

**Terrestrial Biological Resources Study
Lechuza Beach Project
Malibu, Los Angeles County, California**

Point Dume, California USGS 7.5-minute Topographic Quadrangle Map
Topanga Malibu Sequit Land Grant, Township 1 South, Range 19 West

Prepared for:

Mountains Recreation and Conservation Authority
5810 Ramirez Canyon Road
Malibu, CA 90265
310.589.3230

Contact: Ms. Judi Tamasi, Project Analyst

Prepared by:

Michael Brandman Associates
220 Commerce, Suite 200
Irvine, CA 92602
714.508.4100

Contact: Steve Hongola, Project Manager/Biologist



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SECTION 1: SUMMARY

This report contains the results of a Terrestrial Biological Resources Study conducted by Michael Brandman Associates (MBA) for a 4.1-acre property owned by the Mountains Recreation and Conservation Authority (MRCA). The property, hereinafter referred to as project site or site, is located within Lechuza Beach in the City of Malibu, Los Angeles County, California. The MRCA proposes to expand public access to the beach.

The project site contains suitable habitat for two sensitive wildlife species, California least tern (*Sterna antillarum browni*) and western snowy plover (*Charadrius alexandrinus nivosus*). The site also contains suitable nesting habitat for avian species protected by the Migratory Bird Treaty Act (MBTA) and California Fish and Game (CFG) Code §3503. Prior to any project-related ground disturbance during the nesting season, February to August, a nesting bird survey is required. In addition, a wintering season survey for western snowy plover is recommended prior to any disturbance on or adjacent to the sandy beach from September to January.

The project site does not contain any potentially jurisdictional waters or wetlands. However, the site is located within the vicinity of a potentially jurisdictional drainage feature, as well as the Pacific Ocean. Although impacts are not expected, it should be noted that direct or indirect impacts to jurisdictional waters would require permits from the regulatory agencies.

The project site is located within the City of Malibu's Local Coastal Program (LCP), adjacent to a designated Environmentally Sensitive Habitat Area (ESHA). The type of project that is proposed for the site is permitted within the ESHA.

SECTION 2: INTRODUCTION

At the request of the MRCA, MBA conducted a biological resources study of the Lechuza Beach project site, located in the City of Malibu, Los Angeles County, California. This report provides a detailed description of existing site conditions and was written to comply with all California Environmental Quality Act (CEQA) and local requirements to evaluate biological resources. The information contained herein is intended to provide a baseline for which subsequent evaluations can be made of potential biological resource impacts associated with future projects, based upon the environmental policies and regulations discussed in Appendix D, including the Clean Water Act (CWA), the Federal Endangered Species Act (ESA), the California Endangered Species Act (CESA), and CEQA.

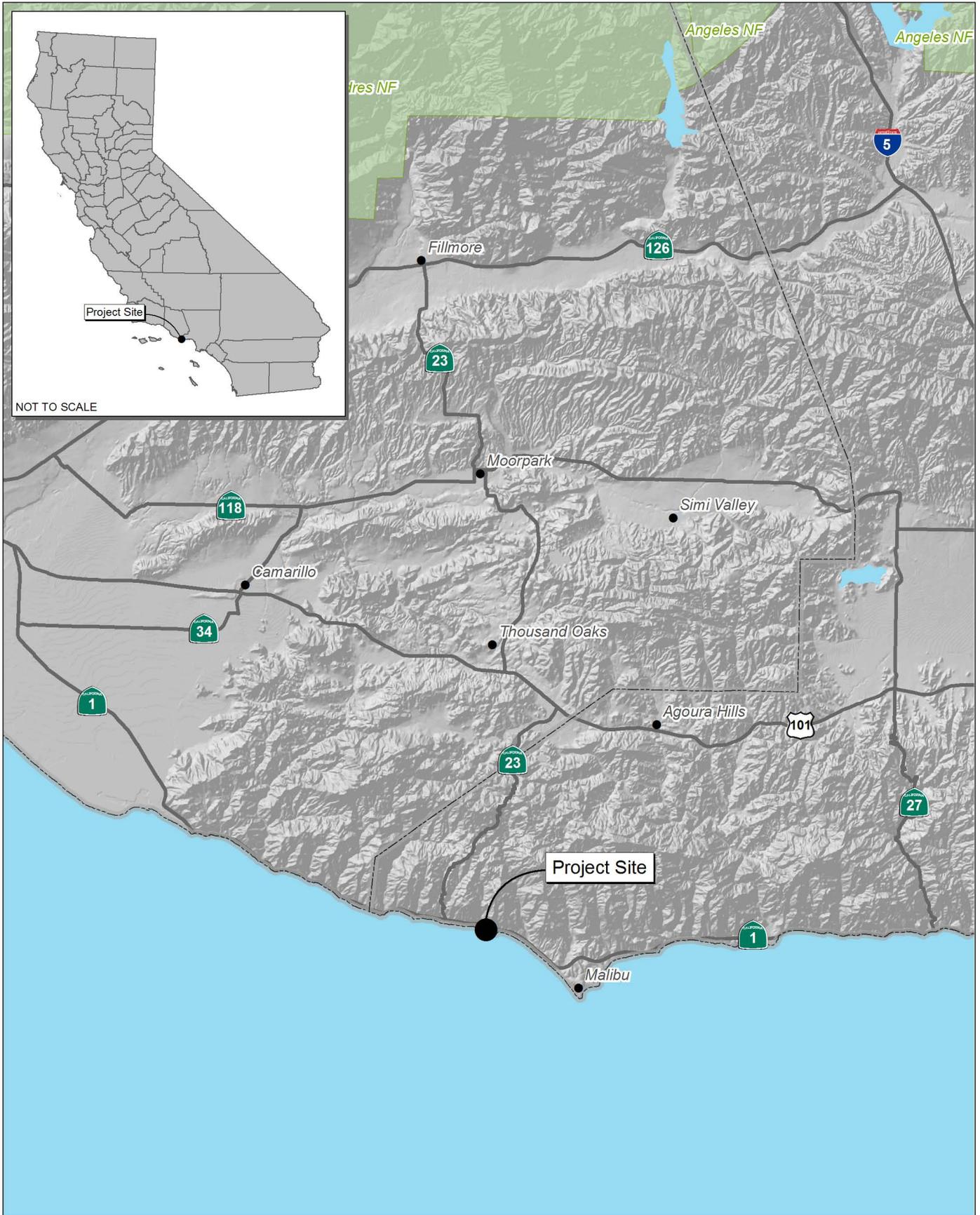
2.1 - PROJECT SITE LOCATION

The project site is generally located south of State Route 1 (Pacific Coast Highway), east of State Route 23, and west of State Route 27, in the City of Malibu, Los Angeles County, California (Exhibit 1). The site is located immediately adjacent to the Pacific Ocean, east of Robert H Meyer Memorial State Beach and west of Lechuza Point, within the southern portion of the Topanga Malibu Sequit Land Grant, Township 1 South, Range 19 West, of the *Point Dume, California*, United States Geological Survey (USGS) 7.5-minute topographic quadrangle map (Exhibit 2).

The project site is comprised of an irregular-shaped parcel approximately 4.1-acres in size, located south of Broad Beach Road, between West Sea Level Drive and East Sea Level Drive (Exhibit 3). It is currently used for public beach access and recreation. Land use adjacent to the site consists of private residential development to the north, east, and west, with the Pacific Ocean located to the immediate south.

2.2 - PROJECT DESCRIPTION

The MRCA proposes to expand public access to Lechuza Beach while protecting and enhancing the Beach's natural resources. Specific project plans are being developed and were not available during the preparation of this report.



Source: Census 2000 Data, The CaSIL, MBA GIS 2006.

