V. ENVIRONMENTAL IMPACT ANALYSIS
C. BIOLOGICAL RESOURCES

INTRODUCTION

A Biological Resources Evaluation for the Proposed Project was prepared by TeraCor Resource Management in November 2003 to analyze the potential impacts on biological resources associated with the Proposed Project. A summary of the Biological Resources Evaluation with respect to potential impacts on biological resources, and as reviewed and revised for consistency with the City of Malibu LCP[1], is set forth below. The Biological Resources Evaluation, which is incorporated herein by this reference, is included in its entirety as Appendix D to this ~~Draft~~ Final EIR.

A Technical Memorandum amending the Biological Resources Evaluation prepared by Teracor Resource Management was written on 27 March 2007 to clarify and evaluate three issues: 1) to confirm the status of biological resources present on site, 2) to confirm the presence or absence of wetlands, "waters of the U.S." streambeds, or other water features present on-site, and, 3) determine if California black walnut *(Juglans californica)* trees are present on-site. The conclusions of the findings made by TeraCor Resource Management with respect to these three issues are set forth below. The Technical Memorandum, which is incorporated herein by reference, is provided in Appendix D-1, Biological Assessment – Verification of Conditions.

The purpose of this evaluation is to provide an understanding of the biological resources present within the Project Site, as determined from field reconnaissance and available scientific literature. This biological evaluation inventories floral and faunal resources detected on or near the Project Site, and predicts faunal resources determined likely to be present based on habitat conditions, known species distribution, and field observations.

Study Methodology

Literature and Museum Records Review

Biological conditions for the project and surrounding areas were first investigated through a review of pertinent scientific and unpublished literature. Literature reviewed in determining community names and vegetation associations for the project area were derived from: *The Jepson Manual, Higher Plants of California*, Hickman, ed., 1993, *Preliminary Descriptions of the Terrestrial Natural Communities of California*, Holland, 1986 and *A Manual of California Vegetation*, Sawyer and Keeler-Wolf, 1995. Vegetation communities are discussed below. Floral and faunal inventories are provided in Appendix D.

[1] *Dave Crawford, City Biologist, City of Malibu (December 2007).*

Additional literature reviewed included: *Investigation of the Presence of Waters of the United States and Areas Subject to the California Coastal Commission and the California Department of Fish and Game Jurisdiction Within the Proposed Malibu Civic Center Project Site Malibu, California* by Huffman & Associates, Inc., April 1999, *Draft Environmental Constraints Study for the Malibu Civic Center* by Environmental Science Associates, February 2000, and *Pepperdine University Upper Campus Development Assessment Area Biological Resources Report*, by Planning Consultants Research, September 1997.

Los Angeles County Natural History Museum (LACM) specimen records (over 4,600 listings) for the mammal collection were reviewed to assess mammalian diversity in the Santa Monica Mountains and Malibu coastline. Other relevant information was derived from reports and species lists for habitat types similar to those found on-site, including ~~Significant Ecological Areas (SEAs)~~ sensitive habitat analyses in adjacent unincorporated LA County areas~~in the vicinity,~~ and personal experience of site investigators throughout the Santa Monica Mountains.

The California Department of Fish & Game maintains the *Natural Diversity Data Base (CNDDB)*, which is a computerized inventory of information on the location of California's rare, threatened, endangered, and otherwise sensitive plants, animals, and natural communities. TeraCor queried the *Malibu Beach* and *Point Dume* Quadrangles for local records of sensitive organisms and habitats.

Field Surveys

Surveys for biotic resources on the Project Site encompassed several seasons, so as to include observations of all flora and fauna occurring or potentially occurring within or around the Project Site. Initial surveys were conducted on May 12, 2002 and supplemental surveys were performed on August 20, 2003. Surveys were conducted during morning and afternoon hours. Conditions were suitable at all times for observing targeted floral and faunal components of the habitat. Field photographs were taken of areas of interest to the biological evaluation, and are shown in Figures V.C-1 and V.C-2.

Field work was conducted on foot, through all habitat areas within the entire site. Surveyors included S. Reed, I. Swift, and W.E. McTeer. Plants were identified and recorded in the field by TeraCor field personnel. Vegetation communities were field-mapped on ~~recent~~ aerial photography (March 2003). All plant species encountered within natural areas of the site were identified and are presented in Appendix D. No attempt was made to identify non-native ornamental species present within ~~lower areas~~ southern portions of the Project Site as a result of nursery operations~~ on site~~. Reptiles and amphibians were surveyed by turning debris and scanning sunning and foraging areas. Birds were identified by using 10x40 binoculars and by call, with nomenclature following Peterson (1990) and Dunn (1999), amended as necessary to conform to current nomenclature changes. Mammal presence was deduced based on habitat conditions. All faunal species that were observed, or have probable expectance to occur, are presented in Appendix D.

No trapping or focused surveys were conducted to conclusively determine the presence of animal species. This assessment is, therefore, largely habitat-based and predictive. The evaluation for presence included

Photo 1- View of the property looking north from Civic Center Way. Disturbed annual non-native grassland is the most prevalent plant community on-site. Much of the property is disturbed with no vestige of natural plant communities. Sycamore woodland cells are present in the central portion of the site. 20 August 2003

Photo 2 - This south-facing perspective of the property was taken from the hillside at the north end of the site. With the exception of the sycamore woodland cells on-site, the property is dominated by non-native grassland which almost exclusively supports exotic annual weedy species. 20 August 2003

Photo 3 - The northeast corner of the property is shown in this photograph. Native coastal sage scrub is present on the adjoining hillsides, but most natural habitat on-site has been substantially modified over many years of human activities and uses. 20 August 2003

Photo 4 - The subject site is shown here in the context of adjoining properties. The hillside in the right foreground is off-site and comprised of coastal sage scrub. Existing off-site residential uses are present in the left of the photo. The adjacent property to the east, also proposed for commercial/office uses, is comprised of habitats similar to those found on-site. 20 August 2003

Source: TeraCor Resource Management, November 2003.

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Figure V.C-1
Site Photographs Exhibit A

Photo 1 - A portion of the property supports coastal sage scrub. The CSS shown in Photo 1 is present on steeper hillside areas at the west-central edge of the site and northeast corner of the property. More level portions of the site support primarily non-native invasive species, as depicted in the right side of the photo. 20 August 2003

Photo 2 - Coastal sage scrub in hillside areas is relatively robust, containing many of characteristic species which comprise this community type. Mechanical disturbance of this CSS cell has been light ad confined to areas where a perimeter road was established.

Photo 3 - CSS in the northeast corner of the site is heavily invaded with non-native Eucalyptus, palm trees, fennel, castorbean, and other exotic species.

Photos 4 and 5 - Cells of Sycamore Woodland persist on the property. Though not conclusively established, the trees are multi-trunked and appear to be respouts from a much older parent tree. We concluded the trees are likely relicts from the pre-disturbance condition when this area was part of the Malibu Creek/lagoon complex.

Source: TeraCor Resource Management, November 2003.

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Figure V.C-2
Site Photographs Exhibit B

such variables as availability of support resources (such as rock outcrops, flowing water, specific host plants, nesting sites, etc.), the size of the Project Site, and the apparent history of disturbance and surrounding development.

