PHASE I STUDY FOR THE COLD CREEK SIGNIFICANT ECOLOGICAL AREA NO. 9

Prepared for:

County of Los Angeles
Department of Regional Planning
320 West Temple Street, Room 1354
Los Angeles, California 90012

Contact: Frank Meneses

Prepared by:

Michael Brandman Associates 606 South Olive Street, Suite 600 Los Angeles, California 90014 (213) 622-4443

Contact: Marie C. Campbell, Manager of Environmental Protection Services

TABLE OF CONTENTS

Section		Page
I	INTRODUCTION	1
п	METHODS	3
ш	OWNERSHIP PATTERNS AND CURRENT USES	4
IV	EXISTING BIOLOGICAL RESOURCES	4
	Plant Communities	6
v	DEVELOPMENT PRESSURE ANALYSIS	15
VI	RECOMMENDATIONS FOR THE FUTURE MANAGEMENT OF COLD CREEK SEA NO. 9	
	Original Intent of SEA Designation and Current Uses Suggestions for Boundary Adjustments	17
VII	BIBLIOGRAPHY	29
Appendices		
A B	List of Parcel Owners Within the Cold Creek Significant Ecological A Floral and Faunal Compendia for the Cold Creek Significant Ecolo No. 9	Area No. 9 ogical Area
<u>Exhibit</u>		Follows Page
1 2	Vicinity Map Cold Creek SEA No. 9 Boundary Map	1

PHASE I REPORT FOR COLD CREEK SIGNIFICANT ECOLOGICAL AREA (SEA No. 9)

This report describes the current biological condition of the Cold Creek Significant Ecological Area No. 9. It includes descriptions of the plant and wildlife communities based upon field surveys and review of other reports and information for the region. The report also includes information on ownership patterns within the Significant Ecological Area (SEA) and an evaluation of the original intent of the SEA designation and current activities within the SEA. A number of management measures and boundary changes for the SEA are suggested. All of the efforts were designed to provide a framework for preservation of the Cold Creek SEA No. 9, and to furnish those proposing actions that would affect the SEA with a baseline analysis to guide their individual biological constraints analyses, provide useful information to assist in environmentally sound project planning, and develop conceptual mitigation measures.

I. INTRODUCTION

The Cold Creek SEA No. 9 is located near the western end of Los Angeles County in the Santa Monica Mountains (see Exhibit 1, Regional Vicinity Map). It is generally surrounded by the Santa Monica Mountains National Recreation Area, with several state parks in the vicinity, including Malibu Creek, Charmlee, and Tapia. The approximately 1,500 acre-area lies northeast of Saddle Peak Road and southwest of Mulholland Highway and is bisected by Stunt Road. The boundary of the SEA runs approximately along the ridge enclosing the upper reaches of the Cold Creek drainage west of Mulholland Highway and Cold Canyon Road (see Exhibit 2, Boundary Map). The SEA is located on the Malibu Beach 7.5-minute series USGS topographic map, T.1S.; R.17W.; Sections 3, 4, 9, 10, 11, 14, 15, and 16. Aerial photographs and USGS topographic maps of the SEA No. 9 (at 1-inch equals 1,000 feet scale) are available at the Los Angeles County Regional Planning Department.

There is some low density development along Mulholland Highway and Stunt Ranch, but the majority of the SEA remains in a natural state as it has been protected by the Cold Creek Preserve and Stunt Road which are managed by the Mountains Restoration Trust (private) and the Santa Monica Mountains Conservancy (public), respectively. The topography of the area is

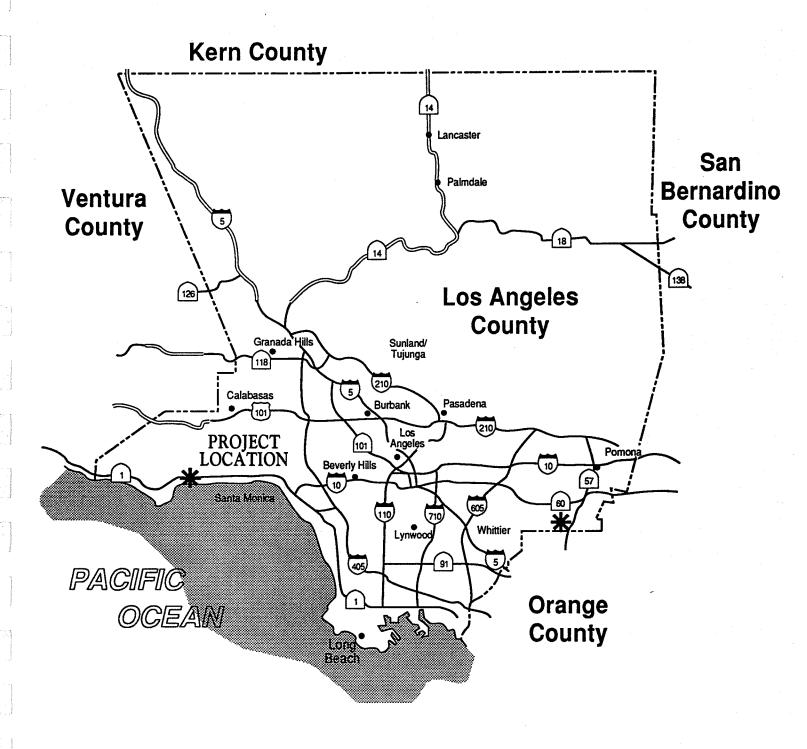


Exhibit 1

Cold Creek SEA No. 9 Regional Vicinity Map





Significant Ecological Area

LEGEND

generally steep and rugged, particularly along the northeast ridge of the canyon where there are substantial rock outcrops.

The England and Nelson (1976) report on the SEAs indicates that the Cold Creek SEA was established because it contains a relatively undisturbed sandstone bench, and a steep valley floor with springs and a perennial stream -- Cold Creek. England and Nelson state that year-round surface water sources are uncommon in Southern California. The topography contributes to an extreme range of physical conditions and, combined with a perennial water source, supports an unusually diverse flora. England and Nelson (1976) state that the Cold Creek area is "a showplace for native vegetation." They also indicated that no buffer zone was necessary for this SEA as the boundaries included enough of the unique features to preserve the most important resources.

At the time of the England and Nelson report (1976), the SEA contained pristine stands of chaparral, oak woodlands, coastal sage scrub, and riparian woodlands. Several uncommon plant species occur in the SEA, including stream orchid (Epipachis gigantea), red mimulus (Mimulus cardinalis), Humboldt lily (Lilium humboldtii var. ocellatum), big-leaf maple (Acer macrophyllum), and redshanks (Adenostoma sparsifolium). There were also several "tree-sized" flowering ash (Fraxinus dipetala), some reaching unusual heights of 40 feet (this species is usually a shrub-like 15-20 in height).

The many outstanding botanical features attract nature groups, botany and ecology classes, and regional scientific researchers. The area is bisected by Stunt Road and several dirt roads and trails lead into various parts of the SEA. The area was relatively undisturbed, in spite of these access features (England and Nelson 1976); however, it was noted that amphibian and reptile populations seemed to be declining due to overcollection.

The Cold Creek SEA designation is intended to protect a biotic community, vegetative association, and the habitat of plant and animal species that are either one of a kind or are restricted in distribution in Los Angeles County. The SEA is also classified with other areas that contain biotic resources that are of scientific interest because they are either at the extreme in physical/geographical limitations, or they represent an unusual variation in a population or community. Also, it was determined that the Cold Creek SEA is an area that would provide for the preservation of relatively undisturbed examples of natural biotic communities in Los Angeles County.

Compatible uses for the Cold Creek SEA were determined to include low intensity recreational activities such as photography, wildlife observation, painting, and other general outdoor experiences (England and Nelson 1976). Length of visits was expected to be less than one day, with only minimal additions to the existing access routes. It is indicated that special precautions should be taken not to damage the unique botanical resources in the SEA (England and Nelson 1976).

In addition, the Los Angeles County General Plan (1988) and the 1986 Malibu Local Coastal Program/Land Use Plan (LCP/LUP) provide more specific planning guidelines for compatible uses, including low density residential development, restricted commercial uses, public and semi-public uses essential to the maintenance of public health and safety, agricultural uses, and natural resources extraction per a conditional use permit consistent with protection of the SEA resources. Pending implementation of the Malibu LCP/LUP, developments in the LCP area are subject to the provisions of the Los Angeles County General Plan and the approval of the California Coastal Commission.

II. <u>METHODS</u>

The existing biological conditions at the Cold Creek SEA No. 6 are described below based on the results of field surveys supplemented by review of documentation pertinent to the SEA and regional plant and wildlife distributions. Field surveys were conducted on foot and by vehicle where access was permitted. Where access was not obtained, the SEA was surveyed with binoculars and by review of an aerial photograph.

Plant community designations are derived from Holland (1986); the corresponding California Natural Diversity Data Base (CNDDB) codes are indicated after each plant community name. Plant species names, where not available from Munz (1974), are taken from Raven et al. (1986), Abrams (1923, 1944), and Abrams and Ferris (1951, 1960). References used for wildlife taxonomy include: Emmel and Emmel (1973) and Mattoni (1990) for butterflies; Jennings (1983) for amphibians and reptiles; the American Ornithologists' Union (1983 and supplements) for birds; and Jones et al. (1982) for mammals. Wildlife distributions were derived from the California Wildlife Habitat Relationships System (CWHRS 1990), Bell (1978), Jennings (1983), Stebbins (1985), Garrett and Dunn (1981), Hall and Kelson (1981), Burt and Grossenheider (1976), Jones et al. (1982), Ingles (1965), and DeLisle et al. (1986).

III. OWNERSHIP PATTERNS AND CURRENT USES

Land ownership patterns were derived from the County Tax Assessor's Roll. Parcel numbers compiled from the Tax Assessor's Roll were forwarded to Quality Mapping Services for compilation of lot lines for the SEA. The lot line data were mapped at a scale of 1-inch equals 1,000 feet. Analysis of the land ownership data for Cold Creek SEA No. 9 indicates that the SEA and vicinity contain 146 parcels held by 63 owners. The names of the current landowners are given in the list of parcel holders (Appendix A). The locations of the holdings are shown on the ownership maps available at the Los Angeles County Regional Planning Department.

This SEA is held in a variety of public and private ownerships. The SEA contains a large number of small (1 to 10 acres) privately held parcels. The Stunt Ranch area is centrally located in the SEA and is currently held by the Santa Monica Mountains Conservancy. As of December 1991, the Conservancy is in the process of transferring Stunt Ranch to the University of California Natural Reserve System for use as a field station. The Mountain Restoration Trust is a private organization that owns the Cold Creek Preserve and Cold Canyon Reserve. Founded in 1981, their mission is to preserve, protect, and enhance the natural resources of the Santa Monica Mountains through: (1) provision of educational opportunities; (2) preacquisition of land to assist public agencies in achieving their stated goals and objectives; and (3) mitigate new development through transferrable development credits pursuant to the California Coastal Commission guidelines. As of December 1991, the Mountains Restoration Trust was working with the Santa Monica Mountains Conservancy to assist in preacquisition of properties north and south of Stunt Ranch.

IV. EXISTING BIOLOGICAL RESOURCES

The description of plant and wildlife communities below are intended to provide a general overview of the species encountered during the current and past surveys of the Cold Creek SEA No. 9 and those that can reasonably be expected to occur in the SEA. This section also provides necessary natural history information for assessment of the biological resources in the area. A complete list of observed plant species and observed and expected wildlife species is provided in the Floral/Faunal Compendia (Appendix B).

PLANT COMMUNITIES

Chaparral (37000)

The majority of the vegetation of the SEA consists of chaparral communities. Red shanks chaparral (37300), characterized by the presence of red shanks (Adenostoma sparsifolium), comprises much of the chaparral in the eastern part of the SEA. This species forms a dense, tall chaparral, occasionally to the exclusion of other species, but often with scrub oak (Quercus dumosa), big-podded ceanothus (Ceanothus megacarpus), and green bark ceanothus (Ceanothus spinosus). The red shanks community is unusual in the Santa Monica Mountains, the species being more typically found in Riverside and San Diego counties.

In chamise chaparral (37200), the other common chaparral in the SEA, red shanks is replaced by chamise (Adenostoma fasciculatum). The shrubs that are common in red shanks chaparral also occur in the chamise chaparral. Chamise chaparral is more common in the rocky, less hospitable areas along the northern part of the SEA. Little to no understory exists within these dense chaparral habitats. Smaller shrubs, herbs, and grasses are generally restricted to the open periphery of the chaparral.

Diegan Coastal Sage Scrub (32500)

Coastal sage scrub occurs among the chaparral through much of the site. The composition of the coastal sage scrub is generally characterized by coastal sagebrush (Artemisia californica) dominated vegetation with laurel sumac (Rhus laurina), California buckwheat (Eriogonum fasciculatum), and black sage (Salvia mellifera). Several large patches of coastal sage scrub composed of nearly pure stands of purple sage (Salvia leucophylla) occur on the slopes in the northern-most part of the SEA.

Coast Live Oak Woodland (71160)

The main Cold Creek drainage and its larger side drainages support coast live oak woodland. Coast live oaks (<u>Ouercus agrifolia</u>), sycamores (<u>Platanus racemosa</u>), and California bay (<u>Umbellularia californica</u>) line the perennial stream and cover the more mesic, north-facing slopes

of the canyon. The understory of the woodland consists of chaparral or non-native grassland in the upland areas and poison oak (<u>Toxicodendron diversilobum</u>) and other lianas along the stream.

Valley and Foothill Grassland (42000)

Non-native grassland (42200) within the Cold Creek SEA is generally limited to areas around existing development where the natural vegetation has been cleared for construction or fire prevention. Composition of the non-native grassland includes species such as wild oats (Avena sp.) typical of this community throughout the region.

The SEA also supports small areas of valley needlegrass grassland (42110) characterized by the native, perennial purple needlegrass (Stipa pulchra) and a variety of native annuals and perennials and common non-native annuals.

WILDLIFE

The richness and diversity of the fauna found in an area are primarily defined by the plant communities present. Secondary factors such as topographic complexity, degree of disturbance, site history, and general location can also play significant roles. A comparison of the wildlife abundance and diversity between habitat types would show that woodland habitats support more wildlife species than the adjacent drier shrub habitats, but fewer species than the onsite wetland areas. Additionally, many wildlife species occur in more than one community. This is especially true for habitats with similar plant species composition and structure, or communities that provide exceptional resources. Many of the wildlife species observed at the Cold Creek SEA No. 9 are common, widespread, and often highly adaptable species. A complete listing of all wildlife species observed and expected to occur in the SEA is included in the Faunal Compendium (Appendix B).

Amphibians and Reptiles

Habitat structure and available moisture vary greatly within the Cold Creek SEA, ranging from year-round surface water in riparian habitats to dry, rocky slopes. The diversity of amphibian and reptile species reflects this diversity of conditions as well as the relatively undisturbed condition of the site. The most common amphibian species in the SEA are the California newt (Taricha torosa), black-bellied salamander (Batrachoseps nigriventris), western toad (Bufo boreas), and

California and Pacific tree frogs (<u>Hyla cadaverina</u> and <u>H. regilla</u>). Less common but probably occurring in the SEA are arboreal salamander (<u>Aneides lugubris</u>) and ensatina (<u>Ensatina eschscholtzi</u>). Both of these species have been recorded in the Cold Creek drainage (DeLisle et al. 1986).

Reptiles are expected to be more widespread over the SEA because of their adaptations to the more xeric conditions found in chaparral and coastal sage scrub. A number of reptiles also benefit from the presence of oak and riparian woodlands, while the absence of extensive grasslands may restrict or exclude others. Typical reptile species in the SEA include western fence lizard (Sceloporus occidentalis), side-blotched lizard (Uta stansburiana), western skink (Eumeces skiltonianus), southern alligator lizard (Gerrhonotus multicarinatus), common kingsnake (Lampropeltis getulus), striped racer (Masticophis lateralis), two-striped garter snake (Thamnophis hammondii), gopher snake (Pituophis melanoleucus), and western rattlesnake (Crotalus viridis).

Less common reptiles in the SEA are associated with specific habitat types, such as oak woodlands or riparian woodlands. Those that may occur in the Cold Creek SEA No. 9 in drier shrub or rocky habitats include the coast horned lizard (Phrynosoma coronatum) and western whiptail (Cnemidophorus tigris). Oak woodlands may support the California legless lizard (Anniella pulchra), common kingsnake (Lampropeltis getulus), and California mountain kingsnake (Lampropeltis zonata), while two-striped garter snake (Thamnophis hammondii), ringneck snake, (Diadophis punctatus) and night snake (Hypsiglena torquata) are to be expected primarily in moist canyon bottoms.

Birds

The bird species in chaparral and coastal sage scrub habitats in the Cold Creek SEA occurring as common, year-round residents include the California quail (Callipepla californica), mourning dove (Zenaida macroura), Anna's hummingbird (Calypte anna), scrub jay (Aphelocoma coerulescens), common raven (Corvus corax), bushtit (Psaltriparus minimus), Bewick's wren (Thryomanes bewickii), wrentit (Chamaea fasciata), California thrasher (Toxostoma redivivum), rufous-sided towhee (Pipilo erythrophthalmus), California towhee (Pipilo crissalis), house finch (Carpodacus mexicanus), and lesser goldfinch (Carduelis psaltria).

Oak woodlands in the SEA support several year-round resident bird species, such as red-tailed hawk (<u>Buteo jamaicensis</u>), American kestrel (<u>Falco sparverius</u>), western screech-owl (<u>Otus kennicottii</u>), great horned owl (<u>Bubo virginianus</u>), acorn woodpecker (<u>Melanerpes formicivorus</u>), Nuttall's woodpecker (<u>Picoides nuttallii</u>), plain titmouse (<u>Parus inornatus</u>), house wren (<u>Troglodytes aedon</u>), and Hutton's vireo (<u>Vireo huttoni</u>).

A variety of bird species are likely to be dependent upon riparian habitats within the SEA; breeders restricted to these areas include black-chinned hummingbird (Archilochus alexandri; absent in winter), downy woodpecker (Picoides pubescens), Pacific-slope flycatcher (Empidonax difficilis; absent in winter) and song sparrow (Melospiza melodia). Conditions in riparian habitats vary seasonally more than do conditions in scrub or live oak habitats. Probably as a consequence, more of the birds using riparian areas are migratory, dependent on these wetland areas for only part of the year.

Year-round residents are supplemented by transient species migrating through the area, by summer residents that spend the winter to the south, and by winter visitors that appear in larger numbers outside of the breeding season. The combination of chaparral, coastal sage scrub, oak woodlands and especially riparian areas in the Cold Creek SEA are likely to attract a large number of migratory birds. These species may include sharp-shinned hawk (Accipiter striatus), common poorwill (Phalaenoptilus nuttallii), Rufous and Allen's hummingbirds (Selasphorus rufus and S. sasin), western wood-peewee (Contopus sordidulus) and several other flycatchers, several swallow species, ruby-crowned kinglet (Regulus calendula), hermit thrush (Catharus guttatus), warbling vireo (Vireo gilvus), a large variety of wood warbler species, black-headed grosbeak (Pheucticus melanocephalus), golden-crowned and white-crowned sparrows (Zonotrichia atricapilla and Z. leucophrys), dark-eyed junco (Junco hyemalis), and hooded and northern orioles (Icterus cucullatus and I. galbula).