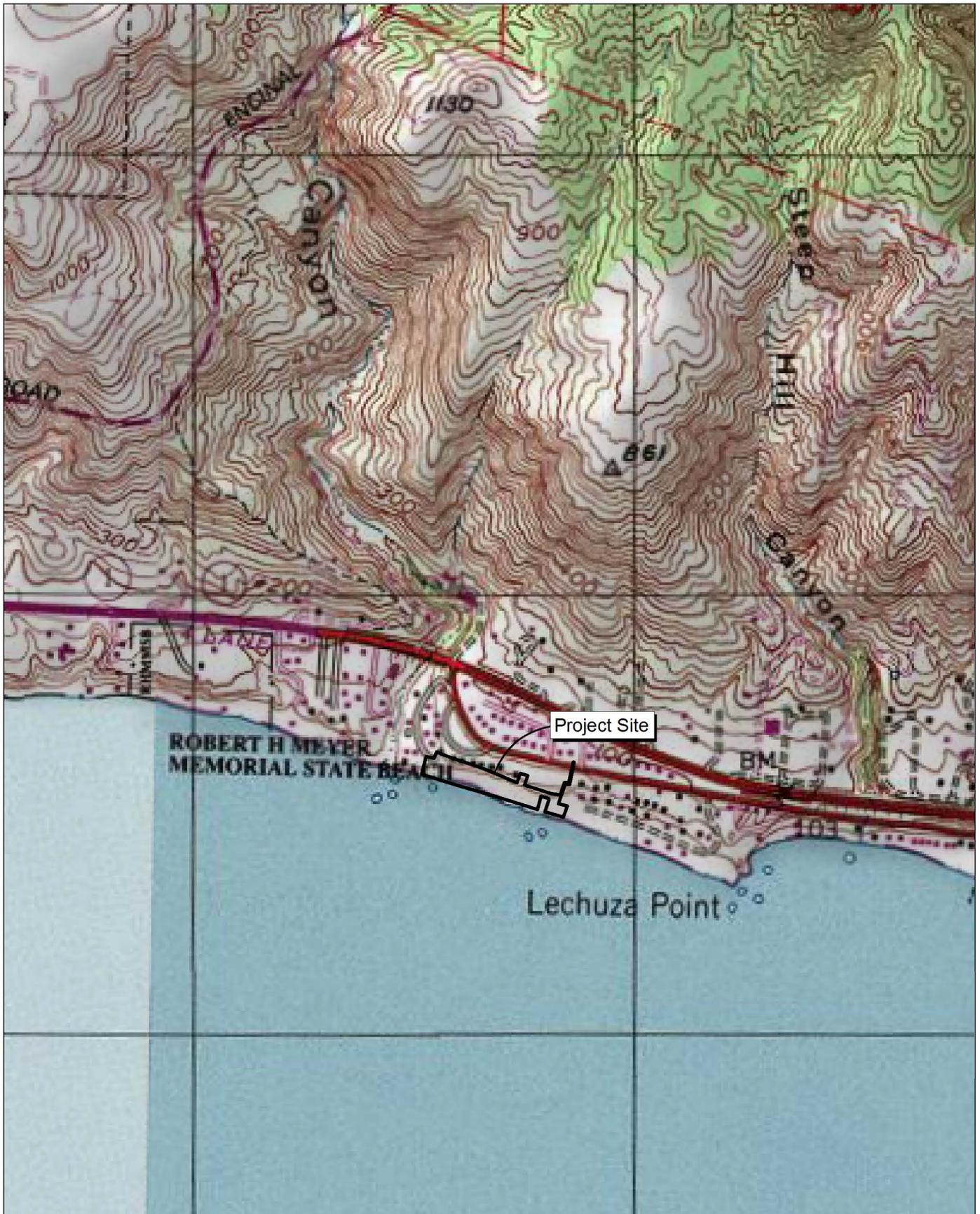


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Exhibit 1 Regional Location Map



Source: TOPO! USGS Point Dume (1995) 7.5' DRG.



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Exhibit 2 Local Vicinity USGS Map



Source: National Agricultural Imagery Program 2005.



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Exhibit 3 Local Vicinity Aerial Map

SECTION 3: METHODOLOGY

Analysis of the biological resources associated with the project site began with a thorough review of relevant literature followed by a reconnaissance-level field survey. The primary objective of the field survey was to document existing site conditions, focusing on the terrestrial environment. An assessment of marine resources in the adjacent coastal waters is not included within this study.

3.1 - LITERATURE REVIEW

The literature review provides a baseline from which to evaluate the biological resources potentially occurring on the project site, as well as the surrounding area. For the purposes of this report, sensitive species are defined as those species designated as threatened or endangered under the ESA or CESA; California Species of Special Concern; California Fully Protected; given a status of 1A, 1B, or 2 by the California Native Plant Society (CNPS); or otherwise considered sensitive under CEQA review.

A compilation of sensitive plant and wildlife species recorded in the vicinity of the project site was derived from the California Department of Fish and Game's (CDFG) California Natural Diversity Database (CNDDDB), a sensitive species and plant community account database. Additional recorded occurrences of plant species found on or near the site were obtained in the CNPS Electronic Inventory of Rare and Endangered Vascular Plants of California database. The CNDDDB GIS database was utilized, together with ArcGIS software, to determine sensitive species located within a 7-mile radius of the site. The CNDDDB and CNPS search was based on the *Point Dume* and surrounding *Triunfo Pass* and *Malibu Beach, California*, USGS 7.5-minute topographic quadrangles. Federal register listings, protocols, and species data provided by the United States Fish and Wildlife Service (USFWS) and CDFG were reviewed in conjunction with anticipated federal and state listed species potentially occurring in the vicinity. These and other documents are listed in Section 7, References.

3.2 - RECONNAISSANCE-LEVEL SURVEY

MBA biologist Steve Hongola conducted the reconnaissance-level field survey on November 21, 2006. Special attention was paid to sensitive habitats or those areas potentially supporting sensitive floral and faunal species. The field survey focused on three primary objectives:

- General habitat assessment
- Plant community mapping
- Special status species and plant community assessment

The reconnaissance-level field survey was conducted on foot during daylight hours. The object of the survey was not to extensively search for every species occurring within the project site, but to ascertain general conditions and identify habitat areas that could be suitable for various sensitive plant and wildlife species. Sensitive species are generally considered potentially present on the site if suitable habitat is present, the area lies within a species' geographic range, and the species has been recorded to occur within the vicinity of the site. MBA's biologist inspected habitats for diagnostic wildlife signs such as nests, burrows, tracks, vocalizations, and noted all direct observations. The biologist also inspected surface litter, and occasionally turned over stones, fallen bark, and tree branches to look for secretive reptiles and amphibians.

3.2.1 - Plant Community Mapping

Plant communities were mapped using 7.5-minute USGS topographic base maps and recent aerial photography (ca 2004). Sensitive or unusual biological resources identified during the literature review were ground-truthed during the reconnaissance-level survey for mapping accuracy. Plant communities within the project site were classified at a general level of detail using the widely accepted descriptions provided in Holland's *Preliminary Descriptions of the Terrestrial Natural Communities of California* (1986 and 1996 update), and modifications were made by MBA's biologist where appropriate. Survey results for plant and wildlife species are described in Section 4 of this report.

3.2.2 - Plant Species

Common plant species observed during the reconnaissance-level field survey were identified by visual characteristics and morphology in the field and recorded in a field notebook. Uncommon and less familiar plants were identified offsite using taxonomical guides. A list of all species observed on the project site was compiled from the survey data, shown in Appendix A. Taxonomic nomenclature used in this study follows Hickman (1993). Common plant names, when not available from Hickman (1993), were taken from Munz (1974). In this report, scientific names are provided immediately following common names of plant species for the first reference only.

3.2.3 - Wildlife Species

Wildlife species detected during the reconnaissance-level field survey by sight, calls, tracks, scat, or other signs were recorded in a field notebook. Notations were made regarding general habitats for sensitive species potentially occurring on the project site based on our preliminary assessment of the cited literature. Field guides were used to assist with species identification during surveys and included Stebbins (2003) for amphibians and reptiles, National Geographic Society (1987) for birds,

and Burt and Grossenheider (1980) for mammals. Common names of wildlife species are standard; however, scientific names are provided immediately following common names for the first reference only. Appendix A lists all wildlife species observed or detected on the project site during the survey.

A survey for raptors, birds of prey, was conducted simultaneously with the reconnaissance-level field survey. Efforts included direct identification of perched owls or soaring raptors, and incidental observation of sign, including burrows, feathers, nests, pellets, and whitewash.