ENVIRONMENTAL SETTING

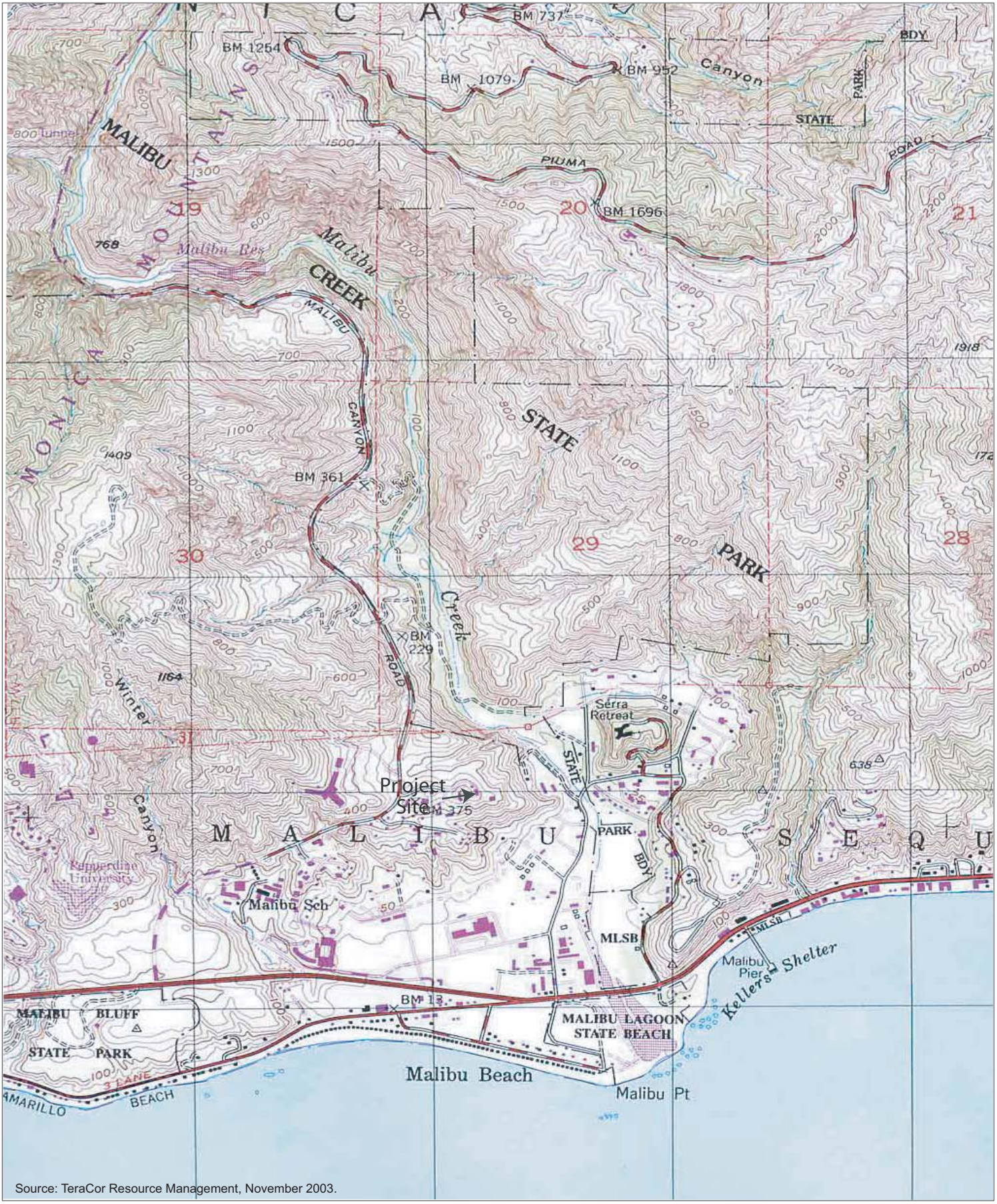
The Project Site is located on Civic Center Way, one lot west of Cross Creek Road, approximately 0.25 mile north of Pacific Coast Highway, within the City of Malibu, California. The Project Site consists of two parcels, accessible from Civic Center Way. The 15.2-acre site is located south of the Malibu Sequit line, within an un-sectioned area, Township 1 South, Range 18 West, of the *Malibu Beach, California, U.S.G.S. Topographic Quadrangle*, 1950 (revised 1981, 1994).

The elevation of the Project Site ranges from approximately 20 feet above mean sea level (msl) at the south end of the site, adjacent to Civic Center Way, to 90 feet above msl at the north end of the site. The topography of the site is generally flat throughout the southerly half of the site, and gently sloping in the northerly half, with a sudden northward increase in gradient near the northwest property boundary. Figure V.C-3, Topographic Map, depicts the topography of the Project Site and surrounding area.

The Project Site is generally located in the central, seaward side of the Santa Monica Mountains region, ~~adjacent to~~near the Pacific Ocean and Malibu Creek, a major watershed in the range. The Santa Monica Mountains are part of the northwestern extent of the Transverse Ranges, characterized by their west to east outlay, low overall elevation, diverse geological make-up, and configuration. They are dominated by dense chaparral, oak woodland, and sage scrub.

The Santa Monica Mountains are generally a biogeographically isolated range. These mountains are cut off to the north, northwest, and northeast by US-101, SR-134, the cities of Thousand Oaks and Westlake Village, and the highly developed San Fernando Valley. The Valley represents the north end of the City of Los Angeles and is one of the largest and most densely developed urban areas in the region. To the south lies the Pacific Ocean, including the Channel Islands. The Los Angeles River Basin forms a significant barrier to the east and southeast. Finally, the western flank of the range is bordered by the Oxnard Plain, a large alluvial formation at the terminus of the Santa Clara River at the Pacific Ocean. This area is an extensive agricultural region, with heavy disturbance to natural land formations and soil profiles. All of these human-made features constitute a significant barrier for low mobility organisms.

The Project Site is largely disturbed and degraded, except in the northwest hillside area. Early residential and basic infrastructure remnants, such as concrete pads and dirt roadways, remain in the central area and northwest corner of the site. Subsequent to residential use, nursery operations on-site have allowed naturalization of numerous non-native shrubs and annual plants across the Project Site. In addition to a strong ornamental presence, mechanical maintenance of on-site vegetation is ongoing on the property. Areas along the northwesterly property boundary are comprised of a peninsula of coastal sage scrub (CSS) on a south-facing slope. There are also ~~native~~ cells of native sycamore trees (*Platanus racemosa*) on-site. Vegetation on-site is discussed in detail below.



Source: TeraCor Resource Management, November 2003.

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Figure V.C-3
Topographic Map

Site Vegetation and Wildlife

Vegetation

The Project Site is located within the California Floristic Province (CFP), which extends from Oregon to Baja, Mexico. The Project Site is specifically located within the CFP's Southwestern California region, South Coast subregion, adjacent to the border of the Western Transverse subregion. The South Coast subregion extends along the Pacific Coast from Point Conception to Mexico, and to the San Gorgonio Pass at Banning.

References to on-site vegetation reflect information contained in *Preliminary Descriptions of the Terrestrial Natural Communities of California*, (Holland, 1986 and updated in 1992), *A Manual of California Vegetation* (Sawyer and Keeler-Wolf, 1995), and *The Jepson Manual - Higher Plants of California* (Hickman, 1993). Classification of plant communities follows the *CNDDB's List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database*, which recognizes over 210 separate plant communities across California.

Two native vegetation communities were identified on-site: coastal sage scrub and California sycamore cells. Both communities together comprise less than five percent (5%) of the vegetative cover on-site. Vegetation communities on-site are illustrated in Figure V.C-4, Vegetation Communities.

Coastal sage scrub (CNDDB Vegetation Code 32.000.00) is confined to the northwest corner of the site on the south-facing slope above Project Site disturbance. The patch of vegetation on-site has been connected to a larger stand of sage scrub off-site to the north. Review of recent aerial photography (March 2003), however, revealed the larger hillside area to be effectively truncated at the Project Site's north end through habitat clearance, presumably for fire protection. The area of CSS habitat present on site as identified in Figure V.C-4 is estimated at 21,500 square feet.

California sycamore (CNDDB Vegetation Code 61.310.00) woodland cells, consisting of several mature sycamore trees (*Platanus racemosa*), were present in clusters in the central and west areas of the site, possibly remnants of a riparian woodland or streamside forest. For this reason they were mapped as sycamore woodland relics. California sycamore woodland is recognized as its own community type by the CNDDB. California sycamore is denoted as "known or believed to be a high priority for inventory" in the CNDDB.

In their Technical Memorandum update, prepared on 27 March 2007, Teracor Resource Management confirmed that the sycamores are intermixed with gum trees (*Eucalyptus sp.*) and date palms (*Phoenix sp.*), suggestive of an ornamental origin, and that the actual origin of the sycamores is not known; though they likely were either planted by property owners many years ago or may be relictual stands of trees no longer associated with freshwater braids of Malibu Creek. In either event, they are not associated with water features at this time.

8. Contribution to an established conservation organization or governmental agency in the Santa Monica Mountains to assist with purchase and set-aside of existing CSS habitat in the Santa Monica Mountains on a 2:1 per/acre basis.

Notwithstanding mitigation, the cumulative loss of open space remains potentially significant and unavoidable.

