VOLUME IV

Coastal Permit No. 166, Conditional Use Permit Nos. 215 & 216,
Tentative Parcel Map No. 26073 and Grading Permit Nos. 2229 & 2230

Environmental Impact Report for the Long Point Resort Project

BIOLOGICAL RESOURCES

Prepared for:

City of Rancho Palos Verdes

Prepared by:

RBF Consulting

Draft Report Completed: July 31, 2001
Final Report Completed: _____

VOLUME IV

REVISED BIOLOGICAL RESOURCES SECTION

of the

DRAFT ENVIRONMENTAL IMPACT REPORT

for the

LONG POINT RESORT PROJECT

(General Plan Amendment No. 28, Coastal Permit No. 166,
Conditional Use Permit Nos. 215 & 216,
Tentative Parcel Map No. 26073, Grading Permit Nos. 2229 & 2230)

State Clearinghouse #2000071076

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TABLE OF CONTENTS

LIST OF EXHIBITS

LIST OF TABLES

1.0 INTRODUCTION

1.0 INTRODUCTION

The City of Rancho Palos Verdes is the Lead Agency under the California Environmental Quality Act (CEQA) and is responsible for preparing the Environmental Impact Report (EIR) for the Long Point Resort project (State Clearinghouse No. 2000071076).

The Draft Review was circulated for public review from February 6, 2001 to April 6, 2001. The City of Rancho Palos Verdes has determined that additional public review is warranted for the Biological Resources section of the EIR (Section 5.3). The section is being recirculated for public review due to textual clarifications resulting from public comments on the Draft EIR and spring survey data compiled concurrently with the Draft EIR review period. Added or modified text is shaded (example) while deleted text is striked out (~~example~~).

5.0 DESCRIPTION OF ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION MEASURES

5.3 BIOLOGICAL RESOURCES

The purpose of this Section is to identify existing biological resources on-site and in the vicinity, analyze potential Project-related impacts to these resources (including sensitive species) and recommend mitigation measures to reduce the significance of impacts which are identified. Information in this Section is based on the *Long Point Resort Draft Biological Technical Report*, prepared by BonTerra Consulting ~~(February 2001). The Report~~in February 2001 and updated in July 2001, and focused survey efforts completed in the Spring and Summer 2001. Technical data which is referenced for this section is included in ~~it's entirety in~~ Appendix 15.3~~, *Biological Resources Report*~~. This Section describes the biological character of the site in terms of vegetation, flora, wildlife, and wildlife habitats and analyzes the biological significance of the site in consideration of federal, state, and local laws and policies.

EXISTING CONDITIONS

The Project site encompasses approximately 168.40 acres and is characterized by a variety of resource conditions including marine habitat, partially-disturbed coastal bluffs and hillsides, coastal sage scrub, full-graded bluff-top areas used for agriculture, and remnants of the former Marineland Aquatic Park. The Project site is comprised of two areas: the Resort Hotel Area (RHA) and Upper Point Vicente Area (UPVA).

SURVEY METHODOLOGIES

This Section describes the methodologies used to conduct the various biological field surveys. The results of these survey efforts are discussed in the following section, *Existing Biological Resources*. Additional survey efforts completed after the preparation of the Report are identified below.

Vegetation Mapping and General Plant Surveys

A general reconnaissance field survey was conducted August 22 and September 1, 2000 by BonTerra Consulting. The purpose of this survey was to review the draft vegetation map and Draft Biological Resources Report and Impact Assessment for Long Point Specific Plan Rancho Palos Verdes, California prepared by Dudek & Associates in September 1999 for the City of Rancho Palos Verdes (hereafter referred to as the Dudek report). All plant species observed were recorded in field notes. Plant species were identified in the field or collected for later identification. Plants were identified using taxonomic keys in Hickman (1993), Munz (1974), and Abrams (1923, 1960). Taxonomy follows Hickman (1993) for scientific and common

names. Plant community classifications used in this ~~report~~section follow Holland (1986) and Gray and Bramlet (1992).

General Wildlife Surveys

A verification survey to determine the accuracy of existing documentation for wildlife on the Project site was conducted on September 1, 2000 by BonTerra Consulting. The survey consisted of a general walk over of the Project site. All wildlife species observed during the survey were recorded in field notes and incorporated into the Long Point Biological Technical Report and Flora and Fauna Compendia.

Focused Surveys

Jurisdictional Delineation. On February 20 and April 4, 2001, regulatory specialists of Glenn Lukos Associates, Inc. (GLA) examined the project site to determine the limits of (1) Army Corps of Engineers (ACOE) jurisdiction pursuant to Section 404 of the Clean Water Act, (2) CDFG jurisdiction pursuant to Division 2, Chapter 6, Section 1600 of the Fish and Game Code, (3) California Water Quality Control Board (Regional Board) jurisdiction pursuant to Section 401 of the Clean Water Act, and (4) any "wetlands" as defined by the California Coastal Commission (CCC). Suspected jurisdictional areas were field checked for the presence of definable channels and/or wetlands vegetation, soils, and hydrology based on resource agency guidelines, manuals, and industry standards. A copy of the Jurisdictional Delineation (Revised May 30, 2001) is available for review at the City.

Special Status Plant Species. Special status plant surveys were not conducted by BonTerra Consulting. Dudek & Associates conducted focused special status plant surveys in April, May, and June of 1998 and again in June of 1999. According to the Dudek report, reasonably intact habitats on the site were surveyed during a period when most, if not all, of the potentially-occurring special status plant species would be evident, if not blooming. However, physical access to areas of steep bluffs that could support special status species was not achieved for safety reasons. Surveys were conducted along the top of the intact bluffs on the RHA, and binoculars were used to scan areas that could support plants. No unidentified special status species plants were observed during the Dudek & Associates surveys.

Butterfly Host Plants. A focused survey was conducted by Dudek & Associates on June 15, 1999 for three host plants of two special status butterfly species: locoweed (*Astragalus trichopodus*) and deerweed (*Lotus scoparius*) which are associated with the Palos Verdes blue butterfly (*Glaucopsyche lygdamus palosverdesensis*) and ~~ashy-leaved~~coast buckwheat (*Eriogonum ~~cineracens~~parvifolium*) which is associated with the El Segundo blue butterfly (*Euphilotes battoides allyni*). The

location and number of individuals for each host plant species were estimated and recorded on 200-scale topographic field maps.

Palos Verdes Blue. Focused surveys on the Project site have been conducted to assess the UPVA and RHA for potential habitat for the federally Endangered Palos Verdes blue, and to determine the presence or absence of this species on the site. Focused surveys were conducted and consisted of a series of five field visits between March 17 and April 22, 2001. The purpose of the field surveys was to evaluate the habitat potential for this species and conduct focused surveys during the course of the known flight season. While conducting surveys, notes were taken on host plant species and abundance as well as other resources and site conditions important to the biology and ecology of the Palos Verdes blue.