3.3 - JURISDICTIONAL WATERS AND WETLANDS

Prior to conducting the site visit, MBA's biologists reviewed USGS topographic maps and aerial photography to identify any potential natural drainage features and water bodies that may fall within the jurisdiction of the United States Army Corps of Engineers (USACE), the Regional Water Quality Control Board (RWQCB), and/or the CDFG. In general, all surface drainage features indicated as blue-line streams on USGS maps and linear patches of vegetation expected to exhibit evidence of flows are considered potentially subject to state and federal regulatory authority as "waters of the US and/or state." The assessment was not intended as a formal delineation of waters of the U.S. or State but rather to identify areas that may require a formal delineation.

3.4 - WILDLIFE MOVEMENT CORRIDORS

The project site was evaluated as a potential wildlife movement corridor. The scope of the biological resources survey did not include a formal wildlife movement corridor study, such as the use of track plates, camera stations, scent stations, or snares. However, the focus of this study is to determine if the alteration of current land use on the site will have significant impacts on the regional movement of wildlife. These conclusions are based on the information compiled from the literature review of aerial photographs, USGS topographic maps, and resource maps for the vicinity, and the field surveys combined with knowledge of desired topography and resource requirements for wildlife potentially utilizing the site and vicinity.

3.5 - PROBLEMS AND LIMITATIONS

The reconnaissance-level survey was conducted during the late fall season. As a result, most residual annual plants were withered and dead and some perennial species were dormant, making identifications problematic.

Many amphibians, reptiles, and mammals are secretive by nature and some are only nocturnally active, making diurnal observations problematic. Observations of diagnostic signs may provide evidence of occurrence of these species. Otherwise, conclusions regarding potential occurrence are based on consideration of habitat suitability factors.

SECTION 4: EXISTING CONDITIONS

4.1 - WEATHER CONDITIONS

During the field survey, weather conditions included temperatures ranging from 65 to 68 degrees Fahrenheit and onshore winds averaging 4 to 6 miles per hour. Skies were foggy in the morning with partial clearing in the afternoon.

4.2 - ENVIRONMENTAL SETTING

The project site is located south of Broad Beach Road, between West Sea Level Drive and East Sea Level Drive. The site includes the stretch of beach between these two roads, as well as a narrow stairway access easement on the adjacent bluffs, extending south to the beach from Broad Beach Road at the intersection with Bunnie Lane. The site also includes a small square parcel that extends up a portion of the bluffs from the beach. West Sea Level Drive and East Sea Level Drive and three small isolated square parcels to the east are MRCA access easements.

4.2.1 - Topographic Features

Topographically, the project site is located on the beach and adjacent bluffs above the Pacific Ocean, at the base of the Santa Monica Mountains. The site slopes steeply to the south off the bluffs and then more gently from the beach into the ocean. Lechuza Point extends into the ocean southeast of the site. The site ranges in elevation from mean sea level (msl) to approximately 75 feet above msl.

4.2.2 - Soils

The project site contains two different soils: Ahaft-Beaches association and Lockwood-Urban land complex (USDA 1979) (Exhibit 4). The Ahaft-Beaches association and the Lockwood-Urban land complex are each mixtures of two different soil series. A soil series is a group of soils with similar profiles. These profiles include major horizons with similar thickness, arrangement, and other important characteristics.

4.2.3 - Level of Disturbance

Overall, the project site is moderately disturbed. The sandy beach area of the site is used for recreational purposes, including walking and sun bathing, although this use is likely heavier during warmer months of the year. Vegetation on the adjacent bluffs has been degraded due to private residential development and associated planting of non-native, ornamental species.



Source: USDA Soils Data and NAIP 2005.



Exhibit 4 USDA Soils Map

4.3 - PLANT COMMUNITIES

The project site is dominated by ornamental landscape vegetation associated with surrounding residential development, as well as mostly unvegetated sandy beach (Exhibit 5). The ornamental landscape community is present on the bluffs above the beach, and contains sparsely scattered native coastal scrub species as well as ruderal (weedy) species. The sandy beach contains a narrow stand of ornamental vegetation extending off the bluffs, with a few scattered native species. A complete list of plant species observed during the field survey is provided in Appendix A.

4.3.1 - Ornamental Landscape (0.9 Acres)

Ornamental landscape is a human-influenced assemblage of trees and shrubs usually associated with urban development. Ornamental landscape communities are found within various urban and areas and are usually maintained by periodic pruning and/or artificial irrigation. Non-native, ornamental trees and shrubs typically dominate this community type, but native plant species and grasses may also be present. Ornamental landscape communities provide cover and nesting habitat for wildlife species that have adapted to urban areas.

Ornamental landscape occupies 0.9 acres of the project site. It occurs on the coastal bluff areas, including the access easement stairs, and extends slightly onto the sandy beach. Dominant or common non-native species observed within this community include myoporum (*Myoporum laetum*), fig-marigold (*Carpobrotus* sp.), and iceplant (*Mesembryanthemum* sp.). A small stand of planted Monterey cypress (*Cupressus macrocarpa*) trees occurs at the base of the stairs that extend down to the beach from Bunnie Lane.

The ornamental landscape community also contains small stands of remnant native species as well as invasive, ruderal species. Common native species observed include lemonade berry (*Rhus integrifolia*), laurel sumac (*Malosma laurina*), coast goldenbush (*Isocoma menziesii*), California buckwheat (*Eriogonum fasciculatum*), and giant wild-rye (*Leymus condensatus*). Ruderal species present include pampas grass (*Cortaderia selloana*), castor bean (*Ricinus communis*), and short-pod mustard (*Hirschfeldia incana*).

4.3.2 - Sandy Beach (3.2 Acres)

Sandy beach occupies 3.2 acres of the project site. The majority of the sandy beach present within the site lacks vegetation; however, small stands of the ornamental landscape community extend into the northern portion of the beach from the adjacent coastal bluffs. This narrow stand is dominated by non-native ornamental species such as myoporum and fig-marigold. Other scattered species present include natives such as sand verbena (*Abronia maritima*),



Legend

-  Project Boundary
-  MRCA Easement
-  Ornamental Landscape 0.9 acres
-  Sandy Beach 3.2 acres

Source: USDA NAIP 2005 and MBA Field Survey 2006.



Exhibit 5 Plant Communities Map

as well as non-natives such as sea rocket (*Cakile maritima*) and purple fountain-grass (*Pennisetum setaceum*).

4.4 - WILDLIFE

Wildlife activity was moderate during the field survey and observations of wildlife consisted mostly of avian species. Common species observed within the ornamental landscape community include Anna's hummingbird (*Calypte anna*), bushtit (*Psaltiriparus minimus*), yellow-rumped warbler (*Dendroica coronata*), and house finch (*Carpodacus mexicanus*). Species observed at the interface of the bluffs and the beach include black phoebe (*Sayornis nigricans*), common yellowthroat (*Geothlypis trichas*), and California ground squirrel (*Spermophilus beecheyi*). Shorebirds present along the beach's shoreline included black-bellied plover (*Pluvialis squatarola*), willet (*Catoptrophorus semipalmatus*), whimbrel (*Numenius phaeopus*), and sanderling (*Calidris alba*). California gull (*Larus californicus*) and western gull (*Larus occidentalis*) were observed flying over the beach and adjacent coastal waters. A complete list of wildlife species observed on the project site can be found in Appendix A.

SECTION 5: SENSITIVE BIOLOGICAL RESOURCES

5.1 - SENSITIVE PLANT AND WILDLIFE SPECIES

Based upon the literature and database review, 14 sensitive plant species, 6 sensitive plant communities, and 12 sensitive wildlife species have been recorded to occur in the vicinity of the project site, within roughly 7 miles (CNDDDB and CNPS). A discussion of the sensitive plant and wildlife species recorded to occur in the project vicinity is presented in Table 1 and Table 2. These tables identify each sensitive plant and wildlife species, their federal and state status, required habitat, and potential to occur within the site. Based on MBA's literature review, no sensitive species have been previously recorded onsite.

