicata</i>
silver bird's-foot trefoil	<i>Lotus argophyllus</i>
Spanish clover	<i>Lotus purshianus</i>
deerweed	<i>Lotus scoparius</i>
Bishop lotus	<i>Lotus strigosus</i>
miniature lupine	<i>Lupinus bicolor</i>
stinging lupine	<i>Lupinus hirsutissimus</i>
Coulter's lupine	<i>Lupinus sparsiflorus</i>
bush mallow	<i>Malacothamnus fasciculatus</i>
annual malacothrix	<i>Malacothrix clevelandii</i> ?
cliff aster	<i>Malacothrix saxatilis</i>
laurel sumac	<i>Malosma laurina</i>
cheeseweed mallow	<i>Malva parviflora</i>
horehound	<i>Marrubium vulgare</i>
California burclover	<i>Medicago polymorpha</i>
sourclover	<i>Melilotus indica</i>
coast range melic	<i>Melica imperfecta</i>
bush monkey flower	<i>Mimulus aurantiacus</i>
scarlet monkey flower	<i>Mimulus cardinalis</i>
wishbone bush	<i>Mirabilis californica</i>
tree tobacco	<i>Nicotiana glauca</i>
California peony	<i>Paeonia californica</i>
California pellitory	<i>Parietaria hespera hinton var. californica</i>
birds-foot fern	<i>Pellaea mucronata</i>
foothill penstemon	<i>Penstemon heterophyllus</i>
gold fern	<i>Pentagramma triangularis</i>
caterpillar phacelia	<i>Phacelia cicutaria</i>

common phacelia	<i>Phacelia distans</i>
imbricate phacelia	<i>Phacelia imbricata</i>
branching phacelia	<i>Phacelia ramosissima</i>
millet mountain rice	<i>Piptatherum miliaceum</i>
California sycamore	<i>Platanus racemosa</i>
California polypody	<i>Polypodium californica</i>
Fremont's cottonwood	<i>Populus fremontii</i>
holly-leaved cherry	<i>Prunus illicifolia</i>
pterostegia	<i>Pterostegia drymarioides</i>
Interior live oak	<i>Quercus agrifolia</i>
scrub oak	<i>Quercus berberidifolia</i>
California chicory	<i>Rafinesquia californica</i>
castor bean	<i>Ricinus communis</i>
coffeeberry	<i>Rhamnus californica</i>
wild radish	<i>Rhaphanus sativus</i>
lemonadeberry	<i>Rhus integrifolia</i>
sugarbush	<i>Rhus ovata</i>
chaparral currant	<i>Ribes malvaceum</i>
curly dock	<i>Rumex crispis</i>
black willow	<i>Salix gooddingii</i>
arroyo willow	<i>Salix lasiolepis</i>
Russian thistle	<i>Salsola tragus</i>
white sage	<i>Salvia apiana</i>
purple sage	<i>Salvia leucophylla</i>
Mexican elderberry	<i>Sambucus mexicana</i>
Peruvian pepper tree	<i>Schinus molle</i>
Bigelow's spike-moss	<i>Selaginella biglovii</i>
windmill pink	<i>Silene gallica</i>
fringed indian pink	<i>Silene lacinata</i>
many-nerved catchfly	<i>Silene multinervia</i>
milk thistle	<i>Silybum marianum</i>
hedge mustard	<i>Sisymbrium officinale</i>
Indian hedgemustard	<i>Sisymbrium orientale</i>
evening nightshade	<i>Solanum americanum</i>
Douglas' nightshade	<i>Solanum douglasii</i>
purple nightshade	<i>Solanum xanti</i>
sowthistle	<i>Sonchus spp.</i>
twiggy wreath plant	<i>Stephanomeria virgata</i>
southern umbrellawort	<i>Tauschia arguta</i>
poison oak	<i>Toxicodendron diversilobum</i>
tomcat clover	<i>Trifolium willdenovii</i>
cattail	<i>Typha latifolia</i>
California bay	<i>Umbellularia californica</i>
Lindley's silverpuffs	<i>Uropappus lindleyi</i>

canyon sunflower	<i>Venegasia carpesioides</i>
western vervain	<i>Verbana lasiostachys var. lasiostachys</i>
Mexican fan palm	<i>Washingtonia robusta</i>
cocklebur	<i>Xanthium strumarium</i>
our Lord's candle	<i>Yucca whipplei</i>
Fremont's death camas/star lily	<i>Zigadenus fremontii</i>

Table 2. List of special status plant species and vegetation communities and their status identified in the Oat Mt, Calabasas, Canoga Park, and Simi Valley East USGS 7.5-minute quadrangles from the CDFG CNDDDB Rarefind Database and CNPS.

SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS	STATE STATUS	CNPS STATUS	GENERAL HABITAT	MICRO HABITAT
<i>Astragalus brauntonii</i>	Braunton's milk-vetch	FE		1B	Closed-cone coniferous forest, chaparral, coastal scrub, valley and foothill grassland.	Recent burns or disturbed areas; in stiff gravelly clay soils overlying granite or limestone. 4-640m.
<i>Calochortus clavatus</i> var. <i>gracilis</i>	slender mariposa lily			1B	Chaparral, coastal scrub.	Shaded foothill canyons; often on grassy slopes within other habitat. 420-760m
<i>Calochortus plummerae</i>	Plummer's mariposa lily			1B	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest.	Occurs on rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire. 90-1610m.
<i>Chorizanthe parryi</i> var. <i>fernandina</i>	San Fernando Valley spineflower		SE	1B	Coastal scrub.	Sandy soils. 3-1035m.
<i>Deinandra minthornii</i>	Santa Susana tarplant			1B	Chaparral, coastal scrub.	On sandstone outcrops and crevices, in shrubland. 280-760m.
<i>Dodecahema leptoceras</i>	slender-horned spineflower	FE	SE	1B	Chaparral, coastal scrub (alluvial fan sage scrub).	Flood deposited terraces and washes; assoc include encelia, dalea, lepidospartum, etc. 200-760m.
<i>Dudleya blochmaniae</i> ssp. <i>Blochmaniae</i>	Blochman's dudleya			1B	Coastal scrub, coastal bluff scrub, valley and foothill grassland.	Open, rocky slopes; often in shallow clays over serpentine or in rocky areas w/little soil. 5-450m.
<i>Dudleya cymosa</i> ssp. <i>agourensis</i>	Agoura Hills dudleya	FT		1B	Chaparral, cismontane woodland.	Rocky, volcanic breccia. 200-500m.
<i>Dudleya multicaulis</i>	many-stemmed dudleya			1B	Chaparral, coastal scrub, valley and foothill grassland.	In heavy, often clayey soils or grassy slopes. 0-790m.
<i>Dudleya parva</i>	Conejo dudleya	FT		1B	Coastal scrub, valley and foothill grassland.	In clayey or volcanic soils on rocky slopes and grassy hillsides. 60-450m.
<i>Erodium macrophyllum</i>	round-leaved filaree			2	Cismontane woodland, valley and foothill grassland.	Clay soils. 15-1200m.
<i>Nolina cismontana</i>	chaparral nolina			1B	Chaparral, coastal scrub.	Primarily on sandstone and shale substrates; also known from gabbro. 140-1275m.
<i>Orcuttia californica</i>	California Orcutt grass	FE	SE	1B	Vernal pools.	15-660m.
<i>Pentachaeta lyonii</i>	Lyon's pentachaeta	FE	SE	1B	Chaparral, valley and foothill grassland.	Edges of clearings in chap., usually at the ecotone between grassland and chaparral or edges of firebreaks. 30-630m.
	California Walnut Woodland					
	Southern Coast Live Oak Riparian Forest					
	Southern Cottonwood Willow Riparian Forest					
	Southern Mixed Riparian Forest					
	Southern Riparian Scrub					
	Southern Sycamore Alder Riparian Woodland					
	Southern Willow Scrub					
	Valley Needlegrass Grassland					
	Valley Oak Woodland					

FE	Listed as endangered under the Federal Endangered Species Act.
FT	Listed as threatened under the Federal Endangered Species Act.
SE	Listed as endangered under the California Endangered Species Act.
1B	CNPS List 1B: Plants rare, threatened or endangered in California.
2	CNPS List 2: Plants rare, threatened, or endangered in California, but more common elsewhere

Table 3. List of species predicted to occur in coastal scrub, mixed chaparral, coastal oak woodland, chamise-redshank chaparral, annual grassland, eucalyptus, valley foothill riparian, and barren habitats in Los Angeles, County California

