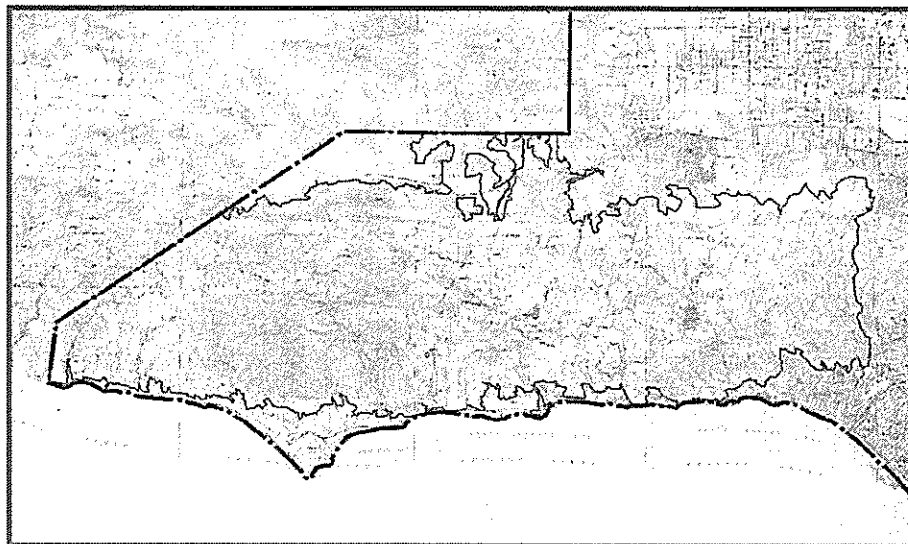


# BIOLOGICAL RESOURCES ASSESSMENT OF THE PROPOSED SANTA MONICA MOUNTAINS SIGNIFICANT ECOLOGICAL AREA



## SANTA MONICA MOUNTAINS

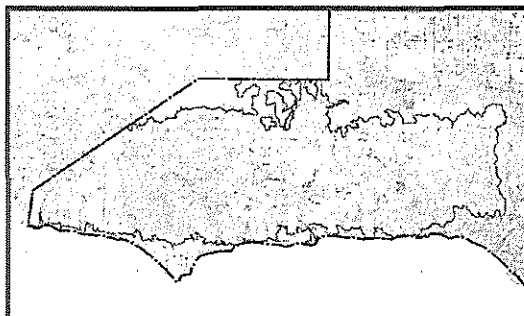
(Including Existing SEA Nos. 3, 4, 5, 6, 7, 8, 9, 10, 11,  
12, and 39)

Los Angeles County, California

November 2000

PCR

# BIOLOGICAL RESOURCES ASSESSMENT OF THE PROPOSED SANTA MONICA MOUNTAINS SIGNIFICANT ECOLOGICAL AREA



## SANTA MONICA MOUNTAINS

(Including Existing SEA Nos. 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, and 39)

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November 2000

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## EXECUTIVE SUMMARY

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**Location:** The proposed Santa Monica Mountains Significant Ecological Area (SEA) is located within the Santa Monica Mountains. Most of this area is situated within the jurisdiction of unincorporated Los Angeles County. The proposed SEA includes nearly all of the canyons and ridges from the Ventura/Los Angeles County line east to Sullivan Canyon and from the edge of development along the coastline to the edge of development or the Ventura/Los Angeles County line to the north. It includes all or most of existing SEA numbers 3, 3a, 3b, 4, 5, 5b, 6, 7, 8, 9, 10, 11, 12, and 39.

**Description:** The proposed Santa Monica Mountains SEA covers approximately 99,431 acres and includes most of the Santa Monica Mountains Range. This east-west trending range is geologically complex and characterized by steep, rugged terrain of mountain slopes and canyons, with elevations in the SEA ranging from sea level to over 2,800 feet above mean sea level on Castro Peak. The Santa Monica Mountains are bounded by the Pacific Ocean to the south, the Oxnard Plain to the west, the Los Angeles Basin to the east, and the San Fernando Valley and Simi Hills on the north. The majority of land within the proposed 99,431-acre SEA lies within unincorporated Los Angeles County and accounts for approximately 70,880 acres. Other jurisdictions include approximately 5,974 acres within the City of Malibu, 14,832 acres within the City of Los Angeles, 4,625 acres within the City of Calabasas, 1,567 acres within the City of Agoura Hills, 31 acres within the City of Hidden Hills, and 1,522 acres within the City of Westlake Village.

**Existing Land Use:** The proposed Santa Monica Mountains SEA currently supports a variety of land uses. The greater majority of the area is undisturbed open space supporting native vegetation. Much of this open space is parkland within the lands of the Santa Monica Mountains National Recreation Area which are distributed throughout the SEA. Other uses include low, moderate, and high density residential, rural residential development, and commercial uses and services.

**Ownership:** Land ownership within the proposed Santa Monica Mountains SEA consists of a relatively even distribution of public and private holdings. Publicly owned lands are extensive within the SEA and are mostly part of the Santa Monica Mountains National Recreation Area managed by the National Park Service; a few large parcels are owned by the State. The remaining land within the proposed SEA is privately held and predominantly located within unincorporated Los Angeles County.

**Vegetation:** Plant communities within the proposed SEA include: chaparral, redshank chaparral, coastal sage scrub, non-native grassland, native grassland, coast live oak woodland, valley oak woodland, walnut woodland, southern willow scrub, cottonwood-willow riparian forest, sycamore-alder riparian woodland, oak riparian forest, freshwater marsh, salt marsh, and disturbed communities.

**Wildlife:** Wildlife within the proposed SEA is generally diverse and abundant due to the large acreage of natural open space and the diversity of habitat types. The entire mosaic of vegetation communities within the proposed SEA and adjoining areas constitutes a functional ecosystem for wildlife species, within the SEA and as part of the regional ecosystem.

**Wildlife Movement:** Due to its large size, many corridors and linkages are certain to occur within the proposed Santa Monica Mountains SEA, particularly at various bottlenecks. Malibu Creek State Park is likely the central core habitat area in the Santa Monica Mountains, serving as a connective hub between the Simi Hills to the north and the open space preserves of Topanga State Park to the east and Mugu State Park to the west. Open space linkages between Kanan Road and Calabasas Parkway are of particular importance for continued wildlife movement between the Santa Monica Mountains and the Simi Hills, due to the lack of alternative routes and encroachment of development.

**Sensitive Biological Resources:** Sensitive plant communities within the proposed SEA include: coastal sage scrub, native grassland, valley oak woodland, walnut woodland, southern willow scrub, southern cottonwood-willow riparian forest, sycamore-alder woodland, oak riparian forest, freshwater marsh, and salt marsh. The SEA includes a large number federally and state listed or otherwise sensitive plant and animal species occurring or potentially occurring within the SEA such as: Braunton's milk-vetch, Lyon's pentachaeta, Santa Monica Mountains dudleya, marcescent dudleya, Southern California steelhead trout, tidewater goby, western yellow-billed cuckoo, bald eagle, and many others.

**Regional Biological Value:** The proposed SEA meets several designation criteria and supports many regional biological values (see Criteria Analysis table at the end of this summary). Core populations of Braunton's milk-vetch, Lyon's pentachaeta, Santa Monica Mountains dudleya, marcescent dudleya, tidewater goby, and Southern California steelhead trout are all present within the SEA. Many areas contain a rich and diverse or unique flora composition such as Upper La Sierra Canyon, Malibu Lagoon, and Malibu Canyon. The SEA also contains areas important to migrating birds including the Malibu Lagoon and the upstream riparian woodland, Tuna Canyon, and Pena Canyon. Other valuable resources include pristine examples of several habitat types and areas of importance to science such as Zuma Canyon, Cold Creek, Tuna Canyon, Pena Canyon, Palo

Comado Canyon, Chesebro Canyon, Temescal Canyon, Rustic Canyon, Sullivan Canyon, and slopes surrounding Encino reservoir.

**Recommended Management Practices:** Proposed new development within the proposed Santa Monica Mountains SEA should be designed to be highly compatible with the continued ecological function of each of the component biological resources described above. In order to preserve the integrity of the SEA, the proposed comprehensive management practices described in the *Los Angeles County SEA Update Study 2000 Background Report* are recommended. These practices address:

- Core habitat
- Habitat linkages and wildlife corridors
- Fire management
- Public access and recreation
- Infrastructure
- Wetlands, riparian habitats, and streambeds
- Non-riparian/upland woodlands

In addition to the comprehensive management practices the following proposed management practices are recommended specifically for the proposed Santa Monica Mountains SEA:

- Limit development densities to one residential unit per ten acre parcel, and constrain development design, where feasible, to cluster dwelling configuration along existing roadways in order to minimize clearing associated with fuel management, and to reduce the need for grading, fencing, and other habitat disturbances.
- Maintain the habitat of core populations of listed species including the federally endangered Braunton's milk-vetch, Lyon's pentachaeta, Southern California steelhead and tidewater goby, and federally threatened Santa Monica Mountains dudleya, and marcescent dudleya as well as adequate buffers to eliminate or minimize adverse impacts.
- Retain rare communities with adequate buffers so as to allow for the long term viability and integrity of plant communities as a whole. Rare communities include: coastal sage scrub, native grassland, valley oak woodland, walnut woodland, southern willow scrub, southern cottonwood-willow riparian forest, sycamore-alder woodland, oak riparian forest, fresh-water marsh, and salt marsh.