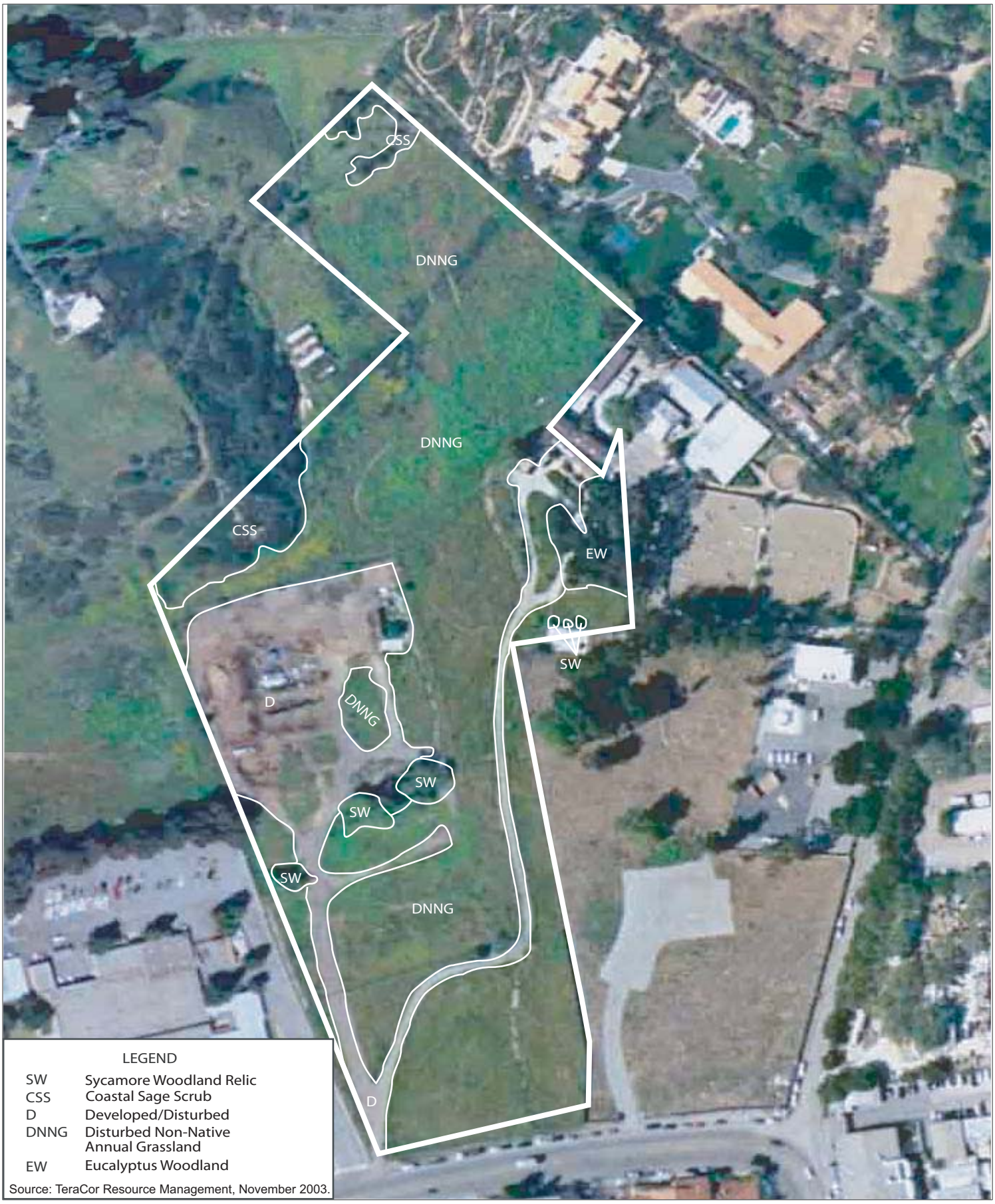

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Figure V.C-4
Vegetation Communities

~~Additional~~ Nnon-native, annual vegetation was present as cover throughout the remainder ~~most~~ of the site. These areas, referred to as disturbed, consisted mostly of black mustard (*Brassica nigra*), wild raddish (*Raphanus sativa*), and cheese weed (*Malva parviflora*). These weedy annuals were mixed with grasses such as wild oat (*Avena fatua*), wild barley (*Hordeum murinum*), ripgut grass (*Bromus diandrus*), and foxtail chess (*Bromus madrintensis rubens*). Large stands of non-native and highly invasive castor bean (*Ricinus communis*) were also present across the north end of the property.

Overall, the limited extent of natural vegetation ~~formations~~associations, both in quality and quantity would preclude many native species from occupying the site. Some organisms, usually habitat generalists such as red-tailed hawk (*Buteo jamaicensis*), deer mouse (*Peromyscus maniculatus*), and fence lizard (*Sceloporus occidentalis*), would be expected to occupy heavily modified areas such as this site. Often, as in the case of the red-tailed hawk, non-native components of the modified habitat (such as a Eucalyptus tree or a utility pole) satisfy a physical or structural requirement for the organism, rather than replacing the natural habitat outright.

Wetlands

In response to the California Coastal Commission's request (See Comment Letter No. 2, in Section IX, Responses to Comments) to update the Biological Impact Assessment and to address the Project's impacts upon wetlands, Teracor Resource Management evaluated the subject property for the presence of wetlands, "waters of the Unitied States," streambeds, and other water features. Though sycamore trees are present on-site, they are either ornamental or relictual trees from a period where conditions in the Malibu Civic area were more natural. Teracor Resource Management concluded that the subject site does not support wetlands and has been substantially modified over many years of human activities.

Wildlife

Habitat values for wildlife within and adjacent to the Project Site are low. These low values are ascribed due to the substantial modifications that have occurred to the Project Site and surrounding hillsides over the last century. At one time, the site was located in what was ~~probably~~ possibly a large, broad, brackish marsh associated with ~~at the confluence of~~ Malibu Creek ~~and the Pacific Ocean. This area could have contained sandy flats, saltgrass (*Distichlis spicata*), pickle weed (*Salicornia sp.*) and cattail (*Typha sp.*) marshes, open brackish water, and extensive riparian areas at the margins.~~ In the last century, the area has been dredged and filled to stabilize the shoreline for human habitation and later, for the construction of State Highway 1 (Pacific Coast Highway). Since the original modification of the region as a whole, the site has been disturbed further in the intervening decades through various land issues on and adjacent to the subject parcel.

The Project Site's value to wildlife is further degraded by similar historical development and disturbance to the areas adjacent to and surrounding the Project Site. The closest intact habitat is the Malibu Creek drainage, which is located approximately 600 feet to the east to the subject property. At this point in its proximity to the site, ~~it~~Malibu Creek has been highly modified with development on either side of the channel and a narrow band of riparian vegetation along the banks. Additional surrounding natural habitat

beyond existing adjacent development includes the foothills of the Santa Monica Mountains to the north of the site. These areas are somewhat degraded as well, having been cleared of much of their chaparral vegetation in the past few years for fuel control around the respective residences. None of these surrounding natural habitats contribute significantly to the overall wildlife value of the site.

Invertebrates

During the late Spring of 2002 the Project Site contained several blooming flower species, many of which were non-native. Nevertheless, a number of invertebrate species were observed visiting flowers, under debris, and on vegetation in general. West Coast ladies (*Vanessa annabella*), Sonoran blues (*Philotes sonorensis*), and monarch butterflies (*Danaus plexippus*) were seen visiting flowers such as black mustard (*Brassica nigra*) and wild raddish (*Raphanis sativa*). Under debris, non-native European earwigs (*Forficula auricularia*), and the terrestrial crustacean known as the pillbug (*Armadillidium vulgare*) were present in great numbers. Only one abundant species of arachnid was observed, the common wolf spider (*Lycosa sp.*). In general, the species of invertebrates represented indicated heavy disturbance to the site, and no unique or habitat specialists were observed.

Amphibians

No amphibians were observed on the site during surveys. Due to the lack of water features on or near the site, no amphibians would be expected to occur.

Fish

No aquatic resources were extant on the site, and no fish species are expected to be present.

Reptiles

One species of reptile, the western fence lizard (*Sceloporus occidentalis*), was observed on the Project Site. This species, of which two individuals were observed, is common throughout the western United States in a variety of habitats, including disturbed areas. It is likely but unknown whether breeding occurs on the site. Other species that might occur on the site include the side-blotched lizard (*Uta stansburiana*), southern alligator lizard (*Elgaria multicarinata*), and possibly several snake species, include the rattlesnake (*Crotalus sp.*) and gopher snake (*Pituophis melanoleucus*).

Birds

Fewer birds were observed in and around the Project Site than would be expected of a similar site in its natural condition. Nesting and other resource-dependent activities were observed for a few species, however, these were all common species that nest readily in urban and developed areas. Nesting was confirmed on-site for the California towhee (*Pipilo crassalis*), house finch (*Carpodacus mexicanus*), Bullock's oriole (*Icterus bullockii*), and red-tailed hawk (*Buteo jamaicensis*). Other suspected breeders in the general vicinity, but not on the Project Site, included the mourning dove (*Zenaidia macroura*), lesser goldfinch (*Carduelis psaltria*), California quail (*Callipepla californica*), American crow (*Corvus*

brachyrhynchos), Anna's hummingbird (*Calypte anna*), cliff swallow (*Stelgidopteryx seripennis*), ~~song sparrow (*Melospiza melodia*),~~ and spotted towhee (*Pipilo maculatus*). A number of transient, migratory, or Winter-visiting species would be expected as well. These birds would visit the site primarily during early Spring, Fall, and Winter. They either move through the area on their biannual migration, or stay in the region, which serves as their wintering grounds. These species include the yellow-rumped warbler (*Dendroica coronata*), white-crowned sparrow (*Zonotrichia leucophrys*), dark-eyed junco (*Junco hyemalis*), and various species of gulls (*Larus spp.*).

Mammals

Due to the disturbed, homogenous nature of the site, few species of mammals were observed on the Project Site. Diurnal field surveys detected a moderate diversity of mammals for such a small site. Species observed or otherwise detected through tracks, burrows, scats, carcasses or other signs include the Virginia opossum (*Didelphis virginiana*), woodrat (*Neotoma sp.*), Audubon's cottontail (*Sylvilagus audubonii*), California ground squirrel (*Spermophilus beecheyi*), and coyote (*Canis latrans*). Additional species that may occur on the site include the striped skunk (*Mephitis mephitis*), Botta's pocket gopher (*Thomomys bottae*), ~~gray fox (*Urocyon cinereoargenteus*),~~ and deer mouse (*Peromyscus maniculatus*). No large mammals were detected, and due to the site's isolation within a highly disturbed region and perimeter fencing, no corridors for more mobile species would be expected.

