ALTADENA
SIGNIFICANT ECOLOGICAL AREA

General

The Altadena Significant Ecological Area (SEA) is located along the Altadena foothills directly above the community of Altadena. A large portion of this SEA lies within the Angeles National Forest. The Arroyo Seco and Millard Canyon are located in the western portion of the SEA, and Hastings Canyon is located to the east. The potential for wildlife movement exists along this area, where the foothills afford year-round means for wildlife to travel in an east-west direction through terrain that is generally not as rugged or constrained by severe weather as that found at higher elevations. In addition, a second potential wildlife corridor exists between the Angeles National Forest and the Verdugo Mountains.

Description

The wide range of elevation, topography, aspect, and geology represent a wide array of physical habitats within this SEA. In general, the topography of the SEA is moderately steep to very steep, resulting in a number of very narrow corridors with elevations ranging from a high of approximately 3,000 feet above mean sea level (MSL) along the northern boundary, to a low of approximately 1200 feet above MSL along the southern boundary. Consequently, a variety of plant communities exist, including riparian and upland shrublands and woodlands. Within these major community types, there are many vegetation series varying according to plant species dominance.

Of particular note for this SEA, is its potential to accommodate lower elevation east-west linkages. This is significant in this area because of the constraints of development at lower elevations and very steep terrain and seasonal snow storms above the SEA, beginning at about 3000 feet, all of which limit potential movement for many species. There is also potential for north-south wildlife movement between the Angeles National Forest and the Verdugo Mountains. A link between the Angeles National Forest and the Arroyo Seco creates a potential movement corridor from the forest to the Foothill (I-210) Freeway. After passing over and under the 210 Freeway the linkage enters the San Rafael Hills where blocks of habitat remain, interspersed with residential development. From the San Rafael Hills, linkages may then be traced to the west across the Glendale Freeway and enclaves of residential development to access the Verdugo Mountains.

Vegetation

The variety of topography, soil types, aspect and water availability within the Altadena SEA creates a range of physical habitats which support numerous plant species. Sensitive plant species occurring or potentially occurring within the SEA are discussed below in the Sensitive Biological Resources section. Many of these species, although often different in their growth form, prefer similar habitat characteristics and are often found in recurring assemblages to form recognized plant communities.

Plant communities within the SEA were classified using standard methodology and terminology. Most of the communities correspond directly with those listed in Holland's Preliminary Descriptions of the Terrestrial Natural Communities of California (1986 and 1992 update). Other communities are named based on dominant species within them and/or commonly used terminology. Brief descriptions and general locations of each major plant community present within the SEA are provided below, including oak woodland, oak riparian forest, chaparral, and coastal sage scrub.

Oak woodland is a plant community dominated by arborescent species of the genus *Quercus.* Within this SEA, oak woodland is dominated by coast live oak, which is interspersed with chaparral and coastal sage scrub communities. Understory and adjacent vegetation varies from annual grasses and forbs in level areas to shrubs where topography is steeper. Oak woodland is scattered throughout the SEA, but is most prevalent on north-facing slopes and in drainage bottoms.

A similar community found in the SEA is **oak riparian forest**. This community is also dominated by coast live oak (canyon oak at higher elevations). The primary difference between oak woodland and oak riparian forest is the greater availability of water in riparian situations which is expressed in a denser tree canopy and higher density of trees. There is also a greater abundance of hydrophytic (moisture favoring) plant species in the understory. Oak riparian forest is best developed within broader, low gradient drainages of this SEA.

Chaparral is a shrub community composed of robust, mostly evergreen species. Within this SEA a number of chaparral series are found according to their dominant plant species. These include chamise, buck brush, ceanothus, scrub oak, interior live oak and mosaics of these depending on mixes of species and elevation. These and other shrub species form dense vegetation five to ten feet in height. The development of chaparral is pronounced over hillside areas throughout the SEA.

A shrub community exhibiting less robust structure found in this SEA is **coastal sage scrub**. This plant community is dominated by California sagebrush, California encelia, white sage, black sage, and California buckwheat. It also forms dense stands which grow three to four feet in height. Within this SEA this plant community is generally found in scattered patches which are highly interdigitated with mixed chaparral. These are primarily located in the lower elevation hillsides of the SEA.

Wildlife

Wildlife populations within the Altadena SEA are diverse due to the area's physiographic diversity and its location within and adjacent to the Angeles National Forest. The analysis of invertebrates is severely limited due to the lack of specific data; however, the SEA is likely to support healthy populations of a diverse assortment of invertebrate species based on its undisturbed nature and variety of habitats. Amphibians are expected to be present due to the aquatic and semi-aquatic habitats provided within the Arroyo Seco, Millard Canyon and their tributaries. Reptile abundance and diversity are expected to be characteristic of the habitats present, although areas closer to urban development along the southern boundaries of this SEA are likely to be degraded due to edge effects.

Bird use, diversity, and abundance within the Altadena SEA are expected to be high for several reasons. In general, this SEA provides habitat for a wide range of shrubland, woodland, and riparian species that occur at varying elevations. In particular, the riparian habitats found in drainages throughout this SEA provide essential habitat for riparian-obligate and riparian-favoring species. In addition, a number of migratory birds no doubt use this area to move across the northern portion of the Los Angeles Basin. These include a wide spectrum of birds including songbirds, waterfowl and raptors.

Similarly, the mammalian fauna is expected to be very diverse and abundant. Many mammalian species, including wide ranging, large mammals such as mountain lion, bobcat, coyote and deer are expected to use the SEA to forage. These animals are likely to den within the more isolated areas within the National Forest; however they are known to roam the SEA.

Wildlife Movement

Wildlife movement within the Altadena SEA takes on two major forms. First, due to the extreme intervening topography it is logical to expect considerable movement of wildlife up and down the drainages, which course through this SEA to connect the forest interior with foothill areas. Consequently, this type of movement occurs on a seasonal basis, particularly for large mobile mammals whose full range of habitat needs are typically met over broad areas.

The second major type of movement occurs across the flanks of the foothills in an east-west direction. Particularly for riparian-favoring migratory birds, a corridor linking lower elevation riparian habitats in the Altadena SEA is of high importance and is heavily utilized.

Sensitive Biological Resources

Sensitive biological resources are habitats or individual species that have been given special recognition by federal, state, or local conservation agencies and organizations as endangered, threatened, rare, or otherwise sensitive; this is principally due to species' declining or limited distribution or population sizes, usually resulting 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 recognized authorities 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 Altadena SEA that have been afforded special recognition.

Sensitive Plant Communities/Habitats

This report/description supports several habitat types considered sensitive by resource agencies, namely the CDFG [California Natural Diversity Database (CNDDB)], because of their scarcity and their being habitat for a number of state and federally listed endangered, threatened, and rare vascular plants, as well as several sensitive bird and reptile species. These communities include: **oak riparian woodland** and **coastal sage scrub**. These communities, or closely related designations, are considered highest-inventory priority communities by the CDFG, indicating that they are experiencing a decline throughout their range.

Sensitive Species

Sensitive species include those listed, or candidates for listing by the USFWS, CDFG, and CNPS. These species include, but are not limited to, Nevin's barberry, California gnatcatcher, arroyo southwestern toad, and red-legged frog. In addition, the SEA identifies other species observed, recorded in the CNDDB, or reported in previous documentation as observed within or in the immediate vicinity of the SEA.

Ecological Transition Areas (ETAs)

There are no ETAs designated within this SEA.