- Maintain distribution extremes and unique populations of species including the California juniper, linear leaved goldenbush, *Calochortus venustus*, valley oak, island mountain-mahogany, lyre snake, mountain quail, hirsute rain-beetle, and the Jerusalem cricket with the goal of retaining the long term viability and integrity of the plant communities in which they persist.
- Retain connectivity and linkage values between the Santa Monica Mountains and the Simi Hills especially along Highway 101 between Kanan Road and Calabasas Parkway. Also maintain linkages between large canyons of the SEA, and between the mouths of canyons and the coastline.

**CRITERIA ANALYSIS  
OF THE PROPOSED SANTA MONICA MOUNTAINS SEA**

<u>Criterion</u>	<u>Status</u>	<u>Justification</u>
A) The habitat of core populations of endangered or threatened plant or animal species.	Met	The proposed SEA includes: core habitat of the federally endangered Braunton's milk-vetch, Lyon's pentachaeta, Southern California steelhead, and tidewater goby and federally threatened Santa Monica Mountains dudleya and marcescent dudleya.
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.	Met	Upper La Sierra Canyon contains an unusually rich and diverse stand of canyon flora including marcescent dudleya, creek dogwood, and many unusually large specimens of other rare plant species; Malibu Lagoon is the only natural lagoon between Point Mugu in Ventura County and Anaheim Bay in Orange County; Malibu Canyon contains a unique mix of floral species uncommon in the region such as black cottonwood and leather leaf ash as well as a regionally unique mixture of inland and coastal species; regionally rare volcanic rock formations create unique communities where they occur.
C) Within Los Angeles County, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution.	Met	Malibu Lagoon is the only natural lagoon in Los Angeles County; upper La Sierra Canyon contains an unusually rich and diverse stand of canyon flora including marcescent dudleya, creek dogwood, and many unusually large specimens of other rare plant species; and Malibu Canyon contains a regionally unique mix of floral species uncommon in the County such as black cottonwood and leather leaf ash, as well as a unique mix of inland and coastal species.
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 in Los Angeles County.	Met	The Malibu Lagoon and the upstream riparian woodland in Malibu Creek is an important migrating bird refuge with over 200 species recorded. Tuna and Pena Canyons are an important area to migratory birds due to their combined qualities of healthy vegetation, riparian woodland, surface moisture, undeveloped land, and an unobstructed opening to the coast. The SEA also contains habitat linkages between large open space areas within the SEA as well between areas outside the SEA, such as the Simi Hills and the western extent of the Santa Monica Mountains in Ventura County, which are crucial in maintaining regional plant and animal population health and viability.
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.	Met	The proposed SEA includes: a myriad of unique and pristine natural areas important for nature study and scientific research; the range extremes of many species such as the California juniper, linear leaved goldenbush, <i>Calochortus venustus</i> , and valley oak; and disjunct and unique populations of island mountain-mahogany, lyre snake, mountain quail, hirsute rain-beetle, and the Jerusalem cricket.
F) Areas that would provide for the preservation of relatively undisturbed examples of the original natural biotic communities in Los Angeles County.	Met	Zuma Canyon is one of the last major drainages in the Santa Monica Mountains with a year-round stream that supports a rich riparian community, it remains in an undeveloped state; Cold Creek includes an excellent example of an undisturbed natural sandstone basin with springs and a perennial stream; Tuna and Pena Canyons are the last drainages in the central and eastern Santa Monica Mountains that have

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**CRITERIA ANALYSIS  
OF THE PROPOSED SANTA MONICA MOUNTAINS SEA  
(CONTINUED)**

<b>Criterion</b>	<b>Status</b>	<b>Justification</b>
		not sustained development either in the watershed, or between the canyon mouth and the coast; Palo Comado and Chesebro Canyons support one of the last examples of an oak woodland savannah of any significant size in Los Angeles County; Temescal, Rustic, and Sullivan Canyons represent contiguous, self-contained watersheds that are large enough to support representative samples of native flora and fauna; the area surrounding Encino Reservoir supports the best undisturbed stand of an inland chaparral, coastal sage scrub, and streamside vegetation remaining on the inland slope of the Santa Monica Mountains.

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## SIGNIFICANT ECOLOGICAL AREA UPDATE STUDY

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### 1. LOCATION

#### 1.1 GENERAL

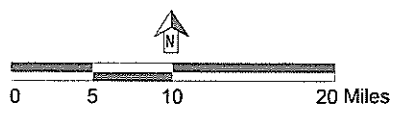
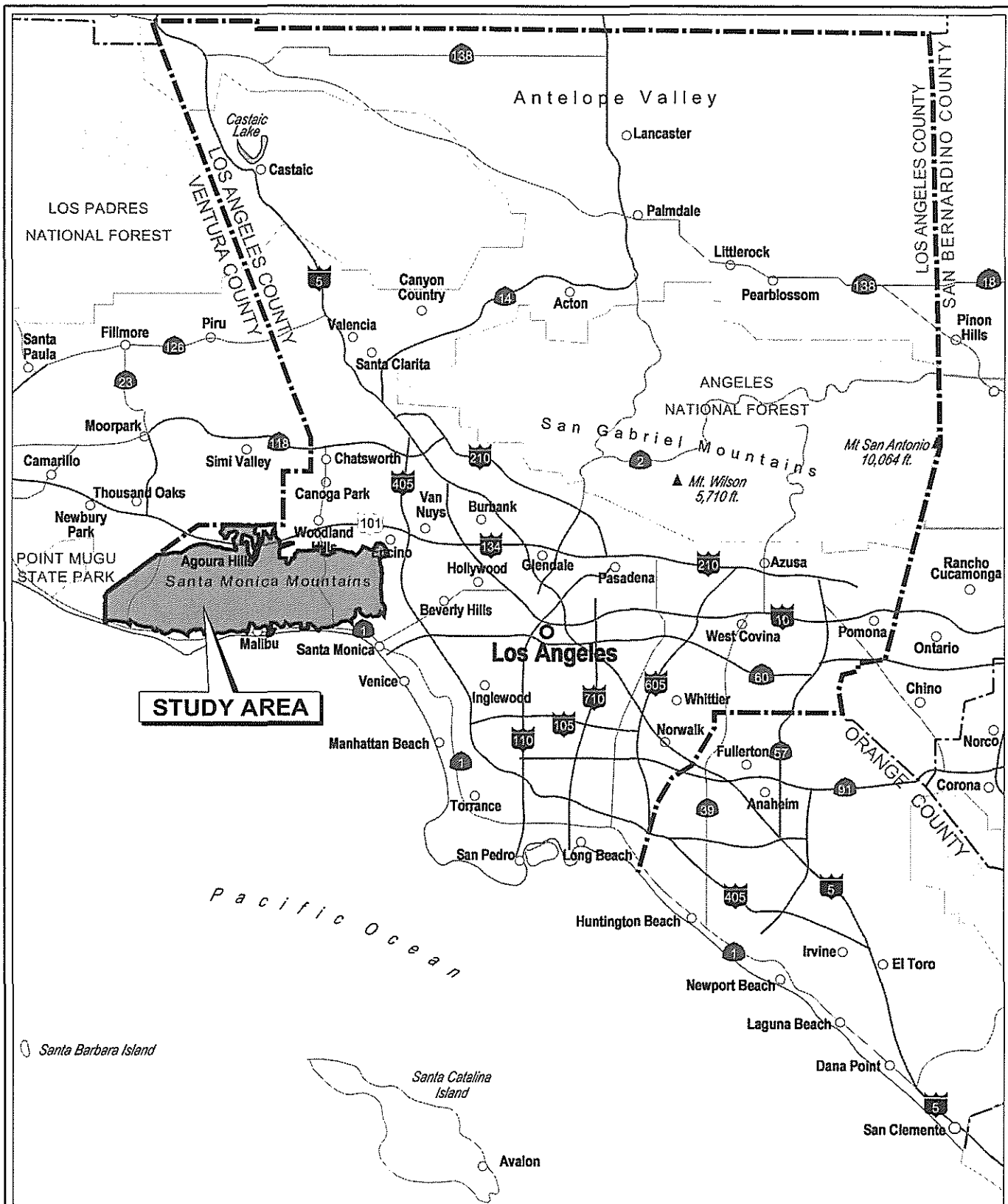
The proposed Santa Monica Mountains Significant Ecological Area (SEA) is located within the Santa Monica Mountains in a mostly unincorporated area of Los Angeles County as shown in Figure 1, *Regional Map*, on page 2. The proposed SEA includes nearly all of the canyons and ridges from the Ventura-Los Angeles County line east to Sullivan Canyon and from the northern edge of development along the coastline to the southern edge of development or the Ventura/Los Angeles County line to the north.