COMMON NAME	SCIENTIFIC NAME
California newt	<i>Taricha torosa</i>
Ensatina	<i>Ensatina eschscholtzii</i>
Black-bellied slender salamander	<i>Batrachoseps nigriventris</i>
Pacific slender salamander	<i>Batrachoseps pacificus</i>
Tehachapi slender salamander	<i>Batrachoseps stebbinsi</i>
Arboreal salamander	<i>Aneides lugubris</i>
Western spadefoot	<i>Spea hammondii</i>
Western toad	<i>Bufo boreas</i>
Southwestern toad	<i>Bufo microscaphus</i>
Red-spotted toad	<i>Bufo punctatus</i>
California chorus frog	<i>Pseudacris cadaverina</i>
Pacific chorus frog	<i>Pseudacris regilla</i>
Red-legged frog	<i>Rana aurora</i>
Foothill yellow-legged frog	<i>Rana boylei</i>
Northern leopard frog	<i>Rana pipiens</i>
Bullfrog	<i>Rana catesbeiana</i>
American white pelican	<i>Pelecanus erythrorhynchos</i>
Brown pelican	<i>Pelecanus occidentalis</i>
Double-crested cormorant	<i>Phalacrocorax auritus</i>
Brandt's cormorant	<i>Phalacrocorax penicillatus</i>
Pelagic cormorant	<i>Phalacrocorax pelagicus</i>
Great blue heron	<i>Ardea herodias</i>
Great egret	<i>Ardea alba</i>
Snowy egret	<i>Egretta thula</i>
Cattle egret	<i>Bubulcus ibis</i>
Green heron	<i>Butorides virescens</i>
Black-crowned night heron	<i>Nycticorax nycticorax</i>
White-faced ibis	<i>Plegadis chihi</i>
Tundra swan	<i>Cygnus columbianus</i>
Greater white-fronted goose	<i>Anser albifrons</i>
Snow goose	<i>Chen caerulescens</i>
Brant	<i>Branta bernicla</i>
Canada goose	<i>Branta canadensis</i>
Wood duck	<i>Aix sponsa</i>
Green-winged teal	<i>Anas crecca</i>
Mallard	<i>Anas platyrhynchos</i>
Northern pintail	<i>Anas acuta</i>
Blue-winged teal	<i>Anas discors</i>
Cinnamon teal	<i>Anas cyanoptera</i>

COMMON NAME	SCIENTIFIC NAME
Northern shoveler	<i>Anas clypeata</i>
Gadwall	<i>Anas strepera</i>
Eurasian wigeon	<i>Anas penelope</i>
American wigeon	<i>Anas americana</i>
Lesser scaup	<i>Aythya affinis</i>
Common goldeneye	<i>Bucephala clangula</i>
Bufflehead	<i>Bucephala albeola</i>
Hooded merganser	<i>Lophodytes cucullatus</i>
Common merganser	<i>Mergus merganser</i>
Ruddy duck	<i>Oxyura jamaicensis</i>
Turkey vulture	<i>Cathartes aura</i>
California condor	<i>Gymnogyps californianus</i>
Osprey	<i>Pandion haliaetus</i>
White-tailed kite	<i>Elanus leucurus</i>
Bald eagle	<i>Haliaeetus leucocephalus</i>
Northern harrier	<i>Circus cyaneus</i>
Sharp-shinned hawk	<i>Accipiter striatus</i>
Cooper's hawk	<i>Accipiter cooperii</i>
Northern goshawk	<i>Accipiter gentilis</i>
Red-shouldered hawk	<i>Buteo lineatus</i>
Swainson's hawk	<i>Buteo swainsoni</i>
Red-tailed hawk	<i>Buteo jamaicensis</i>
Ferruginous hawk	<i>Buteo regalis</i>
Rough-legged hawk	<i>Buteo lagopus</i>
Golden eagle	<i>Aquila chrysaetos</i>
American kestrel	<i>Falco sparverius</i>
Merlin	<i>Falco columbarius</i>
Peregrine falcon	<i>Falco peregrinus</i>
Prairie falcon	<i>Falco mexicanus</i>
Chukar	<i>Alectoris chukar</i>
Wild turkey	<i>Meleagris gallopavo</i>
California quail	<i>Callipepla californica</i>
Mountain quail	<i>Oreortyx pictus</i>
Virginia rail	<i>Rallus limicola</i>
American coot	<i>Fulica americana</i>
Black-bellied plover	<i>Pluvialis squatarola</i>
Snowy plover	<i>Charadrius alexandrinus</i>
Semipalmated plover	<i>Charadrius semipalmatus</i>
Killdeer	<i>Charadrius vociferus</i>
Mountain plover	<i>Charadrius montanus</i>
Black oystercatcher	<i>Haematopus bachmani</i>
Black-necked stilt	<i>Himantopus mexicanus</i>
American avocet	<i>Recurvirostra americana</i>