Regulatory Setting

Lead, Responsible, and Trustee Agencies

The City of Malibu is the Lead Agency with regard to project approval and the disposition of biotic resources on-site. Resource agencies, such as the U.S. Army Corps of Engineers, California Department of Fish and Game, and U.S. Fish and Wildlife Service, are considered Trustee Agencies for this particular property due to the absence of any State or Federally-designated endangered or threatened species, streambeds, or "waters of the United States." These trustee agencies are expected to review the project and comment on the potential impacts of project implementation and the adequacy of proposed mitigation.

Definitions

Protected sensitive species are usually classified by both State and federal resource management agencies as threatened or endangered, under provisions of the State and Federal Endangered Species Acts. "At-risk" species proposed or being considered for listing as threatened or endangered are considered "candidate" species. Both the U.S. Fish and Wildlife Service (Service) and the California Department of Fish and Game (CDFG) use various classifications to describe vulnerable species. There are also other species classifications and categories used in this report, all of which are described below.

The Federal Endangered Species Act of 1973 (ESA) defines an endangered species as "any species which is in danger of extinction throughout all or a significant portion of its range [...]." Threatened species are

defined as "any species which is likely to become an endangered species in the foreseeable future throughout all or significant portions of its range [...]."

California's Endangered Species Act (CESA) defines an endangered species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease." The State defines a threatened species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the commission as rare on or before January 1, 1985 is a threatened species."

A candidate species is defined as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to either list." Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission.

Federal and State listing status differs as follows:

- Federal:
    - Federally listed as Endangered = FE
    - Federally listed as Threatened = FT
    - Proposed as Threatened = FPT
    - Proposed as Endangered = FPE
    - Federally listed as Candidate = C
    - Former Federal Candidate = FSC
- State:
    - State listed as Endangered = SE
    - State listed as Threatened = ST
    - State listed as Rare (Plants only) = SR
    - California Species of Special Concern = CSC
    - Fully Protected = SFP
    - California Native Plant Society Listed = CNPS
- CNPS codes presented for sensitive flora below include the following:
    - List 1B: Rare, Threatened, or Endangered in California and elsewhere

  - List 2: Rare, Threatened, or Endangered in California but more common elsewhere
  - List 3: Plants about which more information is needed (a review list)
  - List 4: Plants of Limited Distribution (a watch list)
- The R-E-D Code is as follows:
  - R values represent "rarity" on a scale of one through three with three being most rare.
  - E values represent "endangerment" on a scale of one through three with three being the most endangered.
  - D values represent "distribution" on a scale of one through three, with one being widespread, two being rare outside of California, and three being endemic to California.

Migratory Bird Treaty Act (MBTA)

In addition to the federal and State ESAs, the Migratory Bird Treaty Act (MBTA) (16 USC 703) makes it illegal for anyone to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid permit issued pursuant to Federal regulations. The over 800 avian species including geese, ducks, shorebirds, raptors, songbirds, and many relatively common species protected under the MTBA are listed in 50 CFR 10.13.

On-Site Occurrence of Sensitive Resources

No threatened or endangered species are believed to inhabit the Project Site. Additionally, no sensitive species are known to inhabit the Project Site; however, some species are known to occupy the general vicinity and are therefore discussed in this assessment in terms of their probability of occurrence and ability to sustain potential impacts associated with the Proposed Project. Other sensitive species may occur on a transitory basis, but would not be expected to have a resident status or breed on-site. Table V.C-1 presents the regulatory framework under which impacts on sensitive species are evaluated, as well as a prediction of each organism's probability to occur on-site based on habitat conditions and species requirements.

Table V.C-1
Summary of Sensitive Species, their Status and Probability of Occurrence

Species	Sensitive Species Status	Probability of Occurrence On-Site
Plants		
~~California Androsace (*Androsace elongata ssp. acuta*)~~	~~CNPS List 4; RED Code 1-2-2. This species has no formal governmental status.~~	~~**Not Present**. This annual herb is found in chaparral, cismontane woodland, and coastal scrub. It is believed to be extirpated from LA County; Jepson reports a historic broad distribution, occurring from OR to Baja, specifically in the South Coast region, on dry grassy slopes below 1200 meters. Detection on-site is considered improbable.~~
Aphanisma (*Aphanisma blitoides*)	CNPS List 1B; R-E-D Code 2-2-2. ~~**FSC**~~	**Low**. This annual herb blossoms in April and May in coastal bluff scrub and coastal scrub. It currently is known from three occurrences on San Nicholas Island. It only occurs below 100 meters above sea level; therefore, it has potential to occur in CSS on-site, but seems unlikely based on disturbance factors. This plant was not detected during field surveys.
Braunton's Milk-Vetch (*Astragalus brauntonii*)	CNPS List 1B; R-E-D Code 3-2-3. **FE**	**Low.** This species prefers soils with a clay base, and is occasionally found within limestone or stiff gravelly deposits. This species has been detected as close as Malibu Lagoon. The habitat on-site is marginally suitable. This species was not detected during Spring surveys in 2002, and there were no skeletal remains of *Astragalus* observed in August 2003.
Coastal Dunes Milk-Vetch (*Astragalus tener var. titi*)	CNPS List 1B; R-E-D Code 3-3-3. **FC**	**Low.** This annual, delicate species is known only from coastal dunes and sandy coastal bluff scrub. It occurs below 20 meters in moist sandy depressions. It was not expected to occur on-site due to habitat conditions, nor was it detected on-site during field surveys.
Coulter's Atriplex (*Atriplex coulteri*)	CNPS List 1B; R-E-D Code 2-2-2. The species has no governmental listing status.	~~**Moderate**~~**Low.** Species requires alkaline soils, usually in low areas, and depressions where water is allowed to collect and leach or deposit minerals and salts. Habitat associations include coastal bluff scrub, coastal dunes, coastal sage scrub, and grasslands. Localities in the vicinity include Point Dume. The species was not detected on-site.
South Coast Saltscale (*Atriplex pacifica*)	CNPS List 1B; R-E-D Code 3-2-2. **FC**	**Low.** This annual herb occurs in coastal bluff scrub and coastal scrub below 100 meters in elevation and blooms in March through October. The species was not detected on-site during the surveys.
Parish's Brittlescale (*Atriplex parishii*)	CNPS List 1B; R-E-D Code 3-3-2. **FC**	~~**Low**~~**Improbable.** This annual herb blooms June through October, and has been collected only once since 1974. Presumed extinct, it occurs in habitats not present on the Project Site, including playas and vernal pools, and chenopod scrub below 1900 meters.
~~Davidson's Saltscale (*Atriplex serenana var. davidsonii*)~~	~~**FSC**~~	~~**Low.** This annual herb blooms from April through October, and is believed to be extirpated from Los Angeles County. It occurs below 200 meters in alkaline conditions in coastal bluff scrub and coastal scrub. It was not detected on the Project Site.~~
Malibu Baccharis (*Baccharis malibuensis*)	CNPS List 1B; R-E-D Code 3-3-3. The species has no governmental listing status.	**Low.** This species is found in a mixture of sage scrub and woodland habitats, usually adjacent to disturbance. Although suitable habitat is present on-site, no *B. malibuensis* were detected.
~~Plummer's Baccharis (*Baccharis plummerae*)~~	~~CNPS List 4; R-E-D Code 1-1-3. The species has no governmental~~	~~**Low.** The habitat for this species is rocky chaparral, or coastal scrub, and cismontane woodland up to 425 meters. It is known to occur on the central and south coast, the north Channel Islands, and the western~~