The following existing SEAs have been encompassed within the proposed SEA in their entirety or close to it. These include SEA numbers 3, 3a, 3b, 4, 5, 5b, 6, 7, 8, 9, 10, 11, 12, and 39. Exceptions include small portions of SEA numbers 3, 5, 12, and 39 which have been excluded from the proposed boundary due to the disturbed nature of the land. Existing SEA number 2 was not included because it consists mostly of non-native vegetation, it no longer supports resources which meet the designated criteria, and development to its north prevents linkage with the remainder of the proposed SEA. Because marine resources are not within the scope of this study, existing SEA number 1 was also excluded.

The proposed SEA is located at least partially in each of the following United States Geological Survey (USGS) 7.5' California Quadrangles: Thousand Oaks, Calabasas, Canoga Park, Triunfo Pass, Point Dume, Malibu, and Topanga as shown in Figure 2, *Existing and Proposed Boundaries* on page 3.

#### 1.2 BOUNDARY DESCRIPTION

Beginning at the intersection of the Los Angeles County line and Highway 1, the boundary of the proposed SEA traces the northern edge of Highway 1 moving east. The boundary continues in an easterly direction following either the northern edge of developed and disturbed areas or Highway 1. At San Nicholas Canyon the boundary veers south across the highway and encompasses a riparian woodland before continuing east again. Eventually reaching Malibu Creek, the boundary turns south again to include the Creek and Malibu Lagoon. The boundary then resumes its easterly direction until turning north at Rustic Canyon. Tracing the edge of development



Source: PCR Services Corporation, 2000

Figure 1  
 Santa Monica Mountains  
 Significant Ecological Area  
 Regional Map



- Proposed SEA Boundary
- - Existing SEA Boundary
- ▨ Angeles National Forest

*Figure 2*  
**Santa Monica Mountains  
Significant Ecological Area  
Existing and Proposed Boundaries**

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along the east slope of the canyon, the boundary continues north eventually over a ridgeline and into Sullivan Canyon. The boundary then moves up the eastern slope of the Canyon and continues moving north on the ridgeline between Sullivan Canyon and Mandeville Canyon until reaching the northern edge of Encino Reservoir.

At Encino Reservoir, the proposed boundary turns and follows the southern edge of development in a westerly direction. Eventually the boundary turns north just before reaching Parkway Calabasas and traces the western edge of development. The boundary continues north, crosses Highway 101, and encompasses the open space just west of the City of Hidden Hills as well as the undeveloped portion of Gates Canyon. Moving slightly further to the west, the boundary turns north to encompass the open space from Las Virgenes Road to the edge of development off of Chesebro Canyon Road. The boundary then returns to its westerly direction tracing the southern edge of disturbed or developed areas. Eventually the boundary veers to the southwest to avoid the developed areas of Westlake Village and skirts around the northwestern edge of Las Virgenes Reservoir. A short distance west of this point the boundary intersects with the county line, and follows it in a southwesterly direction towards the coast until reaching Highway 1.

Within the larger SEA boundary, there are several areas that are not a part of the proposed SEA. These densely developed areas are located in the vicinity of the intersection of Highway 101 and Las Virgenes Road. The first of these areas is a narrow swatch between Las Virgenes Road and Las Virgenes Creek from Agoura Road south to Lost Hills Road. A second area is located on the west side of Las Virgenes Creek from Lost Hills Road north nearly to Morrison Ranch Road. The final excluded area is a development on either side of Liberty Canyon Road just south of Highway 101.

## **2. DESCRIPTION**

The proposed Santa Monica Mountains SEA covers 99,431 acres and includes most of the Santa Monica Mountains Range. This east-west trending range is geologically complex and characterized by steep, rugged terrain of mountain slopes and canyons, with elevation ranging from sea level to over 2,800 feet above mean sea level (MSL) at Castro Peak. The Santa Monica Mountains are bounded by the Pacific Ocean to the south, the Oxnard Plain to the west, the Los Angeles Basin to the east, and the San Fernando Valley and Simi Hills on the north. The SEA includes major canyons such as Trancas Canyon, Zuma Canyon, Ramirez Canyon, Escondido Canyon, Solstice Canyon, Corral Canyon, Malibu Canyon, Carbon Canyon, Los Flores Canyon, Tuna Canyon, Topanga Canyon, Santa Ynez Canyon, Temescal Canyon, Sullivan Canyon, Lobo Canyon, Triunfo Canyon, Liberty Canyon, and Stokes Canyon. Major drainages within the proposed SEA

include the Arroyo Sequit, Zuma Canyon Creek, Malibu Creek, Los Flores Canyon Creek, Topanga Canyon Creek, Las Virgenes Creek, and Medea Creek.

The majority of the proposed SEA consists of undisturbed open space with scattered rural residential communities and a few high density residential developments. Open space within the SEA is mostly vegetated with dense stands of chaparral. Other types of vegetation such as woodlands and grasslands occur in smaller portions scattered throughout the SEA on moist or north facing slopes and canyon bottoms. Lesser amounts of coastal sage scrub are also present mostly as an early successional community in areas previously disturbed.

The majority of land within the proposed 99,431-acre SEA lies within unincorporated Los Angeles County and accounts for approximately 70,880 acres. Other jurisdictions include approximately 5,974 acres within the City of Malibu, 14,832 acres within the City of Los Angeles, 4,625 acres within the City of Calabasas, 1,567 acres within the City of Agoura Hills, 31 acres within the City of Hidden Hills, and 1,522 acres within the City of Westlake Village.

### **3. EXISTING LAND USE**

The proposed Santa Monica Mountains SEA currently supports a variety of land uses. The majority of the area is undisturbed open space supporting native vegetation. Much of this open space is parkland within the lands of the Santa Monica Mountains National Recreation Area which are distributed throughout the SEA. Disturbances within the open space are infrequent and limited to medium duty roadways, fire breaks, trails, unimproved dirt roads, and camp grounds.

The second most frequent type of land use within the proposed SEA is low density rural residential development. Many communities of this type occur throughout the SEA in short segments along several roadways. These areas consist mostly of large parcels with small residential structures and associated ranching or equestrian disturbances. High density rural residential land uses also occur in many locations within the SEA. These areas are generally small but contain intense residential development within them on small parcels with little vegetation between dwelling units. The location of the majority of these areas is associated with features such as large drainages, reservoirs, or flat valley bottoms. High density residential is not common within the SEA. These areas are large development projects with numerous small parcels and no native vegetation among them. Where possible, these areas were eliminated from the proposed SEA; a few areas are included, however, due to their location. These areas include developments such as those in the vicinities of Malibu Lake and Cornell Road, Monte Nido, Fernwood, Topanga, Palisades Highland, and many others.



Land uses adjacent to the proposed SEA are similar to those within the SEA except the percentage of developed areas is much higher. The area west of the SEA is predominantly open space within the western extent of the Santa Monica Mountains, with scattered rural residential development. Land use south of the proposed SEA consists of low to high density residential with scattered commercial/services districts along the coast. East of the SEA, land uses consist mostly of open space among a multitude of residential corridors in the eastern extent of the Santa Monica Mountains. Land uses north of the SEA are mostly highly urbanized with high density residential, commercial/services, industrial, and transportation. Some areas north of and adjacent to the north-central portion of the SEA, however, consist of undisturbed open space within Ventura County.

#### 4. LAND OWNERSHIP

Land ownership within the proposed Santa Monica Mountains SEA consists of a nearly even mix of public and private holdings. Publicly owned lands are extensive within the Santa Monica Mountains and are mostly part of the Santa Monica Mountains National Recreation Area; this area is managed by the National Park Service. State owned lands include Leo Carrillo State Beach, Malibu Creek State Park, Topanga State Park, and an assortment of other unnamed parcels managed by the California Department of Parks and Recreation and the Santa Monica Mountains Conservancy. Other parcels are publicly owned by the Conejo Open Space Agency, Mountains Recreation Conservation Authority, Mountains Restoration Trust, and the University of California Reserve. County owned lands include Charmlee County Park, Malibu Lagoon County Beach, Tapia County Park, and Camps Kilpatric and Miller. Santa Ynez Canyon Park represents the only remaining sizable publicly owned land owned by the City of Los Angeles. All of the aforementioned publicly owned lands, excluding Camps Kilpatric and Miller, consist of open space with little to no disturbed areas.

The remaining land within the proposed SEA is privately held and predominantly within unincorporated Los Angeles County. Other city jurisdictions located within the SEA are limited in acreage and consist of both public and privately owned open space.

#### 5. VEGETATION

Vegetation within the proposed Santa Monica Mountains SEA is comprised of a large variety of community types. The diversity of the communities reflects the topography of the Range itself. The southern slopes are strongly affected by moist marine weather conditions while the northern slopes are influenced by drier inland weather conditions. In addition, the steepness of many slopes causes sharp differences in vegetation on either side of a ridge. 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 and plant communities occurring or potentially occurring within the proposed SEA are discussed in the Sensitive Biological Resources section of this document.

Plant communities within the proposed 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 the each plant community present within the SEA, including chaparral, redshank chaparral, coastal sage scrub, non-native grassland, native grassland, walnut woodland, valley oak woodland, coast live oak woodland, southern willow scrub, cottonwood-willow riparian forest, oak riparian forest, salt marsh, sycamore-alder woodland, freshwater marsh, and disturbed communities are presented below.