COMMON NAME	SCIENTIFIC NAME
Greater yellowlegs	<i>Tringa melanoleuca</i>
Willet	<i>Catoptrophorus semipalmatus</i>
Spotted sandpiper	<i>Actitis macularia</i>
Whimbrel	<i>Numenius phaeopus</i>
Long-billed curlew	<i>Numenius americanus</i>
Marbled godwit	<i>Limosa fedoa</i>
Ruddy turnstone	<i>Arenaria interpres</i>
Black turnstone	<i>Arenaria melanocephala</i>
Surfbird	<i>Aphriza virgata</i>
Western sandpiper	<i>Calidris mauri</i>
Least sandpiper	<i>Calidris minutilla</i>
Dunlin	<i>Calidris alpina</i>
Short-billed dowitcher	<i>Limnodromus griseus</i>
Long-billed dowitcher	<i>Limnodromus scolopaceus</i>
Common snipe	<i>Gallinago gallinago</i>
Wilson's phalarope	<i>Phalaropus tricolor</i>
Mew gull	<i>Larus canus</i>
Ring-billed gull	<i>Larus delawarensis</i>
California gull	<i>Larus californicus</i>
Herring gull	<i>Larus argentatus</i>
Thayer's gull	<i>Larus thayeri</i>
Western gull	<i>Larus occidentalis</i>
Glaucous-winged gull	<i>Larus glaucescens</i>
Caspian tern	<i>Sterna caspia</i>
Royal tern	<i>Sterna maxima</i>
Elegant tern	<i>Sterna elegans</i>
Common tern	<i>Sterna hirundo</i>
Forster's tern	<i>Sterna forsteri</i>
Least tern	<i>Sterna antillarum</i>
Common murre	<i>Uria aalge</i>
Pigeon guillemot	<i>Cepphus columba</i>
Xantus' murrelet	<i>Synthliboramphus hypoleucus</i>
Rhinoceros auklet	<i>Cerorhinca monocerata</i>
Rock dove	<i>Columba livia</i>
Band-tailed pigeon	<i>Columba fasciata</i>
Spotted dove	<i>Streptopelia chinensis</i>
Mourning dove	<i>Zenaida macroura</i>
Common ground-dove	<i>Columbina passerina</i>
Greater roadrunner	<i>Geococcyx californianus</i>
Barn owl	<i>Tyto alba</i>
Western screech owl	<i>Otus kennicottii</i>
Great horned owl	<i>Bubo virginianus</i>
Northern pygmy owl	<i>Glaucidium gnoma</i>

COMMON NAME	SCIENTIFIC NAME
Burrowing owl	<i>Athene cunicularia</i>
Spotted owl	<i>Strix occidentalis</i>
Long-eared owl	<i>Asio otus</i>
Short-eared owl	<i>Asio flammeus</i>
Northern saw-whet owl	<i>Aegolius acadicus</i>
Lesser nighthawk	<i>Chordeiles acutipennis</i>
Common poorwill	<i>Phalaenoptilus nuttallii</i>
Black swift	<i>Cypseloides niger</i>
White-throated swift	<i>Aeronautes saxatalis</i>
Black-chinned hummingbird	<i>Archilochus alexandri</i>
Anna's hummingbird	<i>Calypte anna</i>
Costa's hummingbird	<i>Calypte costae</i>
Calliope hummingbird	<i>Stellula calliope</i>
Allen's hummingbird	<i>Selasphorus sasin</i>
Belted kingfisher	<i>Ceryle alcyon</i>
Lewis' woodpecker	<i>Melanerpes lewis</i>
Acorn woodpecker	<i>Melanerpes formicivorus</i>
Red-naped sapsucker	<i>Sphyrapicus nuchalis</i>
Red-breasted sapsucker	<i>Sphyrapicus ruber</i>
Nuttall's woodpecker	<i>Picoides nuttallii</i>
Downy woodpecker	<i>Picoides pubescens</i>
Hairy woodpecker	<i>Picoides villosus</i>
Northern flicker	<i>Colaptes auratus</i>
Olive-sided flycatcher	<i>Contopus cooperi</i>
Western wood-pewee	<i>Contopus sordidulus</i>
Dusky flycatcher	<i>Empidonax oberholseri</i>
Pacific-slope flycatcher	<i>Empidonax difficilis</i>
Black phoebe	<i>Sayornis nigricans</i>
Say's phoebe	<i>Sayornis saya</i>
Ash-throated flycatcher	<i>Myiarchus cinerascens</i>
Cassin's kingbird	<i>Tyrannus vociferans</i>
Western kingbird	<i>Tyrannus verticalis</i>
Horned lark	<i>Eremophila alpestris</i>
Tree swallow	<i>Tachycineta bicolor</i>
Violet-green swallow	<i>Tachycineta thalassina</i>
Northern rough-winged swallow	<i>Stelgidopteryx serripennis</i>
Bank swallow	<i>Riparia riparia</i>
Cliff swallow	<i>Petrochelidon pyrrhonota</i>
Barn swallow	<i>Hirundo rustica</i>
Steller's jay	<i>Cyanocitta stelleri</i>
Western scrub-jay	<i>Aphelocoma californica</i>
American crow	<i>Corvus brachyrhynchos</i>
Common raven	<i>Corvus corax</i>

