21. Santa Felicia SEA

Location

General

The Santa Felicia Significant Ecological Area (SEA) is located northwest of the City of Santa Clarita within unincorporated area of the County. Some of the SEA extends into the Angeles National Forest. The area is west of the Interstate-5, north of State Route-126 and encompasses almost the entire County portion of the Santa Felicia watershed that drains into Lake Piru and Piru Creek. Piru Creek has the largest watershed of any tributary of the Santa Clara River. The SEA is largely composed of natural coastal slopes of the western San Gabriel Mountains, with south-facing slopes of coastal sage scrub and grasslands, north-facing slopes of oak woodland and chaparral, and canyons of riparian oak forest and other riparian habitats. This habitat has been diminished by development, and the SEA is one place in the County where the natural habitat remains.

The SEA is located at least partially in each of the following United States Geological Survey (USGS) 7.5' California Quadrangles: Whitaker Peak and Val Verde.

General Boundary and Resources Description

Starting at the north end of the SEA boundary on the Ventura-Los Angeles County line, the northern SEA boundary is about one-quarter to one-half mile north of the boundary of Angeles National Forest, with private property as it follows along the northern ridgeline of Devil Canyon. Most of the SEA captures the natural, coastal sage scrub-covered south-facing slopes, oak-forests and mixed chaparral of the north-facing slopes, and deep ravines with riparian oak forest in the canyons. Devil Canyon is a major tributary of Piru Creek (at Lake Piru) in Ventura County. Where the Devil Canyon watershed contacts the southern ridgeline off Townsend Peak, the SEA boundary turns south along a ridge that separates Santa Felicia Canyon and its tributaries on the west side, from Palomas Canyon on the east side. The boundary goes south out of the Angeles National Forest into private lands about a 0.75 mile south of Townsend Peak. To capture the watershed tributaries, the eastern boundary follows the dominant ridgeline between Palomas Canyon and Santa Felicia Canyon, and then between Santa Felicia Canyon and Violin Canyon, after Palomas Canyon joins Violin Canyon. There is a triple divide for the watersheds of Violin Canyon (which joins Castaic Creek), the watershed of Romero Canyon, which joins Hasley Canyon before it joins Castaic Canyon, and Santa Felicia Canyon, which is a tributary of Piru Creek. At the triple divide, the SEA boundary turns west to follow the ridge of the Santa Felicia watershed. The boundary crosses Loma Verde (peak), where it separates Santa Felicia Canyon from Romero Canyon, and the unnamed headwater creeks of Hasley Canyon, excluding the rapidly developing areas. About a mile southwest of Loma Verde Canyon, the SEA boundary turns south and west to encompass the watershed of Oak Canyon, with coast live oaks and riparian forest. The SEA boundary goes north along the Ventura-Los Angeles County line, crossing riparian forest of Santa Felicia Canyon and Devil Canyon into the Angeles National Forest, where it joins the north ridge of Devil Canyon. Most of the SEA is included in the wildlife movement linkage Sierra Madre-Castaic Connection that was outlined by the South Coast Wildlands study of linkages (Penrod, et al. 2005).

The SEA includes a wide variety of topographic features and habitat types. The orientation and extent of the SEA encompasses the surface and subsurface hydrology of the Santa Felicia watershed, from its headwater, tributaries, and basin to the point at which it exits the County jurisdiction.
The SEA encompasses most of the County portion of the Santa Felicia watershed that drains into Lake Piru. This watershed is largely undeveloped and contains vast stands of coastal sage scrub and chaparral communities on south- and north-facing slopes. In addition to the undisturbed upland habitats, the watershed includes examples of mixed riparian (sycamore-willow), oak riparian and coast live oak forests and alluvial scrub in the bottomlands. Grasslands occur in areas where grazing may have taken place; however, there is little invasion of these ruderal taxa into the native communities. A brief summary of the plant communities present, or likely to occur, within the SEA is provided in the Vegetation section.

Vegetation

The plant communities within the SEA are composed of numerous plant species. These plant species are adapted to a Mediterranean climate with a cool, wet season followed by a hot, dry season. Due to the topographic complexity and coastal and desert influences, the SEA supports a wide diversity of plant species.