**Chaparral** consists of broad-leaved or needle-leaved, sclerophyllous (hard-leaved), medium height to tall shrubs that form a dense cover on steep slopes below 5,000 feet in Southern California. Dominant species found within this community include ceanothus, toyon, scrub oak, sugar bush, holly-leaved cherry, hollyleaf redberry, chamise, laurel sumac, and manzanita. This plant community occurs throughout the proposed SEA and occupies most of the higher elevations and steep slopes.

**Redshank chaparral** is a very similar community to the chaparral described above, with the exception that red shank is the dominant species with lesser amounts of other chaparral species. This community is less common; it occurs in small patches, on steep slopes throughout the SEA.

**Coastal sage scrub** consists of drought-deciduous, low, soft-leaved shrubs and herbs on gentle to steep slopes under 1,500 feet in elevation. This community is dominated by California sage brush, California buckwheat, black sage, purple sage, and California encelia. Coastal sage scrub is distributed throughout the SEA along dry ridgelines, slopes, and other areas previously disturbed by fire.

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 proposed SEA include both non-native grasslands and native grasslands. **Non-native grassland** consists of dominant invasive annual grasses that are primarily of Mediterranean origin. Dominant species found within this community include wild oat, slender oat, red brome, rigput brome, and herbs such as black mustard and wild radish. Non-native grasslands are located in small to large patches throughout the SEA in previously disturbed areas, cattle pastures, valley bottoms, and along road sides.

**Native grassland** consists of at least ten percent cover of native purple needlegrass with the remaining coverage similar to non-native grasslands. Few small patches of native grassland can be found scattered throughout the SEA mostly in openings in coastal sage scrub and mixed with non-native grasslands

**Coast live oak woodland** is dominated by coast live oak with a poorly developed shrub layer which may include toyon, currant gooseberry, laurel sumac, elderberry, and mule fat. Some coast live oak woodlands in the area include scattered California walnut or valley oaks. This community occurs throughout the SEA and generally along canyon bottoms and more mesic north-facing slopes.

**Valley oak woodland** is an open woodland community dominated by valley oak. The understory is a grassy savannah composed mostly of non-native grasses. Valley oak woodland occurs mostly on the north slope of the Santa Monica Mountains in shaded ravines and on north-facing slopes.

**Walnut woodland** is an open woodland dominated by Southern California black walnut. Occurring on moist, fine-textured soils, the open tree canopy usually has a grassy understory. Other characteristic species include coast live oak, sugar bush, and skunkbrush. This community occurs mostly on the north slope of the Santa Monica Mountains in shaded ravines and on north-facing slopes.

**Southern willow scrub** is a riparian community consisting of dense, broad-leafed, winter-deciduous riparian thickets occurring within and adjacent to water courses. The dominant species of this community within the SEA are arroyo willow with lesser amounts of mule fat. This community occurs in segments along portions of several of the drainages as well as the periphery of many of the ponds and lakes throughout the proposed SEA.

**Cottonwood-willow riparian forest** is an open broad-leafed winter-deciduous riparian forest dominated by Fremont cottonwood, black cottonwood, black willow, and red willow. This community occurs in segments along of many of the drainages, ponds, and lakes throughout the proposed SEA.

**Sycamore-alder riparian woodland** is a tall, open, broad-leafed, winter-deciduous streamside woodland dominated by western sycamore and alder. These stands often form a closed canopy forest and even may appear as trees scattered in a shrubby thicket of sclerophyllous and deciduous species. This community is found infrequently within the SEA along lower reaches of several major creeks.

**Oak riparian forest** is an open woodland of dense evergreen sclerophyllous riparian woodland dominated by coast live oak. This type appears to be richer in herbs and poorer in understory shrubs than other riparian communities. This community occurs along many streams and canyon bottoms scattered throughout the SEA.

**Freshwater marsh** develops in areas of still or slow-moving permanent freshwater. This community is dominated by the perennial, emergent monocot cattails which reach a height of 4-5 meters and often form a closed canopy. Bulrushes are dominant below the cattail canopy. Freshwater marsh is relatively uncommon; it occurs in small patches in natural or created sinks with water sources.

**Salt marsh** is similar to the freshwater marsh described above but with more salt-tolerant hydrophytes present. Species associated with this community include cattails, pickleweed, and saltgrass. Salt marsh is rare within the SEA and is known only from Malibu Lagoon.

**Rock outcrop** is a sparsely vegetated community occurring on cliffs and rock outcroppings of sedimentary, metamorphic, and volcanic rocks along the ridges and peaks of the hills and mountains. Between the rocks and in the crevices, the few plants found are usually representative of a chaparral species composition. Other plants often found on the rock faces in protected areas include *Dudleya*, *Selaginella*, and various lichens.

**Disturbed** or barren areas either completely lack vegetation or are dominated by ruderal species. Ruderal vegetation typically found within the proposed SEA include non-native grasses and a high proportion of weedy species, including black mustard and thistle species. Several disturbed areas are scattered throughout the proposed SEA and take the form of residential developments, paved roads, fire breaks, dirt access roads, trails, and other similarly disturbed areas.

## 6. WILDLIFE

Wildlife within the proposed SEA is generally diverse and abundant due to large acreages of natural open space and diversity of habitat types. While a few wildlife species are entirely dependent on a single vegetative community, the entire mosaic of all the vegetation communities within the study area and adjoining areas constitutes a functional ecosystem for a variety of wildlife species, both within the SEA and as part of the regional ecosystem.

The analysis of invertebrates in this study is severely limited due to the lack of data; the SEA, however, undoubtedly supports healthy populations of a diverse assortment of invertebrate species. Amphibian populations are plentiful in the SEA due to the high moisture content provided by coastal

conditions as well as the large number of drainages and year-round water supplies. The SEA is also likely to support a variety of amphibians within the moister woodland areas and canyon bottoms. Many essential reptilian habitat characteristics are present within the SEA. These include rock outcroppings, that allow for high visibility and small mammal burrows for cover and escape from predators and extreme weather. These characteristics, as well as the variety of habitat types present, are likely to support a wide variety of reptilian species.

The scrubland, woodland, riparian, and grassland habitats in the proposed SEA provide foraging and cover habitat for year-round residents, seasonal residents, and migrating song birds. In addition, the SEA encompasses many year-round water sources located throughout the proposed SEA and abundant raptor foraging, perching, and nesting habitat along the northern slopes of the of the Range. The southern edge of the SEA, along the coast, is also part of the Pacific Flyway. The combination of these resources as well as the confluence of many community types provide an unusually high diversity of bird species. Not unlike other taxonomic groups, mammal populations within the proposed SEA are diverse and reflective of the large size and variation of topography and community types.

All wildlife species previously recorded, as well as those expected to occur, within the study area are indicated in the *Comprehensive Floral & Faunal Compendium of the Los Angeles County SEA Update Study 2000 Background Report*. Sensitive wildlife species occurring or potentially occurring within the SEA are discussed in the Sensitive Biological Resources section of this document.

## 7. WILDLIFE MOVEMENT

Although wildlife movement is hampered by rural development in the proposed SEA, animals are still able to move through the Santa Monica Mountains in many areas. Due to its large size and topographic complexity, many linkages are certain to occur within the SEA at various bottlenecks. Edelman (1990) identifies Malibu Creek State Park as the central core habitat area in the Santa Monica Mountains, serving as a connective hub between the Simi Hills to the north and the open space preserves of Topanga State Park to the east and Mugu State Park to the west. These linkages allow movement between large open space areas within the SEA as well as between areas outside the SEA such as the Simi Hills and the western extent of the Santa Monica Mountains in Ventura County. The genetic flow through these areas is crucial in maintaining the diversity and viability of the species within the Santa Monica Mountains. Open space linkages between Kanan Road and Calabasas Parkway along Highway 101, as indicated by the National Park Service, are of particular importance for continued wildlife movement, due to the lack of alternative routes and encroachment of development (Nelson, 2000). Although there are significantly large open spaces within the SEA,

contiguous habitat linkages between them is critical in reducing bottlenecks and providing for long-term sustainability.

## 8. 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, rare, or otherwise, this is due to the species' declining or limited 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 proposed SEA, that have been afforded special recognition.

### 8.1 SENSITIVE PLANT COMMUNITIES/HABITATS

The proposed Santa Monica Mountains SEA supports several habitat types considered sensitive by resource agencies, namely the CDFG [California Natural Diversity Database (CNDDDB), 2000], because of their 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. These communities include **native grassland, coastal sage scrub, valley oak woodland, walnut woodland, southern willow scrub, southern cottonwood-willow riparian forest, sycamore-alder woodland, oak riparian forest, salt marsh and freshwater marsh** which occur throughout the study area. 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. The array and composition of these communities has been discussed earlier in this report (see Section 5, Vegetation, above).

### 8.2 SENSITIVE SPECIES

Sensitive species include those listed, or candidates for listing by the USFWS, the CDFG, and the CNPS (particularly List 1A, 1B, and 2 as defined in the Sensitive Species Table). The Sensitive Species Table on page 12 lists those species which have been recorded within the proposed SEA as well as those reasonably expected to occur. The table includes locations of sensitive species observed, recorded in the CNDDDB, or reported in previous documentation as observed within or in the immediate vicinity of the proposed SEA. Additional species, such as native oak or sycamore trees, may be protected under local ordinances but are not included in this table.