5.1.1 - Sensitive Plant Species

The project site contains marginal habitat for three sensitive plant species that occur in coastal bluff scrub and coastal dune-type communities, Coulter's saltbush (*Atriplex coulteri*), Orcutt's pincushion (*Chaenactis glabriuscula* var. *orcuttiana*), and Blochman's dudleya (*Dudleya blochmaniae* ssp. *blochmaniae*). Each of these species is listed as 1B by the CNPS. However, as discussed in Section 4.3, the site contains only elements of marginal habitat for these species, specifically the remnant native coastal bluff scrub vegetation within the ornamental landscape community. Due to the limited habitat area, dominance of non-native ornamental plant species, and overall human disturbance associated with residential development and recreational beach use, these sensitive plant species are considered to have a low potential to occur within the site. The site does not contain suitable habitat for any of the other 11 sensitive plant species recorded to occur in the vicinity.

Sensitive Plant Communities

Based on MBA's literature review the following sensitive plant communities have been recorded within roughly seven miles of the project site:

- Southern California coastal lagoon
- Southern California steelhead stream
- Southern coast live oak riparian forest
- Southern coastal salt marsh
- Southern sycamore alder riparian woodland
- Valley oak woodland

None of the sensitive plant communities listed above are present on the project site. The site contains elements of coastal bluff scrub, a plant community generally considered sensitive by the resource agencies. However, the site is dominated by ornamental landscape vegetation and the elements of coastal bluff scrub do not account for enough coverage to warrant consideration as a distinct plant community.

5.1.2 - Sensitive Wildlife Species

The project site contains suitable habitat for two sensitive wildlife species that occur in sandy beach habitat, California least tern and western snowy plover. Due to disturbance, the site's sandy beach is only marginally suitable nesting habitat for both species. However, it is moderate quality wintering habitat for western snowy plover. No sensitive wildlife species were observed on the project site during the field survey. Based on MBA's literature review, no sensitive wildlife species have been previously recorded onsite. The site contains no suitable habitat for any of the other nine sensitive wildlife species known to occur in the vicinity.

Table 1: Sensitive Plant Species

Species		Status			Preferred Habitat	Life Form	Blooming Period	Potential to Occur / Known Occurrence / Suitable Habitat
Scientific Name	Common Name	USFWS	CDFG	CNPS				
<i>Astragalus brauntonii</i>	Braunton's milk-vetch	FE	—	1B	Closed-cone coniferous forest, chaparral, coastal scrub, and valley and foothill grassland habitats. Specifically found in recent burns or disturbed areas, in stiff gravelly clay soils overlying granite or limestone. Elevation limits: 4 to 640m.	Perennial herb	February - July	Low. Observed approximately 3 miles east of the project site. No suitable habitat present.
<i>Atriplex coulteri</i>	Coulter's saltbush	—	—	1B	Coastal bluff scrub, coastal dunes, coastal scrub, and valley and foothill grassland. Prefers ocean bluffs and ridgetops as well as alkaline low places. Elevation limits: 10 to 440m.	Perennial herb	March - October	Low. Observed approximately 4 miles southeast of the project site. Marginal habitat onsite is significantly disturbed and limited in area.
<i>Baccharis malibuensis</i>	Malibu baccharis	—	—	1B	Coastal scrub, chaparral, and cismontane woodland. Found in Conejo volcanic substrates, often on exposed roadcuts. Sometimes occupies oak woodland habitat. Elevation limits: 150 to 260m.	Deciduous shrub	August	Not likely. Observed approximately 7 miles northeast of the project site. No suitable habitat present. Site is below species' elevation limits.

Table 1 (Cont.): Sensitive Plant Species

Species		Status			Preferred Habitat	Life Form	Blooming Period	Potential to Occur / Known Occurrence / Suitable Habitat
Scientific Name	Common Name	USFWS	CDFG	CNPS				
<i>Calochortus plummerae</i>	Plummer's mariposa lily	—	—	1B	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest. Occurs on rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire. Elevation limits: 90 to 1610m.	Bulbiferous herb	May - July	Low. Observed approximately 2 miles west of the project site. No suitable habitat present. Site is below species' elevation limits.
<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>	Orcutt's pincushion	—	—	1B	Coastal bluff scrub and coastal dunes. Prefers sandy sites. Elevation limits: 3 to 100m.	Annual herb	January - August	Low. Observed approximately 4 miles west of the project site. Marginal habitat onsite is significantly disturbed and limited in area.
<i>Deinandra minthornii</i>	Santa Susanna tarplant	—	SR	1B	Chaparral and coastal scrub. Found on sandstone outcrops and crevices, in shrublands. Elevation limits: 280 to 760m.	Deciduous shrub	July - November	Low. Observed approximately 1.5 miles northeast of the project site. No suitable habitat present. Site is below species' elevation limits.
<i>Delphinium parryi</i> ssp. <i>blochmaniae</i>	Dune larkspur	—	—	1B	Chaparral, coastal dunes (maritime). Found on rocky areas and dunes. Elevation limits: 0 to 200m.	Perennial herb	April - May	Not likely. Observed approximately 7 miles north of the project site. No suitable habitat present.

Table 1 (Cont.): Sensitive Plant Species

Species		Status			Preferred Habitat	Life Form	Blooming Period	Potential to Occur / Known Occurrence / Suitable Habitat
Scientific Name	Common Name	USFWS	CDFG	CNPS				
<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>	Blochman's dudleya	—	—	1B	Coastal scrub, coastal bluff scrub, and valley and foothill grassland. Prefers open, rocky slopes, often in shallow clays over serpentine or in rocky areas with little soil. Elevation limits: 5 to 450m.	Perennial herb	April - June	Low. Observed over 7 miles east of the project site. Marginal habitat onsite is significantly disturbed and limited in area.
<i>Dudleya cymosa</i> ssp. <i>agourensis</i>	Agoura Hills dudleya	FT	—	1B	Chaparral and cismontane woodland. Found on rocky, volcanic breccia. Elevation limits: 200 to 500m.	Perennial herb	May - June	Not likely. Observed approximately 7 miles north of the project site. No suitable habitat present.
<i>Dudleya cymosa</i> ssp. <i>marcescens</i>	Marcescent dudleya	FT	SR	1B	Chaparral. Found on sheer rock surfaces and rocky volcanic cliffs. Elevation limits: 180 to 520m.	Perennial herb	April - July	Not likely. Observed approximately 4 miles north of the project site. No suitable habitat present.
<i>Dudleya cymosa</i> ssp. <i>ovatifolia</i>	Santa Monica Mountains dudleya	FT	—	1B	Chaparral and coastal scrub. Found in canyons on sedimentary conglomerates; primarily north-facing slopes. Elevation limits: 210-500m.	Perennial herb	March - June	Not likely. Observed approximately 4 miles northeast of the project site. No suitable habitat present.

Table 1 (Cont.): Sensitive Plant Species

Species		Status			Preferred Habitat	Life Form	Blooming Period	Potential to Occur / Known Occurrence / Suitable Habitat
Scientific Name	Common Name	USFWS	CDFG	CNPS				
<i>Eriogonum crocatum</i>	Conejo buckwheat	—	SR	1B	Chaparral, coastal scrub, and valley and foothill grassland. Found on Conejo volcanic outcrops and rocky sites. Elevation limits: 50 to 580m.	Perennial herb	April - July	Not likely. Observed approximately 6.5 miles northeast of the project site. No suitable habitat present.
<i>Pentachaeta lyonii</i>	Lyon's pentachaeta	FE	SE	1B	Chaparral and valley and foothill grassland. Prefers the edges of clearings in chaparral and is usually found at the interface of grassland and chaparral or at the edges of firebreaks. Elevation limits: 30 to 630m.	Annual herb	March - August	Not likely. Observed approximately 5 miles. Northwest of the project site. No suitable habitat present.
<i>Thelypteris puberula</i> var. <i>sonorensis</i>	Sonoran maiden fern	—	—	2	Meadows and seeps. Found along streams and seepage areas. Elevation limits: 50 to 550m.	Rhizomatous herb	January - September	Low. Observed approximately 0.5 miles north of the project site. No suitable habitat present. Site is below species' elevation limits.
U.S. Fish and Wildlife Service FE Federal Endangered FT Federal Threatened PE Proposed Endangered PT Proposed Threatened FC Federal Candidate FSC Species of Concern* *No longer recognized as a federal designation.		California Department of Fish and Game SE State Endangered ST State Threatened SR State Rare			California Native Plant Society 1A Plants presumed extinct in California. 1B Plants rare, threatened, or endangered in California and elsewhere. 2 Plants rare, threatened, or endangered in California, but more common elsewhere. 3 Plants about which we need more information. 4 Plants of limited distribution.			