Mammals

Two of the most important factors contributing to the value of the SEA for abundance and diversity of mammals are the ready availability of water and the continued linkage with adjacent natural areas. These factors allow the SEA to function as part of a larger wildlife movement area. In particular, the Malibu Canyon and Lagoon SEA and the buffer zone between this and the Cold

Creek SEA allow medium-size and larger mammals adequate movement corridors that they required for long-term population stability.

Mammals typical of the chaparral and coastal sage scrub communities in the SEA include desert cottontail (Sylvilagus audubonii), California ground squirrel (Spermophilus beecheyi), California pocket mouse (Perognathus californicus), Pacific kangaroo rat (Dipodomys agilis), western harvest mouse (Rheithrodontomys megalotis), deer mouse (Peromyscus maniculatus), California mouse (Peromyscus californicus), brush mouse (Peromyscus boylii), dusky-footed woodrat (Neotoma fuscipes), and coyote (Canis latrans).

The oak woodlands in the SEA support a number of medium to large mammals, and several others that rely on the deeper soils and leaf litter. The larger mammals expected to occur include Virginia opossum (Didelphis virginiana), gray fox (Urocyon cinereoargenteus), raccoon (Procyon lotor), striped skunk (Mephitis mephitis), bobcat (Felis rufus), and mule deer (Odocoileus hemionus). The SEA may also support one or more mountain lions (Felis concolor) that are heavily reliant on the availability of habitat linkages to maintain their home range needs. Other mammals expected to be heavily dependent upon the woodlands include ornate shrew (Sorex ornatus), Yuma myotis (Myotis yumanensis), brush rabbit (Sylvilagus bachmani), Botta's pocket gopher (Thomomys bottae), ringtail (Bassariscus astutus), and long-tailed weasel (Mustela frenata).

SENSITIVE SPECIES

This section describes the plant and wildlife species present or potentially present in the Cold Creek SEA No. 9 that have been afforded special recognition by federal, state, and local resource conservation agencies due to limited or declining populations. The potential for the occurrence of sensitive plant and wildlife species was first determined through review of the CNDDB data for the Malibu Beach USGS quadrangle. This was supplemented by review of the following sources:

- <u>Plants.</u> USFWS (1990), CDFG (1990), CNPS (1988), Haines and Baker (1973), and McCauley (1986).
- <u>Wildlife</u>. California Wildlife Habitat Relationships System (CWHRS 1990), USFWS (1990), CDFG (1990), Williams (1986), and Remsen (1978).

While not all of the species in the discussion to follow have been observed in the Cold Creek SEA No. 9, there is the potential for them to occur due to regional records and the presence of suitable

habitat in the SEA. The potential for their occurrence in the SEA is estimated based on field surveys and review of other documentation.

Sensitive Plant Species

Lyon's pentachaeta (Pentachaeta lyonii) is a federal Category 1 candidate for listing as endangered or threatened and a state-listed endangered species. This annual member of the sunflower family generally occurs in grassy openings in chaparral. The range of this species formerly included coastal Los Angeles to the Santa Susana Mountains and Santa Catalina Island.

There are approximately thirteen reported extant populations of this species, primarily in the Santa Monica Mountains.

The Cold Creek SEA supports at least one population of Lyon's pentachaeta. Any projects proposed for this SEA should include focused, in season surveys for this species.

Braunton's milkvetch (Astragalus brauntonii) is a federal Category 2 candidate for listing as threatened or endangered. Braunton's milkvetch occurs in a variety of habitats, usually appearing after a fire or other disturbance. It is often associated with calcareous soils. The range of this species includes the northern end of the Santa Ana Mountains to the southern foothills of the San Gabriel Mountains, the Santa Monica Mountains, and the Simi Hills.

Braunton's milkvetch has not been reported from the Cold Creek SEA. However, as a fire-follower, the species is only apparent under certain conditions. Given the right conditions, Braunton's milkvetch may occur in the Cold Creek SEA. Any projects proposed for this SEA should include focused, in season surveys for this species.

The Santa Susana tarweed is a federal Category 2 candidate for listing as threatened or endangered and a state-listed rare species. This species occurs on rock outcrops in the Simi Hills, and the Santa Susana and Santa Monica Mountains.

The Santa Susana tarweed occurs just north of the Cold Creek SEA on Calabasas Peak. Any projects proposed for this SEA should include focused, in season surveys for this species.

Sensitive Wildlife Species

The Santa Monica Mountains band-winged grasshopper (Trimerotropis occidentaloides) is an insect species endemic to the Santa Monica Mountains. It is not currently included on federal or state sensitive species lists. The band-winged grasshopper is included in this discussion because it is vulnerable to extirpations and extinction due to its limited range and distribution. The band-winged grasshopper is diurnal and is most active between June and September. It is found in low grass and on bare soil on hillsides, ridges, on dirt roads, and along trails within chaparral and possibly within coastal sage scrub. This species was discovered near Thousand Oaks, on the northeastern part of the mountains, and has also been located near Potrero Road, adjacent to Charmlee Park.

Roads, trails, low grasses, and hilltops provide patchy habitat for the Santa Monica Mountains band-winged grasshopper within the Cold Creek SEA. This species is expected to occur in the SEA; however, because it is not listed as a sensitive species, directed surveys for the band-winged grasshopper would not be required under federal or state regulations.

The San Diego horned lizard (Phrynosoma coronatum blainvillei) is a federal Category 2 Candidate for listing as endangered or threatened. The decline of this species, that was once common throughout coastal Southern California, is attributable to loss of habitat and overcollection for the pet and curio trades (McGurty 1980). The San Diego horned lizard prefers sandy soils in open areas within chaparral and coastal sage scrub. It is strongly associated with its preferred prey, harvester ants of the genus Pogonomyrmex. Often, the most obvious first sign of the horned lizard's presence is observation of its distinctive scat near harvester ant mounds.

The CNDDB (1991) lists several records of the San Diego horned lizard for the region, including the Cold Creek Preserve. DeLisle et al. (1986) also indicate records for this species in Cold Canyon, although discrepancies exist between the subspecies identification in the CNDDB records and the observations of DeLisle et al. The latter lists the California horned lizard (P. c. frontale), and does not list the San Diego horned lizard at all. There is some debate between herpetologists as to whether or not the two are distinct subspecies, and there is much evidence of intermediate forms where the subspecies' ranges overlap, indicating interbreeding. For this report, it is assumed that the horned lizard in the SEA will be the San Diego subspecies.

Although no horned lizards were observed during recent surveys of the Cold Creek SEA, there is suitable habitat, especially in the coastal sage scrub and chaparral areas, and the ecotones between habitats. Because of the presence of suitable habitat and past records, the San Diego horned lizard is expected to occur in the Cold Creek SEA No. 9. Any projects proposed for this SEA should include focused surveys for this species during the warm months, April to October.

The San Diego mountain kingsnake (Lampropeltis zonata pulchra) is a federal Category 2 Candidate and a California Species of Special Concern. It occurs throughout the Sierra Nevada and scattered localities in the coast ranges across the entire length of the state, and in the San Bernardino, San Jacinto, and San Gabriel Mountains in Southern California. It ranges from near sea level to 8,000 feet in the vicinity of water sources near shrub or woodland habitats. Declines in populations of the San Diego mountain kingsnake may be attributed to overcollecting and habitat conversion.

DeLisle et al. (1986) list this species as moderately common in the Santa Monica Mountains. There are records from the DeLisle study from Cold Canyon within the SEA. The SEA supports high-quality habitat, that indicates that this species is expected to occur. Focused surveys should be conducted during May (during peak diurnal activity) to determine the status of the San Diego mountain kingsnake in the Cold Creek SEA. The San Diego mountain kingsnake hibernates in the cold winter months (October to February); surveys conducted during this period are likely to be inaccurate.

The Cold Creek SEA No. 9 is not expected to support any sensitive bird species during their breeding season. There are several that may use the area during migration in fall or spring, or as winter visitors from breeding grounds elsewhere within their range. The SEA is not a known nesting area for any sensitive bird species. However, perennial water sources and riparian woodlands are scarce along the Southern California Coast and are often used as wintering and resting habitat for regional migratory bird species, some of that are consider sensitive.

The sharp-shinned and Cooper's hawks (Accipiter striatus and A. cooperii) are likely to occur in the Cold Creek SEA. Both of these birds are California Species of Special Concern. There are some breeding pairs of Cooper's hawks in Southern California, but the sharp-shinned hawk is known to nest mostly in the Sierra Nevada and the northern part of the state (Garrett and Dunn 1981; CWHRS 1990). Both of these species prefer, but are not restricted to, riparian

habitat. They are forest hawks and prey on small birds and occasional rodents, amphibians, reptiles, and insects.

These species are expected to occur in the Cold Creek SEA No. 9 as winter visitors and transients during migration. Neither species is expected to nest in the SEA, although the riparian and oak woodlands could support nesting Cooper's hawks. The presence of chaparral and coastal sage scrub habitats adjacent to the riparian and oak woodlands increases the value of the SEA as foraging habitat for the sharp-shinned and Cooper's hawks, and the area is likely to be important to these species during winter and in spring and fall migration.

The yellow warbler (Dendroica petechia) is California Species of Special Concern. It is strictly a summer resident throughout most of its range in California, however, some individuals spend the winter in several localities along the Southern California coast and Colorado River (Garrett and Dunn 1981). It breeds in riparian woodlands from sea level to 8,500 feet elevation. Breeding pairs in the lowlands, especially along the coast, have declined dramatically in recent years, most likely due to nest parasitism by brown-headed cowbirds and loss of habitat (CWHRS 1990).

The yellow warbler is expected to occur in the SEA in the riparian woodlands. Nesting in the SEA is not expected because the yellow warbler prefers woodlands within broad drainages with dense, brushy understory. The SEA provides important migratory rest stops for the yellow warbler and may serve as wintering habitat in some years.

The greater mastiff bat (Eumops perotis californicus) is a federal Category 2 Candidate and a California Species of Special Concern. Its range extends from Butte County south through the Southern California coastal mountains and portions of the southeast desert region. The mastiff bat favors rugged, rocky areas at low elevations in the coastal basins where there are suitable roost sites. Roost site characteristics for this species are very specific and must include crevices that open downward, and are at least 5 cm wide and 30 cm deep (Burt and Grossenheider 1976).

The Cold Creek SEA No. 9 is within the range of the greater mastiff bat and contains extensive rocky cliffs that may have suitable roost sites. Some of the possible roost sites in the eastern portion of the SEA are surrounded by dense chaparral that probably prevents human disturbance. In addition, the riparian woodlands and extensive undisturbed habitat provide ample foraging opportunities for this species. The greater mastiff bat is expected to occur in the Cold Creek SEA

No. 9 and focused nocturnal surveys by a qualified chiropterist should be performed for any future projects.

Townsend's big-eared bat (<u>Plecotus townsendi</u>) is a California Species of Special Concern. The subspecies (<u>P. t. townsendi</u>) is also a federal Category 2 Candidate, but it occurs in the humid north and central portions of the state and is not expected to occur in the SEA. The other subspecies in California (<u>P. t. pallescens</u>) is expected to occur in the SEA. It is found in a number of habitats, from deserts and grasslands to coniferous forests (CWHRS 1990). Favored roost sites are found in limestone caves, mine tunnels, and abandoned buildings.

The Townsend's big-eared bat is particularly susceptible to human disturbance, and will often abandon a roost site after one visit by humans (Ingles 1965). Recent surveys in California have revealed that the species has abandoned many former roost sites and its current status is uncertain (Williams 1986). The dense vegetation and limited access to possible roost sites in the Cold Creek SEA mean that it is likely that the Townsend's big-eared bat still occurs in the SEA. Focused nocturnal surveys to detect echolocating Townsend's big-eared bats, along with discreet roost site surveys should be conducted for projects proposed in the SEA.

WILDLIFE MOVEMENT

The issue of wildlife movement corridors, or habitat linkages, is of special importance to researchers in the Santa Monica Mountains (Edelman 1990). Most of this concern is for continuing connections between the Santa Monica, Santa Susana, and San Gabriel Mountains through the Simi Hills. However, local movement is also of some importance to maintaining wildlife diversity in a given area. If animals are not able to travel between patches of suitable habitat, the likelihood of local extinctions increases. Fire or other disturbances may have extirpated some species, especially large mammals, from a given area if there are no opportunities for finding or reaching refuge nearby. Also, the isolation of patches of habitat without connection to other open space promotes inbreeding among populations that, in turn, lowers fecundity and may ultimately result in population declines.

The Cold Creek SEA is connected to the Malibu Canyon and Lagoon SEA No. 5 through a buffer zone proposed by England and Nelson (1976). The buffer zone for SEA No. 5 extends northeast from Malibu Canyon and connects the diverse wildlife community in that SEA with the Cold

Creek drainage. The concept was to connect the habitat in the Malibu Creek ecosystem with the permanent water resource in Cold Creek in order to maintain the complexity of wildlife in the region.

V. <u>DEVELOPMENT PRESSURE ANALYSIS</u>

There has been minimal development pressure within the Cold Creek SEA. Most development has been rural residential homes in the north and along the southern edge of the SEA. These have had little impact on the resources in the SEA as much of the SEA is protected as private reserve land, and the homes are well-spaced and have not removed large tracts of native vegetation as may occur with dense developments.

The annexation of SEAs into newly incorporated cities within the County has led to removal of many of the original 62 SEAs identified in England and Nelson (1976). Following annexation, the SEAs are no longer afforded protection pursuant to the Los Angeles County General Plan. In addition, projects proposed within the SEA are no longer subject to review by the Los Angeles County SEA Technical Advisory Committee. Annexation poses a major threat to the continued protection of the SEAs unless the City that annexes the SEA provides the same level of planning guidelines for the SEA to protect the designated resources. As more cities achieve incorporation, unique biological resources within the County could be impacted. Suggestions for managing this situation are provided in the section on Management Measures.

Additional protection of the Cold Creek SEA may result from the implementation of the Malibu Local Coastal Program. The 1986 Malibu Local Coastal Program/Land Use Plan (LCP) was prepared in accordance with the California Coastal Act of 1976. It identifies Malibu Canyon and its tributary drainages (Sleeper Canyon, Daily Canyon, and Cold Creek) as significant watersheds and resource management areas that are subject to protection under the provisions of the LCP. Pending implementation of the LCP, developments in the LCP area are subject to the provisions of the Los Angeles County General Plan and the approval of the California Coastal Commission. The Malibu LCP is compatible with the uses proposed by England and Nelson (1976) and provides more specific resource dependent planning guidelines.

According to the LCP, potential land uses in resource management areas are limited to those activities that are resource dependent, such as nature study and photography. Residential uses

are specifically defined as not being resource dependent. Protection of the Malibu-Cold Creek Resource Management Area under the LCP includes the following guidelines: resource dependent uses such as native observation, research and education, and passive recreation, including hiking and horseback riding. The resource management area provides for residential development in accordance with the following: for parcels less than 20 acres, buildout at existing parcel cuts at one unit per acre in accordance with specified standards and policies and subject to review by the Environmental Review Board; and for parcels greater than 20 acres, land divisions are allowable, but not below 20 acres per parcel.

VI. RECOMMENDATIONS FOR FUTURE MANAGEMENT OF THE COLD CREEK SEA NO.9

ORIGINAL INTENT OF SEA DESIGNATION AND CURRENT USES

The England and Nelson report (1976) indicated that the Cold Creek SEA was designated to protect unique botanical resources in the area and to preserve prime examples of the habitats occurring in Los Angeles County. The Los Angeles County General Plan (1988) revises the compatible use definition. While it retains the essence of England and Nelson (1976), it goes further in stating that reasonable use of privately held lands within SEAs cannot be precluded without just compensation to the landowner. Instead, the General Plan recognizes that measures necessary to preserve and enhance SEAs will vary depending on the nature of the resource values present and the degree of threat implied by potentially incompatible development. In addition, the General Plan states that compatible uses may also include low density residential development, minor commercial uses serving local residents, public and semi-public uses essential to the maintenance of public health and safety, agricultural uses, and natural resources extraction (gas, oil, etc.).

This SEA has had minimal development in the northern porion of an area that has been deleted from the SEA, and there are a few scattered residences in the southern part of the SEA. To date, the original intent of the SEA has been preserved, perhaps due to public ownership, limited and difficult access, the high level of citizen concern for the preservation of the SEA's unique biological resources, and the availability of more accessible recreation facilities in the vicinity of the SEA.

SUGGESTIONS FOR BOUNDARY ADJUSTMENTS

As it currently exists, the SEA encompasses all of the unique botanical features described in England and Nelson's report (1976). Expansion of the SEA would not add significantly to preservation of these resources. There should not be any further deletions because development potential is high for the ridges surrounding the SEA as indicated by the current (1991) ownership patterns. These patterns suggest that there is potential for large developments in the southern part of the SEA due to large parcel ownership by a few landowners and the relatively level terrain in this area. Continued rural residential development should be limited, but this type of construction will not remove large tracts of vegetation as may occur in the construction of a golf course or dense residential development.

COMPATIBLE MANAGEMENT MEASURES

The following section describes potential measures that may avoid, minimize, or compensate for impacts to biological resources within the Cold Creek SEA No. 9. These measures are designed to enhance the quality of the existing SEA and ensure that future actions within the SEA do not significantly diminish the quality of the biological resources. These measures are not intended to be comprehensive, but provide a general approach that addresses the immediate needs of the SEA.

Measure to Minimize the Effects of Annexation of the SEA

Annexation of SEAs into newly incorporated cities provides an opportunity for development of the SEA inconsistent with the unique biological resources currently protected by the County. When possible, SEAs to be included in an incorporation should be eliminated from the sphere of influence proposed. Otherwise, in the approval process for incorporation and decisions on boundaries for cities seeking incorporation, the County should undertake coordination with LAFCO to require that any SEAs within the proposed sphere of influence should remain, as much as possible, within the control of the County unless the city agrees that the SEA(s) affected will be afforded protection similar to that currently provided by the SEATAC review process. Upon annexation of an SEA into a City jurisdiction, the County should make provisions to provide planning guidance to the City staff consistent with continued protection at the SEA resource.

Based on the County's expertise pursuant to the SEAs, the County should provide review of City lead agency CEQA documents that affect previously designated County SEAs.

Measures to Protect/Enhance Surface Hydrology

The following recommendations combine management practices for water quality enhancement of urban runoff with measures for controlling increased runoff quantity due to development that may adversely affect the flows within the Cold Creek drainage and subsequently damage the riparian vegetation. In addition, water quality control measures are proposed to establish baseline water quality conditions, to evaluate the effectiveness of certain management components, and to evaluate the overall effect of urban runoff from any future development on the water quality of Cold Creek. The goal of the following measures is to reduce hydrology impacts associated with future development adjacent to the SEA and in tributary canyons that would affect downstream vegetation. Specifically, the measures would result in:

- controlling increased peak flows and volumes into Cold Creek
- minimizing nuisance flows into Cold Creek
- minimizing the velocity of flow into Cold Creek
- protecting stormwater, nuisance flow, and groundwater quality
- minimizing erosion and sedimentation
- minimizing the flow of trash and debris into Cold Creek

Water Quantity Control Measures

- 1. Prior to the issuance of any grading permits, the following drainage studies will be submitted to and approved by the Public Works Department:
 - a. A drainage study of the project including diversion and offsite areas that drain onto or through proposed development.
 - b. When applicable, a drainage study that provides evidence that proposed drainage patterns will not overload existing drainages.
 - c. Storm drain systems will be designed to locate discharge points to Cold Creek to minimize the disturbance of hillside terrain due to construction and to minimize any changes in natural streambank erosion trends. Consideration will be given also to geology, slope stability, proximity to important vegetation, and land uses (both development and open space).