COMMON NAME	SCIENTIFIC NAME
Mountain chickadee	<i>Poecile gambeli</i>
Oak titmouse	<i>Baeolophus inornatus</i>
Bushtit	<i>Psaltriparus minimus</i>
Red-breasted nuthatch	<i>Sitta canadensis</i>
White-breasted nuthatch	<i>Sitta carolinensis</i>
Brown creeper	<i>Certhia americana</i>
Cactus wren	<i>Campylorhynchus brunneicapillus</i>
Rock wren	<i>Salpinctes obsoletus</i>
Canyon wren	<i>Catherpes mexicanus</i>
Bewick's wren	<i>Thryomanes bewickii</i>
House wren	<i>Troglodytes aedon</i>
Winter wren	<i>Troglodytes troglodytes</i>
Marsh wren	<i>Cistothorus palustris</i>
American dipper	<i>Cinclus mexicanus</i>
Golden-crowned kinglet	<i>Regulus satrapa</i>
Ruby-crowned kinglet	<i>Regulus calendula</i>
Blue-gray gnatcatcher	<i>Polioptila caerulea</i>
Western bluebird	<i>Sialia mexicana</i>
Mountain bluebird	<i>Sialia currucoides</i>
Townsend's solitaire	<i>Myadestes townsendi</i>
Swainson's thrush	<i>Catharus ustulatus</i>
Hermit thrush	<i>Catharus guttatus</i>
American robin	<i>Turdus migratorius</i>
Varied thrush	<i>Ixoreus naevius</i>
Wrentit	<i>Chamaea fasciata</i>
Northern mockingbird	<i>Mimus polyglottos</i>
California thrasher	<i>Toxostoma redivivum</i>
American pipit	<i>Anthus rubescens</i>
Cedar waxwing	<i>Bombycilla cedrorum</i>
Phainopepla	<i>Phainopepla nitens</i>
Loggerhead shrike	<i>Lanius ludovicianus</i>
European starling	<i>Sturnus vulgaris</i>
Bell's vireo	<i>Vireo bellii</i>
Cassin's vireo	<i>Vireo cassinii</i>
Hutton's vireo	<i>Vireo huttoni</i>
Warbling vireo	<i>Vireo gilvus</i>
Orange-crowned warbler	<i>Vermivora celata</i>
Nashville warbler	<i>Vermivora ruficapilla</i>
Yellow warbler	<i>Dendroica petechia</i>
Yellow-rumped warbler	<i>Dendroica coronata</i>
Black-throated gray warbler	<i>Dendroica nigrescens</i>
Townsend's warbler	<i>Dendroica townsendi</i>
Hermit warbler	<i>Dendroica occidentalis</i>

COMMON NAME	SCIENTIFIC NAME
Macgillivray's warbler	<i>Oporornis tolmiei</i>
Common yellowthroat	<i>Geothlypis trichas</i>
Wilson's warbler	<i>Wilsonia pusilla</i>
Yellow-breasted chat	<i>Icteria virens</i>
Summer tanager	<i>Piranga rubra</i>
Western tanager	<i>Piranga ludoviciana</i>
Black-headed grosbeak	<i>Pheucticus melanocephalus</i>
Blue grosbeak	<i>Guiraca caerulea</i>
Lazuli bunting	<i>Passerina amoena</i>
Spotted towhee	<i>Pipilo maculatus</i>
California towhee	<i>Pipilo crissalis</i>
Rufous-crowned sparrow	<i>Aimophila ruficeps</i>
Chipping sparrow	<i>Spizella passerina</i>
Brewer's sparrow	<i>Spizella breweri</i>
Black-chinned sparrow	<i>Spizella atrogularis</i>
Vesper sparrow	<i>Pooecetes gramineus</i>
Lark sparrow	<i>Chondestes grammacus</i>
Black-throated sparrow	<i>Amphispiza bilineata</i>
Sage sparrow	<i>Amphispiza belli</i>
Savannah sparrow	<i>Passerculus sandwichensis</i>
Grasshopper sparrow	<i>Ammodramus savannarum</i>
Fox sparrow	<i>Passerella iliaca</i>
Song sparrow	<i>Melospiza melodia</i>
Lincoln's sparrow	<i>Melospiza lincolni</i>
Golden-crowned sparrow	<i>Zonotrichia atricapilla</i>
White-crowned sparrow	<i>Zonotrichia leucophrys</i>
Dark-eyed junco	<i>Junco hyemalis</i>
Lapland longspur	<i>Calcarius lapponicus</i>
Red-winged blackbird	<i>Agelaius phoeniceus</i>
Tricolored blackbird	<i>Agelaius tricolor</i>
Western meadowlark	<i>Sturnella neglecta</i>
Yellow-headed blackbird	<i>Xanthocephalus xanthocephalus</i>
Brewer's blackbird	<i>Euphagus cyanocephalus</i>
Brown-headed cowbird	<i>Molothrus ater</i>
Hooded oriole	<i>Icterus cucullatus</i>
Bullock's oriole	<i>Icterus bullockii</i>
Scott's oriole	<i>Icterus parisorum</i>
Purple finch	<i>Carpodacus purpureus</i>
House finch	<i>Carpodacus mexicanus</i>
Red crossbill	<i>Loxia curvirostra</i>
Pine siskin	<i>Carduelis pinus</i>
Lesser goldfinch	<i>Carduelis psaltria</i>
Lawrence's goldfinch	<i>Carduelis lawrencei</i>