El Segundo Blue. The UPVA and RHA provides potentially suitable habitat for the federally-listed Endangered El Segundo blue butterfly because of the presence of coast buckwheat and the ashy-leaf buckwheat (*Eriogonum cinereum*)[1]. Focused surveys have been conducted and consisted of a series of five field visits between June 20 and July 26, 2001. The purpose of the survey was to evaluate the habitat potential and conduct focused surveys in accordance with the surveying biologists survey permit from the USFWS. Surveys were conducted during the course of the known flight season of the El Segundo blue butterfly. While conducting surveys, notes were taken on host plant species and abundance as well as other resources and site conditions important to the biology and ecology of the El Segundo blue butterfly.

Coastal California Gnatcatcher. Surveys for the coastal California gnatcatcher (*Polioptila californica californica*) were conducted by Dudek & Associates on May 8, 15, and 22, 1998 and by Natural Resource Consultants on February 8, 16, and March 1, 2001 per the guidelines issued by the U.S. Fish and Wildlife Service (USFWS) (USFWS, February 28, 1997). These guidelines stipulate that for areas participating in a Natural Communities Conservation Planning (NCCP) program, a minimum of three surveys are to be conducted in suitable habitat, a limit of 100 acres are to be surveyed per day, and surveys are to occur with at least a seven-day interval between site visits. ~~According to the Dudek & Associates report, "survey consisted of slowly walking a meandering transect throughout all suitable habitat" (Dudek 1999).~~

[1] *Eriogonum parvifolium* is the larval food plant for the El Segundo blue; however this species may also occur on *Eriogonum cinereum* (Osborne, Ken. June 4, 2001, Personal communication concerning the potential presence of El Segundo blue butterflies on site.)

All portions of the site suitable for use by the gnatcatcher were surveyed during the 1998 and 2001 survey efforts.

Pacific Pocket Mouse. A habitat assessment of the site to support the Pacific pocket mouse (*Perognathus longimembris pacificus*) was conducted on January 31, 2001 by Dr. Philip Behrends of Dudek & Associates. Dr. Behrends is considered one of the few experts with this species. The Project site was surveyed on foot, with surveys focusing on areas supporting coastal sage scrub, southern cactus scrub, and grassland areas to a lesser extent. The habitat assessment was based on suitability of soils and vegetation, with the primary focus on soils. A separate letter report documenting the assessment is included in the Appendix to Appendix 15.3, *Biological Resources Report*.

EXISTING BIOLOGICAL RESOURCES

This section describes the biological resources that either occur or potentially occur within the Project site or in the immediate vicinity. Vegetation types, wildlife populations and movement patterns, special status vegetation types, and special status plant and wildlife species either known or potentially occurring are discussed below. Unless otherwise noted, "the Project site" shall refer to both the ~~Upper Point Vicente Area~~ (UPVA) and the ~~Resort Hotel Area~~ (RHA).

Vegetation Types

~~Eleven~~Fourteen vegetation types occur within the Project site including eight types within the scrub community, two types within the riparian/marine community and ~~four~~three subject to past and present levels of disturbance. Exhibits 5.3-1, *Biological Resources Within Resort Hotel Area*, and 5.3-2, *Biological Resources Within Upper Point Vicente Area*, illustrate the distribution and Table 5.3-1, *Existing Vegetation Types on the Project Site*, summarizes the extent of vegetation types present within the Project site. The following section describes each of the vegetation types observed during the field survey. In addition, a summary of the wetland delineation has been provided.

Mixed Coastal Sage Scrub and Disturbed Mixed Coastal Sage Scrub. Mixed coastal sage scrub occurs entirely within the Upper Point Vicente Area. The dominant species include California sagebrush (*Artemisia californica*), ashy-leaf buckwheat (*Eriogonum cinereum*), California buckwheat (*Eriogonum fasciculatum*), bladderpod (*Isomeris arborea*), California bush sunflower (*Encelia californica),* and scattered evergreen shrubs including lemonadeberry (*Rhus integrifolia*), laurel sumac (*Malosma laurina*), and toyon (*Heteromeles arbutifolia*). This community also contains scattered succulents such as coastal cholla (*Opuntia prolifera*), coastal prickly-pear (*Opuntia littoralis*), oracle cactus *(Opuntia oricola*), and bright

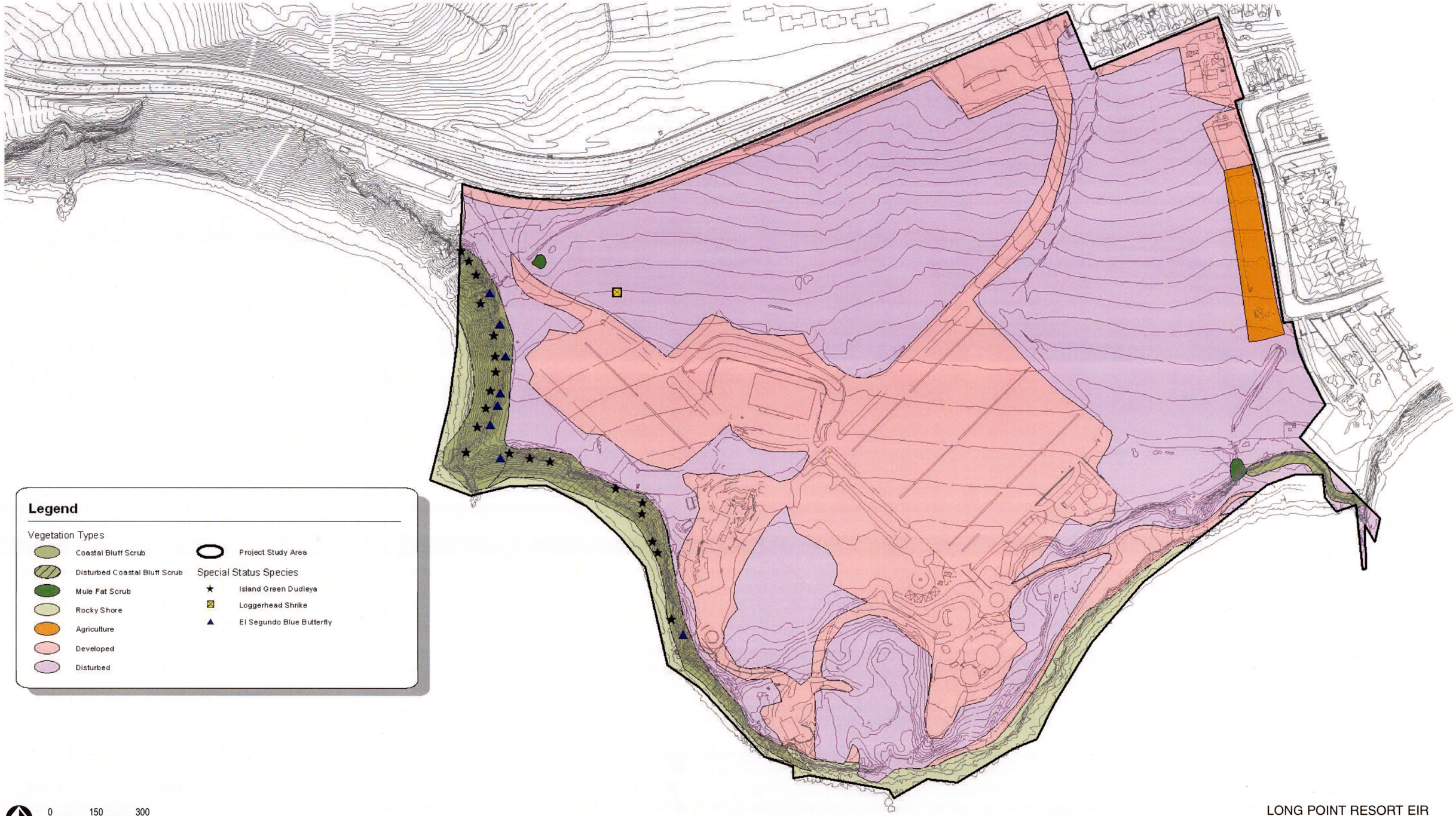
green dudleya (*Dudleya virens*). Large portions of the site have been disturbed by long-standing clearing and mowing activities. These areas include a much higher percent cover of non-native grasses and a lower density of native shrubs. Mixed coastal sage scrub was mapped where the native shrub density was greater than 50 percent. Where native shrub density was ten to 50 percent, the habitat was mapped as disturbed mixed coastal sage scrub. Where native shrub density was less than ten percent, the habitat was mapped as disturbed habitat (discussed below).