- 2. Prior to issuance of any grading permits, the applicant will design and receive approval by the Regional Planning Director for the following measure to reduce the velocity of stormwater runoff into Cold Creek:
 - a. The program will include aesthetic alternatives for energy dissipation. Desirable criteria will include intended function, size and scale, compatibility with surroundings, and proximity to important vegetation.
- 3. Prior to issuance of any grading permits, the applicant will design and receive approval by the Director of the Department of Public Works, for a program to mitigate increases in stormwater peak flow rates and volumes and nuisance flows into Cold Creek that will include the following:
 - a. Detention basins for the purpose of reducing quantity of post-development peak flows.
 - b. Designs for efficient landscaping practices in order to reduce the amount of effective impervious surfaces.
 - c. Alternatives for controlling nuisance flow from development into Cold Creek such as alternative designs for transporting nuisance flows to the channel thalweg or infiltration of nuisance flow in conjunction with detention basin construction or water quality enhancement of nuisance flows in conjunction with basins.

Water Quality Control Measures

- 4. Prior to issuance of any grading permits, the applicant will design and receive approval by the Director of the Department of Public Works for the following measures to mitigate stormwater runoff quality into Cold Creek:
 - a. Where deemed necessary by the Los Angeles County Department of Public Works, a program will be designed that will include a detention basin program to mitigate water quality impacts. The detention basin facility will be constructed by the applicant, and will be ultimately dedicated to one, or a combination of, the following:
 - 1. Community Facilities District
 - 2. Homeowners Association
 - 3. Los Angeles County
 - 4. Other organizations formed for the purpose of managing and maintaining the detention facilities.

Prior to the issuance of any certificates of occupancy, improvements will be constructed in a manner meeting the approval of the Director of the Regional Planning Department.

b. A program for monitoring baseline water quality, and the effectiveness of the detention basin facilities will be developed. At a minimum, two water quality sampling locations will be designated. Prior to the outset of any Cold Creek monitoring program, the list of constituents will be reviewed and approved by the Regional Water Quality Control Board. The water quality monitoring program reports will be submitted to the Regional Water Quality Control Board and the Regional Planning Department.

- c. The applicant will make provisions for feasible, community-specified water quality protection programs (e.g., car washes that drain directly into the sewer system, oil disposal centers, permeable "paving", and efficient landscaping practices) to provide opportunities to diminish common threats to local water quality prior to contaminated runoff reaching storm water outlets.
- 5. Prior to issuance of any grading permits, the applicant will design the following improvements and provide necessary dedications in a manner meeting the approval of the Director of Regional Planning.
 - a. All provisions for onsite surface drainage.
 - b. All necessary storm drain facilities extending to a satisfactory point of disposal for the proper control and disposal of storm runoff.
 - c. Where determined necessary by the Director of Regional Planning, the associated easements will be dedicated to the appropriate agency of the County of Los Angeles.

Erosion And Sedimentation Control Measures

- 6. Prior to issuance of any grading permits, the applicant will submit to the Director of the Building and Safety Department for review and approval, an erosion control program that indicates that proper control of siltation, sedimentation, and other pollutants will be implemented as required in the Los Angeles County Grading Code.
 - a. During construction, siltation basins will be employed for use in reducing potential sedimentation. A siltation basin plan will be reviewed and approved by the Director of the Building and Safety Department or Director of the Department of Public Works.
 - b. Filter fences, trash racks, or other devices will be provided at storm water outlets, as needed, to prevent trash and debris from entering the detention basin facility and Cold Creek. The specifications and location of these devices will be included in the management plans.

Measure to Minimize Development Pressures Within the SEA

In cases where one owner holds large areas within the SEA, development density transfers may be a viable option. Parcels zoned for low densities may be allowed higher densities of development if such higher densities would not diminish the quality of habitat for unique plant species and wildlife, in exchange for donation of more sensitive parcels to the County or another resource conservation agency. A suitable ratio for such an exchange would be 2:1 -- one parcel of higher density development for two preserved parcels in mitigation. Such density transfers would likely be subject to review by County supervisors.

Measures to Provide for Long-term Preservation of SEA No. 9

One of the options for mitigation of impacts to biological resources from development is offsite preservation of habitat. The regional loss of open space, that is often identified as an unavoidable adverse impact for large developments, has few other options if the project is to proceed as planned. There are opportunities to use the Cold Creek SEA as a mitigation bank for projects elsewhere in the County. There are numerous small privately held parcels which are suitable for purchase and donation to the County or other private or public land preservation organizations or agencies. Offsite mitigation efforts that could be performed in the SEA include revegetation, restoration, land purchase, and preservation.

Measures to Provide for Riparian Restoration

Specific steps to preserve the quality of the Cold Creek SEA No. 9 should also be implemented on a project by project basis. Typical measures that could be included in mitigation for any future developments within the SEA include: (1) contribution to a restoration program; (2) creation of buffer areas to minimize siltation and turbidity during times of high water flows, including revegetation of hillsides and restoration of natural drainage patterns that have been disrupted by development; (3) conscientious grading practices that restore natural slopes, avoid filling canyon bottoms, and minimize erosion; (4) landscaping with native, regionally-occurring plant species that are not invasive into riparian habitat; and (5) limitation of human activity within Cold Creek, such as off-road vehicles, that may alter the streambed.

Measures to Preserve Oak Woodlands

The Los Angeles County Oak Tree Preservation Ordinance was enacted to prevent the loss of native oaks of the genus <u>Quercus</u>. The preservation of these trees is often mitigated through replacement of trees to be lost to a development at a ratio greater than 1:1. While this replacement may compensate for the loss of individual trees, in most cases it does not replace the

valuable habitat that is removed. Avoidance of impacts to the oak woodlands should be the preferred measure to preserve this habitat. The construction of large scale developments, such as housing tracts or golf courses, that will remove large areas of oak woodlands should be redesigned or restricted to avoid mature oak woodlands and understory resources. For projects that cannot avoid impacts to oak woodlands, adequate compensation should include replacement of trees as required under the oak tree ordinance and contribution to preservation of suitable habitat elsewhere in the Cold Creek SEA and the Santa monica Mountains. Any proposed project that could potentially affect mature oak trees must prepare an oak tree report in accordance with Los Angeles County Code, Title 22, Sections 22.56.2050 through 22.56.2140.

The following techniques to stimulate the natural regeneration of oak seedlings in the SEA and encourage the establishment of native understory plants should be encouraged:

- Low oak regeneration can often be attributed to soil compaction. The greatest degree of compaction occurs within the top 12 inches of soil, and treatment would consist of methods of breaking up the soil surface by discing or augering. Areas of severely compacted soil should be disced in early fall and immediately reseeded with native understory species in order to prevent the invasion of weeds. If weeds do invade, they could be controlled through mowing or the limited use of appropriate herbicides. Discing should not occur within 5 feet of the dripline of any oak.
- Soil inoculation. Beneficial fungi help oaks survive times of water stress and allow uptake of nutrients in poor soils. These fungi attach to the roots of host species, but do not tend to survive in areas of nonhost species such as annual grasslands. Treatment would consist of inoculating oak regeneration sites with commercially available fungi and other beneficial organisms, and it is strongly recommended for areas where soils are poor and the population of nonhost species is high.
- Natural oak regeneration should be supplemented with the planting of germinated acorns, grown form acorns collected onsite. Areas particularly favorable for planting include north-facing slopes, deep soils, swales, or other areas with subsurface water. Planting locations would be augured to enhance root development, and plantings should be temporarily caged to prevent rodent damage. Site surveys would be necessary to determine specific planting number and locations.
- Deadwood/leaf litter removal. Deadwood should not be removed, except for fire
 management purposes, as logs and branches provide valuable microhabitats for
 invertebrates, reptiles, small mammals, and birds. In addition, the decomposition
 of deadwood and leaf litter is essential for the replenishment of the soil's
 nutrients and minerals.

- Pruning. Pruning or clearing of native trees and shrubs should be avoided, except near residential areas for fuel modification purposes, as dense understory and canopy provide necessary wildlife habitat.
- Fertilizers/Pesticides. Neither fertilizers nor pesticides should be used in natural open space. Fertilizers are unnecessary for the successful growth of native species and promote excessive weed growth. Pesticides are undesirable as they can have long-term adverse effects on the ecosystem.
- Weed Control. Weed control within the natural open space areas should be limited. For the most part, the existing oak understory is dominated by introduced grasses along with many annual native species. These annual grasses are providing erosion control and should not be removed. Persistent invasive species, such as thistles and mustard should be selectively eliminated through the use of such weed control methods as mechanical clearing, mowing, and the use of nonresidual herbicides.

The primary method of weed eradication that should be used within the natural open space area is mowing. Mowing should be performed twice yearly, in early spring and summer, for fire control, weed control, and to stimulate the growth of native understory plants.

In areas where there are problem weeds, the area should first be cleared of existing non-native species during the early spring, irrigated frequently so as to germinate weed seeds, then mowed in late spring/early summer before the seeds mature. All mechanical weed removal activities should take place 5 feet outside of the dripline of any oak tree so as to avoid damage to existing oaks and oak seedlings. Any weed removal within 5 feet of the dripline of any oak should be done by hand.

Herbicides could be used in the existing habitats only if nonchemical means of weed removal are not successful and control is considered to be of greater benefit than leaving the site as is. Selective spraying with appropriate, nonresidual herbicides should be conducted by a weed control specialist under direction of a qualified biologist.

Fuel Modification Program

The fuel modification plans for areas in and adjacent to the Cold Creek SEA No. 9 would be developed to integrate measures for the protection of structures from fire hazard conditions with the use and management of native plant species and compatible drought-tolerant plants for fire protection. The use of nonvolatile native species and compatible drought-tolerant species would also serve as a natural buffer and transition between residential areas and natural open space. The fuel modification program should include a transition area between a development and open

space. Typically, the area is split into three zones that vary in the degree of thinning, removal, revegetation, and irrigation.

General guidelines that apply to all three zones include: (1) the retention of nonvolatile native plant species within natural open space areas, including oaks and walnuts; and (2) the replacement of volatile native plant species with nonvolatile native and drought-tolerant plant species within fuel modification areas. The actual widths of the three zones within the fuel modification area would vary according to slope conditions, degree of irrigation, and existing vegetation.

Additionally, development should strongly encourage the use of nonvolatile drought-tolerant and native plant species within development areas and strongly discourage the use of invasive, nonnative plant materials such as pampas grass (Cortaderia sellowiana), fountain grass (Pennisetum spp.), ice plant (Delosperma spp.), periwinkle (Vinca major), trailing lantana (Lantana camara), German ivy (Senecio mikaniodes), Spanish broom (Spartium junceum), French broom (Genista monspessulanus), blue gum (Eucalyptus globulus), Brazilian pepper tree (Schinus terebenthifolius), California pepper tree (Schinus molle), and tree of heaven (Ailanthus altissima) in areas outside the development edge of rural residential areas.

Potential guidelines pertaining to each of the three fuel modification zones are presented below:

- Zone 1. The first fuel modification zone is normally used to establish the maximum fire prevention area that will receive the most extensive thinning and removal of flammable vegetation. This area is immediately adjacent to the development and can be planted in fire-retardant low groundcover plants and trees that receive regular irrigation. Low volume irrigation systems can be used in order to prevent saturated conditions in natural areas downslope. Jute netting may be required on the slopes in this zone to prevent erosion until the plants are established.
- Zone 2. This zone is often within the areas disturbed by project grading but may extend into natural open space areas. The volume of vegetation is often greatly reduced and low fuel volume native plants will be established by seed or from containers. This zone normally receives periodic thinning to maintain low fuel levels. In addition, invasive grasses are cleared. Existing oaks and walnuts within this zone will be retained, although some thinning and dead wood removal will be necessary to reduce fuel load.

• Zone 3. Native vegetation furthest away from development should be selectively thinned, removing highly flammable plant species such as California sagebrush, California buckwheat, sages, and deadwood so that the structure of the vegetation is open but the soil is not exposed to erosion. If large volumes of vegetation are removed, the area would normally be replanted with low fuel volume native plants and compatible drought-tolerant species that would stabilize the soil (i.e., toyon, laurel sumac, oak).

Management Measures for the Urban/Natural Interface

The following guidelines pertain to the transition areas between the SEA and residential and other development sites:

• Buffer Zone. Successful integration of wildlife habitat into development depends on proper buffering at the interface of these two areas. Development often results in an edge condition where residential lots are located adjacent to areas of natural open space. A conceptual buffer plan using native plant species has been developed for the management of this edge condition. This buffer will limit potential impacts to the natural areas by screening development from wildlife, capturing excess runoff from landscape irrigation that could potentially injure sensitive plants, and providing an edge along residential lots that is aesthetically pleasing while providing many plant species that are valuable to wildlife. This edge should be designed so that it may be integrated into a fuel modification plan for the development that meets all of the requirements of the Los Angeles County Fire Department.

Native plants recommended for this buffer include more mesic species such as toyon (<u>Heteromeles arbutifolia</u>), elderberry (<u>Sambucus mexicana</u>), California lilac (<u>Ceanothus</u> spp.), squaw bush (<u>Rhus</u> trilobata), coffeeberry (<u>Rhamnus californica</u>), and coyote bush (<u>Baccharis pilularis</u>).

Additional native plant species that are low growing and of low fuel volume, and would not impede views into natural areas, could also be used. These include golden yarrow (Eriophyllum confertiflorum), California poppy (Eschscholzia californica), monkey flower (Diplacus spp.), penstemon (Penstemon spp.), California fuchsia (Epilobium spp.), deerweed (Lotus scoparius), wooly blue curls (Trichostema lanatum), and annual lupine (Lupinus spp.). This zone should be periodically thinned to maintain low fuel levels, as well as cleared of invasive grasses.

- <u>Signs</u>. Signs should be located in appropriate areas so as to discourage human intrusion into the SEA.
- Night Lighting. Night lights near residential areas should be directed away from the SEA so as not to disrupt nocturnal wildlife activity.

• <u>Fencing</u>. Fencing should be used where residential lots abut natural areas to discourage human intrusion into the SEA.

Measures to Comply with Regulatory Jurisdiction

State, federal, and local laws and regulations exist to protect wildlife and plant resources. Compliance with federal, state, and local regulations may be required at various stages in the environmental planning process for projects within the Cold Creek SEA No. 9. Compliance with federal regulations becomes necessary when a proposed project involves a federal action, including permits, grants, licenses, or other forms of federal authorizations or approval that may result in construction. The impacts associated with a proposed federal action (such as issuance of a permit under Section 404 of the Clean Water Act) must be analyzed pursuant to the National Environmental Policy Act (NEPA). All general plan amendments, specific plans, and tentative tract approvals require an assessment of impacts to biological resources pursuant to the California Environmental Quality Act (CEQA). In addition, local regulations require an assessment of impacts when (1) significant biological resources such as rare, threatened, or endangered species, riparian habitat, or mature native trees are affected; (2) sensitive communities of special concern as reported by the California Department of Fish and Game Natural Diversity Data Base are present; or (3) the project is located within or may affect wildlife movement.

The following section summarizes the major federal and state regulations applicable to the Cold Creek SEA No. 9 that help guide the planning process with respect to biological resources.

Section 404 of the Clean Water Act

The goal of Section 404 of the Clean Water Act is to maintain the integrity of U.S. waters through the control of discharge of fill materials. Areas that meet the definition of "waters of the United States" include all "blue line" areas as indicated on U.S.G.S. topographic maps. Also included is habitat for migratory birds that cross state lines, habitat used by species covered by the Endangered Species Act, and waters used for recreation by out-of-state visitors. Activities potentially affecting Cold Creek and the riparian woodlands are likely to be subject to the jurisdiction of the U.S. Army Corps of Engineers.

Section 404 states that no dredge or fill material may be discharged into aquatic ecosystems unless no adverse effects will result, and that there should be no discharge of dredge or fill material into wetlands if there is an alternative that would have less environmental impact. Adverse effects include those that jeopardize endangered or threatened species or critical habitat under the Endangered Species Act of 1973. Section 404 guidelines also recognize that the loss of wetlands is the most significant environmental impact and that the loss is irreversible.

Authority for Section 404 is delegated to the U.S. Army Corps of Engineers (ACOE). Pursuant to Section 404(b)(1), persons who wish to add fill to a U.S. water must file an application with the ACOE. The primary objective of the application is to disclose how much fill will be placed, where fill will placed, and how and why it will be placed in U.S. waters. Wetland-dependent wildlife species must also be reviewed in consultation with CDFG (under section 1603 of the Fish and Game Code) and USFWS (under section 7 of the Endangered Species Act). Other federal or state agencies may ultimately be involved with the process (for example, waters that fall under CDFG jurisdiction pursuant to section 1603 of the Fish and Game code).

California Department of Fish and Game Code Section 1603

Section 1603 of the Fish and Game code states that it is unlawful for any person to divert or obstruct the flow or to alter the bed, channel, or bank of any river, stream, or lake without notifying the CDFG of such action. Areas in the Cold Creek SEA No. 9 area subject to the CDFG 1603 agreements would likely include Cold Creek, all of the tributaries to Cold Creek within the SEA, and all other "blue line" areas as indicated on USGS topographic maps.

After notification of such activity, the CDFG will inform the applicant of any fish or wildlife resource that may be adversely affected by the alterations. This notification will also include measures that CDFG feels are necessary to protect the fish and wildlife. The persons proposing the action may request an onsite investigation by CDFG, or the CDFG may find an onsite investigation necessary before proposing measures to protect fish and wildlife. It is unlawful to begin projects affected by this section of the Fish and Game code until CDFG has found that fish and wildlife will not be adversely affected, or until CDFG proposals have been incorporated into the project.

Projects falling under 1603 jurisdiction may also require Section 404(b)(1) permits, as discussed above, and may result in consultation with the USFWS pursuant to Section 7 of the Endangered Species Act of 1973, or coordination pursuant to Section 9 and Section 10 of the Endangered Species Act.

Measures to Preserve Wildlife Movement

The maintenance of biological diversity in the Cold Creek SEA No. 9, as well as the Santa Monica Mountains, is somewhat dependent upon the maintenance of a connection between the pristine habitats in Cold Creek and the diverse wildlife community in the Malibu Canyon and Lagoon SEA No. 5 (England and Nelson 1976). Protection of the buffer zone identified by England and Nelson (1976) is necessary to allow continued interchange of wildlife between the two drainages. The loss of habitat in the buffer zone to residential development will seriously diminish the value of the SEA to this function. Piecemeal developments and large projects that alter the habitat, increase human intrusion, or impede wildlife movement should be avoided. Other management measures outlined in this section to preserve, restore, or enhance existing habitat will aid the maintenance of the wildlife movement corridor.