Table 1 (Cont.): Sensitive Plant Species

Species		Status			Preferred Habitat	Life Form	Blooming Period	Potential to Occur / Known Occurrence / Suitable Habitat
Scientific Name	Common Name	USFWS	CDFG	CNPS				
<p>Not Likely - There are no present or historical records of the species occurring on or in the immediate vicinity, (within 3 miles) of the project site and the diagnostic habitats strongly associated with the species do not occur on or in the immediate vicinity of the site.</p> <p>Low - There is a historical record of the species in the vicinity of the project site and potentially suitable habitat on site, but existing conditions, such as density of cover, prevalence of non-native species, evidence of disturbance, limited habitat area, isolation, substantially reduce the possibility that the species may occur. The site is above or below the recognized elevation limits for this species.</p> <p>Moderate - The diagnostic habitats associated with the species occur on or in the immediate vicinity of the project site, but there is not a recorded occurrence of the species within the immediate vicinity (within 3 miles). Some species that contain extremely limited distributions may be considered moderate, even if there is a recorded occurrence in the immediate vicinity.</p> <p>High - There is both suitable habitat associated with the species and a historical record of the species on or in the immediate vicinity of the project site (within 3 miles).</p> <p>Species Present - The species was observed on the project site at the time of the survey or during a previous biological survey.</p>								

Table 2: Sensitive Wildlife Species

Species		Status			Required Habitat	Potential to Occur / Known Occurrence / Suitable Habitat
Scientific Name	Common Name	Federal	State	Other		
Fish						
<i>Eucyclogobius newberryi</i>	Tidewater goby	FE	—	CDFG: CSC	Brackish water habitats along the California coast from Agua Hedionda Lagoon in San Diego County to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches, the species needs fairly still but not stagnant water and high oxygen levels.	Not likely. Observed over 7 miles east of the project site. No suitable habitat present.
<i>Gila orcuttii</i>	Arroyo chub	—	—	CDFG: CSC	Los Angeles basin south coastal streams. Low water stream sections with mud or sand bottoms. Species feeds heavily on aquatic vegetation and associated invertebrates.	Not likely. Observed over 7 miles east of the project site. No suitable habitat present.
<i>Oncorhynchus mykiss irideus</i>	Southern steelhead - southern California ESU	FE	—	CDFG: CSC	Populations occur from Santa Maria River south to San Mateo Creek in San Diego County. Southern steelhead likely have greater physiological tolerances to warmer water and more variable conditions.	Not likely. Observed approximately 4 miles northwest of the project site. No suitable habitat present.
Reptiles and Amphibians						
<i>Phrynosoma coronatum blainvillii</i>	Coast (San Diego) horned lizard	—	—	CDFG: CSC	Inhabits coastal sage scrub and chaparral in arid and semi-arid climates. Prefers friable, rocky, or shallow sandy soils.	Not likely. Observed approximately 4 miles southeast of the project site. No suitable habitat present.
<i>Emmys marmorata pallida</i>	Southwestern pond turtle	—	—	CDFG: CSC	Inhabits permanent or nearly permanent bodies of water in many habitat types, below 2000m. Species requires basking sites such as partially submerged logs, vegetation mats, or open mud banks and needs suitable nesting sites.	Not likely. Information on exact occurrences in vicinity of project site not available. No suitable habitat present.

Table 2 (Cont.): Sensitive Wildlife Species

Species		Status			Required Habitat	Potential to Occur / Known Occurrence / Suitable Habitat
Scientific Name	Common Name	Federal	State	Other		
<i>Thamnophis hammondi</i>	Two-striped garter snake	—	—	CDFG: CSC	Coastal California from the vicinity of Salinas to northwest Baja California, from sea level to about 7,000 ft. in elevation. Highly aquatic, found in or near permanent fresh water, often along streams with rocky beds and riparian growth.	Not likely. Observed approximately 7 miles northeast of the project site. No suitable habitat present.
Birds						
<i>Aquila chrysaetos</i>	Golden eagle	—	—	CDFG: CSC	(Nesting and wintering) rolling foothills mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; will also nest in large trees in open areas.	Not likely. Observed approximately 6.5 miles northwest of the project site. No suitable habitat present.
<i>Charadrius alexandrinus nivosus</i>	Western snowy plover	FT	—	CDFG: CSC	(Nesting) Sandy beaches, salt pond levees, and shores of large alkali lakes. Needs sandy, gravelly, or friable soils for nesting.	Moderate. Known to nest approximately 15 miles west of the project site. Suitable foraging habitat present. Nesting habitat is marginal in quality due to human disturbance.
<i>Pelecanus occidentalis californicus</i>	California brown pelican	FE	SE	—	(Nesting colonies) Species is a colonial nester on coastal islands just outside the surf line. Nests on coastal islands of small to moderate size that afford immunity from attack by ground-dwelling predators.	Low. Observed offshore in vicinity of site during field survey. No suitable nesting habitat present. Suitable foraging habitat present offshore.
<i>Sterna antillarum browni</i>	California least tern	FE	SE	—	(Nesting colonies) Nests along the coast from San Francisco bay south to northern Baja California. Colonial breeder on bare or sparsely vegetated, flat substrates, including sandy beaches, alkali flats, land fills, or paved areas.	Moderate. Known to nest approximately 15 miles west of the project site. Suitable foraging habitat present offshore. Nesting habitat is marginal in quality due to human disturbance.

Table 2 (Cont.): Sensitive Wildlife Species

Species		Status			Required Habitat	Potential to Occur / Known Occurrence / Suitable Habitat
Scientific Name	Common Name	Federal	State	Other		
<i>Riparia riparia</i>	Bank swallow	—	ST	—	(Nesting) Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	Not likely. Observed approximately 7 miles north of the project site. No suitable habitat present.
Mammals						
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	—	—	CDFG: CSC	Coastal scrub of southern California from San Diego County to San Luis Obispo County. Species prefers moderate to dense canopies and is particularly abundant in rock outcrops and rocky cliffs and slopes.	Not likely. Observed over 7 miles east of the project site. No suitable habitat present.
Federal		State			Other	
FE	Federal Endangered	SE	State Endangered		CDFG:CSC	California Species of Concern
FT	Federal Threatened	ST	State Threatened		CDFG:FP	Fully Protected Species
FSC	Federal Species of Concern				CDFG: P	Protected Species
PFT	Proposed Federal Threatened					
C	Candidate for Federal Listing					
D	Delisted					
<p>Not Likely - There are no present or historical records of the species occurring on or in the immediate vicinity, (within 3 miles) of the project site and the diagnostic habitats strongly associated with the species do not occur on or in the immediate vicinity of the site.</p> <p>Low - There is a historical record of the species in the vicinity of the project site and potentially suitable habitat on site, but existing conditions, such as density of cover, prevalence of non-native species, evidence of disturbance, limited habitat area, isolation, substantially reduce the possibility that the species may occur. The site is above or below the recognized elevation limits for this species.</p> <p>Moderate - The diagnostic habitats associated with the species occur on or in the immediate vicinity of the project site, but there is not a recorded occurrence of the species within the immediate vicinity (within 3 miles). Some species that contain extremely limited distributions may be considered moderate, even if there is a recorded occurrence in the immediate vicinity.</p> <p>High - There is both suitable habitat associated with the species and a historical record of the species on or in the immediate vicinity of the project site (within 3 miles).</p> <p>Species Present - The species was observed on the project site at the time of the survey or during a previous biological survey.</p>						

Nesting Birds

The project site contains suitable nesting habitat for several tree and shrub-nesting avian species that are protected by the MBTA and CFG Code §3503. The ornamental landscape vegetation on the bluffs and extending into the upper portions of the beach provides suitable habitat for avian species that nest in disturbed communities, such as mourning dove (*Zenaida macroura*) and northern mockingbird (*Mimus polyglottos*). As previously discussed, the sandy beach is marginal nesting habitat for California least tern and western snowy plover.