Burnt Disturbed Mixed Coastal Sage Scrub. The burnt area occurs entirely within the UPVA. This area was previously documented in the Dudek & Associates report as disturbed coastal sage scrub. However, the only vegetation identifiable at the time of the BonTerra survey was ornamental shrubs and trees, which include acacia (*Acacia* sp.) and fan palm (*Washingtonia filifera*). It is assumed that at the time of the BonTerra survey, the scrub species had not yet had the opportunity to recover from the fire. Because fire is a natural process to the coastal sage scrub community, it is expected that this area will recover to its previous condition-disturbed mixed coastal sage scrub.

Disturbed Chenopod Scrub. Disturbed chenopod scrub occurs entirely within the UPVA. Chenopod scrub is not recognized as a native plant community by Holland (1986); however, it is a distinct vegetation type in Southern California recognized by Gray and Bramlet (1992). The dominant scrub species in this area include big saltbush (*Atriplex lentiformis*), California buckwheat, and bladderpod. This area is heavily disturbed due to its proximity to development and mowing around the perimeter. This vegetation type contains many non-native and ornamental species, which include statice (*Limonium perezii*) and acacia ~~(*Acacia* sp.)~~.

Southern Cactus Scrub. Southern cactus scrub occurs entirely within the UPVA. Southern cactus scrub is not recognized as a native plant community by Holland (1986); however, it is a distinct vegetation type in Southern California recognized by Gray and Bramlet (1992). This vegetation type contains at least 20-percent cactus. It is dominated by coastal prickly-pear, oracle catus, and coastal cholla. It also contains California sagebrush, lemonadeberry, and tree tobacco (*Nicotiana glauca*). ~~This vegetation type has been disturbed~~An area of Disturbed Southern Cactus Scrub occurs in the western portion of the UPVA due to its proximity to Palos Verdes Drive South.

Southern Coastal Bluff Scrub. Southern coastal bluff scrub occurs along the steep cliffs in the RHA. This vegetation type is a native plant community composed primarily of woody and/or succulent plants, up to two meters tall. Dominant species on the RHA include California bush sunflower, bright green dudleya,



SOURCE: BONTERRA CONSULTING

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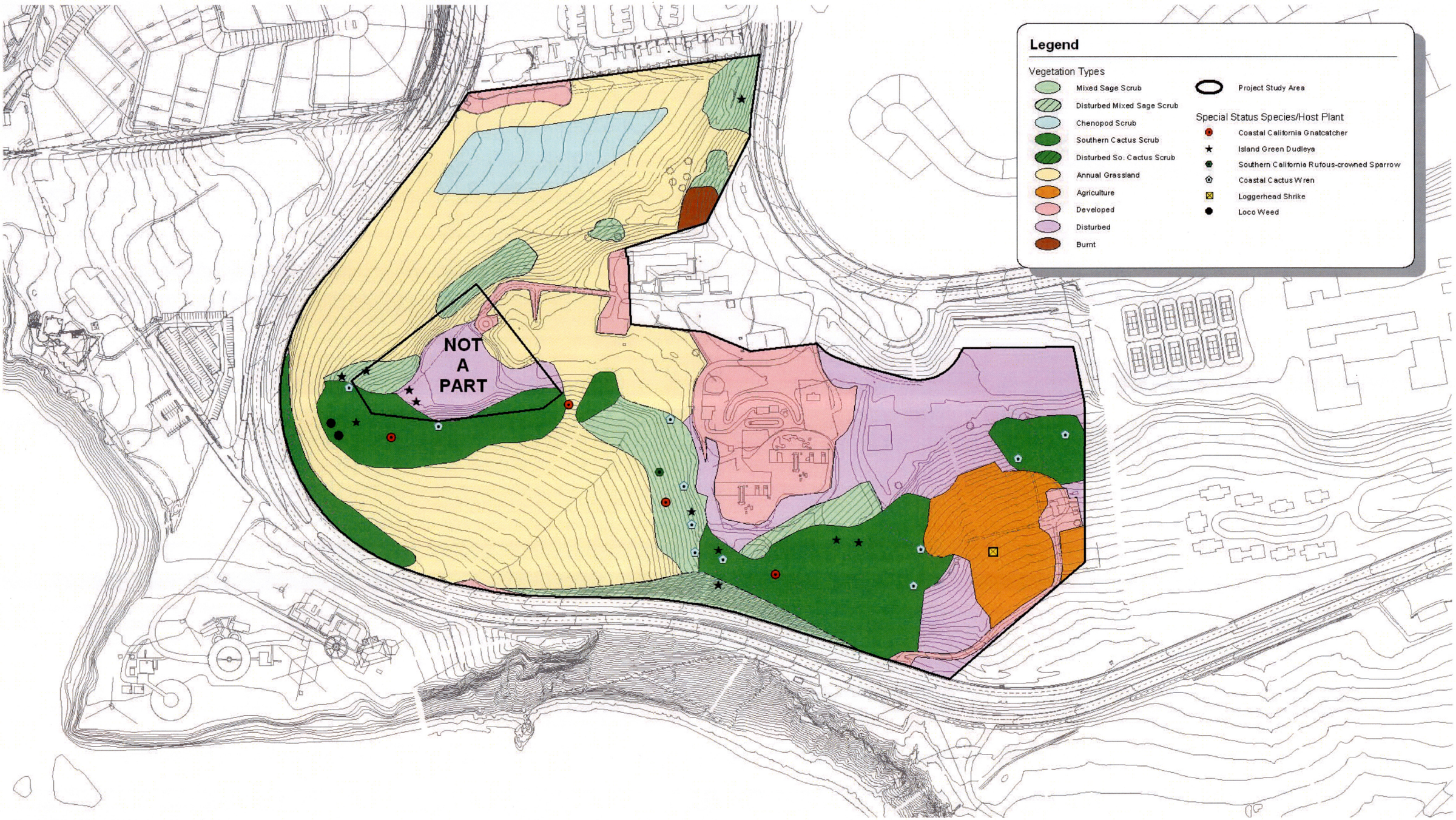
LONG POINT RESORT EIR