VII. BIBLIOGRAPHY

- Abrams, L. 1923. Illustrated Flora of the Pacific States, Vol. 1. Stanford: Stanford University Press. . 1944. Illustrated Flora of the Pacific States, Vol. II. Stanford: Stanford University Press. Abrams, L. and R. S. Ferris. 1951. Illustrated Flora of the Pacific States, Vol. III. Stanford: Stanford University Press. 1960. Illustrated Flora of the Pacific States, Vol. IV. Stanford: Stanford University Press. American Ornithologists' Union (AOU). 1983. Check-list of North American Birds. 6th ed. Lawrence, Kansas: Allen Press. With supplements in 1985, 1987, and 1989. Burt, W. H. and R. P. Grossenheider. 1976. A Field Guide to the Mammals, third edition. Boston: Houghton Mifflin Company. California Coastal Commission. December 11, 1986. Malibu Local Coastal Program-Land Use Plan. California Department of Fish and Game (CDFG). 1990. "Endangered and Threatened Animals of California". Sacramento: State of California Resources Agency. . 1989. "Designated Endangered, Threatened or Rare Plants." Summary list from Section 1904 Fish and Game Code (Native Plant Protection Act). Sacramento: State of California Resources Agency. _. 1988. "1987 Annual report on the status of California's state listed threatened and endangered plants and animals". Revised February 1988. Sacramento: State of California Resources Agency. . 1986. "Endangered, Threatened, and Rare Animals of California". State of California Resources Agency, Sacramento, California. . 1980. "At the Crossroads: A Report on the Status of California's Endangered and Rare Fish and Wildlife." State of California Resources Agency, Sacramento, California.
- California Natural Diversity Data Base (CNDDB). 1990. "RareFind: A database application for the use of the California Department of Fish and Game's Natural Diversity Data Base". Data base record search for information on threatened, endangered, rare or otherwise sensitive species and communities in the vicinity of seven Significant Ecological Areas (Kentucky Springs, Tonner Canyon, Cold Canyon, Tuna Canyon, San Francisquito Canyon, Las Virgenes Canyon, and <u>Dudleya densiflora</u>), Los Angeles County. California Department of Fish and Game, State of California Resources Agency, Sacramento, California.

- County of Los Angeles. 1987. Environmental Document Reporting Procedures and Guidelines, adopted by the Board of Supervisors on November 17, 1987.
- _____. 1980. County of Los Angeles General Plan, adopted by the Board of Supervisors on November 25, 1980.
- De Lisle, H., G. Cantu, J. Feldner, P. O'Connor, M. Peterson, and P. Brown. 1986. The Distribution and Present Status of the Herpetofauna of the Santa Monica Mountains of Los Angeles and Ventura Counties, California. Special Publication No. 2 of the Southwestern Herpetologists' Society. Prepared under the auspices of the Southwestern Herpetologists' Society and the Society for the Study of Amphibians and Reptiles.
- England and England Environmental Consultants. 1976. Los Angeles County Significant Ecological Area Study. Prepared for Los Angles County and Environmental Systems Research.
- Friesen, R.D. 1982. Significant Ecological Areas of the Santa Monica Mountains Report.

 Prepared for Los Angeles County Department of Regional Planning. Los Angeles
 County Museum of Natural History.
- Garrett, K. and J. Dunn. 1981. <u>Birds of Southern California: Status and Distribution</u>. Los Angeles: Los Angeles Audubon Society.
- Grinnell, J. and A. H. Miller. 1944. <u>The Distribution of the Birds of California</u>. Pacific Coast Avifauna. No. 27.
- Hall, E. and K. R. Kelson. 1981. <u>The Mammals of North America</u>. New York: John Wiley and Sons.
- Holland, R. F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. Sacramento: California Department of Fish and Game.
- Ingles, L. G. 1965. Mammals of the Pacific States. Stanford: Stanford University Press.
- Jennings, M. R. 1983. "An annotated check list of the amphibians and reptiles of California". California Fish and Game 69(3): 151-171.
- Jones, J. K., Jr., D. C. Carter, H. H. Genoways, R. S. Hoffman, and D. W. Rice. 1982. "Revised Checklist of North American Mammals North of Mexico". Occas. Pap. Mus. Texas Tech. Univ., No. 80.
- McGurty, B. M. 1980. "Preliminary Review of the Status of the San Diego Horned Lizard Phrynosoma coronatum blainvillei, and the Orange-throated Whiptail Cnemidophorus hyperythrus beldingi." Status report commissioned by the California Department of Fish and Game.
- Munz, P. A. 1974. A Flora of Southern California. Berkeley: University of California Press.

- Planning Center. 1990. Biological Resources Assessment, Southern California Golf Association Member's Club at Firestone, Tentative Tract No. 48380, Los Angeles County, California. Prepared for Planning and Designs Solutions.
- Rea, A. M. 1986. "Geographic Variation [of <u>Campylorhynchus bruneicapillum</u>]: (1) Northwest, Peninsular, and Insular Races." In A.R. Phillips (ed.). <u>The Known Birds of North and Middle America</u>, Part 1, pp. 118-119. A.R. Phillips, Denver, CO.
- Rea, A. M. and K. L. Weaver. 1990. "The taxonomy, distribution, and status of coastal California cactus wrens". Western Birds 21:81-126.
- Reintz, D.C.F. and D.B. Weissman. 1981. Faunal affinities, systematics, and bionomics of the Orthoptera of the California Channel Islands. Univ. of Calif. Press, Berkeley, California.
- Remsen, J. V. 1978. "Bird Species of Special Concern in California: An Annotated List of Declining or Vulnerable Bird Species". Nongame Wildlife Investigations, Wildlife Management Branch, California Department of Fish and Game. Administrative Report No. 78-1.
- Smith, J. P. Jr., and R. Berg. 1988. <u>Inventory of Rare and Endangered Vascular Plants of California</u>. Special Publication No. 1 (4th edition). Sacramento: California Native Plant Society.
- Stebbins, R. 1966. A Field Guide to Western Reptiles and Amphibians. 1st ed. Houghton Mifflin Company, Boston.
- Stebbins, R. 1985. <u>A Field Guide to Western Reptiles and Amphibians</u>. 2nd ed. Houghton Mifflin Company, Boston.
- U.S. Fish and Wildlife Service (USFWS). 1985. "Sensitive Bird Species, Region 1". Portland: U.S. Fish and Wildlife Service.
- _____. 1989. "Endangered and Threatened Wildlife and Plants; Animal (sic) Notice of Review". Federal Register 50 CFR Part 17. Washington, D.C.: U.S. Department of the Interior.
- . 1990. "Endangered and Threatened Wildlife and Plants". Federal Register 50 CFR 17.11 and 17.12. Washington, D.C.: U.S. Department of the Interior.
- . 1990. "Endangered and Threatened Wildlife and Plants; Review of Plant Taxa for Listing as Endangered or Threatened Species; Notice of Review". Federal Register 50 CFR Part 17. Washington, D.C.: U.S. Department of the Interior.
- Wiechec, Betty. 1991. Mountains Restoration Trust. December 23.
- Williams, D. F. 1986. "Mammalian Species of Special Concern in California". Nongame Wildlife Investigations, Wildlife Management Branch, California Department of Fish and Game. Administrative Report No. 86-1.

APPENDIX A

LIST OF PARCEL OWNERS WITHIN THE COLD CREEK SIGNIFICANT ECOLOGICAL AREA NO. 9

1-1 4453-021-010 JOSEPH P. LUSKIN 1178 STUNT ROAD CALABASAS, CA 91302
2-1 4453-021-012 CHARLES R. LEE P.O. BOX 897 IDYLLWILD, CA
1-2 4453-021-016 JOSEPH P. LUSKIN 1178 STUNT ROAD CALABASAS, CA 91302
3-1 4453-021-020 FIRST NETWORK SAVINGS BANK GENERAL COUNSEL 10100 SANTA MONICA BLVD. 5TH FLR. LOS ANGELES, CA 90067
4-1 4453-021-023 STEVEN L BRODIE 965 STUNT ROAD CALABASAS, CA 91302
5-1 4453-021-025 SIMON BENHAIM 446 S. WETHERLY DR. BEVERLY HILLS, CA 90211
6-1 4453-021-026 BENHAIM MAYER 666 S. WETHERLY DR. BEVERLY HILLS, CA 90211
5-2 4453-021-027. SIMON BENHAIM 446 S. WETHERLY DR. BEVERLY HILLS, CA 90211
7-1 4453-021-028 GARY D. HALE 21747 ERWIN ST. WOODLAND HILLS, CA 91367
8-1 4453-021-031" HARUKI YAMADA 100 CORPORATE PLAZA #2 NEWPORT BEACH, CA 92660
4-2 -4453-021-036 STEVEN L. BRODIE 965 STUNT ROAD CALABASAS, CA 91302
4-3 4453-021-037 STEVEN L. BRODIE 24955 PACIFIC COAST HWY. MALIBU, CA 90265
9-1 #453-021-038 CONRAD HALL SELNICK & ASSOC. INC. 2401 COLORADO AVE. #160 SANTA MONICA, CA 90404
9-2 4453-021-039 CONRAD HALL SELNICK & ASSOC. INC. 2401 COLORADO AVE. #160 SANTA MONICA, CA 90404
8-2 4453-021-040 .HARUKI YAMADA 100 CORPORATE PLAZA #2 NEWPORT BEACH, CA 92660
8-3 4453-021-041 HARUKI YAMADA 100 CORPORATE PLAZA #2 NEWPORT BEACH, CA 92660
8-4 4453-021-042 HARUKI YAMADA 100 CORPORATE PLAZA #2 NEWPORT BEACH, CA 92660
10-1 4453-021-900 STATE OF CALIFORNIA DEPT. OF GNRL SERVICES 640 HOWE AVENUE SACRAMENTO, CA 95825
11-1 #4438-033-006 KELLY & COGAN 2632 LINCOLN BLVD. SANTA MONICA, CA 90405
12-1 4438-033-024 ANTON PAVLOVICH 244 CALLE ARAGON #A LAGUNA HILLS, CA 92653
13-1 4438-033-025 RICHARD E. GRAF 3289 MALCOLM AVE. LOS ANGELES, CA 90034
14-1 4438-033-026 RONALD D. SOUCEY c/o: BISHOP TRUST CO. P.O. BOX 2390 HONOLULU, HI
11-2 *4438-033-028 KELLY & COGAN 2632 LINCOLN BLVD. SANTA MONICA, CA 90405

15-1	4438-033-029 DONOVAN L. NICOL P.O. BOX 5548 BEND, OR
16-1	4438-033-900-COUNTY OF LOS ANGELES 320 W. TEMPLE STREET LOS ANGELES, CA 90012
17-1	4455-009-002-TRYON N. SISSON 1279 WESTWIND CRCL. WESTLAKE VILLAGE, CA 91361
18-1	4455-009-004 DELORES A. SISSON 1279 WESTWIND CRCL WESTLAKE VILLAGE, CA 91361
19-1	4455-009-005-ANNA R. CHARNOCH 3549 GREENFIELD AVE. LOS ANGELES, CA 90034
20-1	4455-009-006 -NORMA E. WORCESTER 23340 ZUNIGA RD. TOPANGA, CA 90290
21-1 CA	4455-009-008-ROCKY MOUNTAIN PARTNERS C.W. 5000 CALABASAS PKWY. #308 CALABASAS, 91302
22-1	*4455-009-009 PARECHER FARHAD 4141 ROYAL CREST PL. ENCINO, CA 91436
22-2	4455-009-010-PARECHER FARHAD 4141 ROYAL CREST PL. ENCINO, CA 91436
17-2	4455-009-011-TYRON N. SISSON 1279 WESTWIND CRCL. WESTLAKE VILLAGE, CA 91361
17-3	4455-009-012-77RON N. SISSON 1279 WESTWIND CRCL. WESTLAKE VILLAGE, CA 91361
23-1	4455-018-007 ROBERT G. MATTOX JR. 25023 MULHOLLAND HWY. CALABASAS, CA 91302
24-1	4455-018-008 KENNETH C. WIKLE 25053 MULHOLLAND HWY. CALABASAS, CA 91302
25-1	4455-018-010-RICHARD MILLER 1954 COLD CANYON RD. CALABASAS, CA 91302
26-1	4455-018-011 WALDO N. BOCASH 22711 DEKALB DR. WOODLAND HILLS, CA 91364
25-2	4455-018-012-RICHARD C. MILLER 1954 COL CANYON RD. CALABASAS, CA 91302
27-1	4455-018-014-MICHEL T. GHOSN 265 GREEN LEA PL. THOUSAND OAKS, CA 91360
28-1	4455-018-015 GERALD L. HEGLIN 25159 MULHOLLAND HWY. CALABASAS, CA 91302
29-1	4455-018-016-RONALD M. BIEN 25161 MULHOLLAND HWY. CALABASAS, CA 91302
30-1	4455-018-024 WILLIAM K. CAMPBELL 1746 COLD CANYON RD. CALABASAS, CA 91302
31-1	4455-018-025 WALTER DEVEREAUX 25090 MULHOLLAND HWY. CALABASAS, CA 91302
32-1	4455-018-026 MOSES & MEIMEI YU 1080 OXFORD RD. SAN MARINO, CA 91108
33-1	4455-018-027-EDWARD BETZ 16500 VENTURA BLVD. #418 ENCINO, CA 91436
33-2	4455-018-028 EDWARD D. BETZ 16500 VENTURA BLVD. #418 ENCINO, CA 91436
34-1	4455-018-029 HOOSHANG GHAFFARI 17929 VENTURA BLVD. #7 ENCINO, CA 91416
35-1	4455-018-030-LUCINDA B. CUNNINGHAM 25040 MULHOLLAND HWY. CALABASAS. CA 91302