**SENSITIVE SPECIES  
OCCURRING OR POTENTIALLY OCCURRING  
WITHIN THE PROPOSED SANTA MONICA MOUNTAINS SEA**

**VASCULAR PLANTS**

<u>Scientific Name</u>	<u>Common Name</u>	<u>Agency Listing Status</u>	<u>CNPS Listing Status</u>	<u>Preferred Habitat</u>	<u>Location</u>
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**FERNS AND FERN ALLIES****Thelypteridaceae      Thelypteris Family**

<i>Thelypteris puberula</i> var. <i>sonorensis</i>	Sonoran maiden fern		2	Meadows and seeps.	Encinal Cyn., about 0.5 mi. from mouth (1966)
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**ANGIOSPERMS (Dicotyledons)****Asteraceae      Sunflower Family**

<i>Baccharis p. plummerae</i>	Plummer's baccharis		4	Chaparral, broad-leaved upland forest, cismontane woodland, sage scrub; rocky areas.	Pepperdine Campus, Malibu
<i>Hemizonia minthornii</i>	Santa Susana tarplant	FSC, SR	1B	Sage scrub, chaparral.	South slope of Calabasas Peak (1985); upper end Corral Cyn. Rd. (1978); several additional localities
<i>Hemizonia parryi</i> ssp. <i>australis</i>	southern tarweed	FSC	1B	Coastal salt marsh (estuaries), valley and foot-hill grassland vernal mesic, vernal pools.	Historic record from Topanga quad (1930)

**Legend****Agency Lists**

FE	Federally Listed as Endangered	SE	State Listed as Endangered
FT	Federally Listed as Threatened	ST	State Listed as Threatened
FSC	Federal Special Concern Species	SCE	State Candidate for Endangered
FPE	Federally Proposed as Endangered	SCT	State Candidate for Threatened
FPT	Federally Proposed as Threatened	SP	State Protected
FPD	Federally Proposed for Delisting	SFP	State Fully Protected
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		CSC	California Special Concern Species

**California Native Plant Society (CNPS) Lists**

1A	Presumed extinct in California.
1B	Rare, threatened, or endangered throughout their range.
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**SENSITIVE SPECIES  
OCCURRING OR POTENTIALLY OCCURRING  
WITHIN THE PROPOSED SANTA MONICA MOUNTAINS SEA  
(CONTINUED)**

**VASCULAR PLANTS**

<u>Scientific Name</u>	<u>Common Name</u>	<u>Agency Listing Status</u>	<u>CNPS Listing Status</u>	<u>Preferred Habitat</u>	<u>Location</u>
<i>Lasthenia glabrata</i> <i>var. coulteri</i>	Coulter's goldfields	FSC		Coastal, marshes and swamps, playas, and vernal pools.	Potential where suitable habitat occurs
<i>Pentachaeta lyonii</i>	Lyon's pentachaeta	FE, SE	1B	Openings in chaparral, valley and foothill grasslands; coastal habitats below 500 feet.	Stunt Ranch, S and W of Cold Creek (1989); Adjacent to Malibu Creek State Park, 0.5 mi. S of Mulholland Hwy. (1996); Saddle Rock Ranch, near Seminole Hot Springs (1963); several additional localities
<b>Brassicaceae</b>	<b>Mustard Family</b>				
<i>Dithyrea maritima</i>	beach spectaclepod	FSC, ST	1B	Coastal dunes.	Beaches W of Santa Monica (1884)
<b>Chenopodiaceae</b>	<b>Goosefoot Family</b>				
<i>Atriplex coulteri</i>	Coulter's saltbush		1B	Coastal bluff scrub, coastal scrub, valley and foothill grassland.	Coastal bluffs near Pt. Dume (1991)

**Legend**

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**SENSITIVE SPECIES  
OCCURRING OR POTENTIALLY OCCURRING  
WITHIN THE PROPOSED SANTA MONICA MOUNTAINS SEA  
(CONTINUED)**

**VASCULAR PLANTS**

<u>Scientific Name</u>	<u>Common Name</u>	<u>Agency Listing Status</u>	<u>CNPS Listing Status</u>	<u>Preferred Habitat</u>	<u>Location</u>
<i>Atriplex parishii</i>	Parish's brittle-scale	FSC	1B	Alkali meadows, vernal pools, chenopod scrub.	Beverly Hills and Topanga quads, exact date and location unknown
<i>Suaeda esteroa</i>	estuary seablite		4	Coastal bluff scrub, marshes and swamps (coastal salt).	Potential where suitable habitat occurs such as Malibu Lagoon
<b>Crassulaceae</b>	<b>Stonecrop Family</b>				
<i>Dudleya b. blochmaniae</i>	Blochman's dudleya	FSC	1B	Coastal bluff scrub, coastal scrub, valley and foothill grassland/rocky, clay or serpentine.	Mouth of Winter Cyn., near Malibu Beach (1948); Pt. Dume area (1959)
<i>Dudleya cymosa</i> ssp. <i>marcescens</i>	marcescent dudleya	FT, SR	1B	In rock crevices (usually volcanic) in chaparral.	Malibu Creek (1979); Rock Pool, Malibu Creek (1984); 1 mi. above Seminole Hot Springs (1979, 1982)

**Legend**

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**SENSITIVE SPECIES  
OCCURRING OR POTENTIALLY OCCURRING  
WITHIN THE PROPOSED SANTA MONICA MOUNTAINS SEA  
(CONTINUED)**

**VASCULAR PLANTS**

<u>Scientific Name</u>	<u>Common Name</u>	<u>Agency Listing Status</u>	<u>CNPS Listing Status</u>	<u>Preferred Habitat</u>	<u>Location</u>
<i>Dudleya cymosa</i> ssp. <i>ovatifolia</i>	Santa Monica Mountains dudleya	FT	1B	In rock crevices (usually volcanic) in chaparral and coastal scrub.	Topanga Cyn. Blvd., S of Trippet Ranch (1994); E facing slope of Ladyface Mtn.; Malibu Cyn., along Malibu Cyn. Rd., 1.9 mi. N of PCH (1980)
<b>Fabaceae</b>	<b>Legume Family</b>				
<i>Astragalus brauntonii</i>	Braunton's milk-vetch	FE	1B	Sage scrub, chaparral, valley and foothill grassland, closed cone coniferous forest; limestone endemic, carbonate soils, recent burns and disturbed areas.	Topanga Cyn. (1917); Los Liones Cyn. (1975, 1983); Palisades Highlands, along Trailer Cyn. Rd., (1986, 1988); Temescal Cyn. (1987, 1996) multiple CNDDDB records
<b>Juglandaceae</b>	<b>Walnut Family</b>				
<i>Juglans californica</i> var. <i>californica</i>	Southern California black walnut		4	Sage scrub, chaparral, cismontane woodland; often in association with oaks/oak woodland; frequently found on steep hillsides with northern exposures; deep alluvial soils.	Scattered throughout the eastern portion of the SEA

**Legend**

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**SENSITIVE SPECIES  
OCCURRING OR POTENTIALLY OCCURRING  
WITHIN THE PROPOSED SANTA MONICA MOUNTAINS SEA  
(CONTINUED)**

**VASCULAR PLANTS**

<u>Scientific Name</u>	<u>Common Name</u>	<u>Agency Listing Status</u>	<u>CNPS Listing Status</u>	<u>Preferred Habitat</u>	<u>Location</u>
<b>Hydrophyllaceae</b>		<b>Waterleaf Family</b>			
<i>Nama stenocarpum</i>	mud nama		2	Marshes and swamps.	Historic record in Santa Monica, Topanga quad (1889)
<b>Lamiaceae</b>		<b>Mint Family</b>			
<i>Acanthomintha obovata</i> ssp. <i>cordata</i>	heart-leaved thorn mint		4	Chaparral (openings), valley and foothill grassland, clay soils.	Potential where suitable habitat occurs
<i>Lepechinia fragrans</i>	fragrant pitcher sage		4	Chaparral (openings), and coastal scrub.	Scattered throughout upper portion of Santa Monica Mts.
<b>Malvaceae</b>		<b>Mallow Family</b>			
<i>Chorizanthe parryi</i> var. <i>fernandina</i>	San Fernando Valley spineflower	FSC	1A	Coastal scrub, sandy soils.	Recent record just outside SEA in Simi Hills
<i>Sidalcea neomexicana</i>	salt spring checkerbloom		2	Alkali playas, brackish marshes, chaparral, coastal scrub, lower montane coniferous forest, desert scrub.	Historic record in Santa Monica, Beverly Hills and Topanga quads (no date)

**Legend**

<u>Agency Lists</u>			<u>California Native Plant Society (CNPS) Lists</u>		
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FPT	Federally Proposed as Threatened	SP	State Protected	4	Species of limited distribution in California (i.e., naturally rare in the wild), but whose existence does not appear to be susceptible to threat.
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**SENSITIVE SPECIES  
OCCURRING OR POTENTIALLY OCCURRING  
WITHIN THE PROPOSED SANTA MONICA MOUNTAINS SEA  
(CONTINUED)**