COMMON NAME	SCIENTIFIC NAME
American goldfinch	<i>Carduelis tristis</i>
Evening grosbeak	<i>Coccothraustes vespertinus</i>
House sparrow	<i>Passer domesticus</i>
California gnatcatcher	<i>Polioptila californica</i>
Plumbeous vireo	<i>Vireo plumbeus</i>
Pacific golden-plover	<i>Pluvialis fulva</i>
American oystercatcher	<i>Haematopus palliatus</i>
Baird's sandpiper	<i>Calidris bairdii</i>
Pectoral sandpiper	<i>Calidris melanotos</i>
Chimney swift	<i>Chaetura pelagica</i>
American redstart	<i>Setophaga ruticilla</i>
White-throated sparrow	<i>Zonotrichia albicollis</i>
Harris's sparrow	<i>Zonotrichia querula</i>
Indigo bunting	<i>Passerina cyanea</i>
Virginia opossum	<i>Didelphis virginiana</i>
Dusky shrew	<i>Sorex monticolus</i>
Ornate shrew	<i>Sorex ornatus</i>
Desert shrew	<i>Notiosorex crawfordi</i>
Broad-footed mole	<i>Scapanus latimanus</i>
Yuma myotis	<i>Myotis yumanensis</i>
Long-eared myotis	<i>Myotis evotis</i>
Fringed myotis	<i>Myotis thysanodes</i>
Long-legged myotis	<i>Myotis volans</i>
California myotis	<i>Myotis californicus</i>
Western small-footed myotis	<i>Myotis ciliolabrum</i>
Western pipistrelle	<i>Pipistrellus hesperus</i>
Big brown bat	<i>Eptesicus fuscus</i>
Western red bat	<i>Lasiurus blossevillii</i>
Hoary bat	<i>Lasiurus cinereus</i>
Spotted bat	<i>Euderma maculatum</i>
Townsend's big-eared bat	<i>Corynorhinus townsendii</i>
Pallid bat	<i>Antrozous pallidus</i>
Brazilian free-tailed bat	<i>Tadarida brasiliensis</i>
Western mastiff bat	<i>Eumops perotis</i>
Brush rabbit	<i>Sylvilagus bachmani</i>
Desert cottontail	<i>Sylvilagus audubonii</i>
Black-tailed jackrabbit	<i>Lepus californicus</i>
Merriam's chipmunk	<i>Tamias merriami</i>
White-tailed antelope squirrel	<i>Ammospermophilus leucurus</i>
California ground squirrel	<i>Spermophilus beecheyi</i>
Mohave ground squirrel	<i>Spermophilus mohavensis</i>
Western gray squirrel	<i>Sciurus griseus</i>
Eastern fox squirrel	<i>Sciurus niger</i>