Total Control

38-1 445 39-1 445 32-2 445 33-3 445 40-1 445 41-1 445 42-1 445 43-1 445 44-1 445 45-1 445 47-1 445 23-2 445 27-2 445	55-018-032 DAVID O. BROWN III 5939 RUGBY AVE. #G HUNTINGTON PARK, CA 90255 55-018-033 DONALD V. CRAMER 24754 VIA MADERA CALABASAS, CA 91302 55-018-034 WILLY CHANG 790 TONGA COURT SAN JOSE, CA 95127 55-018-035 MOSES YU 1080 OXFORD RD. SAN MARINO, CA 91108 55-018-036 JAMES P. CASEY 1039 VERNON AVE. VENICE, CA 90291 55-018-037 DONALD W. WALLACE 1710 N. COLD CANYON RD. CALABASAS, CA 91302 55-018-039 BAYNES PROJECT LTD. 25750 VISTA VERDE CALABASAS, CA 91302 55-018-040 ALAN SATTERLEE 26560 AGOURA RD. #201 CALABASAS, CA 91302 55-018-040 ALAN SATTERLEE 26560 AGOURA RD. #201 CALABASAS, CA 91302 55-018-042 RUSSEL J. COSTA 1640 COLD CANYON RD. CALABASAS, CA 91302 55-018-042 RUSSEL J. COSTA 1640 COLD CANYON RD. CALABASAS, CA 91302 55-018-043 EDWARD POLL 421 HOWLAND CANAL VENICE, CA 90291 55-018-044 WILLIAM McDONALD 19709 VICTORY BLVD. WOODLAND HILLS, CA 91364 55-018-044 WILLIAM McDONALD 19709 VICTORY BLVD. WOODLAND HILLS, CA 91302
39-1 445 32-2 445 33-3 445 40-1 445 41-1 445 42-1 445 43-1 445 44-1 445 45-1 445 47-1 445 23-2 445 27-2 445	55-018-034 WILLY CHANG 790 TONGA COURT SAN JOSE, CA 95127 55-018-035-MOSES YU 1080 OXFORD RD. SAN MARINO, CA 91108 55-018-036 JAMES P. CASEY 1039 VERNON AVE. VENICE, CA 90291 55-018-037-DONALD W. WALLACE 1710 N. COLD CANYON RD. CALABASAS, CA 91302 55-018-039-DOUGLAS BUCKNER 24671 CALLE LARGO CALABASAS, CA 91302 55-018-039-BAYNES PROJECT LTD. 25750 VISTA VERDE CALABASAS, CA 91302 55-018-040 ALAN SATTERLEE 26560 AGOURA RD. #201 CALABASAS, CA 91302 55-018-041-TIMOTHY B. JOHNSTON 906 CALLE CALLADO THOUSAND OAKS, CA 91360 55-018-042-RUSSEL J. COSTA 1640 COLD CANYON RD. CALABASAS, CA 91302 55-018-043-EDWARD POLL 421 HOWLAND CANAL VENICE, CA 90291 55-018-044-WILLIAM McDONALD 19709 VICTORY BLVD. WOODLAND HILLS, CA 91364
32-2 445 33-3 445 40-1 445 41-1 445 42-1 445 43-1 445 44-1 445 45-1 445 47-1 445 23-2 445 27-2 445	55-018-035-MOSES YU 1080 OXFORD RD. SAN MARINO, CA 91108 55-018-036-JAMES P. CASEY 1039 VERNON AVE. VENICE, CA 90291 55-018-037-DONALD W. WALLACE 1710 N. COLD CANYON RD. CALABASAS, CA 91302 55-018-039-DOUGLAS BUCKNER 24671 CALLE LARGO CALABASAS, CA 91302 55-018-039-BAYNES PROJECT LTD. 25750 VISTA VERDE CALABASAS, CA 91302 55-018-040-ALAN SATTERLEE 26560 AGOURA RD. #201 CALABASAS, CA 91302 55-018-041-TIMOTHY B. JOHNSTON 906 CALLE CALLADO THOUSAND OAKS, CA 91360 55-018-042-RUSSEL J. COSTA 1640 COLD CANYON RD. CALABASAS, CA 91302 55-018-043-EDWARD POLL 421 HOWLAND CANAL VENICE, CA 90291 55-018-044-WILLIAM McDONALD 19709 VICTORY BLVD. WOODLAND HILLS, CA 91364
33-3 445 40-1 445 41-1 445 42-1 445 43-1 445 44-1 445 45-1 445 47-1 445 23-2 445 27-2 445	55-018-036 JAMES P. CASEY 1039 VERNON AVE. VENICE, CA 90291 55-018-037 DONALD W. WALLACE 1710 N. COLD CANYON RD. CALABASAS, CA 91302 55-018-038 DOUGLAS BUCKNER 24671 CALLE LARGO CALABASAS, CA 91302 55-018-039 BAYNES PROJECT LTD. 25750 VISTA VERDE CALABASAS, CA 91302 55-018-040 ALAN SATTERLEE 26560 AGOURA RD. #201 CALABASAS, CA 91302 55-018-041 TIMOTHY B. JOHNSTON 906 CALLE CALLADO THOUSAND OAKS, CA 91360 55-018-042 RUSSEL J. COSTA 1640 COLD CANYON RD. CALABASAS, CA 91302 55-018-043 EDWARD POLL 421 HOWLAND CANAL VENICE, CA 90291 55-018-044 WILLIAM McDONALD 19709 VICTORY BLVD. WOODLAND HILLS, CA 91364
40-1 445 41-1 445 42-1 445 43-1 445 44-1 445 45-1 445 47-1 445 23-2 445 27-2 445 48-1 445	55-018-037 DONALD W. WALLACE 1710 N. COLD CANYON RD. CALABASAS, CA 91302 55-018-039 DOUGLAS BUCKNER 24671 CALLE LARGO CALABASAS, CA 91302 55-018-039 BAYNES PROJECT LTD. 25750 VISTA VERDE CALABASAS, CA 91302 55-018-040 ALAN SATTERLEE 26560 AGOURA RD. #201 CALABASAS, CA 91302 55-018-041 TIMOTHY B. JOHNSTON 906 CALLE CALLADO THOUSAND OAKS, CA 91360 55-018-042 RUSSEL J. COSTA 1640 COLD CANYON RD. CALABASAS, CA 91302 55-018-043 EDWARD POLL 421 HOWLAND CANAL VENICE, CA 90291 55-018-044 WILLIAM McDONALD 19709 VICTORY BLVD. WOODLAND HILLS, CA 91364
41-1 445 42-1 445 43-1 445 44-1 445 45-1 445 46-1 445 23-2 445 27-2 445	55-018-039-DOUGLAS BUCKNER 24671 CALLE LARGO CALABASAS, CA 91302 55-018-039-BAYNES PROJECT LTD. 25750 VISTA VERDE CALABASAS, CA 91302 55-018-040-ALAN SATTERLEE 26560 AGOURA RD. #201 CALABASAS, CA 91302 55-018-041-TIMOTHY B. JOHNSTON 906 CALLE CALLADO THOUSAND OAKS, CA 91360 55-018-042-RUSSEL J. COSTA 1640 COLD CANYON RD. CALABASAS, CA 91302 55-018-043-EDWARD POLL 421 HOWLAND CANAL VENICE, CA 90291 55-018-044-WILLIAM McDONALD 19709 VICTORY BLVD. WOODLAND HILLS, CA 91364
42-1 445 43-1 445 44-1 445 45-1 445 46-1 445 47-1 445 23-2 445 27-2 445	55-018-049 BAYNES PROJECT LTD. 25750 VISTA VERDE CALABASAS, CA 91302 55-018-040 ALAN SATTERLEE 26560 AGOURA RD. #201 CALABASAS, CA 91302 55-018-041 TIMOTHY B. JOHNSTON 906 CALLE CALLADO THOUSAND OAKS, CA 91360 55-018-042 RUSSEL J. COSTA 1640 COLD CANYON RD. CALABASAS, CA 91302 55-018-043 EDWARD POLL 421 HOWLAND CANAL VENICE, CA 90291 55-018-044 WILLIAM McDONALD 19709 VICTORY BLVD. WOODLAND HILLS, CA 91364
43-1 445 44-1 445 45-1 445 46-1 445 47-1 445 23-2 445 27-2 445 48-1 445	55-018-040 ALAN SATTERLEE 26560 AGOURA RD. #201 CALABASAS, CA 91302 55-018-041 TIMOTHY B. JOHNSTON 906 CALLE CALLADO THOUSAND OAKS, CA 91360 55-018-042 RUSSEL J. COSTA 1640 COLD CANYON RD. CALABASAS, CA 91302 55-018-043 EDWARD POLL 421 HOWLAND CANAL VENICE, CA 90291 55-018-044 WILLIAM McDONALD 19709 VICTORY BLVD. WOODLAND HILLS, CA 91364
44-1 445 45-1 445 46-1 445 47-1 445 23-2 445 27-2 445 48-1 445	55-018-041 TIMOTHY B. JOHNSTON 906 CALLE CALLADO THOUSAND OAKS, CA 91360 55-018-042 RUSSEL J. COSTA 1640 COLD CANYON RD. CALABASAS, CA 91302 55-018-043 EDWARD POLL 421 HOWLAND CANAL VENICE, CA 90291 55-018-044 WILLIAM McDONALD 19709 VICTORY BLVD. WOODLAND HILLS, CA 91364
45-1 445 46-1 445 47-1 445 23-2 445 27-2 445 48-1 445	55-018-042 RUSSEL J. COSTA 1640 COLD CANYON RD. CALABASAS, CA 91302 55-018-043 EDWARD POLL 421 HOWLAND CANAL VENICE, CA 90291 55-018-044 WILLIAM McDONALD 19709 VICTORY BLVD. WOODLAND HILLS, CA 91364
46-1 445 47-1 445 23-2 445 27-2 445 48-1 445	55-018-043 EDWARD POLL 421 HOWLAND CANAL VENICE, CA 90291 55-018-044 WILLIAM McDONALD 19709 VICTORY BLVD. WOODLAND HILLS, CA 91364
47-1 445 23-2 445 27-2 445 48-1 445	55-018-044-WILLIAM McDONALD 19709 VICTORY BLVD. WOODLAND HILLS, CA 91364
23-2 445 27-2 445 48-1 445	
27-2 445 48-1 445	55-018-045-ROBERT G MATTOX IR 25023 MILHOU AND HAVE CALABASES CA 01202
48-1 445	
	55-018-046-MICHEL T. GHOSEN 265 GREEN LEA PL. THOUSAND OAKS, CA 91360
49-1 445	55-018-050 CONDOR FOODS INTL. 28732 EAGLETON ST. AGOURA, CA 91301
	55-018-051-WILLARD L. SCHIPPER 25174 MUHOLLAND HWY. CALABASAS, CA 91302
50-1 445	55-018-052 GENE T. WALLIS 25101 MUHOLLAND HWY. CALABASAS, CA 91302
51-1 445	55-020-003 FRANCES M. OWEN 2251 COLD CANYON RD. CALABASAS, CA 91302
52-1 445	5-020-004 NILS NILSSON 2232 COLD CANYON RD. CALABASAS, CA 91302
53-1 445	5-020-005 WALTER E. MILLER 2250 COLD CANYON RD. CALABASAS, CA 91302
54-1 445	5-020-006 CHARLES F. SMITH 2260 COLD CANYON RD. CALABASAS, CA 91302
55-1 445	5-020-009 ANNE-MARIE B. PRESCOTT P.O. BOX 8009 CALABASAS, CA 91302
55-2 445	5-020-010 ANNE-MARIE B. PRESCOTT P.O. BOX 8009 CALABASAS, CA 91302
56-1 445	
54-1 445 55-1 445	5-020-006 CHARLES F. SMITH 2260 COLD CANYON RD. CALABASAS, CA 91302 5-020-009 ANNE-MARIE B. PRESCOTT P.O. BOX 8009 CALABASAS, CA 91302

A COMMITTEE OF THE PARTY OF THE

57-1 4455-020-012 HORNER MUSIC INC. ATTN: Ms. MOONIE FISHBURN 11812 SAN VICENTE BLVD. #200 LOS ANGELES, CA 90049

	200 LOS ANGELES, CA 90049
58-	4455-020-013 JAMES HORNER 11812 SAN VICENTE BLVD. #200 LOS ANGELES, CA 90049
23-	4455-020-015 ROBERT G. MATTOX 25023 MULHOLLAND HWY. CALABASAS, CA 91302
56-	4455-020-017 MAXIMILIAN SIKINGER 2000 McKAIN ST. CALABASAS,CA 91302
59-	4455-020-018 LINDA S. GULLETTE 2121 McKAIN ST. CALABASAS, CA 91302
60-	4455-020-022 EUGENE R. SLATTERY 2065 McKAIN ST. CALABASAS, CA 91302
61-	4455-020-024 JOHN E. SIEBEL 2188 COLD CANYON RD. CALABASAS, CA 91302
62-	4455-020-026 HAROLD B. WILLIAMS 2070 McKAIN ST. CALABASAS, CA 91302
63-	4455-020-027 RALPH W. HOLDEN 2040 McKAIN ST. CALABASAS, CA 91302
64-	4455-020-028 ALPHONE V. DELLA MONICA 2091 McKAIN ST. CALABASAS, CA 91302
65-	4455-020-031 JOHN B. BATCHELOR 24970 BOB BATCHELOR RD. CALABASAS, CA 91302
66-	4455-020-033 RICHARD FISCHLI 2200 COLD CANYON RD. CALABASAS, CA 91302
66-	4455-020-034 RICHARD FISCHLI 2200 COLD CANYON RD. CALABASAS, CA 91302
67-	4455-020-035 JAMES L. BLACK 2222 COLD CANYON RD. CALABASAS, CA 91302
68-	4455-020-036 GARRY C. CILLETTE 2104 COLD CANYON RD. CALABASAS, CA 91302
58-2	4455-020-038 JAMESHORNER24875 BOB BACHELOR RD. CALABASAS, CA 91302
58-3	4455-020-039 JAMESHORNER24875 BOB BACHELOR RD. CALABASAS, CA 91302
43-2	4455-020-040 ALAN SATTERLEE 26560 AGOURA RD. #201 CALABASAS, CA 91302
69 –1	4455-020-041 GLORIA BARBA 2317 SUPERIOR VENICE, CA 90291
70 -1	4455-020-042 TIGER ANDREWS 4914 ENCINO TERRACE ENCINO, CA 91316
71-1	4355-020-043 UNITEC DEVELOPMENT CO. c/o: LARRY PULLEY 20236 LASSEN STREET HATSWORTH, CA 91311
72-1	4455-020-044 DAN MUNSON 2266 COLD CANYON RD. CALABASAS, CA 91302
59 - 2	4455-020-045 LINDA S. GULLETTE 2121 McKAIN ST. CALABASAS, CA 91302
73-1	4455-020-047 GARNAN HOLDINGS LTD. 2082 BUSINESS CNTR. DR. #290 IRVINE, CA 92715
74- <u>1</u>	4455-020-048 JACK SCALIA 2150 COLD CANYON RD. CALABASAS, CA 91302

17-4	4455-021-007	TRYON N. SISSON 1279 WESTWIND CRCL. WESTLAKE VILLAGE, CA 91361
75-1	4455-021-013	ALBERT R. MACKENZIE 13320 RIVERSIDE DR. SHERMAN OAKS, CA 91403
55-3	4455-021-015	ANNE-MARIE PRESCOTT P.O. BOX 8009 CALABASAS, CA 91302
1-2	4455-021-018	JOSEPH P. LUSKIN 1178 STUNT ROAD CALABASAS, CA 91302
76-1	4455-021-021	HAROLD V. HELSLEY 1970 McKAIN ST. CALABASAS, CA 91302
77-1	4455-021-023	ROBERT J. GRAINGER 3765 SANTIAGO DR. FLORISSANT, MO 63033
77-2	4455-021-024	ROBERT J. GRAINGER 3765 SANTIAGO DR. FLORISSANT, MO 63033
78-1	4455-021-029	MICHAEL S. PULWER 451 S. BARRINGTON AVE. #205 LOS ANGELES, CA 90049
79-1	4455-021-030	RUTH M. AHLBERG P.O. BOX 8117 CALABASAS, CA 91302
79-2	4455-021-031	RUTH M. AHLBERG P.O. BOX 8117 CALABASAS, CA 91302
80-1	4455-021-033	PETER F. BLESER 470 CHINQUAPIN CARLSBAD, CA 92008
12-5	4455-021-034	TRYON N. SISSON 1279 WESTLAKE CRCL. WESTLAKE VILLAGE, CA 91361
81-1	4455-021-036	BARTHOLD W. SORGE RT. 2, BOX 558 LA CENTER, WA
82-1	4455-021-040	JACK DIAMOND 15233 VENTURA BLVD. #301 SHERMAN OAKS, CA 91403
83-1	4455-021-041	ANNA M. WEBER 863 TERRACE 49 LOS ANGELES, CA 90042
81-2	4455-021-042	BARTHOLD W. SORGE RT. 2, BXO 558 LA CENTER, WA
81-3	4455-021-045	BARTHOLD W. SORGE RT. 2, BXO 558 LA CENTER, WA
84-1	4455-021-046	CATHARINE C. CAPPEL 1950 McKAIN RD. CALABASAS, CA 91302
85-1	4455-021-047	JOHN J. BLESER 911 AMOROSO PL. VENICE, CA 90291
86-1	4455-021-050	JOHN H. MATTINGLY 11565 DILLING ST. STUDIO CITY, CA 91604
87-1 CA 902		MOUNTAIN RESTORATION TRUST 24955 PACIFIC COAST HWY. #B201 MALIBU,
88-1	4455-021-052	PATRICIA E. MANLEY 6544 GROSS AVENUE CANOGA PARK, CA 91307
89-1	4455-021-053	RONALD G. HOLZHUETER 9 N. STRATHFIELD CRCL MADISON, WISC 53717
90 -1 91364	4455-021-055	MITCHELL M. WEINER 23036 CUMORAH CREST DR. WOODLAND HILLS, CA
90-2 91364	4455-021-056	MITCHELL M. WEINER 23036 CUMORAH CREST DR. WOODLAND HILLS, CA

91-1	4455-021-057	ANTHONY F. SEGALLE 27733 SEQUOIA GLENN DR. VALENCIA, CA 91355
91-2	4455-021-058	3 ANTHONY F. SEGALLE 27733 SEQUOIA GLENN DR. VALENCIA, CA 91355
92-1	4455-021-059	CELESTINE D. KENDERS 8744 MATILIJA AVE. VAN NUYS, CA 91402
93-1	4455-021-060	CHRIS B. JOHNSON 221 E. WALNUT ST. #241 PASADENA, CA 91101
44-2	4455-021-061	TIMOTHY B. JOHNSTON 906 CALLE COLLADO THOUSAND OAKS, CA 91360
94-1	4455-021-062	BENY P. NOVELLINO 1824 OCEAN DR. #A OXNARD, CA 93035
95-1	4455-021-063	ALFRED J. PLECHNER 24940 BOB BATCHELOR RD. CALABASAS, CA 91302
95-2	4455-021-064	ALFRED J. PLECHNER 24940 BOB BATCHELOR RD. CALABASAS, CA 91302
95-3	4455-021-065	ALFRED J. PLECHNER 24940 BOB BATCHELOR RD. CALABASAS, CA 91302
95-4	4455-021-066	ALFRED J. PLECHNER 24940 BOB BATCHELOR RD. CALABASAS, CA 91302
96-1 CA 91		THOMAS PSINKA c/o: T. SISSON 1279 WESTWIND CRCL. WESTLAKE VILLAGE,
17-6	4455-021-069	TRYON N. SISSON 1279 WESTWIND CRCL. WESTLAKE VILLAGE, CA 91361
97-1	4455-021-072	JOHN H. VAN VEEN 28301 ALAVA MISSION VIEJO, CA 92692
98-1 CALAE	4455-021-900 BASAS, CA 9130	LAS VIRGENES MUNICIPAL WATER DISTRICT 4232 LAS VIRGENES CNYN. RD.
	MOMO, CM 9130	<i>U2</i>
99-1		U.S. GOVERNMENT ATTN: GNRL. SVCS. ADM. 300 N. LOS ANGELES ST. LOS
99-1	4455-021-901 LES, CA 90012	
99-1 ANGE	4455-021-901 LES, CA 90012 4455-022-010	U.S. GOVERNMENT ATTN: GNRL. SVCS. ADM. 300 N. LOS ANGELES ST. LOS
99-1 ANGEI 100-1 8546 87-2	4455-021-901 LES, CA 90012 4455-022-010 4455-022-011	U.S. GOVERNMENT ATTN: GNRL. SVCS. ADM. 300 N. LOS ANGELES ST. LOS HELEN A. GIESE c/o: STEVEN PEAKE P.O. BOX 8546 SANTA CRUZ, CA 95061-
99-1 ANGEI 100-1 8546 87-2 90265	4455-021-901 LES, CA 90012 4455-022-010 4455-022-011 4455-022-012	U.S. GOVERNMENT ATTN: GNRL. SVCS. ADM. 300 N. LOS ANGELES ST. LOS HELEN A. GIESE c/o: STEVEN PEAKE P.O. BOX 8546 SANTA CRUZ, CA 95061- MOUNTAINS RESTORATION TR. 24955 PACIFIC COAST HWY. #201 MALIBU, CA
99-1 ANGE 100-1 8546 87-2 90265 101-1	4455-021-901 LES, CA 90012 4455-022-010 4455-022-011 4455-022-012 4455-022-013	U.S. GOVERNMENT ATTN: GNRL. SVCS. ADM. 300 N. LOS ANGELES ST. LOS HELEN A. GIESE c/o: STEVEN PEAKE P.O. BOX 8546 SANTA CRUZ, CA 95061- MOUNTAINS RESTORATION TR. 24955 PACIFIC COAST HWY. #201 MALIBU, CA YOUNGBLOOD GROUP INC. 4155 OAKPLACE DR. WESTLAKE VILLAGE, CA 91362
99-1 ANGE 100-1 8546 87-2 90265 101-1 102-1	4455-021-901 LES, CA 90012 4455-022-010 4455-022-011 4455-022-012 4455-022-013	U.S. GOVERNMENT ATTN: GNRL. SVCS. ADM. 300 N. LOS ANGELES ST. LOS HELEN A. GIESE c/o: STEVEN PEAKE P.O. BOX 8546 SANTA CRUZ, CA 95061- MOUNTAINS RESTORATION TR. 24955 PACIFIC COAST HWY. #201 MALIBU, CA YOUNGBLOOD GROUP INC. 4155 OAKPLACE DR. WESTLAKE VILLAGE, CA 91362 SOLOMON BERRIAN P.O. BOX 3642 MANHATTAN BEACH, CA 90266
99-1 ANGEI 100-1 8546 87-2 90265 101-1 102-1	4455-021-901 LES, CA 90012 4455-022-010 4455-022-011 4455-022-012 4455-022-013 4455-022-014 4455-022-015	U.S. GOVERNMENT ATTN: GNRL. SVCS. ADM. 300 N. LOS ANGELES ST. LOS HELEN A. GIESE c/o: STEVEN PEAKE P.O. BOX 8546 SANTA CRUZ, CA 95061- MOUNTAINS RESTORATION TR. 24955 PACIFIC COAST HWY. #201 MALIBU, CA YOUNGBLOOD GROUP INC. 4155 OAKPLACE DR. WESTLAKE VILLAGE, CA 91362 SOLOMON BERRIAN P.O. BOX 3642 MANHATTAN BEACH, CA 90266 SOLOMON BERRIAN P.O. BOX 3642 MANHATTAN BEACH, CA 90266
99-1 ANGE 100-1 8546 87-2 90265 101-1 102-1 102-2 103-1	4455-021-901 LES, CA 90012 4455-022-010 4455-022-011 4455-022-012 4455-022-013 4455-022-014 4455-022-015	U.S. GOVERNMENT ATTN: GNRL. SVCS. ADM. 300 N. LOS ANGELES ST. LOS HELEN A. GIESE c/o: STEVEN PEAKE P.O. BOX 8546 SANTA CRUZ, CA 95061- MOUNTAINS RESTORATION TR. 24955 PACIFIC COAST HWY. #201 MALIBU, CA YOUNGBLOOD GROUP INC. 4155 OAKPLACE DR. WESTLAKE VILLAGE, CA 91362 SOLOMON BERRIAN P.O. BOX 3642 MANHATTAN BEACH, CA 90266 SOLOMON BERRIAN P.O. BOX 3642 MANHATTAN BEACH, CA 90266 EDWARD D. COREY 29200 LARKSPUR LANE MALIBU, CA 90265