<b><u>VASCULAR PLANTS</u></b>		<b>Agency Listing Status</b>	<b>CNPS Listing Status</b>	<b>Preferred Habitat</b>	<b>Location</b>
<b>Polygonaceae</b>	<b>Buckwheat Family</b>				
<i>Chorizanthe parryi</i> var. <i>parryi</i>	Parry's spineflower	FSC	3	Openings/clearings in coastal or desert sage scrub, chaparral or interface; dry slopes or flat ground; sandy soils.	West side of mouth of Latigo Cyn. (1957)
<i>Polygala cornuta</i> var. <i>fishiae</i>	Fish's milkwort		4	Shaded rocky places in cyns with cismontane and riparian woodlands, and chaparral between 650 and 3,000 feet.	Potential where suitable habitat occurs
<b>Cercocarpus</b>	<b>Mountain-Mahogany Family</b>				
<i>Cercocarpus betuloides blanchae</i>	island mountain-mahogany		4	Chaparral.	Occurs throughout Santa Monica Mts.
<b>Rubiaceae</b>	<b>Madder Family</b>				
<i>Galium cliftonsmithii</i>	Santa Barbara bedstraw		4	Cismontane woodlands.	Potential where suitable habitat occurs
<b>Saxifragaceae</b>	<b>Saxifrage Family</b>				
<i>Boykinia rotundifolia</i>	round-leaved boykinia		4	Chaparral, riparian woodland, streambanks.	Common in deeper cyns

**Legend**

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**SENSITIVE SPECIES  
OCCURRING OR POTENTIALLY OCCURRING  
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(CONTINUED)**

<u>VASCULAR PLANTS</u>		Agency Listing Status	CNPS Listing Status	Preferred Habitat	Location
<u>Scientific Name</u>	<u>Common Name</u>				
<b>Scrophulariaceae</b>	<b>Figwort Family</b>				
<i>Cordylanthus maritimus maritimus</i>	salt marsh bird's beak	FE, SE	1B	Coastal dunes, salt marsh.	Vicinity of Santa Monica, Topanga and Beverly Hills quad (1882)
<b>ANGIOSPERMS (Monocotyledons)</b>					
<b>Juncaceae</b>	<b>Rush Family</b>				
<i>Juncus acutus</i> var. <i>leopoldii</i>	southwestern spiny rush		4	Coastal dunes (mesic), meadows (alkali seeps), marshes and swamps (coastal salt).	Potential where suitable habitat occurs
<b>Liliaceae</b>	<b>Lily Family</b>				
<i>Calochortus plummerae</i>	Plummer's mariposa lily	FSC	1B	Sage scrub, valley and foothill grassland, yellow pine forest; dry, rocky or sandy sites, granitic or alluvial soil; to 4,800 feet.	Mandeville Cyn. (1929); Mulholland Hwy. E of Kanan-Dume Rd. (1992); Decker Cyn. Rd. at the LA - Ventura county line (1992); Stokes Cyn. (1992); Pepperdine Campus

**Legend**

<u>Agency Lists</u>		<u>California Native Plant Society (CNPS) Lists</u>	
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**SENSITIVE SPECIES  
OCCURRING OR POTENTIALLY OCCURRING  
WITHIN THE PROPOSED SANTA MONICA MOUNTAINS SEA  
(CONTINUED)**

**INVERTEBRATES**

<u>Scientific Name</u>	<u>Common Name</u>	<u>Agency Listing Status</u>	<u>Preferred Habitat</u>	<u>Location</u>
<b>INSECTA – grasshoppers, katydids, crickets, beetles, flies, butterflies, moths</b>				
<b>Order Lepidoptera</b>		<b>Butterflies and Moths</b>		
<i>Panoquina errans</i>	wandering (salt-marsh) skipper	FSC	Salt marshes, requires moist saltgrass for larval development.	Potential where suitable habitat occurs
<i>Satyrium auretorum fumosoum</i>	Santa Monica Mountains hair-streak butterfly	FSC	Meadows, open areas.	Collected in the vicinity of Los Virgenes Cyn. (1990)
<i>Speyeria callippe callippe</i>	Callippe silverspot butterfly	FE	Open hillsides on <i>Viola pedunculata</i> .	Potential where suitable habitat occurs
<b>Order Orthoptera</b>		<b>Grasshoppers</b>		
<i>Neduba longipennis</i>	Santa Monica shieldback katydid	FSC	Near coast in coastal sage scrub, chaparral, and woodlands.	Lower portions of several cyns. in Malibu; Mugu

**VERTEBRATES**

<u>Scientific Name</u>	<u>Common Name</u>	<u>Agency Listing Status</u>	<u>Preferred Habitat</u>	<u>Location</u>
<b>FISH</b>				
<b>Gobiidae</b>		<b>Goby Family</b>		
<i>Eucyclogobius newberryi</i>	tidewater goby	FE, CSC	Shallow lagoon, lower stream, reaches where water is brackish to fresh and slow-moving or fairly still but not stagnant.	Malibu Creek and Lagoon, from mouth to 1.5 mi. upstream (1995)

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OCCURRING OR POTENTIALLY OCCURRING  
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(CONTINUED)**

<b>VERTEBRATES</b>				
<u>Scientific Name</u>	<u>Common Name</u>	<u>Agency Listing Status</u>	<u>Preferred Habitat</u>	<u>Location</u>
<b>Salmonidae</b>	<b>Salmon and Trout Family</b>			
<i>Oncorhynchus mykiss</i>	steelhead-Southern California ESU	FE	Cool, clear, well-oxygenated streams with coastal mouths	Topanga Creek (1990); Malibu Creek and Lagoon (1992)
<b>Cyprinidae</b>	<b>Minnow Family</b>			
<i>Gila orcutti</i>	arroyo chub	CSC	Slow water sections of streams with mud or sand substrates.	Potential where suitable habitat occurs
<b>AMPHIBIANS</b>				
<b>Salamandridae</b>	<b>Newt Family</b>			
<i>Taricha torosa torosa</i>	Coast Range newt	CSC	Moist woodlands.	Common in less disturbed creeks of Santa Monica Mts.
<b>Pelobatidae</b>	<b>Spadefoot Toad Family</b>			
<i>Scaphiopus hammondii</i>	western spadefoot	FSC, CSC, SP	Prefers relatively open areas in lowland grasslands, chaparral, and pine-oak woodlands, areas of sandy or gravelly soil in alluvial fans, washes, and floodplains.	Potential where suitable habitat occurs
<b>Ranidae</b>	<b>True Frog Family</b>			
<i>Rana aurora draytonii</i>	California red-legged frog	FT, CSC, SP	Humid forests, woodlands, grasslands and streamsides, especially where cattails and other plants provide good cover.	Historically throughout the Santa Monica Mts., last record 1976; Simi Hills, W of Hidden Hills, E Los Virgenes Creek (1999)

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OCCURRING OR POTENTIALLY OCCURRING  
WITHIN THE PROPOSED SANTA MONICA MOUNTAINS SEA  
(CONTINUED)**

**VERTEBRATES**

<u>Scientific Name</u>	<u>Common Name</u>	<u>Agency Listing Status</u>	<u>Preferred Habitat</u>	<u>Location</u>
<b>REPTILES</b>				
<b>Emydidae</b>		<b>Box and Water Turtle Family</b>		
<i>Clemmys marmorata pallida</i>	southwestern pond turtle	FSC, CSC, SFP	Ponds, marshes, rivers, streams, irrigation ditches.	Recorded in Pt. Dume, Malibu, Topanga, and Thousand Oaks quads (1955-98), location info suppressed by CNDDB
<b>Iguanidae</b>		<b>Iguanid Lizard Family</b>		
<i>Phrynosoma coronatum blainvillei</i>	San Diego coast horned lizard	FSC, CSC, SFP	Valley-foothill hardwood, conifer, and riparian habitats, pine-cypress, juniper and annual grassland habitats below 6,000 feet, open country; sandy areas, washes, flood plains, and windblown deposits.	Pt. Dume (1966); Stunts Ranch and Cold Creek preserve (198X); Latigo Cyn. Rd., 7 mi. N of jct with PCH; Greenleaf Cyn. (1993); many other records on CNDDB
<i>Phrynosoma coronatum frontale</i>	California horned lizard	CSC, SFP	Scrubland, grassland, coniferous forest, broad-leaf woodlands.	Latigo Cyn. Rd., 4.4 mi. N of jct with PCH (1991)
<b>Teiidae</b>		<b>Whiptail Lizard Family</b>		
<i>Cnemidophorus tigris multiscutatus</i>	coastal western whiptail	FSC	Arid and semi-arid desert to open woodlands, where vegetation is sparse.	Greenleaf Cyn., N of Topanga Cyn. Blvd. (1993); NE of intersection of Triunfo Rd. and Kanan Rd. (1998)

**Legend**

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**SENSITIVE SPECIES  
OCCURRING OR POTENTIALLY OCCURRING  
WITHIN THE PROPOSED SANTA MONICA MOUNTAINS SEA  
(CONTINUED)**