Plant communities within the SEA include: coast live oak woodland, coast live oak riparian forest, chaparral, coastal sage chaparral scrub, non-native and native grasslands, alluvial fan sage scrub, and sycamore-willow riparian woodland.

Plant species observed or recorded in previous documentation within the SEA are indicated in the Comprehensive Floral & Faunal Compendium of the Los Angeles County SEAs. Sensitive plant species occurring or potentially occurring within the SEA are discussed in the Sensitive Biological Resources section.

Descriptions and general locations of the each plant community present within the SEA are given below.

Coastal Sage Chaparral Scrub Communities: Consist of drought-deciduous, low, soft-leaved shrubs and herbs on gentle to steep slopes below 5,000 feet in elevation. Several dominant species may occur within scrub communities, with some areas overwhelmingly dominated by one or two species. Dominant species include California sagebrush (Artemisia tridentata), California buckwheat (Eriogonum fasciculatum), California brittle bush (Encelia californica), purple sage (Salvia leucophylla), and deerweed (Acmispon glaber). Coastal sage chaparral scrub is found at the lower elevations within the SEA on drier south-facing slopes, but can also be found on the north-facing slopes and canyons.

Corresponding MCV communities:

- *Artemisia californica* (California sagebrush scrub) Shrubland Alliance
- *Artemisia californica-Salvia mellifera* (California sagebrush-black sage scrub) Shrubland Alliance
- *Artemisia californica-Eriogonum fasciculatum* (California sagebrush-California buckwheat scrub) Shrubland Alliance
- *Encelia californica* (California brittle bush scrub) Shrubland Alliance
- *Dendromecon rigida* (bush poppy scrub) Shrubland Alliance
- *Salvia leucophylla* (purple sage scrub) Shrubland Alliance
- *Salvia mellifera* (black sage scrub) Shrubland Alliance
- *Eriogonum fasciculatum* (California buckwheat scrub) Shrubland Alliance
- *Ericameria linearifolia* (narrowleaf goldenbush scrub) Provisional Shrubland Alliance
- *Lotus scoparius* [Acmispon glaber] (deer weed scrub) Shrubland Alliance
- *Malacothamnus fasciculatus* (bush mallow scrub) Shrubland Alliance

Alluvial Fan Scrub: Consists of a mixture of shrubs that colonize sandy-gravelly flood deposited soils
within intermittent creeks, arroyos, and drier terraces in large washes. Dominant species include California buckwheat (*Eriogonum fasciculatum*), scalebroom (*Lepidospartum squamatum*), quail bush (*Atriplex lentiformis*), and white sage (*Salvia apiana*).

Corresponding MCV communities:

- *Artemisia californica-Eriogonum fasciculatum* (California sagebrush-California buckwheat scrub) Shrubland Alliance
- *Lepidospartum squamatum* (scale broom scrub) Shrubland Alliance
- *Malosma laurina* (laurel sumac scrub) Shrubland Alliance
- *Salvia apiana* (white sage scrub) Shrubland Alliance

**Coast Live Oak Woodlands**: Commonly occur along drainages that experience at least a seasonal flow or in other areas under mesic conditions. Soil structure and soil moisture are the most important factors for the survival of oak woodlands; soils must be deep, uncompacted, fertile, well-aerated, and well-drained. This community is dominated by coast live oak (*Quercus agrifolia* var. *agrifolia*). If sufficient groundwater is present, western sycamore (*Platanus racemosa*), which is usually associated with riparian habitats, may also occur in the oak woodland. Oak woodlands occupy areas within the canyons and drainages of the SEA.

Corresponding MCV community:

- *Quercus agrifolia* (coast live oak woodland) Woodland Alliance

**Coast Live Oak Riparian Forest**: A variation of coast live oak woodland, where the canopy is more closely grown, and the trees occur in narrower formations along watercourses. Willow, California bay (*Umbellularia californica*), mulefat (*Baccharis salicifolia*), and other riparian species often occur in the understory.