Biological Resources Within Resort Hotel Area

Exhibit 5.3-1



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LONG POINT RESORT EIR

Biological Resources Within Upper Point Vicente Area

Exhibit 5.3-2

TABLE 5.3-1
EXISTING VEGETATION TYPES ON THE PROJECT SITE

Vegetation Type	Upper Point Vicente Area (acres)	Resort Hotel Area (acres)	Total (acres)
Mixed Coastal Sage Scrub	3.17	0.00	**3.17**
Disturbed Mixed Coastal Sage Scrub	3.07	0.00	**3.07**
Burnt Disturbed Mixed Coastal Sage Scrub	0.29	0.00	**0.29**
Disturbed Chenopod Scrub	2.75	0.00	**2.75**
Southern Cactus Scrub	9.23	0.00	**9.23**
Disturbed Southern Cactus Scrub	1.03	0.00	**1.03**
Southern Coastal Bluff Scrub	0.00	2.17	**2.17**
Disturbed Southern Coastal Bluff Scrub	0.00	2.37	**2.37**
Mule Fat Scrub	0.00	0.09	**0.09**
Annual Grassland	25.94	0.00	**25.94**
Rocky Shore/Coastal Bluff	0.00	3.95	**3.95**
Agricultural	3.58	1.27	**4.85**
Disturbed	8.60	56.80	**65.40**
Developed	7.22	36.87	**44.09**
Total	**64.88**	**103.52**	**168.40**

Source: BonTerra Consulting, February 2001.

lemonadeberry, ashy-leaf buckwheat, bladderpod, Australian saltbush (*Atriplex semibaccata*), woolly sea-blite (*Suaeda taxifolia*), saw-toothed goldenbush (*Hazardia squarrosa*), and ~~seacliff buckwheat (*Eriogonum parvifolium*). The southern coastal bluff scrub~~coast buckwheat. Disturbed Southern Coastal Bluff Scrub occurs on the southernmost portion of the RHA ~~is disturbed~~, and contains a greater percentage of weedy species including Russian thistle (*Salsola tragus*) and hottentot fig (*Carpobrotus edulis*).

Mule Fat Scrub. Mule fat occurs in two areas in the RHA. One area occurs in a disturbed area south of Palos Verdes Drive South in a drainage. The other area occurs along a ~~blue line stream~~drainage in the southeastern portion of the RHA. The vegetation in these areas is dominated by mule fat (*Baccharis salicifolia*). Other species present include non-native ornamental species such as tree tobacco, oleander (*Nerium oleander* ~~sp.~~), and acacia. The drainage in the southern portion of the site flows over the cliffs, and supports grass and ornamental species on the rocky shore.

Annual Grassland. Annual grassland occurs in the northern portion of UPVA. The annual grassland is dominated by non-native grasses, which include slender wild oat (*Avena barbata*), wild oat (*Avena fatua*), common ripgut grass (*Bromus diandrus*), foxtail chess (*Bromus madritensis* ssp. *rubens*), Bermuda grass (*Cynodon dactylon*), and shortpod mustard (*Hirschfeldia icana*). Lupine seed pods (*Lupinus* sp.) were also present throughout the grassland.

Rocky Shore/Coastal Bluff. Rocky shore occurs directly adjacent to the Pacific Ocean on the southern border of the RHA. There is very little vegetation present in these areas. The only vegetation present is ornamental directly below the ~~blue line stream~~drainage in the eastern portion of the RHA. The coastal bluff area occurs on the southeast border of the RHA. The coastal bluff area appears to erode on a regular basis and contains no substantial vegetation.

Agricultural. Agriculture is present in the southeastern portion of the UPVA. The agricultural area is an active farm and orchard. This area is actively cultivated and weeded, and contains mostly non-native species. Agriculture is also present in the eastern portion of the RHA. The agricultural area is currently active.

Disturbed. Disturbed habitats occur on both the UPVA and the RHA. The disturbed habitats consist of areas that previously contained Marineland Aquatic Park structures and areas that are cleared for fire control on a routine basis. These areas are characterized by weedy non-native and native species. The species present in these areas include ~~short pod~~shortpod mustard, slender wild oat, Australian saltbush, fennel (*Foeniculum vulgare*), castor-bean (*Ricinus communis*), garland chrysanthemum (*Chrysanthemum coronarium*), Bermuda grass, ripgut

grass, statice ~~(*Limonium perezii*)~~, big saltbush, nasturtium (*Trapaeolum majus*), horseweed (*Conyza canadensis*), horehound (*Marrubium vulgare*), and rat-tail fescue (*Vulpia myuros*).

Developed. Developed areas occur throughout the Project site. Developed areas in the UPVA are associated with the City Hall, old military structures, and the agricultural facilities. The developed areas in the RHA consist of parking lots and structures remaining from the former Marineland Aquatic Park, the Galley West Restaurant and Bar, the Pereira Motel, the Catalina Room, and the Lookout Bar. The vegetation present in these areas consists of non-native ornamental plantings. Ornamental vegetation in these areas include pine tree (*Pinus* sp.), acacia, natal plum (*Carissa macrocarpa*), oleander, hottentot fig, eucalyptus (*Eucalyptus* sp.), myoporum (*Myoporum laetum*), pepper-trees (*Schinus terebinthifolius*), ~~oleander shrubs (*Nerium oleander*),~~ and plumbago (*Plumbago* sp.).