<b>VERTEBRATES</b>				
<u>Scientific Name</u>	<u>Common Name</u>	<u>Agency Listing Status</u>	<u>Preferred Habitat</u>	<u>Location</u>
<b>Anniellidae</b>		<b>Legless Lizard Family</b>		
<i>Anniella pulchra pulchra</i>	silvery legless lizard	CSC	Coastal dune, valley-foothill, chaparral, and coastal scrub habitats.	Summertime observations in Liberty Cyn. (1990); historic records of large populations inhabiting sandy area of Pt. Dume
<b>Colubridae</b>		<b>Colubrid Snake Family</b>		
<i>Diadophis punctatus modestus</i>	San Bernardino ring-neck snake	FSC	Open, relatively rocky areas within valley-foothill, mixed chaparral, and annual grass habitats.	Common throughout Santa Monica Mts.
<i>Lampropeltis zonata pulchra</i>	San Diego mountain kingsnake	CSC, SP	Moist woods, coniferous forests, woodland and chaparral.	Upper Cold Creek Cyn., Stunts Ranch, Cold Creek Preserve, and many other localities
<i>Salvador hexalepis virgulata</i>	coast patch-nosed snake	FSC, CSC	Coastal chaparral, desert scrub, washes, sandy flats, and rocky areas. Barren creosote bush desert flats. Sagebrush semi-deserts; sea level to 7,000 feet.	Mulholland Highway; Westlake; Malibu Cyn.; Topanga Cyn.
<i>Thamnophis hammondi</i>	two-striped garter snake	FSC, CSC, SP	Riparian and freshwater marshes with perennial water.	Triunfo Creek, 2 miles NW of Malibu Lake (1998); many other localities recorded

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OCCURRING OR POTENTIALLY OCCURRING  
WITHIN THE PROPOSED SANTA MONICA MOUNTAINS SEA  
(CONTINUED)**

<b>VERTEBRATES</b>				
<b>Scientific Name</b>	<b>Common Name</b>	<b>Agency Listing Status</b>	<b>Preferred Habitat</b>	<b>Location</b>
<i>Elanus leucurus</i>	white-tailed kite	SFP	Grasslands with scattered trees, near marshes, along highways.	Common along coast
<i>Haliaeetus leucocephalus</i>	bald eagle	FT, FPD, CSC, SE	Lakes, reservoirs, rivers, offshore islands, and some rangelands and coastal wetlands in Southern California.	Occasionally observed along coast
<b>Falconidae</b>	<b>Falcon Family</b>			
<i>Falco columbarius</i>	merlin	CSC	Coastlines, wetlands, woodlands, agricultural fields, and grasslands.	Occasional migrant through Santa Monica Mts.
<i>Falco mexicanus</i>	prairie falcon	CSC	Grasslands, savannahs, rangeland, agricultural fields, and desert scrub; often uses sheltered cliff ledges for cover.	Occasional visitor in Santa Monica Mts.
<i>Falco peregrinus anatum</i>	American peregrine falcon	SE	Open country, cliffs (mts to coasts).	Nests in W end of Santa Monica Mts. Federally delisted Aug. 1999
<b>Rallidae</b>	<b>Rails, Coots and Gallinule Family</b>			
<i>Rallus longirostris levipes</i>	light-footed clapper rail	FE, SE, SFP	Salt marshes and brackish marshes.	Potential where suitable habitat occurs

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OCCURRING OR POTENTIALLY OCCURRING  
WITHIN THE PROPOSED SANTA MONICA MOUNTAINS SEA  
(CONTINUED)**

<b>VERTEBRATES</b>		<b>Agency Listing Status</b>	<b>Preferred Habitat</b>	<b>Location</b>
<b>Scientific Name</b>	<b>Common Name</b>			
<b>Charadriidae</b>	<b>Plover Family</b>			
<i>Charadrius alexandrinus nivosus</i>	western snowy plover	FT, CSC	Beaches and sandy flats.	Potential where suitable habitat occurs
<b>Laridae</b>	<b>Gulls and Tern Family</b>			
<i>Sterna antillarum browni</i>	California least tern	FE, SE, SFP	Sea beaches, bays, large rivers, bars.	Potential where suitable habitat occurs
<b>Cuculidae</b>	<b>Cuckoos and Roadrunner Family</b>			
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo	SE, ST	Riverine woodlands, thickets, and farms.	Individual observed at Arroyo Conejo (1990); Tapia Park 1988
<b>Strigidae</b>	<b>True Owl Family</b>			
<i>Asio flammeus</i>	short-eared owl	CSC	Prairies, marshes (fresh and salt dunes, tundra.	Occasionally observed in Santa Monica Mts.
<i>Asio otus</i>	long-eared owl	CSC	Riparian and live oak woodlands.	Historic documentation as nesting in N-central portion of Santa Monica Mts. (1987)
<b>Apodidae</b>	<b>Swift Family</b>			
<i>Cypseloides niger</i>	black swift	CSC	Steep, rocky, often moist cliffs and crevice or caves on sea cliffs, deep cysns.	Occasional migrant through Santa Monica Mts.

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OCCURRING OR POTENTIALLY OCCURRING  
WITHIN THE PROPOSED SANTA MONICA MOUNTAINS SEA  
(CONTINUED)**

<b>VERTEBRATES</b>				
<u>Scientific Name</u>	<u>Common Name</u>	<u>Agency Listing Status</u>	<u>Preferred Habitat</u>	<u>Location</u>
<b>Tyrannidae</b>	<b>Tyrant Flycatcher Family</b>			
<i>Empidonax traillii extimus</i>	southwestern willow flycatcher	FE	<u>Low elevational sites</u> : Riparian woodlands that contain water and low growing willow thickets. <u>High elevational sites</u> : Large, flat, wet meadows that contain patches of willow trees.	Historically documented as common summer resident to Santa Monica Mts. (1987)
<b>Alaudidae</b>	<b>Lark Family</b>			
<i>Eremophila alpestris actia</i>	California horned lark	CSC	Open habitats, grasslands along the coast, deserts near sea level to alpine dwarf shrub habitat, uncommonly in coniferous and chaparral habitats.	Common in open areas through-out Santa Monica Mts.
<b>Hirundinidae</b>	<b>Swallow Family</b>			
<i>Riparia riparia</i>	bank swallow	ST	Riparian and other lowland habitats west of the desert.	Historic record near Lake Sherwood, near LA-Ventura County line (1864); historic nesting records in Palo Comado Cyn. (1996)
<b>Troglodytidae</b>	<b>Wren Family</b>			
<i>Campylorhynchus brunneicapillus couesi</i>	coastal cactus wren	CSC	Coastal sage scrub, vegetation with thickets of prickly pear or cholla cactus.	In cactus scrub at W end of Santa Monica Mts.

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OCCURRING OR POTENTIALLY OCCURRING  
WITHIN THE PROPOSED SANTA MONICA MOUNTAINS SEA  
(CONTINUED)**

<b>VERTEBRATES</b>				
<u>Scientific Name</u>	<u>Common Name</u>	<u>Agency Listing Status</u>	<u>Preferred Habitat</u>	<u>Location</u>
<b>Laniidae                      Shrike Family</b>				
<i>Lanius ludovicianus</i>	loggerhead shrike	FSC, CSC	Open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches.	Observed in N-central Santa Monica Mts. (1992); Palo Comado Cyn. (1995)
<b>Vireonidae                      Vireo Family</b>				
<i>Vireo bellii pusillus</i>	least Bell's vireo	FE, SE	Perennial and intermittent streams with low, dense riparian scrub and riparian woodland habitats below 2,000 feet elevation; nests primarily in willows & forages in the riparian and occasionally in adjoining upland habitats. Associated with willow, cottonwood, & mule fat.	Observed in Palo Comado Cyn. (1995)
<b>Emberizidae                      Wood Warblers, Tanagers, Buntings, and Blackbird Family</b>				
<i>Aimophila ruficeps canescens</i>	Southern California rufous-crowned sparrow	FSC, CSC	Generally, steep, rocky areas within coastal sage scrub and chaparral, often with scattered bunches of grass; prefers relatively recently burned areas.	Common throughout Santa Monica Mts.
<i>Amphispiza belli</i>	Bell's sparrow	FSC, CSC	Dense, dry chamise chaparral and coastal slopes of coastal sage scrub.	Occasional throughout Santa Monica Mts.; Pepperdine campus
<i>Dendroica petechia brewsteri</i>	yellow warbler	CSC	Riparian woodlands, montane chaparral, and mixed conifer habitats.	Observed in Palo Comado Cyn. (1995); observed in N-central Santa Monica Mts. (1996)