Corresponding MCV community:

- *Quercus agrifolia* (coast live oak woodland) Woodland Alliance

**Sycamore-Willow Riparian Woodland**: May include the following: western sycamore (*Platanus racemosa*), black willow (*Salix gooddingii*), arroyo willow (*Salix lasiolepis*), skunkbush (*Rhus aromatica*), and California blackberry (*Rubus ursinus*).

Corresponding MCV Community:

- *Platanus racemosa* (California sycamore woodland) Woodland Alliance

**Grassland Communities**: Consist of low, herbaceous vegetation that is dominated by grasses, but generally also harbors native forbs and bulbs, as well as naturalized annual forbs. Topographic factors that contribute to grassland presence include gradual slopes or flat areas with deep, well-developed soils in areas below 3,000 feet. The species richness of grassland communities is dependent upon a number of land use factors, including intensity and duration of natural or anthropogenic disturbances, such as grazing.

Native grassland is often associated with coastal sage chaparral scrub and is found in pockets in close proximity to coastal sage chaparral scrub and non-native grassland. This community consists of at least 10 percent relative cover of native herbaceous plants (grasses and forbs). The remaining vegetative cover is made up of non-native grasses found in annual grassland and a variety of annual, showy flowers such as golden stars (*Bloomeria crocea*) and blue-eyed grass (*Sisyrinchium bellum*). Native grassland may be found scattered throughout the SEA, mostly in openings in coastal
sage chaparral scrub and mixed with non-native grasslands.

Corresponding MCV communities:

- *Leymus condensatus* (giant wild rye grassland) Herbaceous Alliance
- *Nassella* [Stipa] *cernua* (nodding needle grass grassland) Provisional Herbaceous Alliance
- *Nassella* [Stipa] *lepida* (foothill needle grass grassland) Provisional Herbaceous Alliance
- *Nassella* [Stipa] *pulchra* (purple needle grass grassland) Herbaceous Alliance

Non-native grassland consists of dominant invasive annual grasses that are primarily of Mediterranean origin. Dominant species found within this community include slender wild oat (*Avena barbata*), wild oat (*Avena fatua*) ripgut brome (*Bromus diandrus*), and red brome (*Bromus madritensis* ssp. *rubens*).

Corresponding MCV communities:

- *Avena* (*barbata*, *fatua*) (wild oats grasslands) Semi-Natural Herbaceous Stands
- *Brassica* (*nigra*) and other mustards (upland mustards) Semi-Natural Herbaceous Stands
- *Bromus* (*diandrus*, *hordeaceus*)-*Brachypodium distachyon* (annual brome grasslands) Semi-Natural Herbaceous Stands
- *Bromus rubens-Schismus* (*arabicus*, *barbatus*) ([*Bromus madritensis* ssp. *rubens*] red brome or Mediterranean grass grasslands) Semi-Natural Herbaceous Stands
- *Centarea* (*solstitialis*, *melitensis*) (yellow star-thistle fields) Semi-Natural Herbaceous Stands
- *Lolium perenne* [*Festuca perennis*] (perennial rye grass fields) Semi-Natural Herbaceous Stands

**Wildlife**

The SEA provides for extremely diverse and abundant wildlife, commensurate with extensive acreages of natural open space and great diversity of habitat types, within the stream channels and on the surrounding uplands. While a few wildlife species may be entirely dependent upon or obligate within a single vegetative community, the mosaic of vegetation communities within the area and adjoining uplands constitutes a continuum of functional ecosystems. These ecosystems support a wide variety of wildlife species, within the SEA boundaries and as a part of the regional ecosystem.

Analysis of invertebrates on any given site generally is limited by a lack of specific data, but the size of the SEA and diversity of habitats present are considered sufficient to support healthy populations of a very large number of invertebrate species. The riparian formations and aquatic habitats within the SEA support diverse faunas of arthropods, which may include native fairy shrimp, craneflies, blackflies and other aquatic dipterans, stoneflies, caddisflies, and dobsonflies, water boatmen, giant water bugs, ground beetles, diving beetles, and tiger beetles. Terrestrial insects are abundant around riparian corridors and in scrub habitats, particularly in oak-dominated habitats.