COMMON NAME	SCIENTIFIC NAME
Northern flying squirrel	<i>Glaucomys sabrinus</i>
Botta's pocket gopher	<i>Thomomys bottae</i>
Little pocket mouse	<i>Perognathus longimembris</i>
San joaquin pocket mouse	<i>Perognathus inornatus</i>
White-eared pocket mouse	<i>Perognathus alticola</i>
San diego pocket mouse	<i>Chaetodipus fallax</i>
California pocket mouse	<i>Chaetodipus californicus</i>
Chisel-toothed kangaroo rat	<i>Dipodomys microps</i>
Pacific kangaroo rat	<i>Dipodomys agilis</i>
Panamint kangaroo rat	<i>Dipodomys panamintinus</i>
Merriam's kangaroo rat	<i>Dipodomys merriami</i>
Western harvest mouse	<i>Reithrodontomys megalotis</i>
Cactus mouse	<i>Peromyscus eremicus</i>
California mouse	<i>Peromyscus californicus</i>
Deer mouse	<i>Peromyscus maniculatus</i>
Canyon mouse	<i>Peromyscus crinitus</i>
Brush mouse	<i>Peromyscus boylii</i>
Pinon mouse	<i>Peromyscus truei</i>
Southern grasshopper mouse	<i>Onychomys torridus</i>
Desert woodrat	<i>Neotoma lepida</i>
Dusky-footed woodrat	<i>Neotoma fuscipes</i>
California vole	<i>Microtus californicus</i>
Common muskrat	<i>Ondatra zibethicus</i>
Black rat	<i>Rattus rattus</i>
Norway rat	<i>Rattus norvegicus</i>
House mouse	<i>Mus musculus</i>
Common porcupine	<i>Erethizon dorsatum</i>
Coyote	<i>Canis latrans</i>
Red fox	<i>Vulpes vulpes</i>
Kit fox	<i>Vulpes macrotis</i>
Gray fox	<i>Urocyon cinereoargenteus</i>
Island gray fox	<i>Urocyon littoralis</i>
Black bear	<i>Ursus americanus</i>
Ringtail	<i>Bassariscus astutus</i>
Raccoon	<i>Procyon lotor</i>
Long-tailed weasel	<i>Mustela frenata</i>
American badger	<i>Taxidea taxus</i>
Western spotted skunk	<i>Spilogale gracilis</i>
Striped skunk	<i>Mephitis mephitis</i>
Mountain lion	<i>Puma concolor</i>
Bobcat	<i>Lynx rufus</i>
California sea-lion	<i>Zalophus californianus</i>
Harbor seal	<i>Phoca vitulina</i>

COMMON NAME	SCIENTIFIC NAME
Northern elephant seal	<i>Mirounga angustirostris</i>
Wild pig	<i>Sus scrofa</i>
Mule deer	<i>Odocoileus hemionus</i>
Feral goat	<i>Capra hircus</i>
Western pond turtle	<i>Clemmys marmorata</i>
Desert tortoise	<i>Gopherus agassizii</i>
Western banded gecko	<i>Coleonyx variegatus</i>
Zebra-tailed lizard	<i>Callisaurus draconoides</i>
Mojave fringe-toed lizard	<i>Uma scoparia</i>
Great basin collared lizard	<i>Crotaphytus bicinctores</i>
Long-nosed leopard lizard	<i>Gambelia wislizenii</i>
Desert spiny lizard	<i>Sceloporus magister</i>
Western fence lizard	<i>Sceloporus occidentalis</i>
Sagebrush lizard	<i>Sceloporus graciosus</i>
Side-blotched lizard	<i>Uta stansburiana</i>
Coast horned lizard	<i>Phrynosoma coronatum</i>
Desert horned lizard	<i>Phrynosoma platyrhinos</i>
Desert night lizard	<i>Xantusia vigilis</i>
Island night lizard	<i>Xantusia riversiana</i>
Western skink	<i>Eumeces skiltonianus</i>
Gilbert's skink	<i>Eumeces gilberti</i>
Western whiptail	<i>Cnemidophorus tigris</i>
Southern alligator lizard	<i>Elgaria multicarinata</i>
California legless lizard	<i>Anniella pulchra</i>
Western blind snake	<i>Leptotyphlops humilis</i>
Rubber boa	<i>Charina bottae</i>
Rosy boa	<i>Charina trivirgata</i>
Ringneck snake	<i>Diadophis punctatus</i>
Spotted leaf-nosed snake	<i>Phyllorhynchus decurtatus</i>
Racer	<i>Coluber constrictor</i>
Coachwhip	<i>Masticophis flagellum</i>
Striped racer	<i>Masticophis lateralis</i>
Western patch-nosed snake	<i>Salvadora hexalepis</i>
Glossy snake	<i>Arizona elegans</i>
Gopher snake	<i>Pituophis melanoleucus</i>
Common kingsnake	<i>Lampropeltis getula</i>
California mountain kingsnake	<i>Lampropeltis zonata</i>
Long-nosed snake	<i>Rhinocheilus lecontei</i>
Common garter snake	<i>Thamnophis sirtalis</i>
Western aquatic garter snake	<i>Thamnophis couchii</i>
Ground snake	<i>Sonora semiannulata</i>
Western shovel-nosed snake	<i>Chionactis occipitalis</i>
Western black-headed snake	<i>Tantilla planiceps</i>