5.2 - JURISDICTIONAL WATERS AND WETLANDS

During the field survey, a qualified wetlands delineator evaluated the project site for the presence of potentially jurisdictional waters and wetlands under the USACE, RWQCB, and/or CDFG. No potentially jurisdictional waters or wetlands are present within site boundaries. An unnamed USGS blue-line drainage features occurs in the vicinity of the site, entering the Pacific Ocean to the west (Exhibit 2). The Pacific Ocean itself is considered a navigable water subject to the jurisdiction of the USACE, extending from the mean high water to three nautical miles offshore.

5.3 - WILDLIFE MOVEMENT CORRIDORS

Wildlife movement corridors link areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated “islands” of wildlife habitat, separating different populations of a single species. Corridors effectively act as links between these populations.

The project site is surrounded by residential development to the north and the Pacific Ocean to the south. These features currently limit wildlife movement onsite and in the surrounding area, and the site does not occur within a narrow corridor that links large areas of undeveloped open space. Therefore, the site is not located within a significant wildlife movement corridor. Common wildlife species such as skunks, opossums, and raccoons can be expected to travel though the site and neighboring developed areas, but the site does not provide narrow connectivity between large areas of open space on a local or regional scale. However, it should be noted that the sandy beach facilitates the movement of shorebirds along the coast.

5.4 - CITY OF MALIBU LOCAL COASTAL PROGRAM

The project site is located within the City of Malibu LCP. This LCP guides development and protection of natural resources in the coastal zone in partnership with the California Coastal Commission (CCC) under the California Coastal Act of 1976. Areas within the LCP that contain

sensitive biological resources or that could be easily degraded by human activities are designated as ESHAs. Although the site is not located within a designated ESHA, near-shore shallow water fish and kelp bed habitat that is designated as an ESHA occurs offshore to the south of the site. The site also provides suitable foraging habitat for western snowy plover. As such, it is considered located within an ESHA based on the ESHA determination in the LCPs Local Implementation Plan.

SECTION 6: RECOMMENDATIONS

6.1 - SENSITIVE PLANT SPECIES

Focused surveys are typically recommended for sensitive plant species that are federally or state-listed as endangered or threatened and have moderate to high potential to occur on the project site. The site does not contain suitable habitat for any federally or state-listed plant species. The site does contain marginal habitat for three CNPS List 1B sensitive plant species, Coulter's saltbush, Orcutt's pincushion, and Blochman's dudleya. Potentially suitable habitat for these species is very limited in area and degraded due to disturbances from adjacent residential development. These sensitive plant species are considered to have a low potential to occur within the site and focused surveys are not recommended.

6.2 - SENSITIVE WILDLIFE SPECIES

Focused surveys are typically recommended for sensitive wildlife species that are federally or state-listed as endangered or threatened and have moderate to high potential to occur on the project site. The site contains suitable habitat for two sensitive wildlife species, both of which are either endangered or threatened.

6.2.1 - California Least Tern

The California least tern is both federally and state-listed as endangered. This species typically nests on open, undisturbed sandy or gravelly beaches and forages nearby in shallow-water coastal areas and estuaries. The least tern is a migratory species that nests along the California coast from April through August but winters in southern latitudes.

The closest recorded California least tern nesting colony occurs approximately 15 miles west of the site. Due to beach disturbance from recreational use during the spring and summer seasons and lack of shallow-water estuarine habitat in the near vicinity, least terns have a low potential to nest within the site, although the species may forage offshore. Given these factors, and that potential projects within the site will be limited to the coastal bluff areas, it is unlikely that project activities will result in direct or indirect take of the species. However, if project-related activities will occur during the nesting season, from February to August, a nesting season survey is recommended to ensure that California least tern will not be impacted. This survey is addressed in detail in Section 6.2.3, below.

6.2.2 - Western Snowy Plover

The western snowy plover is a sensitive avian species that is federally threatened and a California species of special concern. Western snowy plovers nest on open, undisturbed sandy beaches or salt ponds and forage along the shorelines of these habitats. This species is migratory but is present year-round in California. It nests mainly in inland colonies but forms small nesting colonies along the coast and winters on coastal beaches.

Western snowy plovers are known to nest in small colonies adjacent to the California least tern nesting colony mentioned above, approximately 15 miles west of the project site. As with this species, western snowy plovers have a low potential to nest on the site due to disturbance from recreational use. However, the species likely winters along the sandy beach, which provides moderate quality foraging habitat. To ensure that impacts do not occur during the nesting season, a nesting survey is recommended prior to any project-related activities, as described in Section 6.2.3, below. In addition, a pre-construction survey is recommended for project-related activities that occur on the sandy beach during the winter season, from September to January, to determine if wintering snowy plovers are present. Depending on the outcome of this survey, a biological monitor may be required during project activities.

6.2.3 - Nesting Birds

The project site contains suitable nesting habitat for several tree, shrub, and ground-dwelling avian species. Therefore, pursuant to the MBTA and CFG Code, removal of any trees, shrubs, or any other potential nesting habitat should be conducted outside the avian nesting season. The nesting season generally extends from early February through August, but can vary slightly from year to year based upon seasonal weather conditions.

If suitable nesting habitat must be removed during the nesting season, a qualified biologist should conduct a nesting bird survey to identify any potential nesting activity. If active nests are observed, construction activity must be prohibited within a 500-foot buffer around the nest until the nestlings have fledged. All construction activity within the vicinity of active nests must be conducted in the presence of a qualified biological monitor. Construction activity may encroach into the buffer area at the discretion of the biological monitor.

6.3 - JURISDICTIONAL WATERS AND WETLANDS

No potentially jurisdictional waters or wetlands are present within the project site. One unnamed USGS blue-line drainage feature occurs in the vicinity of the site to the west. In addition, the site borders the Pacific Ocean, which is subject to the jurisdiction of the USACE. Proposed projects

within the site must avoid direct or indirect impacts (i.e. the deposition of fill) of these jurisdictional waters. Given that no jurisdictional waters or wetlands occur onsite and proposed project activities will likely be limited to coastal bluff areas, impacts to jurisdictional waters are not anticipated.

6.4 - WILDLIFE MOVEMENT CORRIDORS

The project site is not located within a significant wildlife movement corridor. Although the sandy beach provides for migratory shorebird movement along the coast, proposed project activities are not likely to result in any impacts that might obstruct shorebird movement. No further action is recommended.

6.5 - CITY OF MALIBU LOCAL COASTAL PROGRAM

The project site is located within the City of Malibu's LCP, adjacent to a designated ESHA. The designated ESHA is the near-shore shallow water fish and kelp bed habitat that occurs offshore to the south. The site is located within the buffer of the ESHA and therefore, based on the determination of the LCPs Local Implementation Plan, it is considered to be within the ESHA. However, proposed project activities within the site will consist of improving public access to the beach. This type of development is permitted within the ESHA, per the LCPs Local Implementation Plan.

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SECTION 8: PROJECT RESPONSIBILITY

Principal-In-Charge	Thomas J. McGill, Ph.D.
Senior Project Biologist.....	Scott Crawford
Project Manager	Steve Hongola
Project Biologist.....	Steve Hongola
Biological Resources Assessment Report: Primary Author	Steve Hongola
Technical Review of Biological Resources Assessment.....	Scott Crawford
Field Personnel.....	Steve Hongola
Report Editor	Diana Thompson
Word Processor	Vallie Myers
Graphics.....	Mike Serrano, Karlee Haggins
Reprographics.....	José Morelos
Photography (Site Photographs).....	Steve Hongola

All staff responsible for report preparation and fieldwork are MBA employees and can be contacted at 714.508.4100.

Appendix A: Floral and Faunal Compendia

FLORAL COMPENDIUM

Gymnosperms

Cupressaceae

- * *Cupressus macrocarpa*
- * *Juniperus* sp.

Cypress Family

- Monterey cypress
- juniper

Angiosperms (Dicotyledons)

Anacardiaceae

- Malosma laurina`*
- Rhus integrifolia*

Sumac or Cashew Family

- laurel sumac
- lemonade berry

Apiaceae

- * *Foeniculum vulgare*

Carrot Family

- sweet fennel

Araliaceae

- * *Hedera helix*

Ginseng Family

- English ivy

Asteraceae

- Ambrosia chamissonis*
- Encelia californica*
- Isocoma menziesii*

Sunflower Family

- beach-bur
- bush sunflower
- coast goldenbush

Aizoaceae

- Carpobrotus* sp.
- Mesembryanthemum* sp.