Amphibians are abundant and relatively diverse within moister woodland areas, along montane canyon bottoms, in riparian areas, and within surface water features. The overall riparian systems of the SEA provide habitat for a number of frog and toad populations, which may include populations of Baja California chorus frog (*Pseudacris hypochondriaca*) and California chorus frog (*P. cadaverina*), California toad (*Anaxyrus halophilus*), and western spadefoot (*Spea hammondii*), as well as the federally-endangered arroyo toad (*Anaxyrus calliformalis*). The federally-threatened California red-legged frog (*Rana draytonii*) has a known population and critical habitat in Michael Creek to the north. This frog could occur in Lake Piru and during times of very high water in the SEA. Open scrub, chaparral and alluvial fan habitats support diverse reptile populations, and the overall herpetofauna of the SEA would encompass numerous lizard species as well as a robust snake fauna.
Bird diversity within the SEA is related to habitat opportunities for year-round residents, seasonal residents, migrating raptors, and song birds. Coastal sage chaparral scrub and chaparral host a suite of birds typical of such sites at lower elevations over most of the coastal slopes of Southern California. The most productive sites for resident coastal sage chaparral scrub and chaparral birds are around riparian and freshwater systems, which also attract large numbers of migrants during the spring and fall. Oak woodlands and riparian areas generally support many more species. Notable species include the summer tanager (Piranga rubra), Bullock’s oriole (Icterus bullockii), black-headed grosbeak (Pheucticus melanocephalus), band-tailed pigeon (Patagioenas fasciata), western wood-pewee (Contopus sordidulus), several swallow species, western yellow-billed cuckoo (Coccyzus americanus occidentalis), willow flycatcher (Empidonax traillii), least Bell’s vireo (Vireo bellii pusillus), and the California condor (Gymnogyps californianus).

Native mammal diversity within the SEA is considerable. These likely include bats, rodents, squirrels, rabbits, moles, weasels, American badger (Taxidea taxus), skunks, raccoon (Procyon lotor), gray fox (Urocyon cinereoargenteus), bobcat (Lynx rufus), coyote (Canis latrans), mountain lion (Puma concolor), and mule deer (Odocoileus hemionus).

**Wildlife Movement**

The SEA provides riparian corridors, which serve as linkages between the Pacific coastline, coast ranges, interior ranges, the high desert and southern Sierras (via the Tehachapi Range). Animals move through the Santa Felicia watershed along and within the riparian systems between Piru Lake in Ventura County and the San Gabriel Mountain range and beyond. The tributary drainages in this SEA appear fully intact and open and support regional movement by many wildlife species. Most of the SEA was designated as an important wildlife movement linkage—Sierra Madre-Castaic Connection—which was outlined by the South Coast Wildlands study of linkages (Penrod, et al. 2005).

**Sensitive Biological Resources**

Sensitive biological resources are habitats or individual species that have special recognition by federal, state, or local conservation agencies and organizations as endangered, threatened, or otherwise rare. This is due to the species’ declining or limited population sizes, which usually results from habitat loss. Watch lists of such resources are maintained by the California Department of Fish and Game (CDFG), the United States Fish and Wildlife Service (USFWS), and special groups, such as the California Native Plant Society (CNPS). The following sections indicate the habitats as well as plant and animal species present, or potentially present within the SEA, which have been accorded special recognition. When species are federally-listed as endangered or threatened, they often have federally-designated, geographically-specific “critical habitat areas.” Critical habitat areas, after extensive study by experts, are judged to be essential to conservation and maintenance of the species.

**Sensitive Plan Communities and Habitats**

The SEA supports several habitat types considered sensitive by resource agencies. These are inventoried by California Department of Fish and Game (CDFG) in the California Natural Diversity Database (CNDDB) [2011]. The CNDDDB includes state and federally-listed endangered, threatened, and rare vascular plants, as well as several sensitive vertebrate species. These communities include chamise-white sage chaparral, holly leaf cherry chaparral, California brittle bush scrub, narrowleaf goldenbush scrub, scale broom scrub, white sage scrub, California sycamore woodland, giant wild rye grassland, nodding needle grass grassland, foothill needle grass grassland, and purple needle grass grassland, which occur throughout the SEA.