COMMON NAME	SCIENTIFIC NAME
Lyre snake	<i>Trimorphodon biscutatus</i>
Night snake	<i>Hypsiglena torquata</i>
Speckled rattlesnake	<i>Crotalus mitchellii</i>
Sidewinder	<i>Crotalus cerastes</i>
Western rattlesnake	<i>Crotalus viridis</i>
Mojave rattlesnake	<i>Crotalus scutulatus</i>
Two-striped garter snake	<i>Thamnophis hammondi</i>

Table 4. List of special status wildlife species and their status identified in the Oat Mt, Calabasas, Canoga Park, and Simi Valley East USGS 7.5-minute quadrangles from the CDFG CNDDDB Rarefind Database and U.S. Fish and Wildlife Service.

SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS	STATE STATUS	CDFG STATUS	GENERAL HABITAT	MICRO HABITAT
<i>Spea (=Scaphiopus) hammondi</i>	western spadefoot			SC	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands.	Vernal pools are essential for breeding and egg-laying.
<i>Bufo californicus</i>	arroyo toad	FE		SC	Semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, etc.	Rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of streams in drier parts of range.
<i>Rana aurora draytonii</i>	California red-legged frog	FT		SC	Lowlands & foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation.	Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.
<i>Clemmys marmorata pallida</i>	Southwestern pond turtle			SC	Inhabits permanent or nearly permanent bodies of water in many habitat types; below 6000 ft elev.	Require basking sites such as partially submerged logs, vegetation mats, or open mud banks. Need suitable nesting sites.
<i>Phrynosoma coronatum (blainvillei)</i>	Coast (San Diego) horned lizard			SC	Inhabits coastal sage scrub and chaparral in arid and semi-arid climate conditions.	Prefers friable, rocky, or shallow sandy soils.
<i>Aspidoscelis tigris stejnegeri</i>	coastal western whiptail				Found in deserts & semiarid areas with sparse vegetation and open areas. Also found in woodland & riparian areas.	Ground may be firm soil, sandy, or rocky.
<i>Thamnophis hammondi</i>	two-striped garter snake			SC	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation.	Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.
<i>Aquila chrysaetos</i>	golden eagle			SC	(Nesting & wintering) rolling foothills mountain areas, sage-juniper flats, desert.	Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.
<i>Athene cucularia</i>	burrowing owl			SC	(Burrow sites) open, dry annual or perennial grasslands, deserts & scrublands characterized by low-growing vegetation.	Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.
<i>Polioptila californica californica</i>	coastal California gnatcatcher	FT		SC	Obligate, permanent resident of coastal sage scrub below 2500 ft in southern California.	Low, coastal sage scrub in arid washes, on mesas & slopes. Not all areas classified as coastal sage scrub are occupied.
<i>Vireo bellii pusillus</i>	least Bell's vireo	FE	SE		(Nesting) summer resident of southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft.	Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, baccharis, and mesquite.
<i>Agelaius tricolor</i>	tricolored blackbird			SC	(Nesting colony) highly colonial species, most numerous in central valley & vicinity. Largely endemic to California.	Requires open water, protected nesting substrate, & foraging area with insect prey within a few km of the colony.
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat			SC	Coastal southern California from San Diego County to San Luis Obispo County.	Moderate to dense canopies preferred. They are particularly abundant in rock outcrops & rocky cliffs & slopes.
<i>Gila orcutti</i>	arroyo chub			SC	Los Angeles basin south coastal streams.	Slow water stream sections with mud or sand bottoms. Feed heavily on aquatic vegetation & associated invertebrates.
<i>Danaus plexippus</i>	monarch butterfly				Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico.	Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.
<i>Streptocephalus woottoni</i>	Riverside fairy shrimp	FE			Endemic to western Riverside, Orange, and San Diego Counties in areas of tectonic swales/earth slump basins in grassland & coastal sage scrub.	Inhabit seasonally astatic pools filled by winter/spring rains. Hatch in warm water later in the season.
<i>Socalchemmis gertschi</i>	Gertsch's Socalchemmis spider					

Code	Definition
FE	Listed as endangered under the federal Endangered Species Act.
FT	Listed as threatened under the federal Endangered Species Act.
SC	CDFG Species of special concern.
SE	Listed as endangered under the California Endangered Species Act.