Jurisdictional Delineation Survey Results. The ACOE jurisdiction on the project site totals approximately 0.19 acre, none of which consists of jurisdictional wetlands. CDFG jurisdiction on the site totals approximately 0.20 acre, 0.01 acre of which supports riparian vegetation. Potential CCC wetland jurisdiction at the site totals approximately 0.03 acre. The three ephemeral drainage channels that support these jurisdictional areas were identified on both portions of the project site: two within the RHA and one within the UPVA. Maps illustrating the locations of these drainages are included in the Jurisdictional Delineation available at the City.

Fauna Inventory - Wildlife

Fish. A drainage that forms a small waterfall is present in the southeast corner of the RHA. No fish were observed within this drainage during the surveys, although one or two species may occur. However, only non-native species such as fathead minnow (*Pimephales promelas*), rainwater killifish (*Lucania parva*), and western mosquitofish (*Gambusia affinis*) would be expected to occur.

Amphibians. No amphibians were observed during the surveys, although a few species are expected to occur on the Project site:

The Pacific treefrog (*Hyla regilla*), western toad (*Bufo boreas*), and Pacific slender salamander (*Batrachoseps pacificus*) are anticipated to be present at the drainage in the southeast corner of the RHA. These three amphibian species may also occur in association with ornamental vegetation on the RHA.

The Pacific treefrog, western toad, and Pacific slender salamander may also occur in association with ornamental vegetation and coastal sage scrub habitats on the UPVA.

Reptiles. Only the western fence lizard (*Sceloporus occidentalis*) was observed during the surveys. Other reptiles common in the region and expected to occur on the Project site include the side-blotched lizard (*Uta stansburiana*), southern alligator lizard (*Gerrhonotus multicarinatus*), gopher snake (*Pituophis melanoleucus*), California kingsnake (*Lampropeltis getulus*), and western rattlesnake (*Crotalus viridis*).

Birds. It is expected that a variety of birds could be recorded from the Project site due to its location on a coastal promontory that is situated on a point at the southwest end of the Palos Verdes Peninsula. Such locations can provide habitat for migrant passerines[2] in spring and fall and excellent vantage points from which to observe seabirds.

Seabirds observed during the surveys include the black-vented shearwater (*Puffinus opisthomelas*), brown pelican (*Pelecanus occidentalis*), double-crested cormorant (*Phalacrocorax auritus*), Brandt's cormorant (*Phalacrocorax penicillatus*), western gull (*Larus occidentalis*), and Heermann's gull (*Larus heermanni*). Some migrants observed during the surveys include the western wood-pewee (*Contopus sordidulus*), house wren (*Troglodytes aedon*), blue-gray gnatcatcher (*Polioptila caerulea*), phainopepla (*Phainopepla nitens*), yellow warbler (*Dendroica petechia*), common yellowthroat (*Geothlypis trichas*), lazuli bunting (*Passerina amoena*), and savannah sparrow (*Passerculus sandwichensis*).

The UPVA ~~also~~ supports native habitats such as coastal sage scrub. The coastal sage scrub community supports a number of breeding birds that are permanent residents. These species found to be present on the UPVA include the bushtit (*Psaltriparus minimus*), cactus wren (*Campylorhynchus brunneicapillus*), Bewick's wren (*Thryomanes bewickii*), coastal California gnatcatcher (*Polioptila californica californica*), and California towhee (*Pipilo crissalis*).

Birds of prey (raptors) observed or expected to occur on the Project site for foraging include the white-tailed kite (*Elanus leucurus*), northern harrier (*Circus cyaneus*), sharp-shinned hawk (*Accipiter striatus*), Cooper's hawk (*Accipiter cooperii*), red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), and turkey vulture (*Cathartes aura*). All these species except for the sharp-skinned hawk and turkey vulture also have the potential to nest on the RHA and UPVA.

The RHA supports a small amount of upper shoreline habitat at the base of the coastal bluffs. This habitat provides habitat for roosting seabirds such as the brown pelican, double-crested cormorant, Brandt's cormorant, and a variety of gull species. It also provides foraging opportunities for several sandpipers such as the

[2] The largest group of birds in the world that are commonly referred to as perching birds or songbirds.

black oystercatcher (*Haematopus bachmani*), wandering tattler (*Heteroscelus incanus*), whimbrel (*Numenius phaeopus*), ruddy turnstone (*Arenaria interpres*), black turnstone (*Arenaria melanocephala*), and surfbird (*Aphriza virgata*).

Mammals. One mammal, the California ground squirrel (*Spermophilus beecheyi*), was observed on the Project site during the surveys. Several additional species are expected to occur. These include small mammals such as the deer mouse (*Peromyscus maniculatus*), western harvest mouse (*Reithrodontomys megalotis*), woodrats (*Neotoma* sp.), pocket gopher (*Thomomys bottae*), black rat (*Rattus rattus*), and house mouse (*Mus musculus*). Easily detectable mammals that are expected to occur on the site include the Virginia opossum (*Didelphis virginiana*), and desert cottontail (*Sylvilagus audubonii*). Larger mammals that may still occur on the Project site include the striped skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), and coyote (*Canis latrans*).

Bats occur throughout most of southern California and may use any portion of the Project site as foraging habitat. Most of the bats that could potentially occur onsite are inactive during the winter and either hibernate or migrate, depending on the species. The big brown bat (*Eptesicus fuscus*), ~~Mexican~~Brazilian free-tailed bat (*Tadarida brasiliensis*), California myotis (*Myotis californicus*), western pipistrelle (*Pipistrellus hesperus*), and hoary bat (*Lasiurus cinereus*) may all occur on the Project site. The steep coastal bluffs and abandoned buildings of the Marineland Aquatic Park provide potential roosting opportunities for several bat species.

Fauna Inventory - Wildlife Movement

Wildlife movement activities usually fall into one of three movement categories: (1) dispersal (e.g., juvenile animals from natal areas, individuals extending range distributions); (2) seasonal migration; and (3) movements related to home range activities (e.g., foraging for food or water, defending territories, searching for mates, accessing breeding areas, or securing cover). A number of terms have been used in various wildlife movement studies, such as "travel ~~route",~~route," "wildlife ~~corridor",~~corridor," and "wildlife crossing" to refer to areas in which wildlife move from one area to another.

To clarify the meaning of these terms and to facilitate the discussion on wildlife movement in this analysis, these terms are briefly defined[3] as follows:

- *Travel Route* - a landscape feature such as a ridgeline, drainage, canyon, or riparian strip within a larger natural habitat area that is used frequently by animals to facilitate movement and provide access to necessary resources (e.g., water, food, cover, den sites).

- *Wildlife Corridor* - a piece of habitat, usually linear in nature, that connects two or more habitat patches that would otherwise be fragmented or isolated from one another.