Fig-Marigold Family

- fig-marigold
- iceplant

Brassicaceae

- * *Cakile maritima*
- * *Hirschfeldia incana*
- * *Lobularia maritima*

Mustard Family

- sea rocket
- short-pod mustard
- sweet alyssum

Chenopodiaceae

- Atriplex lentiformis*

Goosefoot Family

- big saltbush

Convolvulaceae

- Calystegia* sp.

Morning-glory Family

- morning glory

Euphorbiaceae

- * *Ricinus communis*

Spurge Family

- castor bean

Fabaceae

- * *Acacia* sp.
- Melilotus* sp.

Legume Family

- acacia
- sweetclover

Myoporaceae

- * *Myoporum laetum*

Myoporum Family

- myoporum

FLORAL COMPENDIUM (CONT.)

Angiosperms (Dicotyledons) (cont.)

Myrtaceae

* *Eucalyptus* sp.

Myrtle Family

gum tree

Nyctaginaceae

Abronia maritima

Four O'Clock Family

sand verbena

Polygonaceae

Eriogonum fasciculatum

Buckwheat Family

California buckwheat

Solanaceae

* *Nicotiana glauca*

Nightshade Family

tree tobacco

Angiosperms (Monocotyledons)

Arecaceae

Phoenix sp.

Palm Family

date palm

Cyperaceae

Cyperus sp.

Sedge Family

nutsedge

Poaceae

* *Arundo donax*

* *Cortaderia selloana*

* *Bromus diandrus*

* *Hordeum vulgare*

Leymus condensatus

* *Pennisetum setaceum*

Grass Family

giant reed

pampas grass

ripgut brome

barley

giant wild-rye

purple fountain grass

* Non-native species

FAUNAL COMPENDIUM

Invertebrates

Nymphalidae

Danaus plexippus

Brushfoots

monarch

Birds

Pelecanidae

Pelecanus occidentalis

Pelicans

brown pelican

Charadriidae

Pluvialis squatarola

Lapwings, Plovers

black-bellied plover

Scolopacidae

Calidris alba

Catoptrophorus semipalmatus

Numenius phaeopus

Sandpipers, Phalaropes

sanderling

willet

whimbrel

Laridae

Larus californicus

Larus occidentalis

Skuas, Gulls, Terns, Skimmers

California gull

western gull

Trochilidae

Calypte anna

Hummingbirds

Anna's hummingbird

Tyrannidae

Sayornis nigricans

Sayornis saya

Tyrant Flycatchers

black phoebe

Say's phoebe

Corvidae

Corvus brachyrhynchos

Jays and Crows

American crow

Timaliidae

Chamaea fasciata

Babblers

wrentit

Aegithalidae

Psaltriparus minimus

Bushtits

bushtit

Troglodytidae

Thryomanes bewickii

Wrens

Bewick's wren

Mimidae

Mimus polyglottos

Mockingbirds, Thrashers

northern mockingbird

FAUNAL COMPENDIUM (CONT.)

Birds (cont.)

Sturnidae

* *Sturnus vulgaris*

Parulidae

Dendroica coronata

Geothlypis trichas

Emberizidae

Zonotrichia leucophrys

Fringillidae

Carpodacus mexicanus

Starlings

European starling

Wood Warblers

yellow-rumped warbler

common yellowthroat

Emberizids

white-crowned sparrow

Finches

house finch

Mammals

Sciuridae

Spermophilus beecheyi

Squirrels

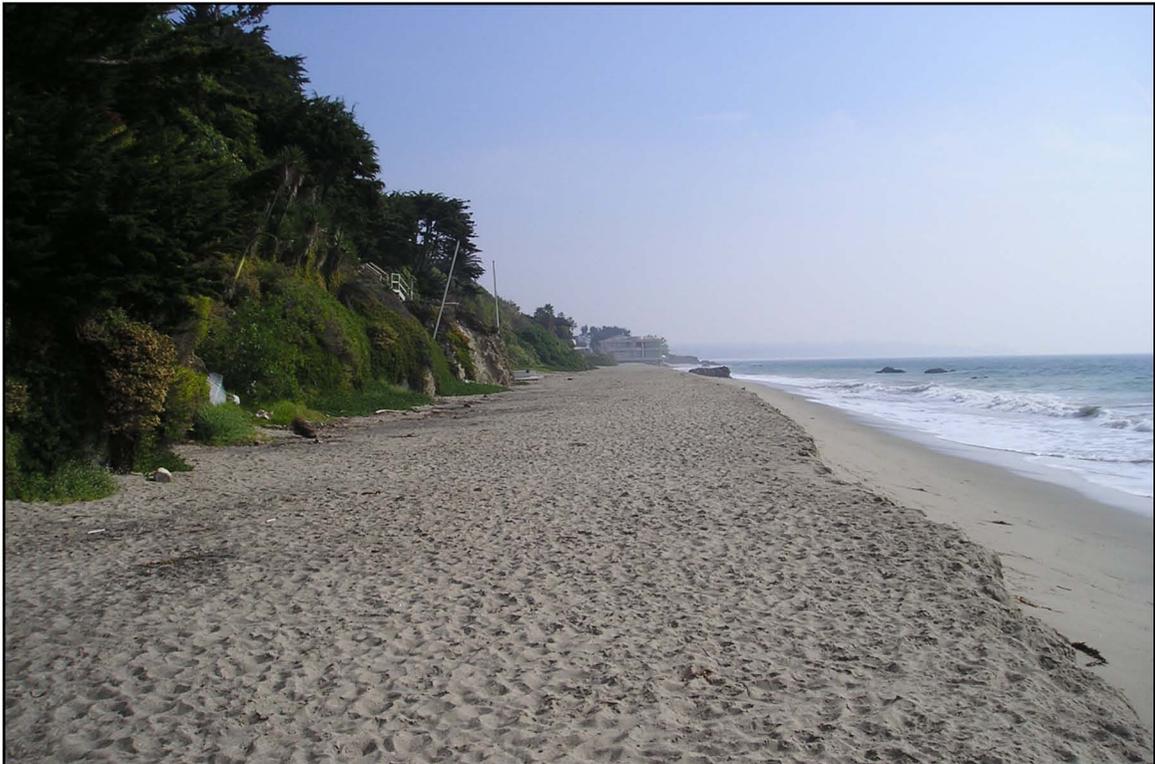
California ground squirrel

* non-native species

Appendix B: Site Photographs



Photograph 1: View of Lechuza Beach facing west with vegetation dominated by ornamental plant species to the right and un-vegetated sandy beach to the center/left.



Photograph 2: View of Lechuza Beach facing east with ornamental vegetation on bluff to left and un-vegetated sandy beach to center/right.

Source: Michael Brandman Associates, 2006.



Michael Brandman Associates

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Appendix B Site Photographs 1 and 2



Photograph 3: View of bluff above the central portion Lechuza Beach facing northwest, dominated by ornamental species such as myoporum and iceplant with scattered native species such as laurel sumac.



Photograph 4: View of bluff above the western portion of Lechuza Beach facing northwest, dominated by ornamental vegetation with limited coverage by native species.

Source: Michael Brandman Associates, 2006.



Michael Brandman Associates

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Appendix B Site Photographs 3 and 4



Photograph 5: View of eastern portion of Lechuza Beach facing west, with private lots to the right and un-vegetated sandy beach to center/left.



Photograph 6: View of stairway access to Lechuza Beach facing north with vegetation dominated by ornamental species such as iceplant and planted Monterey cypress trees.

Source: Michael Brandman Associates, 2006.



Michael Brandman Associates

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Appendix B Site Photographs 5 and 6

Appendix C: Regulatory Compliance

REGULATORY COMPLIANCE

SENSITIVE PLANT AND WILDLIFE SPECIES

Sensitive species are native species that have been accorded special legal or management protection because of concern for their continued existence. There are several categories of protection at both federal and state levels, depending on the magnitude of threat to continued existence and existing knowledge of population levels.