**Sensitive Plant Species**
The following special-status plant taxa have been reported or have the potential to occur within the SEA, based on known habitat requirements and geographic range information:

- Braunton’s milk-vetch (*Astragalus brauntonii*) FE, RPR 1B.1
- Nevin’s barberry (*Berberis nevinii*) FE, SE, RPR 1B.1
- Round-leafed filaree (*California macrophylla*) RPR 1B.1
- Peirson’s morning-glory (*Calystegia peirsonii*) RPR 4.2
- San Fernando Valley spineflower (*Chorizanthe parryi var. fernandina*) FC, SE, RPR 1B.1
- Slender-horned spineflower (*Dodecahemia leptoceras*) FE, SE, RPR 1B.1
- Palmer’s grapplinghook (*Harpagonella palmeri*) RPR 4.2
- Newhall sunflower (*Helianthus inexpectatus*) RPR 1B.1
- Los Angeles sunflower (*Helianthus nuttallii ssp. parishii*) RPR 1A
- Davidson’s bushmallow (*Malacothamnus davidsonii*) RPR 1B.2
- Ojai navarretia (*Navarretia ojaiensis*) RPR 1B.1
- White rabbit-tobacco (*Pseudognaphalium leucocephalum*) RPR 2.2
- Chaparral ragwort (*Senecio aphanactis*) RPR 2.2
- Greata’s aster (*Symphyotrichum greatae*) RPR 1B.3
- Slender mariposa lily (*Calochortus clavatus var. gracilis*) RPR 1B.2
- Late-flowered mariposa lily (*Calochortus fimbriatus*) RPR 1B.2
- Plummer’s mariposa lily (*Calochortus plummerae*) RPR 1B.2
- California Orcutt grass (*Orcuttia californica*) RPR FE, SE, 1B.1

**Sensitive Animal Species**

The following vertebrate species are state and/or federally-listed as endangered or threatened, and are known to have occurred within the SEA or have potential to occur in the SEA:

- Riverside fairy shrimp (*Streptocopehalus wottoni*) FE
- Cuckoo wasp [no common name] (*Ceratochrysis longimala*) CDFG Special Animals List
- Arroyo toad (*Anaxyrus californicus*) FE, SSC
- California red-legged frog (*Rana draytonii*) FT, SSC
- Western spadefoot (*Spea hammondi*) BLMS, SSC
- Coastal whiptail (*Aspidoscelis tigris stejnegeri*) CDFG Special Animals List
- Western pond turtle (*Emys marmorata*) BLMS, FSS, SSC
- Coast horned lizard (*Phrynosoma blainvillii*) BLMS, FSS, SSC
- Coast patch-nosed snake (*Salvadora hexalepis virgulata*) SSC
- Two-striped garter snake (*Thamnophis hammondi*) BLMS, FSS, SSC
- Cooper’s hawk (*Accipiter cooperii*) CDFG Watch List
- Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*) CDFG Watch List
- Grasshopper sparrow (*Ammodramus savannarum*) CDFG Special Animals List
- Bell's sage sparrow (*Amphispiza belli belli*) BCC, CDFG Watch List
- Burrowing owl (*Athene cunicularia*) BCC, BLMS, SSC
- Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) FC, BCC, FSS, SE
- Yellow warbler (*Dendroica petechia brewsteri*) SSC
- White-tailed kite (*Elanus leucurus*) CDFG Fully Protected
- California horned lark (*Eremophila alpestris actia*) CDFG Watch List, LAA
- Prairie falcon (*Falco mexicanus*) BCC, CDFG Watch List, LAA
- California condor (*Gymnogyps californianus*) FE, SE, CDF, CDFG Fully Protected, USBC, AWL, ABC
- Yellow-breasted chat (*Icteria virens*) SSC
• Loggerhead shrike (*Lanius ludovicianus*) BCC, SSC, LAA
• Coastal California gnatcatcher (*Polioptila californica californica*) FT, SSC, USBC, AWL, ABC
• Least Bell’s vireo (*Vireo bellii pusillus*) FE, BCC, SE, USBC, AWL, ABC
• Pallid bat (*Antrozous pallidus*) FSS, BLMS, SSC, WBWG High
• Spotted bat (*Euderma maculatum*) BLMS, SSC, WBWG High
• Western mastiff bat (*Eumops perotis californicus*) BLMS, SSC, WBWG High
• San Diego black-tailed jackrabbit (*Lepus californicus bennettii*) SSC
• California leaf-nosed bat (*Macrotus californicus*) FSS, SSC, WBWG High
• San Diego desert woodrat (*Neotoma lepida intermedia*) SSC
• American badger (*Taxidea taxus*) SSC