- *Wildlife Crossing* - a small, narrow area, relatively short in length and generally constricted in nature, that allows wildlife to pass under or through an obstacle or barrier that otherwise hinders or prevents movement. Crossings typically are man-made and include culverts, underpasses, drainage pipes, and tunnels to provide access across or under roads, highways, pipelines, or other physical obstacles. These often represent "choke points" along a movement corridor, which can impede wildlife movement and expose them to a greater risk of predation.

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[3] The definitions of wildlife movement terminology were generated from the following sources:

Bennett, A.F. *Habitat Corridors and the Conservation of Small Mammals in the Fragmented Forest Environment. Landscape Ecol.* 4:109-122. 1990.

Farhig, L., and G. Merriam. 1985. *Habitat Patch Connectivity and Population Survival. Ecology* 66:1,792-1,768.

Harris, L. D., and P.B. Gallagher. 1989. *New Initiatives for Wildlife Conservation; The Need for Movement Corridors.* Pages 11-34 in G. Mackintosh, ed. *Preserving Communities and Corridors.* Defenders of Wildlife., Washington, D.C. 96pp.

MacArthur, R.H., and E.O. Wilson. 1967. *The Theory of Island Biogeography.* Princeton University Press. Princeton, New Jersey.

Noss, R. F. 1983. *A Regional Landscape Approach to Maintain Diversity. BioScience* 33:700-706.

Simberloff, D., and J. Cox. 1987. *Consequences and Costs of Conservation Corridors. Conser. Biol.* 1:63-71.

Soule, M. E. *Viable Populations for Conservation.* Cambridge Univ. Press, New York, N.Y. 1987.

As defined above, the Project site does not contain wildlife corridors or wildlife crossings. However, local travel routes on the UPVA and RHA are expected to occur onsite. The native habitats (e.g., coastal sage scrub) of the Project site remain connected to larger areas of natural habitats primarily to the east. One canyon remains immediately north of the UPVA portion of the Project site that supports coastal sage scrub habitats. This canyon does support special status species including the coastal California gnatcatcher. In addition, other small open space areas, such as Point Vincente Park and coastal sage scrub preservation areas on the Subregion 1 Site, remain to the west of the UPVA. However, direct connection to open space areas north and west of the UPVA are obstructed by Hawthorne Boulevard, Palos Verdes Drive, and residential and commercial development. As a result, less mobile wildlife species would be limited in their ability to reach the open space areas to the north and west. More mobile species, such as birds, are less affected by these obstructions and are expected to be able to reach the open space areas north and west of the site that provide suitable habitat for these species.

The steep cliffs in the RHA are expected to provide a narrow linkage for wildlife east and west of the site. Because of the steepness of the terrain and limited diversity of habitat types in this area, the use of the cliff by wildlife species as a local travel route on the RHA may be limited.

Special Status Biological Resources

The following section addresses special status biological resources observed, reported, or having the potential to occur on the Project site. These resources include plant and wildlife species that have been afforded special status and/or recognition by federal and state resource agencies, as well as the California Native Plant Society (CNPS). In general, the principal reason an individual taxon (i.e., species, subspecies, or variety) is given such recognition is the documented or perceived decline or limitations of its population size, geographic range, and/or distribution resulting in most cases from habitat loss. Tables 5.3-2, *Special Status Plant Species*, and 5.3-3, *Special Status Wildlife Species*, provide a summary of special status plant and wildlife species known to occur in the Project region including information on the status, potential for occurrence, and definitions for the various status designations. In addition, special status biological resources include vegetation types and habitats that are either unique, of relatively limited distribution in the region, or of particularly high wildlife value. These resources have been defined by federal, state, and local government conservation programs. Sources used to determine the special status of biological resources are as follows:

TABLE 5.3-2
SPECIAL STATUS PLANT SPECIES POTENTIALLY OCCURRING WITHIN THE PROJECT REGION

Species	Status[1]			Likelihood for Occurrence
	USFWS	CDFG	CNPS	
Aphanisima blitoides Aphanisima	SOC	--	List 1B	Potential to occur on the RHA. Not observed during focused surveys.
Atriplex pacifica South coast saltscale	SOC	—	List 1B	Potential to occur on the RHA. Not observed during focused surveys.
Atriplex parishii Parish's brittlescale	SOC	—	List 1B	Not expected to occur; no suitable habitat on the UPVA or RHA.
Calochortus catalinae Catalina mariposa lily	—	—	List 4	Potential to occur on the UPVA. Not observed during focused surveys.
Camissonia lewisii Lewis's evening primrose	—	—	List 3	Potential to occur on the RHA, though not expected due to lack of detection during focused surveys[4].
Centromadia parryi ssp. *australis* Southern tarplant	SOC	—	List 1B	Not expected to occur; no suitable habitat on the UPVA or RHA.
Crossosoma californicum Catalina crossosoma	—	—	List 1B	Potential to occur on the UPVA or RHA. Not observed during focused surveys.
Dithyrea maritima Beach spectaclepod	SOC	ST	List 1B	Not expected to occur; no suitable habitat on the UPVA or RHA.
Dudleya virens ssp. *insularis* Island green dudleya	—	—	List 1B	Observed on the UPVA and RHA.
Lasthenia glabrata ssp. *coulteri* Coulter's goldfields	SOC	—	List 1B	Not expected to occur; no suitable habitat on the UPVA or RHA.
Lycium brevipes var. *hassei* Santa Catalina Island desert-thorn	—	—	List 1B	Potential to occur on the UPVA and RHA. Not observed during focused surveys.
Lycium californicum California box-thorn	—	—	List 4	Observed on the RHA; potential to occur on the UPVA.
Navarretia prostrata Prostrate navarretia	—	—	List 1B	Not expected to occur; no suitable habitat on the UPVA or RHA.
Nemacaulis denudata var. *denudata* Coast woolly-heads	—	—	List 1B	Not expected to occur; no suitable habitat on the UPVA or RHA.

[4] This species was not specifically addressed in the Dudek report regarding focused plant surveys; however, this species blooms from March to June, which corresponds to the timing of the focused plant surveys conducted on the project by Dudek. Therefore, it is assumed that this species would have been found if present in sufficient numbers onsite.

TABLE 5.3-2
SPECIAL STATUS PLANT SPECIES POTENTIALLY OCCURRING WITHIN THE PROJECT REGION (CONTINUED)

Species	Status[1]			Likelihood for Occurrence
	USFWS	CDFG	CNPS	
Pentachaeta lyonii Lyon's pentachaeta	FE	SE	List 1B	Potential to occur on the UPVA. Not observed during focused surveys.
Suaeda esteroa Estuary sea-blite	—	—	List 1B	Not expected to occur; no suitable habitat on the UPVA or RHA.
Suaeda taxifolia Woolly sea-blite	—	—	List 4	Observed on the RHA; no potential to occur on the UPVA.