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(CONTINUED)**

<b>VERTEBRATES</b>				
<u>Scientific Name</u>	<u>Common Name</u>	<u>Agency Listing Status</u>	<u>Preferred Habitat</u>	<u>Location</u>
<b>MAMMALS</b>				
<b>Vespertilionidae</b>	<b>Evening Bat Family</b>			
<i>Antrozous pallidus</i>	pallid bat	CSC	Nests in dry, rocky habitats/caves, crevices in rocks, arid habitats including deserts, chaparral, and scrublands.	Potential where suitable habitat occurs
<i>Corynorhinus (Plecotus) townsendii townsendii</i>	Townsend's big-eared bat	FSC, CSC	Caves, mine tunnels, and buildings.	Potential where suitable habitat occurs
<i>Corynorhinus (Plecotus) townsendii pallescens</i>	pale big-eared bat	FSC, CSC	Needs caves, tunnels, or other structures for roosting, vegetation and mesic edges for feeding, extremely sensitive to roosting site disturbance, maternity roosts are in warm places.	Potential where suitable habitat occurs
<i>Euderma maculatum</i>	spotted bat	FSC, CSC	Deserts, scrublands, chaparral, and coniferous woodlands.	Potential where suitable habitat occurs
<i>Myotis lucifugus occultus</i>	occult little brown bat	FSC, CSC	Sagebrush, bitterbrush, alkali desert scrub, wet meadow, and montane chaparral.	Potential where suitable habitat occurs
<i>Myotis volans</i>	long-legged myotis	FSC	Most common in woodland and forest habitats above 4,000 feet; also forages in chaparral, coastal scrub, shrub habitats from sea level to 11,400 feet.	Potential where suitable habitat occurs

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<b>VERTEBRATES</b>		<b>Agency Listing Status</b>	<b>Preferred Habitat</b>	<b>Location</b>
<b>Scientific Name</b>	<b>Common Name</b>			
<b>Molossidae</b>		<b>Free-Tailed Bat Family</b>		
<i>Eumops perotis californicus</i>	western mastiff bat	FSC, CSC	Primarily arid lowlands, especially deserts. Open, semi-arid to arid habitats including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban.	Potential where suitable habitat occurs
<b>Leporidae</b>		<b>Hares and Rabbit Family</b>		
<i>Lepus californicus bennettii</i>	San Diego black-tailed jackrabbit	FSC, CSC	Open brushlands and scrub habitats between sea level and 4,000 feet.	Occasional in open scrub areas in Santa Monica Mts. interior
<b>Heteromyidae</b>		<b>Pocket Mice and Kangaroo Rat Family</b>		
<i>Perognathus longimembris brevinasus</i>	Los Angeles pocket mouse	FSC, CSC	Coastal sage scrub, and grasslands, desert cactus, creosote bush and sagebrush habitats.	Potential where suitable habitat occurs
<b>Muridae</b>		<b>Mice, Rats, and Vole Family</b>		
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	FSC, CSC	Chaparral, coastal sage scrub, and pinyon-juniper woodland.	Observed along W edge of Pepperdine University Campus (1995); Charmlee County Park

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## 9. REGIONAL BIOLOGICAL VALUE

The proposed Santa Monica Mountains SEA meets all SEA designation criteria and supports many regional biological values. Each criterion and how it is met is described below.

*Criterion A: The Habitat of Core Populations of Endangered or Threatened Plant or Animal Species.*

The proposed SEA includes a large percentage of the known populations of the federally endangered Braunton's milk-vetch and Lyon's pentachaeta, and the federally threatened Santa Monica Mountains dudleya and marcescent dudleya. Malibu Creek is the only water course in Southern California where the federally endangered Southern California steelhead trout still run and spawn and one of the few coastal streams where the federally endangered tidewater goby still occurs.

*Criterion 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.*

Upper La Sierra Canyon contains an unusually rich and diverse stand of canyon flora including marcescent dudleya, creek dogwood, and many unusually large specimens of other rare plant species. Malibu Lagoon is the only natural lagoon between Point Mugu in Ventura County and Anaheim Bay (Bolsa Chica) in Orange County. Malibu Canyon contains a unique mix of floral species uncommon in the region such as black cottonwood and leather leaf ash as well as a regionally unique mixture of inland and coastal species. The SEA also contains regionally rare basaltic and andesitic rock formations which create unique plant communities where they occur.

*Criterion C: Within Los Angeles County, Biotic Communities, Vegetative Associations, and Habitat of Plant or Animal Species that are either Unique or are Restricted in Distribution.*

Malibu Lagoon is the only natural lagoon in Los Angeles County. Upper La Sierra Canyon contains an unusually rich and diverse stand of canyon flora including marcescent dudleya, creek dogwood, and many unusually large specimens of other rare plant species. Malibu Canyon contains a regionally unique mix of floral species uncommon in the County such as black cottonwood and leather leaf ash, as well as a unique mix of inland and coastal species.



*Criterion 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 in Los Angeles County.*

The Malibu Lagoon and the upstream riparian woodland in Malibu Creek is an important migrating bird refuge with over 200 species recorded. Tuna and Pena Canyons are an important area to migratory birds due to their combined qualities of healthy vegetation, riparian woodland, surface moisture, undeveloped land, and an unobstructed opening to the coast. The SEA also contains habitat linkages between large open space areas within the SEA as well between areas outside the SEA, such as the Simi Hills and the western extent of the Santa Monica Mountains in Ventura County, which are crucial in maintaining regional plant and animal population health and viability.

*Criterion 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.*

The proposed SEA includes a myriad of unique and pristine natural areas important for nature study and scientific research. It contains the range extremes of many species such as the California juniper, linear leaved goldenbush, *Calochortus venustus*, and valley oak. It also supports disjunct and unique populations of island mountain-mahogany, lyre snake, mountain quail, hirsute rain-beetle and the Jerusalem cricket. These species represent unique opportunities for scientists studying topics such as taxonomic relationships or survival parameters.

*Criterion F: Areas that would Provide for the Preservation of Relatively Undisturbed Examples of the Original Natural Biotic Communities in Los Angeles County.*

Zuma Canyon is one of the last major drainages in the Santa Monica Mountains with a year-round stream that supports a rich riparian community; it remains in an undeveloped state. Cold Creek includes an excellent example of an undisturbed natural sandstone basin with springs and a perennial stream. Tuna and Pena Canyons are the last drainages in the central and eastern Santa Monica Mountains that have not sustained development either in the watershed, or between the canyon mouth and the coast. Palo Comado and Chesebro Canyons support one of the last examples of an oak woodland savannah of any significant size in Los Angeles County. Temescal, Rustic, and Sullivan Canyons represent contiguous, self-contained watersheds that

are large enough to support representative samples of native flora and fauna. The area surrounding Encino Reservoir supports the best undisturbed stand of an inland chaparral, coastal sage scrub, and streamside vegetation remaining on the inland slope of the Santa Monica Mountains.

In conclusion, the area described in this report is proposed to be an SEA because it contains: 1) the habitat of core populations of endangered and threatened plant and animal species; 2) biotic communities, vegetative associations, and habitat of plant and animal species that are either unique or are restricted in distribution in Los Angeles County, or regionally; 3) concentrated breeding, feeding, resting, or migrating grounds which are limited in availability in Los Angeles County; 4) 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; and 5) areas that provide for the preservation of relatively undisturbed examples of original natural biotic communities in Los Angeles County.

## **10. RECOMMENDED MANAGEMENT PRACTICES**

Proposed new development within the proposed Puente Hills SEA should be designed to be highly compatible with the continued ecological function of the component biological resources described above; retention of existing natural biotic resources should be ensured. Although a comprehensive evaluation of all possible future land uses within this SEA cannot be made here, a general approach is outlined below and is recommended for use on a project specific basis. In order to preserve the integrity of the SEA, the proposed comprehensive management practices described in the *Los Angeles County SEA Update Study 2000 Background Report* are recommended. These practices address:

- Core habitat
- Habitat linkages and wildlife corridors
- Fire management
- Public access and recreation
- Infrastructure
- Wetlands, riparian habitats, and streambeds
- Non-riparian/upland woodlands

In addition to the comprehensive management practices the following proposed management practices are recommended specifically for the proposed Santa Monica Mountains SEA:

- Limit development densities to one residential unit per ten acre parcel, and constrain development design, where feasible, to cluster dwelling configuration along existing roadways in order to minimize clearing associated with fuel management, and to reduce the need for grading, fencing, and other habitat disturbances.
- Maintain the habitat of core populations of listed species including the federally endangered Braunton's milk-vetch, Lyon's pentachaeta, Southern California steelhead and tidewater goby, and federally threatened Santa Monica Mountains dudleya, and marcescent dudleya as well as adequate buffers to eliminate or minimize adverse impacts.
- Retain rare communities with adequate buffers so as to allow for the long term viability and integrity of plant communities as a whole. Rare communities include: coastal sage scrub, native grassland, valley oak woodland, walnut woodland, southern willow scrub, southern cottonwood-willow riparian forest, sycamore-alder woodland, oak riparian forest, fresh-water marsh, and salt marsh.
- Maintain distribution extremes and unique populations of species including the California juniper, linear leaved goldenbush, *Calochortus venustus*, valley oak, island mountain-mahogany, lyre snake, mountain quail, hirsute rain-beetle, and the Jerusalem cricket with the goal of retaining the long term viability and integrity of the plant communities in which they persist.
- Retain connectivity and linkage values between the Santa Monica Mountains and the Simi Hills especially within freeway underpasses between Kanan Road and Calabasas Parkway. Also maintain linkages between large canyons of the SEA, and between the mouths of canyons and the coastline.

Additionally, proposed development should be reviewed when required by federal, state, or local laws before implementing plans which may impact biotic resources and/or sensitive species. Potential impacts to listed species or wetland areas require permitting in accordance with applicable laws.

## 11. SOURCES

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