Species	Sensitive Species Status	Probability of Occurrence On-Site
	~~listing status.~~	~~Transverse Range. It was not detected in the project area.~~
Nevin's Barberry (*Berberis nevinii*)	CNPS List 1B; R-E-D Code 3-3-3. **FE**	**Not Present**. This easily-detected evergreen shrub blooms from March through April. It occurs in sandy or gravelly conditions in coastal scrub, chaparral, cismontane woodland, and riparian scrub below 350 meters. The species was not present on-site.
~~Round-leaved Boykinia (*Boykinia rotundifolia*)~~	~~CNPS List 4; R-E-D Code 1-1-3. The species has no governmental listing status.~~	~~**Low.** This broadly-distributed perennial herb occurs in riparian woodlands and mesic chaparral habitats below 2000 meters in elevation throughout the outer south coast range, Transverse ranges, and Peninsular ranges. It blooms in June and July and was not detected during field surveys.~~
~~Brewer's Calandrinia (*Calandrinia breweri*)~~	~~CNPS List 4; R-E-D Code 1-2-2. The species has no governmental listing status.~~	~~**Low Moderate.** Brewer's Calandrinia is an annual herb which flowers from March through June. It is found most often in sandy to loamy soil, disturbed sites, and burns. The plant has a broad known distribution throughout the western Transverse range and along the California coast from San Francisco to Baja, but is considered uncommon where it still occurs. The species' range of elevation is below 1200 meters and its probability of occurrence within the Project Site is possible; however, it was not detected on-site.~~
~~Seaside Calendrinia (*Calandrinia maritima*)~~	~~CNPS List 4; R-E-D Code 1-2-1. The species has no governmental listing status.~~	~~**Moderate.** This annual herb occurs in sandy substrates, in coastal bluff scrub, and grasslands below 300 meters. It is known to occur along the south coast, Channel Islands, and Baja.~~
~~Catalina Mariposa Lily (*Calochortus catalinae*)~~	~~CNPS List 4; R-E-D Code 1-2-3. The species has no governmental listing status.~~	~~**Moderate.** This perennial bulbiferous herb is found in heavy soils, coastal scrub, and open grasslands below 700 meters and blooms from February through May. It is distributed in the south central coast and the west south coast, especially in the Channel Islands. It is known to occur in the Malibu area, but no dried remains were detected during field surveys.~~
Plummer's Mariposa Lily (*Calochortus plummerae*)	CNPS List 1B; R-E-D Code 2-2-3. ~~**FSC**~~	**Moderate**. This lily is found in habitats similar to that of the Catalina Mariposa Lily, but usually in more xeric slopes of mixed sage scrub and chaparral. It favors soils that are somewhat higher in alluvium and granitic material. This species is known throughout the Santa Monica Mountains and has been detected as close as Pepperdine University. This species was not observed during floral surveys.
Parry's Spineflower (*Chorizanthe parryi var. parryi*)	CNPS List 3; R-E-D Code ?-2-3. ~~**FSC**~~	**Low Moderate.** Uncommonly found in dry, slopes and flats usually within sandy areas along coastal sage scrub and chaparral, between 500 feet and 3,500 feet. The closest historical record for this species is north of Point Dume in Latigo Canyon. No spineflowers were observed on-site.
Santa Susana Tarplant (*Deinandra minthornii*)	CNPS List 1B; R-E-D Code 2-2-3. ~~**FSC,**~~ **SR**	**Moderate.** Grows mostly from sandstone, rocky outcrops, and ledges in open, exposed sites. It proliferates well following post-burn conditions and blooms in late Summer and Fall; however, it can be detected during other seasons by its distinctive foliage and strong, disagreeable odor. Localities for this species in the vicinity include Calabasas Peak, Latigo Canyon, upper Corral Canyon road, and near Castro Peak lookout. No individuals were detected on-site.
Blochman's Dudleya (*Dudleya blochmaniae blochmaniae*)	CNPS List 1B; R-E-D Code 2-2-2. ~~**FSC**~~	**Not Present**. This species grows in open, rocky slopes; often in areas with shallow clay overlying serpentine or rocky areas with little or no soil. Habitats associated with this Dudleya species include coastal sage scrub, coastal bluffs, and several types of grassland below 450 meters. It is known to occur throughout the south central coast, south coast, and northern Baja. The nearest localities for Blochman's

Species	Sensitive Species Status	Probability of Occurrence On-Site
		Dudleya are in Winter Canyon, above Pepperdine University.
Marcescent Dudleya (*Dudleya cymosa marcescens*)	CNPS List 1B; R-E-D Code 3-2-3. **FT**	**Not Present.** This Dudleya inhabits sheer rocky outcrops of the Santa Monica Mountains between 150-500 meters, and therefore is not expected to occur on-site. Nearby localities include Malibu Creek within Malibu Creek State Park.
Santa Monica Mountains Dudleya (*Dudleya cymosa ovatifolia*)	CNPS List 1B; R-E-D Code 2 2 3. **FT**	**Not Present.** Endemic to Los Angeles and Orange counties, especially the Santa Monica's, this species is most often found in rocky, shaded, north-facing slopes between 150-500 meters. It has been seen as close as Malibu Canyon north of State Highway 1. The physiography of the property (lack of canyon walls, rock outcrops, etc.) is marginal and the elevational range does not meet the requirements of the species; therefore, it would not occur on-site.
Many-Stemmed Dudleya (*Dudleya multicaulis*)	CNPS List 1B; R-E-D Code 1-2-3. ~~**FSC**~~	**Not Present.** This dudleya grows in heavy or clayey soils near the coastal plain, below 600 meters throughout the south coast (Los Angeles, Orange, San Bernardino, San Diego, and Riverside counties). It is not present within the project area.
Bright Green Dudleya (*Dudleya virens*)	CNPS List 1B; R-E-D Code 3-3-3. ~~**FSC**~~	**Not Present.** This plant occurs on coastal bluffs below 400 meters in the central south coast (Los Angeles County) and the south Channel Islands, a habitat type not present on the property.
Round-Leaved Filaree (*Erodium macrophyllum*)	CNPS List 2; R-E-D Code 2-3-1. The species was considered, but rejected for governmental listing status.	**Low.** Round-Leaved Filaree occurs in cismontane woodlands and valley and foothill grasslands. It is found in clay soils between 15 and 1200 meters above sea level and blooms from March to May. It was observed by T. Thomas (1999) (CNDDB element) in Malibu Creek State Park, although the precise location is not known. This plant was not detected during surveys nor is it expected to be present based on habitat conditions.
~~Suffrutescent Wallflower (*Erysimum insulare ssp. suffrutescens*)~~	~~CNPS List 4; R-E-D Code 1-2-3. The species has no formal governmental listing status.~~	~~**Low.** This coastal plant is found at low elevations (up to 150 meters) and is found on coastal dunes and bluffs along the south and central coasts. Considered uncommon, it was not detected on the Project Site.~~
Palmer's Grappling Hook (*Harpagonella palmeri*)	CNPS List 2; R-E-D Code 1-2-1. ~~**FSC**~~	**Low.** This annual herb grows in dry sites in chaparral, coastal scrub, and grassland below 450 meters. The species has a broad distribution throughout the south coast, Peninsular ranges, Arizona, and northwest Mexico. The species was not detected during surveys.
Los Angeles Sunflower (*Helianthus nuttallii ssp. parishii*)	CNPS List 1A; No R-E-D Code listed. ~~**FSC**~~	**Improbable.** This plant was last observed in 1937 and is now believed to be extinct. It is highly unlikely to occur on-site.
Southern California Black Walnut (*Juglans californica var. californica*)	~~CNPS List 4; R-E-D~~ Malibu LCP Protected Native Tree Code 1-2-3. This species has no formal governmental listing status.	**Not Present.** This species occurs on slopes and in canyons between 50-900 meters along the south coast, south Transverse ranges, and north Peninsular ranges. Walnut forest is a much fragmented, declining, natural community, which is increasingly rare in Orange, Riverside, San Bernardino, and San Diego counties. ~~Individual juvenile trees are present on the northerly slope on site~~A sparse distribution of walnut trees off-site and up-slope from the project site.
~~Fragrant Pitcher Sage (*Lepechinia fragrans*)~~	~~CNPS List 4; R-E-D Code 1-2-3. This species has no formal governmental listing status.~~	~~**Low.** Considered uncommon in the south coast area, this species occurs in chaparral below 1100 meters in elevation. It was not detected on site.~~