And the second s

The second secon

• ;

4455-023-900 STATE OF CALIFORNIA DEPT. OF GNRL. SVCS. 650 HOWE AVENUE 10-2 SACRAMENTO, CA 95825 4455-023-901 STATE OF CALIFORNIA DEPT. OF GNRL. SVCS. 10-3 650 HOWE AVENUE SACRAMENTO, CA 95825 87-3 4455-024-005 MOUNTAINS RESTORATION TRUST 24955 PACIFIC COAST HWY. #201 MALIBU. CA 90265 17-7 4455-024-007 TRYON N. SISSON 1279 WESTWIND CRCL. WESTLAKE VILLAGE, CA 91361 98-2 4455-024-901 LAS VIRGENES MUNICIPAL WATER DISTRICT 4232 LAS VIRGENES CNYN, RD. CALABASAS, CA 91302 4455-024-902 STATE OF CALIFORNIA DEPT. OF GNRL. SVCS. 650 HOWE AVENUE SACRAMENTO, CA 95825 4455-041-001 DOUGLAS W. CRANE c/o: ANDREA CRANE 4100 CAMELLIA AVE. STUDIO CITY, 107-1 CA 91604 4455-041-002 JOHN D. CRAVEN 11225 HOMEDALE ST. LOS ANGELES, CA 90049 108-1 4455-041-004 MAYNARD GREENBERG 6927 RUBIO AVENUE VAN NUYS, CA 91406 109-1 109-2 4455-041-005 MAYNARD GREENBERG 6927 RUBIO AVENUE VAN NUYS. CA 91406 110-1 4455-041-006 JOSEPH D. BAGWELL 2110 STUNT ROAD CALABASAS, CA 91302 4455-041-008 RICHARD FUESS 18228 ASHLEY ST. TORRANCE, CA 90504 111-1 112-1 4455-041-010 JAMES J. MALLEN 24325 SYLVAN GLEN RD. CALABASAS, CA 91302 113-1 4455-041-011 GARY L. WEHRLE 24317 SYLVAN GLEN RD. CALABASAS, CA 91302 4455-041-012 JULIUS S. MARGOLES 24311 SYLVAN GLEN RD. CALABASAS, CA 91302 114-1 4455-041-013 DONALD J. BARNETT 24301 SYLVAN GLEN RD. CALABASAS. CA 91302 115-1 4455-041-016 RUSSELL M. KERN 2010 STUNT ROAD CALABASAS, CA 91302 116-1 117-1 4455-041-017 STEVEN S. COHN 2002 STUNT ROAD CALABASAS, CA 91302 118-1 4455-041-018 STUNT ROAD PARTNERS 5918 VANALDEN AVENUE TARZANA, CA 91356 119-1 4455-041-019 FRANKLIN D. ROBERTS 2020 STUNT ROAD CALABASAS, CA 91302 120-1 4455-041-020 JACK M. ZIMMERMAN 2100 STUNT ROAD CALABASAS, CA 91302 121-1 4455-041-021 PAUL SIEMEN 17050 CHATSWORTH ST. #235 GRANADA HILLS. CA 91344 122-1 4455-041-022 MARK A. BROWN 22601 MIRANDA ST. WOODLAND HILLS. 91367

4455-050-006 TRION N. SISSON 1279 WESTWIND CRCL WESTLAKE VILLAGE, CA 91361 17-9

- 123-1 4453-024-002 THWEATT, MARY F. AND HEINZ, MARQUEATTE G., 3435 WILSHIRE BLVD, #2500, LOS ANGELES, CA 90010
- 124-1 4453-024-003 BAUER, LUCIEN A., BOX 1147, MALIBU CA
- 21-2 4453-024-004 ROCKY MOUNTAIN PARTNERS CW, 5000 CALABASAS PARKWAY, #308, CALABASAS, CA 91302
- 125-1 4453-024-005 WILLIAMS, LESLIE J., HEAD WEST, 1829 W. EL SEGUNDO BLVD, COMPTON, CA
- 126-1 4453-024-006 HOVENWEEP LANE DEVELOPMENT, PHLYN INC., 22222 SHERMAN WAY, #208, CANOGA PARK, CA 91303
- 21-3 4453-024-008 ROCKY MOUNTAIN PARTNERS CW, 5000 PARKWAY CALABASAS, #308. CALABASAS, CA 91302
- 126-2 4453-024-009 HOVENWEEP LANE DEVELOPMENT, PHLYN INC., 22222 SHERMAN WAY, #208, CANOGA PARK, CA 91303
- 127-1 4453-024-012 BLACKMAN, ROBERT A. AND JOAN S., 502 SCHUREU ROAD, MALIBU, CA 90265
- 21-4 4453-024-013 ROCKY MOUNTAIN PARTNERS CW, 50000 PARKWAY CALABASAS, #308, CALABASAS, CA 91302
- 126-3 4453-024-014 HOVENWEEP LANE DEVELOPMENT, PHLYN INC., 22222 SHERMAN WAY, #208, CANOGA PARK, CA 91303
- 128-1 4453-024-900 STATE OF CALIFORNIA PARKS DEPARTMENT
- 128-2 4453-024-901 STATE OF CALIFORNIA PARKS DEPARTMENT

87-4	4438-005-002 MOUNTAINS RESTORATION TRUST, 24955 PACIFIC COAST HWY #B201, MALIBU, CA 90265
87-5	4438-005-003 MOUNTAINS RESTORATION TRUST, 24955 PACIFIC COAST HWY #B201, MALIBU, CA 90265
87-6	4438-005-004 MOUNTAINS RESTORATION TRUST, 24955 PACIFIC COAST HWY #B201, MALIBU, CA 90265
129-1	4438-005-005 BADDON HELEN CO TR ET AL TIMOTHY D. HUBENTHAL TRUST, BADDON HELEN M., 9531 OLYNPIC DR., HUNTINGNTON BEACH, CA 92646
130-1	4438-005-006 KLEYWEG RONALD H AND HAZEN RICHARD W, 23200 REDROCK RD., TOPANGA, CA 90290
131-1	4438-005-007 WUSSOW DON AND ARLINE, 708 ELAINE RD. WEST, PALM BEACH, FL 33413
106-2	4438-005-009 LARSON FREDERICK AND DOROTHY TRS LARSON TRUST, 350 ALMA REAL PACIFIC PALISADES, CA 90272
107-1	4438-005-012 WEISSBERG ERNEST ET AL, C/O T KAPPEL, P.O. BOX 24026, LOS ANGELES, CA
132-1	4438-005-013 STEINHAUER LOUIS ET AL, C/O STEVE FOX, 3263 GRAND VIEW BLVD., LOS ANGELES, CA 90066
133-1	4438-005-014 RANGE PAUL E AND RANGE GLEN, 3478 WOODCLIFF RD., SHERMAN OAKS, CA 91413
134-1	4438-005-015 BOSE JOHN AND BOSE BONN, 23334 COLLINS ST., WOODLAND HILLS, CA 91367
135-1	4438-005-016 WHITE JAMES A, 9749 S. RICHEON AVE., DOWNEY, CA 90240
136-1	4438-005-017 WHITE JOHN G, 3975 SHEDD TERRACE, CULVER CITY, CA 90232
137-1	4438-005-018 COSTELLO JOHN K AND MARCELLE, P.O. BOX 6060, WASHINGTON D.C.
138-1	4438-005-020 POIRIER ROBIN, 1 ROSE LN., TOPANGA, CA 90290
139-1	4438-005-021 ANKER SAMUEL TR CLIM TRUST, 16311 VENTURA BLVD., #1200, ENCINO, CA 91436
87-7	4438-032-001 MOUNTAINS RESTORATION TRUST, 24955 PACIFIC COAST HWY #B201, MALIBU, CA 90265
87-8	4438-032-002 MOUNTAINS RESTORATION TRUST, 24955 PACIFIC COAST HWY., MALIBU, CA 90265
140-1	4438-032-008 GURKA FRANCES A AND CZAPLECKI JEAN U, 42 BREWSTER ST., SPRINGFIELD, MA 01119
141-1	4438-032-009 BELAS EMILY, 335 MORETON BAY LANE #5, GOLETA, CA 93017

87-9	4438-032-010 MOUNTAINS RESTORATION TRUST, 24955 PACIFIC COAST HWY #B201 MALIBU, CA 90265				
87-10	4438-032-012 MOUNTAINS RESTORATION TRUST, 24955 PACIFIC COAST HWY #B201 MALIBU, CA 90265				
87-11	4438-032-015 MOUNTAINS RESTORATION TRUST, 24955 PACIFIC COAST HWY #B201, MALIBU, CA 90265				
16-2	4438-032-900 L A CO WATERWORKS DIST NO 29				
16-3	4438-032-901 L A COUNTY				
16-4	4438-032-902 L A COUNTY				
99-2	4438-032-903 U S GOVERNMENT				
10-4	4438-032-904 STATE OF CALIFORNIA				
10-5	4438-032-905 STATE OF CALIFORNIA				
10-6	4438-032-906 STATE OF CALIFORNIA				
10-7	4438-032-907 STATE OF CALIFORNIA, MARSHA S MIKLLER, 3580 WILSHIRE BLVD., LOS ANGELES, CA 90010				
142-1	4453-023-003 HARVEY BRIAN L, W.P.O. BOX 93123, LONG BEACH, CA				
3-2	4453-023-004 FIRST NETWORK SAV BK, GENERAL COUNSEL, 10100 SANTA MONICA BLVD., 5 FLR, LOS ANGELES, CA 90067				
10-8	4453-023-900 STATE OF CALIFORNIA				
143-1	4455-019-004 STEINBERG CYNTHIA J, 24772 MULHOLLAND HWY, CALABASAS, CA 91302				
144-1	4455-019-011 KOBLASA GEORGE CO TR KOBLASA FAMILY TRUST, P.O. BOX 55157 SHERMAN OAKS, CA				
144-2	4455-019-012 KOBLASA GEORGE CO TR KOBLASA FAMILY TRUST, P.O. BOX 55157, SHERMAN OAKS, CA				
51-2	4455-019-013 OWEN FRANCES M, 2251 COLD CANYON RD., CALABASAS, CA 91302				
51-3	4455-019-014 OWEN M FRANCES, 2251 COLD CANYON RD., CALABASAS, CA 91302				
145-1	4455-019-015 MCMENAMIN GEORGE E AND VERNA J, 24761 MULHOLLAND HWY., CALABASAS, CA 91302				
146-1	4455-019-016 LEICHNER BENJAMIN AND DOROTHY H TRS, C/O J ARTHUR GREENFIELD AND CO., 10880 WILSHIRE BLVD., #506, LOS ANGELES, CA 90024				
147-1	4455-019-019 KICKER TIMOTHY P AND LINDA J, 24808 MULHOLLAND HWY., CALABASAS, CA 91302				

148-1	4455-019-021 DEMONTIGNY DENNIS ET AL, 11400 SDUNSHINE TERRACE, STUDIO CITY, CA 91604
149-1	4455-019-025 BEAN JAMES M AND STEPHANIE A, 24845 MULHOLLAND HWY., CALABASAS CA 91302
150-1	4455-019-026 MOTAHARI MEHDI, 22020 CRESPI ST., WOODLAND HILKLS, CA 91364
151-1	4455-019-027 BLACK PHILIP, 2 HOLLY BUSH HILL, LONDON, ENGLAND NW3 6SH
152-1	4455-019-028 ERENBERG HOWARD P, 28311 LIVE OAK CYN RD., REDLANDS, CA 92373
153-1	4455-019-029 MCKENZIE RANDALL R AND KAREN L, 24836 MULHOLLAND HWY., CALABASAS, CA 91302
154-1	4455-019-030 MERTZEL DAVID E AND PAMELA L, 2171 N MCKAIN RD., CALABASAS, CA 91302
155-1	4455-019-031 SERINO LOUIS J AND ELIZABETH J, 2185 MCKAIN ST., CALABASAS, CA 91302
156-1	4455-019-032 SLATSKY WILLIAM, 6616 JULIE LN., WEST HILLS, CA 91307
157-1	4455-019-034 BRACAMONTE OSCAR AND GLENNIS TRS BRACAMONTE FAMILY, 24871 MULHOLLAND HWY, CALABASAS, CA 91302
158-1	4455-019-035 GREIMAN DANIEL D AND NANCY L TRS D D AND N L GREIM, 24875 MULHOLLAND HWY., CALABASAS, CA 91302
159-1	4455-019-036 KOHN WENDIE M, 24879 MULHOLLAND HWY., CALABASAS, CA 91302
160-1	4455-019-037 MARCIONE CONRAD C JR CO TR MARCIONE TRUST, 2202 STUNT RD., CALABASAS, CA 91302
161-1	4455-019-038 MENENDEZ JOSE E AND MARY L, 4526 PARK LIVORNO, CALABASAS, CA 91302
162-1	4455-019-040 HARRIS STEPHEN A AND SUSAN R, 2069 COLD CANYON RD., CALABASAS, CA 91302
163-1	4455-019-041 BROWN R LEE AND ARACELI, 2071 COLD CANYON RD., CALABASAS, CA 91302
164-1	4455-019-042 TERINO EDWARD O AND SUSAN M, 24975 MULHOLLAND HWY., CALABASAS, CA 91302
165-1	4455-019-043 COHEN IVAN I AND GAYLE M, 24979 MULHOLLAND HWY., CALABASAS, CA 91302
166-1	4455-019-044 TING LAWRENCE S AND SYLVIA F, 30 LN 68 SEC III HSIN-SHEING N RD., TAIPEI, TAIWAN ROC
166-2	4455-019-045 TING LAWRENCE S AND SYLVIA F, 30 LN 68 SEC III HSIN-SHEING N RD., TAIPEI, TAIWAN ROC
166-3	4455-019-046 TING LAWRENCE S AND SYLVIA F, 30 LN 68 SEC III HSIN-SHEING N RD., TAIPEI, TAIWAN ROC

A Company of the Comp

166-4	4455-019-047 TING LAWRENCE S AND SYLVIA F, 30 LN 68 SEC III HSIN-SHEING N RD. TAIPEI, TAIWAN ROC				
167-1	4455-008-002 RADZINSKI JOHN, 221 6TH ST., SEAL BEACH, CA 90740				
168-1	4455-008-003 EIGENBROIDT ROBERT A, 14651 ROUND VALLEY DR., SHEERMAN OAKS, CA				
169-1	4455-008-004 GENSLEY JULIANA T & JOHN F JR., 24466 MULHOLLAND HWY., CALABASAS CA				
170-1	4455-008-005 MADIC MICHAEL, 24033 FRIAR ST., WOODLAND HILLS, CA 91367				
171-1	4455-008-008 RIES ANDREW AND SUSAN, 54 RN 34 77144 MONTEVRAIN, FRANCE				
172-1	4455-008-009 EBENSTEINER PAUL S AND JUNE TRS EBENSTEINER FAMILY, EBENSTEINER CO., 28611 CANWOOD ST.,M #1, AGOURA, CA 91301				
173-1	4455-008-010 MILLER MARILYN J, 7056 LASAINE AVE., VAN NUYS, CA 91406				
174-1	4455-008-011 POPOVAC JENNIFER C., 17270 ROBIN RIDGE, SONORA, CA 95370				
175-1	4455-008-012 CONNOLLY JOANNA L, 7702 EST LANE, WYNDMOOR, PA 19118				
176-1	4455-008-013 MILLER LYNDON B, 7056 LASAINE AVE., VAN NUYS, CA 91406				
16-5	4455-008-900 L A COUNTY				
10-9	4455-008-902 STATE OF CALIFORNIA				

APPENDIX B

FLORAL AND FAUNAL COMPENDIA FOR THE COLD CREEK SIGNIFICANT ECOLOGICAL AREA NO. 9

INTRODUCTION TO FLORAL AND FAUNAL SURVEY

Floral components encountered during the survey were recorded in terms of relative abundance and host habitat type. Expected site use by wildlife is derived from survey information combined with documented habitat preferences of regional wildlife species that, whether or not recorded during the survey, are considered likely to include the project area within their range.

Habitat designations used in this report are according to the classification system of Holland (986). Floral taxonomy used in this report follows that of Roberts (989), Raven et al. (986), and Beauchamp (986). Common plant names, where not available from Roberts or Beauchamp, are taken from Munz (984) and Abrams (923). Vertebrates identified in the field by sight, calls, tracks, scat, or other signs are cited according to the nomenclature of Jennings (983) for amphibians and reptiles, AOU (983, 985, 987, 989) for birds, and Jones et al. (982) for mammals.

FLORAL COMPENDIUM¹

LEGEND

HABITAT²

CHAP - Chaparral

OW - Coast Live Oak Woodland

CSS - Coastal Sage Scrub

GR - Valley and Foothill Grassland

ABUNDANCE3

- a abundant--ubiquitous throughout the noted community; occurs in high numbers or in large, pure stands
- c common--a dominant species in the noted community; occurs in relatively high numbers
- f frequent--occurs in moderate numbers, but not a dominant element of the noted community
- o occasional--occurs sporadically in the noted community; generally not an obvious or conspicuous component
- i infrequent--occurs rarely, or only in a small portion of the noted community; often not apparent unless searched for

STATUS

* Non-native

This is not intended as an exhaustive listing of the vegetation occurring on the site; some annual herbs or very uncommon species may not have been detected by the field survey.

² Indicates habitat type (plant community) in which species most commonly occurs; species may occur in limited numbers or restricted localities in other communities.

This is simply a gross indication of relative frequency of occurrence on the site. Quantitative sampling methods were not employed to arrive at these determinations.