~~TABLE 5.3-2~~
~~SPECIAL STATUS PLANT SPECIES POTENTIALLY OCCURRING WITHIN THE PROJECT REGION (CONTINUED)~~

[1] **STATUS DEFINITIONS**

USFWS

FE: Species designated as endangered under the federal Endangered Species Act. Endangered = "any species in danger of extinction throughout all or a significant portion of its range."
FT: Species designated as threatened under the Federal Endangered Species Act. Threatened = "species likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range."
FPE: Proposed for federal listing as Endangered.
FPT: Proposed for federal listing as Threatened.
C: Candidate for federal listing as Threatened or Endangered.
SOC: Species of Concern

CDFG

ST: Threatened = "a species 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 Act" (California Endangered Species Act).
SE: Endangered = "a species is endangered when its prospects of survival and reproduction are in immediate jeopardy from one or more causes."

CNPS

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- A Review List
4 Plants of Limited Distribution - A Watch List

TABLE 5.3-3
SPECIAL STATUS WILDLIFE SPECIES POTENTIALLY OCCURRING WITHIN THE PROJECT REGION

Species	Status[1]		Likelihood for Occurrence
	USFWS	CDFG	
Invertebrates			
Euphilotes battoides allyni El Segundo blue butterfly	FE	—	~~Not expected to occur; host plant present without appropriate habitat on the UPVA or RHA.~~*~~Glaucopsyche~~*Observed on the RHA. Absent from the UPVA.
Glaucopsyche lygdamus palosverdesensis Palos Verdes blue butterfly	FE	—	~~Very low~~Not expected; limited suitable habitat present on the UPVA; ~~no suitable habitat present on the RHA~~not observed during focused surveys.
Amphibians			
Scaphiopus hammondi Western spadefoot toad	SOC	SSC/P	Low; limited potentially suitable habitat on the RHA; no suitable habitat on the UPVA.
Reptiles			
Anniella pulchra pulchra Silvery legless lizard	SOC	SSC	Low; limited potentially suitable habitat on the UPVA and RHA.
Cnemidophorus tigris multiscutatus Coastal western whiptail	SOC	—	Moderate; moderate amount of suitable habitat on the UPVA and RHA.
Diadophis punctatus modestus San Bernardino ringneck snake	SOC	—	Moderate; moderate amount of suitable habitat on the UPVA and RHA.
Phrynosoma coronatum blainvilleii San Diego coast horned lizard	SOC	SSC/P	Moderate; moderate amount of suitable habitat on the UPVA and RHA.
Birds			
Accipiter cooperii Cooper's hawk**	—	SSC	High; low as breeder; suitable foraging habitat present on the UPVA and RHA.
Accipiter striatus Sharp-shinned hawk**	—	SSC	High; none as breeder; suitable foraging habitat present on the UPVA and RHA.

TABLE 5.3-3
SPECIAL STATUS WILDLIFE SPECIES POTENTIALLY OCCURRING WITHIN THE PROJECT REGION (CONTINUED)

Species	Status[1]		Likelihood for Occurrence
	USFWS	CDFG	
Agelaius tricolor Tricolored blackbird**	SOC	SSC	Low; suitable foraging habitat, but no nesting habitat on the UPVA and RHA.
Aimophila ruficeps canescens Southern California rufous-crowned sparrow	SOC	SSC	Moderate; moderate amount of suitable habitat on the UPVA and RHA.
Asio flammeus Short-eared owl **	—	SSC	Very low; none as breeder; suitable foraging habitat present on the UPVA and RHA.
Athene cunicularia Burrowing owl **	SOC	SSC	Very low; suitable habitat on the UPVA and RHA, but may be extirpated from area.
Buteo regalis Ferruginous hawk*	SOC	SSC	Very low; none as breeder; suitable foraging habitat present on the UPVA; no suitable habitat on the RHA.
Campylorhynchus brunneicapillus couesi Coastal cactus wren	—	SSC	Observed; suitable habitat present on the UPVA; no suitable habitat on the RHA.
Circus cyaneus Northern harrier**	—	SSC	Moderate; very low as breeder; suitable foraging habitat present on the UPVA and RHA.
Dendroica petechia brewsteri Western yellow warbler**	—	SSC	Migrant observed on the RHA; no suitable breeding habitat present on the UPVA or RHA.
Elanus leucurus White-tailed kite**	—	FP	Moderate; very low as breeder; suitable foraging habitat present on the UPVA; no suitable habitat present on the RHA.
Empidonax traillii extimus Southwestern willow flycatcher**	FE	SE	High as a migrant; none as a breeder; no suitable breeding habitat present on the UPVA or RHA.
Eremophila alpestris actia California horned lark	—	SSC	High; very low as breeder; suitable foraging habitat present on the UPVA and RHA.

TABLE 5.3-3
SPECIAL STATUS WILDLIFE SPECIES POTENTIALLY OCCURRING WITHIN THE PROJECT REGION (CONTINUED)

Species	Status[1]		Likelihood for Occurrence
	USFWS	CDFG	
Falco columbarius Merlin*	—	SSC	Low; none as breeder; suitable foraging habitat present on the UPVA and RHA.
Falco mexicanus Prairie falcon**	—	SSC	Low; very low as breeder; suitable foraging habitat and limited potentially suitable breeding habitat present on the UPVA and RHA.
Falco peregrinus Peregrine falcon **	—	SE	High; low as breeder; suitable foraging habitat and potentially suitable breeding habitat present on the UPVA and RHA.
Icteria virens Yellow-breasted chat**	—	SSC	Low to moderate as a migrant; none as a breeder; no suitable breeding habitat present on the UPVA or RHA.
Lanius ludovicianus Loggerhead shrike	SOC	SSC	Observed; suitable habitat present on the UPVA and RHA.
Larus californicus California gull **	—	SSC	High; none as breeder; suitable roosting and foraging habitat present on the UPVA and RHA.
Pandion halaetus Osprey **	—	SSC	Very low; limited potentially suitable nesting habitat present on the RHA only; no suitable foraging habitat on the UPVA or RHA.
Pelecanus occidentalis California brown pelican **	FE	SE	Observed on the RHA; limited suitable roosting habitat present on the RHA only; not expected to breed on the UPVA or RHA.
Phalacrocorax auritus Double-crested cormorant **	—	SSC	Observed on the RHA; none as breeder on the UPVA and RHA; suitable roosting habitat present on the RHA only.