Species	Sensitive Species Status	Probability of Occurrence On-Site
Robinson's Pepper-Grass (*Lepidium virginicum var. robinsonii*)	CNPS List 1B; R-E-D Code 3-2-2. This species has no formal governmental listing status.	**Moderate.** This species is found in dry shrublands throughout the southwest region below 500 meters. It is an annual herb that blooms from January through July. It was not detected on-site.
~~Ocellated Humboldt Lily (*Lilium humboldti ocellatum*)~~	~~CNPS List 4; R-E-D Code 1-2-3. **FSC**~~	~~**Low.** This species favors dense, shaded riparian habitats with abundant moisture and little disturbance. Often growing from canyon walls or in dense leaf litter flowering in June and July, Humboldt lilies are easily recognizable. Habitats on the site are not suitable for this species.~~
~~Small-Flowered Microseris (*Microseris douglasii var. platycarpha*)~~	~~CNPS List 4; R-E-D Code 1-1-2. This subspecies has no formal governmental listing status.~~	~~**Improbable**. Found in clayey soils associated with vernal pools, grasslands, and similar habitats, this subspecies occurs below 1000 meters in the south coast region, probably including coastal Los Angeles County. These habitats are not present on the Project Site, and the site is outside the current known range of the subspecies.~~
~~California Spineflower (*Mucronea californica*)~~	~~CNPS List 4; R-E-D Code 1-2-3. This species has no formal governmental listing status.~~	~~**Low.** The California Spineflower occurs in a relatively broad distribution across south central and southern coastal California, in sandy conditions below 1400 meters. It was not detected on-site during surveys.~~
California Muhly (*Muhlenbergia californica*)	CNPS List 1B; R-E-D Code 2-2-3. This species has no formal governmental listing status.	**Improbable.** This now uncommon species occurs in wet places, chaparral, forests, scrub, and meadows throughout the western Transverse and south coast regions with an elevational range between 100 and 2000 meters, making its natural distribution quite broad. The elevational range of this species does not match that of the Project Site, therefore, this species was not encountered in the field, nor is it expected to occur on-site.
Lyon's Pentacheata (*Pentacheata lyonii*)	CNPS List 1B; R-E-D Code 3-3-3. **FE, SE**	**Low.** This species is most often found on open, sandy, or gravelly substrates in native grassland or around the margins of exposed granitic rocks, and occurs in chaparral, grassland, and coastal sage scrub. Disturbed habitats on-site are unsuitable for this species. It has been detected at Stunt Ranch along Cold Creek to the northeast, and along Malibu Creek in the vicinity of Tapia Park. The species was not detected during floral surveys.
~~Gairdner's Yampah (*Perideridia gairdneri ssp. gairdneri*)~~	~~CNPS List 4; R-E-D Code 1-2-3. **FSC**~~	~~**Improbable.** Thought to be extirpated from Los Angeles County, this perennial herb occurs in grasslands and coastal flats below 350 meters. It is unlikely to be present on-site.~~
Brand's Phacelia (*Phacelia stellaris*)	CNPS List 1B; R-E-D Code 3-3-2. This species has no formal governmental listing status.	**Improbable.** This plant is probably extirpated from Los Angeles County according to the CNPS Inventory, as historical occurrences have been lost to development. It occurs in coastal dunes and coastal scrub, below 400 meters. It is not likely to occur on-site.
~~Wooly Sea-Blite (*Suaeda taxifolia*)~~	~~CNPS List 4; R-E-D Code 1-2-1. This species has no formal governmental listing status.~~	~~**Improbable.** This chenopod occurs on the margins of coastal salt marsh and in coastal bluff scrub below 15 meters along the south coast, and therefore would not be present in the project area due to elevational requirements.~~
Sonoran Maiden Fern (*Thelypteris puberula var. sonorensis*)	CNPS List 2, R-E-D Code 2-2-1. The species has no governmental listing status.	**Not Present.** Found primarily along stream courses, seepage areas, stream banks, and meadows, this species prefers undisturbed wetland habitats that are more open and exposed. This species is known mostly from undisturbed localities in Encinal Canyon, near the coast. Habitat suitability on-site is not favorable, and no individuals of this fern were detected.

Species	Sensitive Species Status	Probability of Occurrence On-Site
Invertebrates		
Monarch Butterfly (*Danaus plexippus*)	The monarch is considered a Special Animal in the CNDDB while present at winter roost sites, otherwise, it has no formal state or federal ~~listing~~protection status.	~~**Present**~~**Low.** The monarch butterfly's winter roost sites extend along the coast from northern Mendocino County to Baja California, Mexico. Typically, all roost sites are in tall, dense groves of trees (such as oaks, pines, cypress, or Eucalyptus), in wind-sheltered sites near the coast. Field surveys did not coincide with the winter roosting season. The CNDDB lists several localities for winter roosts for this butterfly locally, but specific locational information on winter roost sites is suppressed. Extensive surveys along the coastal zone have been undertaken by W. Sakai, but to TeraCor's knowledge the surrounding area of the Project Site has not been identified as a roosting site for the species. ~~The species was~~ Individual monarchs were observed on-site; however, only roost sites are considered sensitive.
Santa Monica Shieldback Katydid (*Neduba longipennis*)	~~**FSC**~~This species is listed by CDFG as a Special Animal as they are tracking occurrences. However the animal is afforded no protection status.	**Low.** This species is often difficult to detect without focused surveys and its presence cannot be adequately determined or interpreted without such surveys due to insufficient life history data. This organism is known to feed on chaparral vegetation and non-native ice-plant. Habitat values for this taxa at the Project Site are low, and no specimens were observed. It has been collected in Big Rock Canyon, approximately four miles west of Topanga Beach.
Santa Monica Mountains Hairstreak Butterfly (*Satyrium auretorum fumosum*)	~~**FSC**~~This species is listed by CDFG as a Special Animal as they are tracking occurrences. However the animal is afforded no protection status.	**Low.** This subspecies was described from the vicinity Malibu Lake, and is only known from a few local colonies in the Santa Monica Mountains. The larval host, coastal scrub oak (*Quercus sp.*), does not occur on the property. Other nectaring plants, such as buckwheat (*Eriogonum fasciculatum*) and golden yarrow (*Eriophyllum confertifolium*), are not present on the site, but the species may occur transiently. The Hairstreak is a strong flier with low populations and individual numbers and may go undetected during general faunal surveys.
Wandering (Saltmarsh) Skipper (*Panoquina errans*)	~~**FSC**~~This species is listed by CDFG as a Special Animal as they are tracking occurrences. However the animal is afforded no protection status.	**Low.** The highly localized skipper is found entirely along the coastal strand of southern California. It favors dune and marsh habitats that are grown to saltgrass (*Distichlis spicata*), which serves as its larval host. The site is not along the coastal strand, no host plants are present, and the organism was not observed.
Reptiles		
Rosy Boa (*Charina trivirgata*)	~~**FSC**~~This species is listed by CDFG as a Special Animal as they are tracking occurrences. However the animal is afforded no protection status.	**Low.** The rosy boa occurs throughout dry scrubland along the coast and in the deserts. It often is found in association with rocky hillsides. In the Project Site region it would be found in sage scrub and chaparral. This species was not detected and would not be expected to occur on-site due to overall disturbance.
Horned Lizard (*Phrynosoma coronatum ssp.*)	~~**FSC,**~~ **CSC**	**Moderate.** Favorable habitat for this lizard includes open, flat, sandy areas in which several colonies of harvester ants (*Pogonomermex sp.*) are established, as ants are the horned lizard's preferred food item. Plant communities associated with habitation of the horned lizard include coastal sage scrub, chaparral, oak woodland, and mixed sage scrub series. Suitable habitat for the horned lizard exists at the north end of the site, although this species was not observed during surveys.
Coast Patch Nosed Snake	~~**FSC,**~~ **CSC**	**Moderate.** The Coast Patch-Nosed Snake is mostly active during early morning hours, basking until

Species	Sensitive Species Status	Probability of Occurrence On-Site
(*Salvadora hexalepis virgultea*)		temperatures get too warm. This species is infrequently encountered, and is found in the lower slopes of dry scrub, chaparral, and oak woodland habitats, in rocky, sandy areas. It feeds upon lizards and small mammals. This species may occur on sage scrub slopes on the northern portion of the property. It has been recorded from Topanga Canyon and Mulholland Highway.
San Bernardino Ringneck Snake (*Diadophis punctatus modestus*)	~~**FSC**~~This species is listed by CDFG as a Special Animal as they are tracking occurrences. However the animal is afforded no protection status.	**Moderate.** The San Bernardino Ringneck Snake usually occurs in shaded oak forest canyons, where it is most often found beneath rocks and logs. It feeds on smaller amphibians and invertebrates. This species is primarily active above ground in Spring and early Summer, after which it retreats to subterranean burrows and crevices. It was detected in nearby Malibu Canyon in February 1998 under a debris pile in CSS by site investigators.
San Diego Mountain Kingsnake (*Lampropeltis zonata pulchra*)	**CSC**	**Low Moderate.** The San Diego Mountain Kingsnake inhabits mountainous regions across Southern California. It prefers moist woods, coniferous forests, oak woodlands, and chaparral. It not only inhabits mountainous areas, but canyons down to sea level in the Santa Monica Mountains. It is quite secretive, residing in rock crevices or beneath rock and debris piles. The San Diego Mountain Kingsnake was observed by A. Gibson and T. Brothers in 1984 (CNDDB element) in Upper Cold Creek Canyon at Stunts Ranch and the Cold Creek Preserve, approximately eight miles from the Project Site, and probably occurs in the general area. This species was not observed during surveys.
Silvery Legless Lizard (*Aniella p. pulchra)*	~~**FSC,**~~ **CSC**	**Low.** This burrowing species feeds on small, soft-bodied arthropods, often in the lower layers of chaparral or oak woodland leaf duff, less often along stream courses in loose alluvium. It is difficult to detect in cursory surveys. Focused surveys for the species in the Spring or Summer would require specialized pitfall trapping or overturning leaf litter. There are no records in the general vicinity for this species and the absence of leaf litter on-site would probably preclude the species. It was not observed during the faunal surveys.
Coastal Whiptail (*Cnemidophorus tigris multiscutatus*)	~~**FSC**~~This species is listed by CDFG as a Special Animal as they are tracking occurrences. However the animal is afforded no protection status.	**High Moderate.** The Coastal Whiptail usually inhabits dryer, scrub environments, and is somewhat tolerant of disturbances. It is often active later in the year, from May to late September, and usually during hotter times of the day, when other lizards are inactive. None were observed on-site, although there is a reasonable probability of occurrence.
Hammond Two-Striped Garter Snake (*Thamnophis hammondii hammondii*)	~~**FSC,**~~ **CSC**	**Improbable.** This species habitat preferences are stream-side habitats that form pools where amphibian larvae concentrate, allowing the garter snake to gorge itself on this prey. Although year-round surface water is not required for this species' presence, it is most often found in riparian systems in which surface water is present through the Summer. Lack of riparian area would preclude the species from the Project Site. No garter snakes were detected during faunal surveys.
Amphibians		
Coast Range Newt (*Taricha torosa torosa*)	**CSC**	**Improbable.** Populations of the coast range newt are scattered throughout the Santa Monica Mountains, and are confined to slow-moving streams and pools in which surface flows last year-round, as their larvae require one year to develop. Adults and maturing juveniles leave the stream area in Summer and retreat to underground crevices, rockpiles and under debris to estivate, becoming active again during the Winter