VASCULAR PLANTS

FILICAE

ADIANTACEAE - LIP FERN FAMILY	<u>CHAP</u>	<u>ow</u>	<u>CSS</u>	GR
Adiantum capillus-veneris Venus-hair fern	O	o	i	-
Pityrogramma triangularis goldenback fern	O	O	i	O
ASPIDIACEAE - WOOD FERN FAMILY				
Dryopteris arguta coastal wood fern	-	O	-	•
BLECHNACEAE - CHAIN FERN FAMILY				
Woodwardia fimbriata giant chain fern	-	i	-	-
DENNSTAEDTIACEAE - BRACKEN FERN FAMILY				
Pteridium aquilinum western bracken	-	i	-	-
POLYPODIACEAE - POLYPODY FERN FAMILY				
Polypodium californicum California polypody	i	i	•	-
ANGIOSPERMAE (DICOTYLEDONE	S)			
ACERACEAE - MAPLE FAMILY				
Acer macrophyllum big-leaf maple	-	i	<u>-</u>	-

ANACARDIACEAE - SUMAC FAMILY	<u>CHAP</u>	<u>ow</u>	<u>CSS</u>	<u>GR</u>
Malosma laurina laurel sumac	o	i	c	-
Rhus ovata sugar bush	O	-	O	-
Toxicodendron diversilobum poison-oak	o	f	, i	-
ASCLEPIADACEAE - MILKWEED FAMILY				
Asclepias fascicularis narrow-leaved milkweed	-	-	-	0
ASTERACEAE - SUNFLOWER FAMILY				
Artemisia douglasiana California mugwort	-	o	-	-
Chaenactis artemisiaefolia white pincushion	-	-	i	· i
Cirsium occidentale cobweb thistle	-	-	-	o
* Conyza canadensis horseweed	-	-	-	i
Corethrogyne filaginifolia cudweed aster	o	i	o	o
Eriophyllum confertiflorum golden yarrow	i	i	0	-
Gnaphalium californicum California everlasting	o	-	0	-
Gnaphalium microcephalum white everlasting	o	-	o	
Hazardia squarrosa	i	i	i	i
saw-toothed goldenbush <u>Hemizonia ramosissima</u> tarweed	i	i	i	f
Malacothrix saxatilis	o	i	o	0
cliff malacothrix Senecio douglasii	i	i	o	-
shrubby butterweed * Senecio vulgaris	-	-	-	i
common groundsel <u>Venegasia carpesioides</u> canyon sunflower	i	i	0	- ,

BORAGINACEAE - BORAGE FAMILY	<u>CHAP</u>	<u>ow</u>	CSS	<u>GR</u>
Cryptantha intermedia common forget-me-not	i	i	i	i
BRASSICACEAE - MUSTARD FAMILY				
* Brassica nigra	o	o	0	a
black mustard <u>Cardamine californica</u>	-	i	-	i
milkmaids * <u>Nasturtium officinale</u>	-	i	-	
water-cress Thelypodium lasiophyllum	-	_	-	i
shaggy thelypod				_
CAPRIFOLIACEAE - HONEYSUCKLE FAMILY				
Lonicera subspicata	i	o	i	-
southern honeysuckle <u>Sambucus mexicana</u>	i	o	0	-
Mexican elderberry Symphoricarpos mollis	_	o	-	•
spreading snowberry				
CARYOPHYLLACEAE - PINK FAMILY				
* Silene gallica	i	-	-	0
common catchfly Silene laciniata	i	i	o	-
fringed-Indian pink * Stellaria media	.	o	-	
common chickweed				
CHENOPODIACEAE - GOOSEFOOT FAMILY				
* Chenopodium ambrosioides Mexican-tea	i	-	i	-
* Salsola australis Russian-thistle	i	i	i	0
CISTACEAE - ROCK-ROSE FAMILY				
Helianthemum scoparium common rock-rose	i	**	-	-

CONVOLVULACEAE - MORNING-GLORY FAMILY	<u>CHAP</u>	<u>ow</u>	<u>CSS</u>	GR
Calystegia macrostegia western bindweed	i	i	O	0
CRASSULACEAE - STONECROP FAMILY			·	
Dudleya lanceolata	i	-	i	-
lance-leaved dudleya <u>Dudleya pulverulenta</u> chalk dudleya	i		i	-
CUCURBITACEAE - GOURD FAMILY				
Marah macrocarpus wild cucumber	o	i	o	i
ERICACEAE - HEATH FAMILY				
Arctostaphylos glandulosa Eastwood's manzanita	o	-	-	-
EUPHORBIACEAE - SPURGE FAMILY				
* Ricinus communis castor-bean	-	i	-	-
FABACEAE - PEA FAMILY				
Lathyrus laetiflorus	i	0	o	i
wild sweet pea Lotus grandiflorus	i	-	i	i
large-flowered lotus <u>Lotus scoparius</u>	o	i	o	o
deerweed <u>Lupinus longifolius</u>	i	-	o	-
Watson's bush lupine <u>Spartium junceum</u> Spanish broom	i	-	i	-

FAGACEAE - BEECH FAMILY	<u>CHAP</u>	<u>ow</u>	<u>CSS</u>	GR
Ouercus agrifolia coast live oak	o	a	o	
Ouercus dumosa California scrub oak	o	-	-	-
GERANIACEAE - GERANIUM FAMILY				
* Erodium cicutarium red-stemmed filaree	o	0	0	a
HYDROPHYLLACEAE - WATERLEAF FAMILY				
Emmenanthe penduliflora whispering bells	i	-	i	-
Eucrypta chrysanthemifolia common eucrypta	i	-	i	i
Phacelia brachyloba short-lobed phacelia	O	0	O	-
<u>Phacelia cicutaria</u> caterpillar phacelia	O	0 .	0	-
<u>Phacelia viscida</u> sticky phacelia	i	-	i	-
Pholistoma auritum blue fiesta flower	-	0	-	-
LAMIACEAE - MINT FAMILY				
* Marrubium vulgare horehound	i	i	i	o
Silvia aprana white sage	i	· i	0	i
Salvia leucophylla purple sage	i	i	c	-
Salvia mellifera black sage	i	i	f	i
Salvia spathacea pitcher sage	i	-	i	-
Stachys albens white hedge-nettle	•	i		-
Trichostema lanatum woolly blue-curls	i		i	-

LAURACEAE - LAUREL FAMILY	<u>CHAP</u>	<u>ow</u>	<u>CSS</u>	GR
Umbellularia californica California laurel	-	0	-	•
LOASACEAE - STICK-LEAF FAMILY				
Mentzelia micrantha small-flowered stick-leaf	i	-	i	-
MALVACEAE - MALLOW FAMILY				
Malacothamnus fasciculatus mesa bushmallow	o	i	0	-
MYRTACEAE - MYRTLE FAMILY				
* Eucalyptus leucoxylon white iron bark	-	-	-	i
ONAGRACEAE - EVENING-PRIMROSE FAMILY				
Camissonia californica mustard primrose	o	-	o	i
Camissonia ignota small primrose	i	o	i	i
Clarkia unguiculata	o	o	o	i
elegant clarkia <u>Epilobium adenocaulon</u>	_	0		_
willow herb	_	Ü	- .	<u>-</u>
PAEONIACEAE - PEONY FAMILY				
Paeonia californica California peony	i	-	-	-
control poorly				
PAPAVERACEAE - POPPY FAMILY				
<u>Dendromecon rigida</u> tree poppy	O	-	i	-
Eschscholzia californica California poppy	o	i	o	o
Romneya coulteri Matillija poppy	i	-	i	-

PLANTAGINACEAE - PLANTAIN FAMILY	<u>CHAP</u>	<u>ow</u>	<u>CSS</u>	GR
* <u>Plantago lanceolata</u> English plantain	-	i	-	i
PLATANACEAE - SYCAMORE FAMILY				
Platanus racemosa California sycamore	-	-	f	-
POLEMONIACEAE - PHLOX FAMILY				
Allophyllum glutinosum blue false gilia	o	i	O	-
POLYGONACEAE - BUCKWHEAT FAMILY				
Chorizanthe staticoides turkish rugging	i	-	-	-
Eriogonum elongatum long-stemmed buckwheat	i	-	O	-
Eriogonum fasciculatum California buckwheat	O	-	C	O
PORTULACACEAE - PURSLANE FAMILY				
Claytonia perfoliata miner's-lettuce	i	o	i	-
RANUNCULACEAE - CROWFOOT FAMILY				
Clematis lasiantha chaparral virgin's bower	-	o	-	-
Delphinium patens zigzag delphinium	i	-	o	-
RHAMNACEAE - BUCKTHORN FAMILY				
Ceanothus leucodermis chaparral whitethorn	o	-	•	-
Ceanothus megacarpus big-podded ceanothus	c	i	-	-
Ceanothus oliganthus hairy ceanothus	o	-	-	-
Ceanothus spinosus green-barked ceanothus	c	-	-	•

RHAMNACEAE - BUCKTHORN FAMILY (continued)	<u>CHAP</u>	<u>OW</u>	CSS	GR
Rhamnus crocea redberry	o	0	O	-
ROSACEAE - ROSE FAMILY				
Adenostoma fasciculatum chamise	a	o	0	-
Adenostoma sparsifolium red shanks	a	i	o	-
Cercocarpus betuloides birch-leaf mountain-mahogany	O	-	-	-
Heteromeles arbutifolia toyon	f	0	0	•
Prunus ilicifolia holly-leaved cherry	O	0	-	-
Rubus ursinus California blackberry	-	0	-	. •
RUBIACEAE - MADDER FAMILY				
Galium andrewsii phlox-leaved bedstraw	o	-	o	- ,
Galium angustifolium narrow-leaved bedstraw	O	-	o	-
* Galium aparine goose grass	-	0	-	-
SALICACEAE - WILLOW FAMILY				
Salix lasiolepis arroyo willow	-	o	-	- "
SAXIFRAGACEAE - SAXIFRAGE FAMILY				
<u>Lithophragma affine</u> woodland-star	-	i	. •	-
Ribes indecorum chaparral currant	i	0	-	-
Ribes speciosum fuchsia-flowered gooseberry	0	i	0	-

SCROPHULARIACEAE - FIGWORT FAMILY	<u>CHAP</u>	<u>ow</u>	<u>CSS</u>	GR
Antirrhinum multiflorum	i	-	i	-
chaparral snapdragon				
Collinsia heterophylla	i	i	i	i
purple Chinese houses				
Cordylanthus filifolius	i	-	i	-
dark-tipped bird's-beak				
Diplacus longiflorus	0	0	f	-
sticky monkey-flower				
Keckiella cordifolia	О	O	0	-
heart-leaved penstemon		•		
Mimulus brevipes	-	i	-	-
wide-throated monkey-flower		•		
Mimulus guttatus	-	i	-	- '
common monkey-flower		•		•
Penstemon spectabilis	0	i	i	i
royal penstemon				
SOLANACEAE - NIGHTSHADE FAMILY				
Solanum douglasii	i	O	i	-
Douglas' nightshade				
Solanum xanti	i	O	i	i
chaparral nightshade				
ANGIOSPERMAE (MONOCOTYLEDO)	NES)			
AGAVACEAE - AGAVE FAMILY				
Yucca whipplei	i	-	f	-
Spanish bayonet	-		_	
ALLIACEAE - ONION FAMILY				
Allium haematochiton	i	-	i	i
red-skinned onion		•	_	
Bloomeria crocea	O	1	0	0
common golden stars	£	_	c	c
<u>Dichelostemma</u> <u>pulchellum</u> blue dicks	f	0	f	f

CYPERACEAE - SEDGE FAMILY	СНАР	<u>ow</u>	<u>CSS</u>	GR
Carex sp.	-	i	-	•
sedge * Cyperus alternifolius	_	i	_	_
umbrella-plant	_		_	
•				
IRIDACEAE - IRIS FAMILY				
Sisyrinchium bellum	•	i	i	i
blue-eyed grass				
JUNCACEAE - RUSH FAMILY				
Juncus mexicanus Mexican rush	-	i	-	٠.
Mexican rush				
LILIACEAE - LILY FAMILY				
Calochortus sp.	o	-	o	-
mariposa lily	,		_	
<u>Calochortus catalinae</u> Catalina mariposa	0	-	0	-
Chlorogalum pomeridianum	O	o	o	i
soap plant <u>Lilium humboldtii</u>		i		
Humboldt lily	-	1	-	
POACEAE - GRASS FAMILY				
* Avena barbata slender oat	O	o	0	a
* Avena fatua	o	o	o	a
wild oat * Bromus diandrus	_	_		_
ripgut grass	O	O	0	С
* Bromus hordeaceus	i	i	i	i
soft chess * Bromus rubens	o	o	0	С
foxtail chess				
Elymus condensatus giant wild rye	i	0	f	i
* Hordeum leporinum	_	i	_	i
hare barley		-		-
Melica imperfecta coast range melic	i	0	0	-

POACEAE - GRASS FAMILY	<u>CHAP</u>	<u>ow</u>	<u>CSS</u>	GR
* Oryzopsis miliacea millet ricegrass	i	i	i	-
* Schismus barbatus	i	-	i	. •
Mediterranean schismus				
Stipa coronata	i	-	0	•
giant needlegrass				
Stipa lepida	i	-	i	i
small-flowered needlegrass				
Stipa pulchra	i	-	i	i
purple needlegrass				
Vulpia megalura	i	ο	i	i
foxtail fescue				
TYPHACEAE - CATTAIL FAMILY				
Typha latifolia broad-leaved cattail	-	i	-	•

FAUNAL COMPENDIUM¹

LEGEND

ABUNDANCE²

- c common--observed or expected throughout the site in relatively high numbers
- f fairly common--observed or expected in moderate numbers over most of the site
- u uncommon--observed or expected in low numbers over a portion or all of the site
- o occasional--observed or expected only sporadically on the site
- s scarce-observed or expected rarely on the site

STATUS

- + Presence noted by direct sighting, call identification or observation of tracks, scat or other signs.
- * Non-native

SEASONALITY (Birds Only)3

- R resident or found in vicinity year round
- S present in summer only
- W present in winter only
- V visitor from nearby areas
- T transient

List includes species observed or expected to occur on or in the immediate vicinity of the site.

This is simply a gross indication of relative frequency of occurrence of vertebrate species on the site; quantitative sampling methods were not employed to arrive at these determinations. Abundances are not provided for invertebrates.

This is simply a gross indication of relative frequency of occurrence on the site; quantitative sampling methods were not employed to arrive at these determinations.

INVERTEBRATES

BUTTERFLIES AND SKIPPERS

PAPILIONIDAE - SWALLOWTAILS AND PARNASSIANS

Papilio zelicaon zelicaon

anise swallowtail

larval food plant(s): various Apiaceae, including Foeniculum vulgare; citrus (Rutaceae)

Papilio rutulus rutulus

western tiger swallowtail

larval food plant(s): principally <u>Platanus racemosa</u> (Platanaceae), but also <u>Salix</u> spp. and <u>Populus</u> spp. (Salicaceae)

Papilio eurymedon

pale swallowtail

larval food plant(s): Rhamnus crocea, R. californica, Ceanothus spp. (all Rhamnaceae), Prunus ilicifolia (Rosaceae) and occasionally domesticated Prunus.

PIERIDAE - WHITES, SULFURS MARBLES AND ORANGETIPS

Pieris sisymbrii sisymbrii

California white

larval food plant(s): Caulanthus spp., Streptanthus spp., and Arabis spp. (all Brassicaceae)

Pieris protodice

common white

larval food plant(s): <u>Lepidium fremontii</u> (Brassicaceae) in deserts; many other Brassicaceae also used (<u>Cleome spp., Brassica spp., Sisymbrium spp.</u> etc.)

Pieris rapae

cabbage butterfly, cabbage white

larval food plant(s): many Brassicaceae, native and introduced

Colias eurytheme

alfalfa butterfly

larval food plant(s): the non-native <u>Medicago sativa</u>; <u>Lotus scoparius</u>, <u>Trifolium</u> spp. and possibly <u>Astragalus</u> spp. (all Fabaceae)

Colias alexandra harfordii

Harford's sulfur

larval food plant(s): Astragalus spp. (Fabaceae)

Phoebis sennae marcellina

senna sulfur

larval food plant(s): non-native <u>Cassia</u> spp. (Fabaceae); in deserts, possibly natives <u>C. armata</u> and <u>C. covesii</u>

Eurema nicippe

nicippe sulfur

larval food plant(s): Cassia spp. and probably other Fabaceae

Nathalis iole

dwarf yellow

larval food plant(s): Bidens pilosa and other Asteraceae

Anthocharis sara sara

Sara orangetip

larval food plant(s): <u>Arabis spp.</u>, <u>Barbarea vulgaris</u>, <u>Brassica kaber</u>, <u>Descurainea</u> spp. and <u>Sisymbrium officinale</u> (all Brassicaceae)

DANAIDAE - MILKWEED BUTTERFLIES

Danaus plexippus

monarch

larval food plant(s): Asclepias spp. (Asclepiadaceae)

Danaus gilippus strigosus

striated queen

larval food plant(s): <u>Sarcostemma</u> spp., and at least rarely, certain <u>Asclepias</u> spp. (Asclepiadaceae)

SATYRIDAE - SATYRS, ARCTICS AND RINGLETS

Coenonympha tullia california

California ringlet

larval food plant(s): both native and non-native grasses (Poaceae)

Cercyonis sthenele silvestris

sylvan satyr

larval food plant(s): grasses (Poaceae)

NYMPHALIDAE - BRUSH-FOOTED BUTTERFLIES

Euphydryas chalcedona chalcedona

chalcedon checkerspot, common checkerspot

larval food plant(s): most commonly <u>Mimulus aurantiacus</u> and <u>Scrophularia californica</u> (both Scrophulariaceae), but a variety of other hosts are also used (mainly Scrophulariaceae)

Melitaea (Chlosyne) gabbii gabbii

Gabb's checkerspot

larval food plant(s): <u>Corethrogyne filaginifolia</u>, <u>Heterotheca grandiflora</u>; <u>Hazardia squarrosa</u> reported (all Asteraceae)

Phyciodes mylitta mylitta

thistle crescent

larval food plant(s): Cirsium spp. (Asteraceae); species not identified

Nymphalis antiopa antiopa

mourning cloak

larval food plant(s): Salix spp. and Populus spp. (both Salicaceae); Ulmus spp. (Ulmaceae)

Nymphalis californica

California tortoiseshell

larval food plant(s): Ceanothus spp. (Rhamnaceae)

Vanessa atalanta rubria

red admiral

larval food plant(s): <u>Urtica holosericea</u>, and perhaps <u>Parietaria</u> spp. in deserts (both Urticaceae); widespread non-natives hops, <u>Humulus lupulus</u> (Moraceae) and baby's tears, <u>Soleirolia soleirolii</u> (Urticaceae)

Vanessa (Cynthia) cardui

painted lady

larval food plant(s): <u>Malva</u> spp. (Malvaceae), <u>Cirsium</u> spp. (Asteraceae), <u>Urtica</u> spp. (Urticaceae), <u>Lupinus</u> spp. (Fabaceae), <u>Cryptantha</u> spp. and <u>Amsinckia</u> spp. (Boraginaceae) and many others

Vanessa (Cynthia) carye anabella

west coast lady

larval food plant(s): <u>Malva spp.</u>, <u>Sidalcea spp.</u> (Malvaceae), and <u>Urtica holosericea</u> (Urticaceae); <u>Sphaeralcea ambigua</u> (Malvaceae) in desert areas

Vanessa (Cynthia) virginiensis

Virginia lady

larval food plant(s): Gnaphalium spp., Anaphalis margaritacea (both Asteraceae)

Precis coenia

buckeye

larval food plant(s): <u>Plantago erecta</u> and <u>P. lanceolata</u> (Plantaginaceae); <u>Mimulus</u> spp. and <u>Antirrhinum</u> spp. (Scrophulariaceae)

Limenitis lorquini lorquini

Lorquin's admiral

larval food plant(s): Salix spp. (Salicaceae); also Prunus virginiana var demissa (Rosaceae) in the Tehachapi Mts.

Adelpha bredowii californica

California sister

larval food plant(s): Ouercus chrysolepis (Fagaceae); possibly other Ouercus spp.