Federal Endangered Species Act

The United States Fish and Wildlife Service (USFWS) administers the Federal Endangered Species Act (ESA). The ESA provides a process for listing species as either threatened or endangered, and methods of protecting listed species. The ESA defines as “endangered” any plant or animal species that is in danger of extinction throughout all or a significant portion of its known geographic range. A “threatened” species is a species that is likely to become endangered. A “proposed” species is one that has been officially proposed by the USFWS for addition to the federal threatened and endangered species list.

ESA §9 prohibits “take” of threatened or endangered species. The term “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in such conduct. Take can include disturbance to habitats used by a threatened or endangered species during any portion of its life history. The presence of any federally threatened or endangered species in a project area generally imposes severe constraints on development, particularly if development would result in “take” of the species or its habitat. Under the regulations of the ESA, the USFWS may authorize “take” when it is incidental to, but not the purpose of, an otherwise lawful act.

California Endangered Species Act

The California Department of Fish and Game (CDFG) administers the California Endangered Species Act (CESA). The State of California considers an “endangered” species one whose prospects of survival and reproduction are in immediate jeopardy. A “threatened” species is one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the absence of special protection or management. A “rare” species is one present in such small numbers throughout its portion of its known geographic range that it may become endangered if its present environment worsens. The rare species designation applies to California native plants. State threatened and endangered species are fully protected against take, as defined above. The term “species of special concern” is an informal designation used by CDFG for some declining wildlife

species that are not state candidates for listing. This designation does not provide legal protection, but signifies that these species are recognized as sensitive by CDFG.

California Native Plant Society

The California Native Plant Society (CNPS) is a California resource conservation organization that has developed an inventory of California's sensitive plant species. This inventory summarizes information on the distribution, rarity, and endangerment of California's vascular plants. The inventory is divided into four lists based on the rarity of the species. In addition, the CNPS provides an inventory of plant communities that are considered sensitive by the state and federal resource agencies, academic institutions, and various conservation groups. Determination of the level of sensitivity is based on the number and size of remaining occurrences as well as recognized threats.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) protects all common wild birds found in the United States (U.S.) except the house sparrow, starling, feral pigeon, and resident game birds such as pheasant, grouse, quail, and wild turkey. Resident game birds are managed separately by each state. The MBTA makes it unlawful for anyone to kill, capture, collect, possess, buy, sell, trade, ship, import, or export any migratory bird including feathers, parts, nests, or eggs.

California Fish and Game Code - §3503 and §3511

The CDFG administers the California Fish and Game Code (CFG Code). There are particular sections of the CFG Code that are applicable to natural resource management. For example, §3503 of the CFG Code states it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird that is protected under the MBTA. CFG Code §3503.5 further protects all birds in the orders Falconiformes and Strigiformes, birds of prey such as hawks and owls, and their eggs and nests from any form of take. CFG Code §3511 lists fully protected bird species where the CDFG is unable to authorize the issuance of permits or licenses to take these species.

JURISDICTIONAL WATERS AND WETLANDS

Impacts to natural drainage features and wetland areas are regulated by the United States Army Corp of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFG based upon the policies and regulations discussed below.

United States Army Corp of Engineers Regulations

Federal Clean Water Act - §404

The USACE administers §404 of the federal Clean Water Act (CWA). This section regulates the discharge of dredge and fill material into waters of the U.S. USACE has established a series of nationwide permits that authorize certain activities in waters of the U.S., if a proposed activity can demonstrate compliance with standard conditions. Normally, USACE requires an individual permit for an activity that will affect an area equal to or in excess of 0.5 acre of waters of the U.S. Projects that result in impacts to less than 0.5 acre can normally be conducted pursuant to one of the nationwide permits, if consistent with the standard permit conditions. USACE also has discretionary authority to require an Environmental Impact Statement for projects that result in impacts to an area between 0.1 and 0.5 acre. Use of any nationwide permit is contingent on the activities having no impacts to endangered species.

Waters of the United States

Waters of the U.S., as defined in the Code of Federal Regulations (CFR) §328.3, include all waters or tributaries to waters such as lakes, rivers, intermittent and perennial streams, mudflats, sand-flats, natural ponds, wetlands, wet meadows, and other aquatic habitats. Frequently, waters of the U.S., with at least intermittently flowing water or tidal influences, are demarcated by an ordinary high water mark (OHWM). The OHWM is defined in CFR §328.3(e) as the line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas. In this region, the OHWM is typically indicated by the presence of an incised streambed with defined bank shelving.

In June 2001, the USACE South Pacific Division has issued *Guidelines for Jurisdictional Delineations for Waters of the United States in the Arid Southwest*. The purpose of this document was to provide background information concerning physical characteristics of dryland drainage systems. These guidelines were reviewed and used to identify jurisdictional drainage features within the project site.

Wetlands

According to the USACE *Wetlands Delineation Manual, Technical Report*, three criteria must be satisfied to classify an area as a jurisdictional wetland:

1. A predominance of plant life that is adapted to life in wet conditions (hydrophytic vegetation)

2. Soils that saturate, flood, or pond long enough during the growing season to develop anaerobic conditions in the upper part (hydric soils)
3. Permanent or periodic inundation or soils saturation, at least seasonally (wetland hydrology)

Wetland vegetation is characterized by vegetation in which more than 50 percent of the composition of dominant plant species are obligate wetland, facultative wetland, and/or facultative species that occur in wetlands. As a result of the 2001 Solid Waste Agency of North Cook County (SWANCC) case, a wetland must show connectivity to a stream course in order for such a feature to be considered jurisdictional. Although wetland criteria was used to identify if areas were considered wetlands, the exact limits of jurisdiction were not measured based on the standard wetland delineation protocol as described in the 1987 USACE manual.

United States Army Corp of Engineers Regulated Activities

The USACE regulates the discharge of dredged or fill material including, but not limited to, grading, placing of rip-rap for erosion control, pouring concrete, laying sod, and stockpiling excavated material. Activities that generally do not involve a regulated discharge, if performed specifically in a manner to avoid discharges, include driving pilings, drainage channel maintenance, temporary mining and farm/forest roads, and excavating without stockpiling.

Regional Water Quality Control Board Regulations

Clean Water Act - §401

Per §401 of the CWA, “any applicant for a Federal permit for activities that involve a discharge to waters of the State, shall provide the Federal permitting agency a certification from the State in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the Federal Clean Water Act.” Therefore, before the USACE will issue a §404 permit, applicants must apply for and receive a §401 water quality certification from the RWQCB.

Porter-Cologne Water Quality Act

The RWQCB regulates actions that would involve “discharging waste, or proposing to discharge waste, within any region that could affect the water of the state” (water code §13260(a)), pursuant to provisions of the Porter-Cologne Water Quality Act. “Waters of the State” are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state” (water code §13050 (e)).

Regional Water Quality Control Board Regulated Activities

Under §401 of the CWA, the RWQCB regulates all activities that are regulated by the USACE. Additionally, under the Porter-Cologne Water Quality Act, the RWQCB regulates all activities, including dredging, filling, or discharge of materials into waters of the state that are not regulated by the USACE due to a lack of connectivity with a navigable water body and/or lack of an OHWM.

California Department of Fish and Game Regulations

California Fish and Game Code - §1600 to §16003

The CFG Code mandates that “it is unlawful for any person to substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds, without first notifying the department of such activity.” CDFG jurisdiction includes ephemeral, intermittent, and perennial watercourses, including dry washes, characterized by the presence of hydrophytic vegetation, the location of definable bed and banks, and the presence of existing fish or wildlife resources.

Furthermore, CDFG jurisdiction is often extended to habitats adjacent to watercourses, such as oak woodlands in canyon bottoms or willow woodlands that function as part of the riparian system. Historic court cases have further extended CDFG jurisdiction to include watercourses that seemingly disappear, but re-emerge elsewhere. Under the CDFG definition, a watercourse need not exhibit evidence of an OHWM to be claimed as jurisdiction. However, CDFG does not regulate isolated wetlands; that is, those that are not associated with a river, stream, or lake.

California Department of Fish and Game Regulated Activities

The CDFG regulates activities that involve diversions, obstruction, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife resources.