Species	Sensitive Species Status	Probability of Occurrence On-Site
		season. During the terrestrial phase of their annual cycle they become dry skinned and granular appearing, with thin tails; during the breeding season their skins become smooth and moist, and their tails enlarge and flatten for swimming. No habitat for this species is present on the site, and it is unlikely that this species utilizes the site for estivation as it is somewhat isolated from any potential breeding localities such as Malibu Creek. This species was not observed on-site.
Western Spadefoot Toad (*Scaphiopus hammondi*)	~~**FSC,**~~ **CSC**	**Improbable.** This species is generally found in washes, lowland stream courses, floodplains, vernal pools and other xeric areas. Preferred habitat associations include chaparral, oak woodland, coastal sage scrub, riparian woodland, and grassland. The Spadefoot Toad breeds in seasonal ponds and vernal pools in both upland and lowland areas. This toad is active later in the season than other amphibians (e.g. April-June) and often is undetected during early Spring surveys. No evidence of the toad was noted during surveys, and suitable habitat on the site does not exist.
Birds		
Bell's Sage Sparrow (*Amphispiza belli belli*)	~~**FSC,**~~ **CSC**	**Low.** This species is typically found in coastal sage scrub and chaparral habitats. Sage sparrows were not, however, observed on-site. This species is less common along the coast, where the color variety is usually lighter than the darker interior form. It could occur on-site from time to time in sage scrub.
Cooper's Hawk (*Accipiter cooperii*)	**CSC**	**Low Moderate.** This species is a widespread predator favoring other birds and small rodents as prey species. It would be confined locally to riparian and oak woodland habitats. Most portions of the site are unsuitable for nesting by Cooper's Hawk, although the dense patches of mixed native and non-native trees may provide nesting habitat for the hawk. This species was not observed during field surveys, nor were any old nest sites found.
Golden Eagle (*Aquila chrysaetos*)	**CSC,** The species is also protected under the Bald Eagle Protection Act.	**Low.** These large birds of prey could occasionally forage the property, but would not nest anywhere near the Project Site. This species is seen each year in the region in all seasons.
Southern California Rufous-Crowned Sparrow (*Aimophila ruficeps canescens*)	**CSC**	**Moderate.** This subspecies is typically found in coastal sage scrub and chaparral habitats. It has a fairly wide distribution in southern California and is fairly common in the Santa Monica Mountains. It was not observed on-site.
Western Yellow-Billed Cuckoo (*Coccyzus americanus occidentalis*)	**SE**	**Not Present.** Habitat values within the project area are not suitable for the Western Yellow Billed Cuckoo, which inhabits dense riverine woodlands. It would not nest locally, and its occurrence as a transient during migration would be unusual.
Yellow Warbler (*Dendroica petechia brewsteri*)	**CSC (nesting)**	**Improbable.** This species breeds locally in the dense understory of riparian thickets. It was not observed on-site, nor is it expected to occur on-site.
Willow Flycatcher (*Empidonax trailli all subspecies*)	**FE,** ~~**FSC,**~~ **SE**	**Improbable.** This species breeds locally in the dense understory of riparian thickets. It was not observed on-site, nor is it expected to occur on-site.
Yellow Breasted Chat (*Icteria virens*)	**CSC**	**Improbable.** This species breeds in the understory of riparian thickets. It was not observed on-site.

Species	Sensitive Species Status	Probability of Occurrence On-Site
Least Bell's Vireo (*Vireo bellii pusillus*)	**FE, SE**	**Not Present.** This riparian obligate species generally requires less-disturbed areas of dense willow-associated riparian habitat and prefers areas with standing water. The vireo appears to be recovering well throughout much of southern California as a result of habitat protection and cowbird suppression. This species would not occur on-site.
Mammals		
California leaf nosed bat (*Macrotus californicus*), Pallid bat (*Antrozous pallidus*), Pale big eared bat (*Plecotus townsendi pallescens*), and a number of species in the genus Myotis, including the small-footed bat, long-eared bat, fringed bat, long-legged bat and the Yuma bat.	~~**FSC,**~~ **CSC** (California leaf-nosed bat) **CSC** (Pallid bat) ~~**FSC,**~~ **CSC** (Pale big-eared bat) ~~**FSC**~~ The following species are listed by CDFG as Special Animals as they are tracking occurrences. However the animal is afforded no protection status: (Small-footed bat) ~~**FSC**~~ (Long-eared bat) ~~**FSC**~~ (Fringed bat) ~~**FSC**~~ (Long-legged bat) ~~**FSC**~~ (Yuma bat)	**Low Moderate.** Several bat species might forage for flying insects over or within the project area. Local rock outcrops off-site would serve as suitable roosting locations, but there are no potential roosts within the project area. None of the bat species potentially occurring in the area would be dependent upon resources which would be altered during the project. No species of bats were observed on the Project Site.
Ringtail (*Bassariscus astutus octavus*)	**SFP**	**Improbable.** The secretive, nocturnal ringtail is difficult to detect, but has been recorded historically from sites in the Santa Monica Mountains, and would be expected to occur as a resident species in the hillside areas surrounding the Project Site. Ringtails often forage in riparian areas; however, there does not appear to be suitable habitat within the project area.
San Diego Desert Woodrat (*Neotoma lepida intermedia*)	~~**FSC,**~~ **CSC**	**Low Moderate.** Despite its name, this species is rather widely distributed throughout southern California in sage scrub, chaparral, and desert regions. It prefers rocky areas, nesting in cracks and crevices, while the sympatric dusky-footed woodrat (*N. fuscipes*) nests in shrubs and occasionally in trees. There were no nests observed on-site.
~~Los Angeles Pocket Mouse (*Perognathus longimembris brevinasus*)~~	~~**FSC, CSC**~~	~~**Improbable.** Pocket mice are the smallest members of the family Heteromyidae. The Los Angeles pocket mouse is generally believed to occur in lower elevation grasslands and sage scrub, but has not been recorded from the Santa Monica Mountains. A different genus, the California pocket mouse (*Chaetodipus californicus*), is common to the Malibu area. Most of its former habitat range has been rendered uninhabitable or removed outright by development. Based on known areas of occurrence and habitat values, it would not be expected to occur at this location.~~
American Badger (*Taxidea taxus jeffersonii*)	**CSC**	**Improbable.** The American badger occurs uncommonly in open grassland and disturbed habitats, but has become extremely rare in areas of human activity. Habitat values on the Project Site are virtually nonexistent for this species. It could roam onto the site from the surrounding hillsides, but this possible occurrence is expected to be transient. It has been seen occasionally in the Santa Monica Mountains as

Species	Sensitive Species Status	Probability of Occurrence On-Site
		roadkill in areas such as Encinal Canyon (Charmlee Natural Area) and Topanga Canyon. It was not observed on the site.

Source: TeraCor Resource Management, November 2003; Dave Crawford, City Biologist, City of Malibu, December 2007 (conformance review for consistency with the City of Malibu LCP).

ENVIRONMENTAL IMPACTS

Thresholds of Significance

The City of Malibu General Plan EIR thresholds for biological resources were identified from the California Environmental Quality Act (Appendix G) and local/regional plans and ordinances. Using these guidelines, the City of Malibu has determined that the Proposed Projects would have a significant impact to the biological resources of the Malibu Coastal Zone (MCZ) if the project:

- Conflicts with adopted environmental plans and goals in the community where it is located (CEQA Guidelines, App. G[a]); (includes Los Angeles County General Plan, Malibu Local Coastal ~~Plan~~ Program Land Use Plan (LCP/LUP), Santa Monica Mountains Comprehensive Plan and related documents);

- Substantially affects a rare or endangered species of animal or the habitat of the species (CEQA Guidelines App. G[c]);

- Substantially interferes with the movement of any resident or migratory fish or wildlife species (CEQA Guidelines App. G[d]);

- Substantially diminishes habitat for fish, wildlife or plants (CEQA Guidelines App. G[t]);

- Involves the use, production or disposal of materials which pose a hazard to animal or plant populations in the area affected (CEQA Guidelines App. G[v]); and

- Involves the alteration or conversion of sensitive or locally important biological resources within the MCZ (Malibu LCP/LUP); Los Angeles County General Plan (Significant Ecological areas).

