
JOSHUA TREE WOODLANDS (SIX UNITS) SIGNIFICANT ECOLOGICAL AREA

General

The Joshua Tree Woodlands Significant Ecological Area (SEA) is located in the western portion of the Antelope Valley west and northwest of the Antelope Valley California Poppy Reserve in an unincorporated area of Los Angeles County. The SEA consists of six separate units, five of these areas are in close proximity to each other between the Kern County line to the north, the California Aqueduct and Fairmont Butte to the south, 220th Street West to the west, and 140th Street West to the east. The sixth, and furthest western extent of Joshua tree woodland in southern California, is located partially within the Angeles National Forest, east of the I-5 Freeway.

Description

The Joshua Tree Woodlands SEA is located primarily on the western Antelope Valley floor between the Tehachapi Mountains and the western San Gabriel Mountains. The topography of the SEA is extremely flat with the land sloping less than 200 feet in approximately five miles. The location and orientation of the SEA represents a matrix of remnant stands of Joshua tree woodland among a patchwork of disturbed areas. Nearly all of the land within the SEA is undisturbed and vegetated. Most of the land surrounding the SEA is disturbed in the form of agricultural use with a few scattered rural residences. All of the acreage within this SEA is in unincorporated County jurisdiction.

Vegetation

Vegetation within the Joshua Tree Woodland SEA is limited to a few plant communities with relatively few species. However, the dominant community, Joshua tree woodland, is in good condition throughout most of the SEA and includes many mature stands. All plant species observed or recorded in previous documentation within the study area are indicated in the Comprehensive Floral & Faunal Compendium of the Los Angeles County SEA Update Study 2000 Background Report. Sensitive plant species occurring or potentially occurring within the SEA are discussed below in the Sensitive Biological Resources section.

Plant communities within the SEA were classified using standard methodology and terminology. Most of the communities discussed in this study 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. Descriptions and general locations of each plant community present within the SEA, including desert scrub, non-native grassland, Joshua tree woodland, juniper woodland, and disturbed are given below.

Desert scrub is a moderately tall, fairly open shrubland with several species contributing to the canopy. Dominants often include Great Basin sage brush, antelope bush, saltbush, and/or rabbitbrush, with several perennial grasses dispersed between the shrubs. Within the SEA, this community intergrades with Joshua tree woodlands.

Grassland communities consist of low, herbaceous vegetation that are dominated by grasses but generally also harbor native forbs and bulbs as well as naturalized annual forbs. Grasslands within the SEA consists of non-native grasslands alone. **Non-native grassland** consists of dominant invasive annual grasses that are primarily of Mediterranean origin. Dominant species found within this community include slender oats, wild oats, ripgut brome, foxtail chess, golden tops, *Mediterranean Schismus*, and wild mustard. Non-native grasslands are located in small patches intermingling with Joshua tree woodland throughout the SEA.

Joshua tree woodland is an open woodland with Joshua tree usually as the only arborescent species with numerous smaller shrub species interspersed between. Shrub species include Great Basin sagebrush, antelope bush, saltbush, rabbit brush, and creosote bush. Joshua tree woodland occupies approximately 95 percent of the SEA.

Juniper woodland is an extremely open woodland dominated by California juniper, with an understory typical of desert scrub as it is described above. This community is dominant in a few areas within the SEA but is usually loosely scattered within the Joshua tree woodland.

Disturbed or barren areas either completely lack vegetation or are dominated by ruderal species. Ruderal vegetation typically found within the SEA includes non-native grasses and weedy herbaceous species, native and non-native, including doveweed, mustards, telegraph weed, Russian thistle, dock, yellow star thistle, Australian saltbush, and cocklebur. Disturbed areas occur around five of the six SEA units and include active and fallow agriculture and residential developments, paved roads, dirt access roads, and other similarly disturbed areas.

Wildlife

Wildlife populations within the SEA reflect somewhat lower diversity and abundance for the habitat types present due to the small size of the SEA areas, the homogeneity of the topography and habitat, and influences of edge effect from surrounding agricultural lands uses. An assessment of invertebrate populations is made difficult due to the lack of data but the SEA is sure to include more common species in fair numbers. Amphibian populations are generally

scarce in desert communities and no riparian habitat is available within the SEA. Many essential reptilian habitat characteristics such as open habitats that allow free movement and high visibility and small mammal burrows for cover and escape from predators and extreme weather are present within the SEA. These characteristics as well as the availability of fallen and decomposing woody material are likely to support a wide variety of reptilian species.

The scrubland, woodland, and grassland habitats in the SEA provide foraging and cover habitat for year-round resident and seasonal resident song birds. In addition, the SEA encompasses abundant raptor foraging, perching, and nesting habitat. The combination of these resources provide for a diversity of bird species.

Mammal populations are suggested to also reflect the generally disturbed environs influencing this SEA. Small mammals are expected to be uneven in their diversity with more adaptive species and introduced European species being in high numbers compared to others. Medium sized mammal populations are expected to exhibit the same characteristics. Large mammals are largely absent on a resident basis. Sensitive wildlife species occurring or potentially occurring within the SEA are discussed in the Sensitive Biological Resources section of this document.

Wildlife Movement

Wildlife movement within the Joshua Tree Woodland SEA is limited to local movement. Animals foraging within the SEA are unlikely to occur in concentrated areas due to the homogeneity of the topography and habitat of the SEA. However, local movement to and from the different SEA areas as well as to and from the San Gabriel Mountains and the Tehachapi Mountains is restricted due to the disturbed nature of the Valley floor. Wildlife movement, therefore, is likely to converge in areas where movement is still possible causing concentrated movement areas or bottlenecks.

Sensitive Biological Resources

Sensitive biological resources are habitats or individual species granted special recognition by federal, state, or local conservation agencies and organizations as endangered, threatened, rare, or otherwise sensitive due to the 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 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, that have been afforded special recognition.

Sensitive Plant Communities/Habitats

This report/description supports one habitat type, **Joshua tree woodland**, considered sensitive by resource agencies, namely the CDFG [California Natural Diversity Database (CNDDDB)], because of its scarcity and support of a number of state and federally listed endangered, threatened, and rare vascular plants, as well as several sensitive bird and reptile species. Joshua tree woodland occurs throughout the study area. This community is considered a highest-inventory priority community by the CDFG, indicating that it is experiencing a decline throughout its range.

Sensitive Species

Sensitive species include those listed, or candidates for listing by the USFWS, the CDFG, and the CNPS. These species include, but are not limited to, alkali mariposa lily, California horned lizard, golden eagle, Swainson's hawk, burrowing owl, loggerhead shrike, western mastiff bat, and Tehachapi pocket mouse. In addition, the SEA identifies other species observed, recorded in the CNDDDB, or reported in previous documentation as observed within or in the immediate vicinity of the proposed SEA.

Ecological Transition Areas (Etas)

There are no ETAs designated within this SEA.