LYCAENIDAE - METALMARKS, HAIRSTREAKS, COPPERS AND BLUES

RIODININAE - METALMARKS

Apodemia mormo virgulti

Behr's metalmark

larval food plant(s): probably <u>Eriogonum fasiculatum</u> ssp. <u>fasciculatum</u> and ssp. <u>polifolium</u> (Polygonaceae)

THECLINAE - HAIRSTREAKS

Atlides halesus corcorani

great purple hairstreak

larval food plant(s): <u>Phoradendron flavescens</u> var. <u>macrophyllum, P. bolleanum</u> var. <u>densum;</u> probably also <u>P. californicum</u> and <u>P. juniperinum</u> (all Loranthaceae)

Strymon melinus pudica

common hairstreak

larval food plant(s): quite varied; includes <u>Malva</u> spp. and <u>Hibiscus</u> spp. (Malvaceae), <u>Humulus</u> (Moraceae), <u>Amorpha</u> spp. and <u>Phaseolus</u> spp. (Fabaceae), <u>Nolina</u> spp. (Agavaceae), <u>Polygonum</u> spp. and <u>Eriogonum</u> spp. (Polygonaceae)

Satyrium californicum

California hairstreak

larval food plant(s): <u>Ouercus</u> spp. (Fagaceae)

Satyrium sylvinum desertorum

southern sylvan hairstreak

larval food plant(s): Salix spp. (Salicaceae)

Satyrium sylvinum dryope

dryope hairstreak

larval food plant(s): Salix spp. (Salicaceae)

Satyrium auretorum spadix

nut brown hairstreak

larval food plant(s): <u>Ouercus dumosa</u>; probably also <u>O. wislizenii</u> (Fagaceae)

Satyrium tetra

grey hairstreak

larval food plant(s): Cercocarpus betuloides (Rosaceae)

Satyrium saepium chalcis

southern buckthorn hairstreak

larval food plant(s): Ceanothus spp. (Rhamnaceae)

Callophrys (Incisalia) augustus iroides

western elfin

larval food plant(s): most extensively <u>Cuscuta</u> spp. (Convolvulaceae); also on <u>Ceanothus</u> spp. (Rhamnaceae), <u>Chlorogalum pomeridanum</u> (Liliaceae), and <u>Arbutus menziesii</u> (Ericaceae)

Callophrys affinis perplexa

California green hairstreak

larval food plant(s): Lotus spp. (Fabaceae), Eriogonum spp. (Polygonaceae)

LYCAENINAE - COPPERS

Lycaena arota nubila

cloudy copper

larval food plant(s): Ribes spp. (gooseberry; Saxifragaceae)

Lycaena gorgon

gorgon copper

larval food plant(s): Eriogonum elongatum (Polygonaceae) in southern California

PLEBEJINAE - BLUES

Leptotes marina

marina blue

larval food plant(s): in urban areas, <u>Plumbago</u> spp. (Plumbaginaceae); elsewhere, many Fabaceae including <u>Medicago</u> spp., <u>Lathyrus</u> spp., and <u>Astragalus</u> spp., and at least in the San Gabriel Mts., <u>Amorpha californica</u> (all Fabaceae)

Brephidium exilis

pigmy blue

larval food plant(s): Chenopodium spp., Atriplex spp. (Chenopodiaceae)

Hemiargus ceraunus gyas

Edward's blue

larval food plant(s): <u>Prosopis</u> spp. and <u>Medicago</u> spp. (Fabaceae)

Hemiargus isola alce

Mexican blue, Reakirt's blue

larval food plant(s): unknown; elsewhere, Prosopis spp. (Fabaceae)

Everes amyntula

western tailed blue

larval food plant(s): Astragalus spp. (Fabaceae); species are uncertain

Plebejus acmon acmon

acmon blue

larval food plant(s): <u>Astragalus</u> spp. and <u>Lotus</u> spp., especially <u>Lotus</u> scoparius (Fabaceae); <u>Eriogonum</u> spp. also used extensively (Polygonaceae)

Euphilotes (Philotes) bernardino bernardino

Bernardino blue

larval food plant(s): <u>Eriogonum fasciculatum</u> sspp. <u>fasciculatum</u>, <u>polifolium</u> and <u>foliolosum</u> (Polygonaceae)

Glaucopsyche lygdamus australis

southern blue

larval food plant(s): Lotus scoparius (Fabaceae)

Celastrina argiolus echo

echo blue

larval food plant(s): <u>Ceanothus</u> spp. (Rhamnaceae), <u>Cornus</u> spp. (Cornaceae), <u>Spiraea</u> (Rosaceae) and possibly various Fabaceae

HESPERIIDAE - SKIPPERS

Lerodea eufala

eufala skipper

larval food plant(s): unidentified grasses (Poaceae)

Paratrytone melane

umber skipper

larval food plant(s): grasses (Poaceae) including at least Deschampsia caespitosa

Ochlodes sylvanoides sylvanoides

woodland skipper

larval food plant(s): unidentified grasses (Poaceae)

Ochlodes agricola agricola

rural skipper

larval food plant(s): grasses (Poaceae)

Atalopetes campestris

field skipper

larval food plant(s): grasses (Poaceae)

Polites sabuleti sabuleti

sandhill skipper

larval food plant(s): grasses, mostly Distichlis spicata (Poaceae)

Hesperia comma leussleri

Leussler's skipper

larval food plant(s): unknown; grasses in the laboratory

Hesperia columbia

Columbia skipper

larval food plant(s): Koeleria cristata and Danthonia californica var. americana (both Poaceae), at least as oviposition substrates

Hylephila phyleus

fiery skipper

larval food plant(s): bermuda grass, Cynodon dactylon (Poaceae)

Heliopetes ericetorum

large white skipper

larval food plant(s): various Malvaceae, especially Malacothamnus fasciculatus

Pyrgus communis albescens

western checkered skipper

larval food plant(s): Malvaceae, especially Malva spp. and Sidalcea spp.

Erynnis brizo lacustra

lacustra duskywing

larval food plant(s): scrub oaks (Quercus dumosa, Fagaceae)

Ervnnis zarucco funeralis

funereal duskywing

larval food plant(s): <u>Lotus scoparius</u>, <u>Olneya tesota</u> and <u>Sesbania exaltata</u> (all Fabaceae); <u>Nemophila membranacea</u> (Hydrophyllaceae) use documented in western Colorado Desert

Erynnis tristis tristis

mournful duskywing

larval food plant(s): Quercus agrifolia, Q. lobata and Q. douglasii (Fagaceae)

Erynnis propterius propterius

western oak duskywing, propertius duskywing

larval food plant(s): oaks (Fagaceae); at least Ouercus agrifolia in the area

TERRESTRIAL VERTEBRATES

AMPHIBIANS

SALAMANDRIDAE - NEWTS	Abundance
Taricha torosa California newt	C
PLETHODONTIDAE - LUNGLESS SALAMANDER	S
Aneides lugubris arboreal salamander	u
Batrachoseps nigriventris black-bellied salamander	c
Ensatina eschscholtzi ensatina	u
BUFONIDAE - TRUE TOADS	
Bufo boreas western toad	c
HYLIDAE - TREEFROGS	
Hyla cadaverina California treefrog	c
Hyla regilla Pacific treefrog	c
REPTILES	
IGUANIDAE - IGUANID LIZARDS	
Phrynosoma coronatum coast horned lizard	u
+ Sceloporus occidentalis western fence lizard	c
Uta stansburiana side-blotched lizard	c

SCINCIDAE - SKINKS	Abundance
Eumeces skiltonianus western skink	c
TEIIDAE - WHIPTAIL LIZARDS	
Cnemidophorus tigris western whiptail	u
ANGUIDAE - ALLIGATOR LIZARDS	
Gerrhonotus multicarinatus southern alligator lizard	c
ANNIELLIDAE - CALIFORNIA LEGLESS LIZARDS	
Anniella pulchra California legless lizard	0
COLUBRIDAE - COLUBRID SNAKES	
Coluber constrictor	o
racer <u>Diadophis punctatus</u>	f
ringneck snake	c
Hypsiglena torquata night snake	\mathbf{f}
Lampropeltis getulus	c
common kingsnake	
<u>Lampropeltis zonata</u> California mountain kingsnake	u
Masticophis flagellum	o
coachwhip	
Masticophis lateralis striped racer	c
Pituophis melanoleucus	c
gopher snake	
Salvadora hexalepis	u
western patch-nosed snake <u>Tantilla planiceps</u>	0
western black-headed snake	
Thamnophis hammondii	c
two-striped garter snake	
<u>Trimorphodon biscutatus</u> lyre snake	0
•	

VIPERIDAE - VIPERS	Abundance
+ <u>Crotalus viridis</u> western rattlesnake	c
BIRDS	
CATHARTIDAE - NEW WORLD VULTURES	
CATHARTIDAE - NEW WORLD VULTURES	
Cathartes aura turkey vulture	u,R
ACCIPITRIDAE - HAWKS	
Accipiter striatus sharp-shinned hawk	u,T/u,W
Accipiter cooperii Cooper's hawk	u,T/u,W
Buteo lineatus red-shouldered hawk	f,R
Buteo jamaicensis red-tailed hawk	f,R
Aquila chrysaetos golden eagle	o,V
FALCONIDAE - FALCONS	
Falco sparverius American kestrel	u,V
PHASIANIDAE - PHEASANTS & QUAILS	
Callipepla californica California quail	c,R
COLUMBIDAE - PIGEONS & DOVES	
Columba fasciata band-tailed pigeon	o,V
Zenaida macroura mourning dove	c,R
CUCULIDAE - CUCKOOS & ROADRUNNERS	
Geococcyx californianus greater roadrunner	u,R

TYTONIDAE - BARN OWLS Abus	
<u>Tyto alba</u> barn owl	o,V
STRIGIDAE - TRUE OWLS	
Otus kennicottii western screech-owl	f,R
Bubo virginianus great horned owl	u,R
CAPRIMULGIDAE - GOATSUCKERS	
Phalaenoptilus nuttallii common poorwill	u,T/u,S
APODIDAE - SWIFTS	
<u>Chaetura vauxi</u> Vaux's swift	f,T
Aeronautes saxatalis white-throated swift	u,V
TROCHILIDAE - HUMMINGBIRDS	
Archilochus alexandri	u,S
black-chinned hummingbird <u>Calypte anna</u> Anna's hummingbird	c,R
Calypte costae Costa's hummingbird	o,T
Selasphorus rufus	f,T
rufous hummingbird <u>Selasphorus sasin</u> Allen's hummingbird	f,T
PICIDAE - WOODPECKERS	
Melanerpes formicivorus acorn woodpecker	f,R
Sphyrapicus ruber red-breasted sapsucker	o,W
Picoides nuttallii Nuttall's woodpecker	c,R

PICIDAE - WOODPECKERS (continued)	Abundance	
Picoides pubescens	u,R	
downy woodpecker		
Colaptes auratus	c,T/c,W	
northern flicker		
TYRANNIDAE - TYRANT FLYCATCHERS		
Contopus borealis olive-sided flycatcher	u,T	
Contopus sordidulus	f,T	
western wood-pewee	1, 1	
Empidonax traillii	u,T	
willow flycatcher		
Empidonax hammondii	u,T	
Hammond's flycatcher	£TE/£C	
Empidonax difficilis Pacific-slope flycatcher	f,T/f,S	
Sayornis nigricans	u,R	
black phoebe	,	
Sayornis saya	o,W	
Say's phoebe	•	
Myiarchus cinerascens ash-throated flycatcher	c,S	
HIRUNDINIDAE - SWALLOWS		
Tachycineta bicolor tree swallow	f,T	
Tachycineta thalassina	u,T	
violet-green swallow	-, -	
Stelgidopteryx serripennis	u,T	
northern rough-winged swallow		
<u>Hirundo pyrrhonota</u> cliff swallow	f,T	
Hirundo rustica	f,T	
barn swallow		
CORVIDAE - JAYS & CROWS		
Aphelocoma coerulescens scrub jay	c,R	
Corvus brachyrhynchos	f,R	
American crow	-,	
Corvus corax	f,R	
common raven		

PARIDAE - TITMICE	Abundance
Parus gambeli	s,W
mountain chickadee Parus inornatus	c,R
plain titmouse	C, IX
AEGITHALIDAE - BUSHTITS	
Psaltriparus minimus	c,R
bushtit	
CERTHIIDAE - CREEPERS	
	- 377
Certhia americana brown creeper	s,W
TROGLODYTIDAE - WRENS	
Thryomanes bewickii	c,R
Bewick's wren Troglodytes aedon	u,R
house wren	-,
NATIONAL VANIOUENE CALANCAMOVIENE MANA	rovera a pappy ppa
MUSCICAPIDAE - KINGLETS, GNATCATCHERS, THRU	SHES & BABBLERS
Regulus satrapa	s,W
golden-crowned kinglet Regulus calendula	f,T/f,W
ruby-crowned kinglet Polioptila caerulea	f,R
blue-gray gnatcatcher	1,K
Sialia mexicana western bluebird	o,V
<u>Catharus ustulatus</u>	f,T
Swainson's thrush	~ XV
Catharus guttatus hermit thrush	c,W
Turdus migratorius	f,W/f,T
American robin <u>Chamaea fasciata</u>	c,R
wrentit	·

MIMIDAE - THRASHERS	Abundance
Mimus polyglottos	u,R
northern mockingbird Toxostoma redivivum	£D.
California thrasher	f,R
Camorina in asion	
BOMBYCILLIDAE - WAXWINGS	
Bombycilla cedrorum	u,W/u,T
cedar waxwing	- , , -
PTILOGONATIDAE - SILKY-FLYCATCHERS	
Disimonal with	co
Phainopepla <u>nitens</u> phainopepla	f,S
ришорорш	
LANIIDAE - SHRIKES	
	•
Lanius ludovicianus	u,V
loggerhead shrike	
STURNIDAE - STARLINGS	
* Sturnus vulgaris	u,R
European starling	
VIREONIDAE - VIREOS	
<u>Vireo</u> solitarius	u,T
solitary vireo <u>Vireo huttoni</u>	f,R
Hutton's vireo	1,11
Vireo gilvus	f,T/u,S
warbling vireo	
EMBERIZIDAE - WOOD WARBLERS, TANAGERS, BUNT	INGS & BLACKBIRDS
Vermivora celata	c,T/u,S
orange-crowned warbler <u>Vermivora ruficapilla</u>	£T
Nashville warbler	f,T
Dendroica petechia	c,T
yellow warbler	

EMBERIZIDAE - WOOD WARBLERS, TANAGERS, Abundance **BUNTINGS & BLACKBIRDS (continued)** c,W/c,T Dendroica coronata yellow-rumped warbler f,T Dendroica nigrescens black-throated gray warbler f,T Dendroica townsendi Townsend's warbler Dendroica occidentalis f,T hermit warbler Oporornis tolmiei f,T MacGillivray's warbler Geothlypis trichas u,T common yellowthroat Wilsonia pusilla c,T Wilson's warbler Icteria virens o,T yellow-breasted chat Piranga ludoviciana f,T western tanager Pheucticus melanocephalus c,T black-headed grosbeak f,T Passerina amoena lazuli bunting Pipilo erythrophthalmus c,R rufous-sided towhee Pipilo crissalis c,R California towhee Aimophila ruficeps f,R rufous-crowned sparrow Spizella passerina u,T chipping sparrow Chondestes grammacus o,Vlark sparrow Amphispiza belli f,R sage sparrow Passerculus sandwichensis o,W savannah sparrow Passerella iliaca f,W fox sparrow Melospiza melodia f,R song sparrow Melospiza lincolnii f,W Lincoln's sparrow Zonotrichia atricapilla f,W golden-crowned sparrow Zonotrichia leucophrys c,W white-crowned sparrow Junco hyemalis c,W dark-eyed junco

EMBERIZIDAE - WOOD WARBLERS, TANAGERS, BUNTINGS & BLACKBIRDS (continued)	Abundance
Molothrus ater	f,S
brown-headed cowbird	cm/ o
Icterus galbula northern oriole	f,T/u,S
northern oriole	
FRINGILLIDAE - FINCHES	
Carpodacus purpureus purple finch	u,W
Carpodacus mexicanus	c,R
house finch	- ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Carduelis pinus	o,W
pine siskin	- D
<u>Carduelis psaltria</u> lesser goldfinch	c,R
Carduelis lawrencei	o,V
Lawrence's goldfinch	
Carduelis tristis	f,R
American goldfinch	
MAMMALS	
DIDELPHIDAE - NEW WORLD OPOSSUMS	
*+ <u>Didelphis virginiana</u> Virginia opossum	c
SORICIDAE - SHREWS	
Sorex ornatus	f
ornate shrew Notiosorex crawfordi	0
desert shrew	J
TALPIDAE - MOLES	
Scapanus latimanus broad-footed mole	f

Myotis yumanensis Yuma myotis Myotis evotis long-eared myotis Myotis thysanodes fringed myotis Myotis volans long-legged myotis Myotis californicus California myotis Myotis leibii small-footed myotis Pipistrellus hesperus western pipistrelle Eptesicus fuscus big brown bat Lasiurus borealis red bat Lasiurus cinereus hoary bat Plecotus townsendii Townsend's big-eared bat Antrozous pallidus pallid bat

MOLOSSIDAE - FREE-TAILED BATS¹

Tadarida brasiliensis
Brazilian free-tailed bat
Eumops perotis
western mastiff bat

LEPORIDAE - HARES & RABBITS

Sylvilagus bachmani brush rabbit Sylvilagus audubonii desert cottontail

c

С

The site is within the range of a number of bat species in several families, but it is unlikely that all are present. As their distribution varies according to season, and as the precise habitat requirements of each species are not well known, it is difficult to determine which species are present on the property.

SCIURIDAE - SQUIRRELS	Abundance
<u>Tamias merriami</u> Merriam's chipmunk	u
Spermophilus beecheyi California ground squirrel	u
+ Sciurus griseus western gray squirrel	c
GEOMYIDAE - POCKET GOPHERS	
+ Thomomys bottae Botta's pocket gopher	c
HETEROMYIDAE - POCKET MICE & KANGAROO RATS	
Perognathus californicus	f
California pocket mouse	c
<u>Dipodomys agilis</u> agile kangaroo rat	\mathbf{f}
CRICETIDAE - NEW WORLD RATS & MICE	·
Reithrodontomys megalotis	c
western harvest mouse Peromyscus eremicus	u :
cactus mouse	u
Peromyscus californicus	c
California mouse	
Peromyscus maniculatus	c
deer mouse Peromyscus boylii	c
brush mouse	
Peromyscus truei	u
pinon mouse	
Onychomys torridus southern grasshopper mouse	u
Neotoma lepida	${f f}$
desert woodrat	
+ Neotoma fuscipes	C
dusky-footed woodrat <u>Microtus californicus</u>	f
California vole	L

MURIDAE - OLD WORLD RATS & MICE	Abundance
* Rattus norvegicus	О
Norway rat	
* Mus musculus house mouse	0
nouse mouse	
CANIDAE - WOLVES & FOXES	
+ Canis latrans	c
coyote *+ Canis familiaris	£
domestic dog	f
<u>Urocyon cinereoargenteus</u>	c
gray fox	٠.
PROCYONIDAE - RACCOONS	
Bassariscus astutus ringtail	S
Procyon lotor	c
raccoon	
Mustela frenata long-tailed weasel Spilogale gracilis western spotted skunk Mephitis mephitis striped skunk	o u c
FELIDAE - CATS	
* Felis catus	o
domestic cat Felis concolor	0
mountain lion	J
Felis rufus	f
bobcat	. •
EQUIDAE - HORSES & BURROS	
*+ Equus caballus domestic horse	f

CERVII)AE	- D	EER	S
--------	-----	-----	-----	---

Abundance

Odocoileus hemionus mule deer

c