CEQA Appendix G provides the following criteria for determ~~i~~ining significance.

- Would a project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

- Would a project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

- Would a project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

- Would a project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

- Would a project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

- Would a project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Appendix G biota criterion are based on federal and State law with regards to sensitive and endangered habitat and species.

Project Impacts

Vegetation

Development of the Proposed Project would result in the grading (including remedial excavation and re-compaction) of the Project Site. These operations would remove all native hillside sage scrub habitat, ~~California black walnut~~ and sycamore woodland relic cells. Additionally, non-native Eucalyptus trees and the non-native annual grassland would also be permanently removed.

The loss of coastal sage scrub is considered a potentially adverse significant impact due to the limited and isolated extent of CSS on-site. The impact may be off-set by a variety of mitigation measures listed later in this section. With mitigation, the impact would be temporary and less-than-significant.

The loss of sycamore ~~woodland relic~~ trees on-site is a potentially significant ~~and temporal~~ impact ~~due to the decades-old removal of all understory elements to the woodland and the isolated condition under which the trees persist~~as their removal would conflict with the Malibu LIP Chapter 5. ~~Installation of~~ However, the project design incorporates Western Sycamore (*Platanus racemosa*) ~~around detention basins, parking lots, and within~~ landscapinge, at a 10:1 ratio, into the site's landscaping. This action ~~islands would~~ provides sufficient mitigation to render the impact temporary and less-than-significant ~~and temporary~~.

The loss of annual non-native grassland is a less than ~~non-~~significant impact. ~~which would be off-set with replacement by ornamental landscaping on-site.~~ Landscaping within the resulting undeveloped areas would offset any adverse impacts to non-native grasslands. The removal of Eucalyptus and other invasive non-native trees and vegetation (castor bean, mustard, etc.) is considered a beneficial impact.

No sensitive flora are believed to occur on-site. Further, no wetlands or other jurisdictional features are present. ~~, t~~Therefore, no significant impacts to these resources ~~sensitive flora~~ are anticipated.

Wildlife

The construction of the Proposed Project would disturb all wildlife which currently reside or utilize the subject property. All wildlife species which utilize the site would be displaced or killed during grading operations.

The presence of nesting birds was not observed at the time of the field surveys; however the absence of nesting birds at the time of observation does not preclude the possibility for nesting birds to be present on the Project Site at the time of construction activities. As such, any inadvertent destruction of active bird nests during the constriction period would result in a significant and adverse environmental impact as such an action would be in conflict with the Migratory Bird Treaty Act and the Fish and Game Code.

~~.~~ Vegetation removal should only occur outside of the bird nesting season (approximately February ~~15th~~ 1st through August ~~15th~~ 30th) to avoid direct impacts to nesting ~~migratory~~ birds. If a qualified biologist or ecologist ~~is present during vegetation clearance and initial grading activities~~conducts a pre-activity nesting bird survey prior to any site disturbance associated with the project, incidental injuries and kills can be reduced in number. Highly mobile wildlife can move off the property during construction, but low mobility organisms (burrowing mammals, reptiles, etc.) risk destruction. All ~~Most~~ wildlife ~~present~~ identified on-site is common and urban adapted, and loss of any potentially occurring sensitive organisms can be limited through monitoring.

No endangered or threatened wildlife are believed to be present on-site, therefore, no impacts to protected species would occur.

CUMULATIVE IMPACTS

Biological resources in the Santa Monica Mountains and the southern California coastline have been seriously affected over time through incremental development of coastal areas, canyons, valleys and mountaintops. Regional efforts are underway by responsible agencies and private conservation entities to protect the Santa Monica's biological resources. Regional impacts, however, are incremental and cumulative.

Unlike much of southern California, large-scale land conversion has largely been avoided in the Malibu area of the Santa Monica's through popular initiative, land use controls and infrastructure limitations. The project's contribution to the regional loss or degradation of undeveloped open space ~~biological resources~~ is, therefore, limited and incremental. However, the cumulative degradation to regional biological resources, with respect to open space in the Malibu area, from development of existing residential lots, intensification and improvement of existing land use and development of existing commercial lots such as that proposed, may be regionally significant on a cumulative basis.

MITIGATION MEASURES

Project specific impacts to biological resources were determined to be potentially significant with respect to nesting bird species. As such, the following mitigation measure is required to mitigate this impact.

1. Nesting birds are protected by both the California Department of Fish and Game (CDFG) Code and the federal Migratory Bird Treaty Act (MBTA). Removal of, or encroachment into existing on-site vegetation, should be restricted to off-peak bird nesting season, which typically occurs between February 1~~5~~ and August ~~15~~30. Should vegetation/tree removal be required during this period, the Applicant shall obtain the services of a qualified biologist, approved by the City, to conduct a series of nesting bird surveys ~~pursuant to~~consistent with ~~the~~ CDFG recommended nesting bird surveys protocol methods in effect at that time. ~~Specifically, the qualified biologist shall conduct a series of eight (8) surveys, no less than seven (7) days apart, in all areas of the subject parcel that may support nesting birds.~~ Any active nests shall be marked and exclusionary fencing shall be placed at a ~~50~~10-foot radius around the nest (~~200~~ 300 feet for raptors). The exclusionary fencing shall remain in place until such time that the biologist determines that the nest is no longer active. All equipment and human activity shall be excluded from these areas during active nesting without exception. Should the actual construction of nests be observed by the project biologist, he/she may, with direction from the regional CDFG wildlife biologist, remove the nesting materials and/or dissuade further construction of the nest provided no egg-laying has begun.

Additional Measures to Further Reduce Adverse Impacts

Aside from potential direct impacts associated with nesting bird species, impacts upon biological resources at the La Paz site are considered adverse but less than significant. The following protective measures shall be incorporated into the Proposed Project to further reduce potential adverse impacts to biological resources resulting from project implementation.

2. All disturbed and non-vegetated areas of the site must be watered daily during vegetation clearance and grading to minimize the generation of fugitive dust.

3. Prior to the initiation of vegetation clearance and grading, a qualified biologist or ecologist shall monitor the site and attempt to clear the proposed grading area of wildlife. The monitor will be present while all vegetation is removed, and shall direct the equipment operator to avoid impacts to wildlife through normal minimization techniques.

4. Native vegetation shall be used in the landscaping pallet to the greatest extent feasible as ~~approved~~ required by the City of Malibu in the project's landscaping plan pursuant to mitigation measure A-1 at page V.A-14.

5. The lighting plan should be designed in consultation with the City Biologist or a qualified ecologist familiar with best management building practices. All lighting should be of low

luminescence, directed downward or toward structures, and shielded to the extent necessary to protect nocturnal biological resources, pursuant to mitigation measure A-2 at page V.A-15.

~~6.Any CSS removed on the property shall require one of the following mitigation measures to offset the loss of CSS: 1) contribution to a restoration program for CSS in the Santa Monica Mountains to an established conservation organization or governmental agency on a 1:1 creation (2:1 enhancement) per/acre basis; or 2) contribution to an established conservation organization or governmental agency in the Santa Monica Mountains to assist with purchase and set-aside of existing CSS habitat in the Santa Monica Mountains on a 2:1 per/acre basis;~~

~~7.Native protected tree species (i.e., CA black walnut and sycamore) removed on-site shall be replaced on a 10:1 basis on-site and utilized around detention basins, parking lots, and within landscape islands. Trees should be a minimum size of 15-gallon material around detention basins and 24 inch box material in ornamental landscape settings. Prior to removal of any trees, a qualified Biologist, Ecologist, or Certified Arborist shall document the number and size of all protected tree species present on-site and proposed for removal, and provide that information to the City of Malibu Biologist. Large, specimen size trees (i.e., equal to or greater than 24 inch diameter at breast height (dbh)) that are multi-trunked should be replaced 4:1 for each trunk over 24 inches dbh. No tree removals shall be permitted during bird nesting season (February 15th through August 15th) unless the tree has been thoroughly inspected by a qualified Biologist to determine that no nesting migratory birds are present in the canopy.~~

6. Native protected tree species (i.e., sycamore) removed on-site shall be replaced in accordance with the Tree Mitigation Plan approved by the City Biologist. The approved plan includes the removal of 6 trees and a replacement on-site at a better than 10:1 ratio.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of the mitigation measure identified above will reduce the level of impact to nesting birds to a less than significant level. Implementation of the additional recommended measures will mitigate potential adverse impacts to biological resources from the Proposed Project to a less than significant level.

By definition, the nature of cumulative impacts precludes the possibility of true mitigation as existing open space conditions are being replaced with development. The loss of open space can only be mitigated for by creating new open space where none exists now. As this is not a practical or viable measure, the cumulative impacts associated with the Project remain potentially significant and unavoidable. However, to lessen the impact of cumulative loss of open space, any native vegetation removed on the property shall require one of the following measures to offset the loss:

7. Contribution to a restoration program for CSS in the Santa Monica Mountains to an established conservation organization or governmental agency on a 1:1 creation (2:1 enhancement) per/acre basis; or