**Ecological Transition Areas (ETAs)**

There are no ETAs designated within this SEA.

The SEA meets several SEA designation criteria and supports many regional biological values. Each criterion and how it is met described below.

**CRITERIA ANALYSIS OF THE SANTA FELICIA SEA**

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Status</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>A) The habitat of core populations of endangered or threatened plant or animal species.</td>
<td>Not Met</td>
<td>The SEA does not include known core habitat.</td>
</tr>
<tr>
<td>B) On a regional basis, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution.</td>
<td>Met</td>
<td>The natural mountainous terrain and vegetation habitats of the SEA, which is a coastal drainage, have been diminished elsewhere within Southern California through development. The SEA encompasses a fine example of vegetation that has not been impacted very much by development.</td>
</tr>
<tr>
<td>C) Within the County, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution.</td>
<td>Met</td>
<td>This is a somewhat remote area where natural flora and natural bottoms remain in the canyons, invasive predators are nonexistent, and human intrusion is minimal, which is a rare habitat in the County.</td>
</tr>
<tr>
<td>D) Habitat that at some point in the life cycle of a species or group of species, serves as concentrated breeding, feeding, resting, or migrating grounds and is limited in availability either regionally or</td>
<td>Met</td>
<td>The SEA encompasses important tributaries (Santa Felicia Canyon and Devil Canyon) of Piru Creek. Piru Creek is the major tributary of the Santa Clara River. Nearly all of the drainages within the SEA are natural with sensitive habitats of all kinds of riparian forest. These drainages are all migratory corridors for both</td>
</tr>
<tr>
<td>Criterion</td>
<td>Status</td>
<td>Justification</td>
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<tr>
<td>in the County.</td>
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<td>plants and animals that connect the San Gabriel Mountains with the Santa Clara River and the coast, the Sierra Madre-Castaic Connection.</td>
</tr>
<tr>
<td>E) Biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or represent unusual variation in a population or community.</td>
<td>Not Met</td>
<td>The Santa Felicia watershed is not known as a physical/geographical extreme habitat.</td>
</tr>
<tr>
<td>F) Areas that would provide for the preservation of relatively undisturbed examples of the original natural biotic communities in the County.</td>
<td>Met</td>
<td>The Santa Felicia watershed is an excellent example of the inland watercourses and their vegetation on the coastal side of the Transverse Ranges. It is largely undisturbed, and a number of the drainages are still perennial.</td>
</tr>
</tbody>
</table>

In conclusion, the area is an SEA because it contains: B-C) biotic communities, vegetative associations, and habitat of plant and animal species that are restricted in distribution in the County and regionally; D) concentrated breeding, feeding, resting, and migrating grounds, which are limited in availability in the County; and F) areas that provide for the preservation of relatively undisturbed examples of original natural biotic communities in the County.

21. Santa Felicia SEA Sources


County of Los Angeles, Department of Regional Planning. 1993. *Additional Information and Analysis Regarding the Environmental Impact Report for the Sunshine Canyon Landfill Extension*, Los Angeles County, California.

County of Los Angeles, Department of Regional Planning. 2006. *The Santa Felicia SEA Description*, Los Angeles County, California.


Los Angeles Department of Regional Planning, 2010 Revised Draft Santa Clarita Valley Area Plan.


Michael Brandman Associates. 1989. Supplemental to Biological Resources Assessment of Indian Wells Estates, Tentative Tract 44327, Los Angeles County, California.