TABLE 5.3-3
SPECIAL STATUS WILDLIFE SPECIES POTENTIALLY OCCURRING WITHIN THE PROJECT REGION (CONTINUED)

Species	Status[1]		Likelihood for Occurrence
	USFWS	CDFG	
Polioptila californica californica Coastal California gnatcatcher	FT	SSC	Observed on the UPVA; suitable habitat present on the UPVA only.
Sterna antillarum browni California least tern **	FE	SE	None; no suitable habitat present on the UPVA or RHA.
Sterna elegans Elegant tern **	SOC	SSC	None; no suitable habitat present on the UPVA or RHA.
Vireo bellii pusillus Least Bell's vireo**	FE	SE	None; no suitable breeding habitat present on the UPVA or RHA.

TABLE 5.3-3
SPECIAL STATUS WILDLIFE SPECIES POTENTIALLY OCCURRING WITHIN THE PROJECT REGION (CONTINUED)

Species	Status[1]		Likelihood for Occurrence
	USFWS	CDFG	
Mammals			
Antrozus pallidus Pallid bat	—	SSC	May occur; potentially suitable habitat for roosting and foraging present on the UPVA only.
Corynorhinus townsendii pallescens Pale big-eared bat	SOC	SSC	May occur; potentially suitable habitat for roosting and foraging present on the UPVA and RHA.
Eumops perotis californicus California mastiff bat	SOC	SSC	May occur; potentially suitable habitat for roosting and foraging present on the UPVA and RHA.
Lepus californicus bennettii San Diego black-tailed jackrabbit	SOC	SSC	Low; limited suitable habitat present on the UPVA only.
Myotis ciliolabrum Small-footed myotis	SOC	—	May occur; potentially suitable roosting and foraging habitat present on the UPVA and RHA.
Myotis yumanensis Yuma myotis	SOC	---	May occur; potentially suitable foraging habitat present on the UPVA and RHA.
Neotoma lepida intermedia San Diego desert woodrat	SOC	SSC	Moderate; suitable habitat present on the UPVA only.
Perognathus longimembris pacificus Pacific pocket mouse	FE	SSC	~~Very low; potentially~~Not ~~expected.~~ No suitable habitat present on the UPVA ~~and~~or RHA.

TABLE 5.3-3
SPECIAL STATUS WILDLIFE SPECIES POTENTIALLY OCCURRING WITHIN THE PROJECT REGION (CONTINUED)

Species	Status[1]		Likelihood for Occurrence
	USFWS	CDFG	

Status Definitions[1]

USFWS

FE: Species designated as Endangered under the Federal Endangered Species Act. Endangered = "any species in danger of extinction throughout all or a significant portion of its range."
FT: Species designated as Threatened under the Federal Endangered Species Act. Threatened = "species likely to become an Endangered species within the foreseeable future throughout all or a significant portion of its range."
FPE: Proposed for federal listing as Endangered.
FPT: Proposed for federal listing as Threatened.
SOC: Species of Concern

CDFG

SR: Rare = "a species is rare when, although not presently Threatened with extinction, it is in such small numbers throughout its range that it may become Endangered if its present environment worsens."
ST: Threatened = "a species 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 Act (California Endangered Species Act)."
SE: Endangered = "a species is endangered when its prospects of survival and reproduction are in immediate jeopardy from one or more causes."
SSC: Species of Special Concern.

FP: Fully Protected species are protected by special legislation and cannot be taken at any time.
P: Protected species are also protected by special legislation and can only be taken with a permit issued by the CDFG.

* Wintering sites
** Nesting sites

- Plants - *Electronic Inventory of Rare and Endangered Vascular Plants of California.* (California Native Plant Society [CNPS] [2000]). California Natural Diversity DataBbase (CNDDB) *List of Special Plants* (CDFG [1998]). Various Federal Register notices from the USFWS regarding listing status of plant species.

- Wildlife – California Wildlife Habitat Relationships Database System (CDFG 1991); CNDDB (CDFG 2000), Various Federal Register notices from the USFWS regarding listing status of wildlife species.

- Habitats – CNDDB (CDFG 2000).

Definitions of Special Status Biological Resources. Special status habitats are vegetation communities, associations, or subassociations that support concentrations of special status plant or wildlife species, are of relatively limited distribution, or are of particular value to wildlife. Although special status habitats are not afforded legal protection unless they support protected species, potential impacts on them may increase concerns and mitigation suggestions by resources agencies.

A Federally Endangered species is one facing extinction throughout all or a significant portion of its geographic range. A Federally Threatened species is one likely to become eEndangered within the foreseeable future throughout all or a significant portion of its range. The presence of any federally Threatened or Endangered species on a Project site generally imposes severe constraints on development, particularly if development would result in "take" of the species or its habitat. The term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct. Harm in this sense can include any disturbance to habitats used by the species during any portion of its life history.

Proposed species are those officially proposed by the USFWS for addition to the federal Threatened and Endangered species list. Because proposed species may soon be listed as Threatened or Endangered, these species could become listed prior to or during implementation of a proposed development project.

The State of California considers an Endangered species as one whose prospects of survival and reproduction are in immediate jeopardy, a Threatened species as 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, and a rare species as one present in such small numbers throughout its range that it may become Endangered if its present environment worsens. Rare

species applies to California native plants. State Threatened and Endangered species are fully protected against take.

Federal Species of Concern (a "term of art" for former Category 2 candidates) are species ~~with~~in an informal designation by the USFWS for some declining species that are not federal candidates for listing at this time. This designation does not provide legal protection, but signifies that these species are recognized as special status by the USFWS.

California Species of Special Concern is an informal designation used by the CDFG for some declining wildlife species that are not state candidates. This designation does not provide legal protection, but signifies that these species are recognized as special status by the CDFG.

Species that are California Fully Protected and Protected include those protected by special legislation for various reasons, such as the mountain lion and white-tailed kite. Fully protected species may not be taken or possessed at any time. California Protected Species include those species that may not be taken or possessed at any time except under special permit from the department issued pursuant to Sections 650 and 670.7 of the California Code of Regulations, or Section 2081 of the Fish and Game Code.

The California Native Plant Society (CNPS) is a local resource conservation organization that has developed an inventory of California's special status plant species (CNPS 2000). This inventory is the summary of information on the distribution, rarity, and endangerment of California's vascular plants. This rare plant inventory is comprised of four lists. CNPS presumes that List 1A plant species are extinct in California because they have not been seen in the wild for many years. CNPS considers List 1B plants as rare, threatened, or endangered throughout their range. List 2 plant species are considered rare, threatened, or endangered in California, but more common in other states. Plant species for which CNPS needs additional information are included on List 3. List 4 plant species are those of limited distribution in California whose susceptibility to threat appears low at this time. The Guidelines for the California Environmental Quality Act (CEQA) provides for the protection not only for State-listed species, but for any species which can be shown to meet the criteria for State listing. Section 15380 of the CEQA Guidelines indicate that a lead agency can consider a non-listed species to be ~~Rare or~~ Endangered, Rare, or Threatened for the purposes of CEQA if the species can be shown to meet the criteria in the definition of ~~Rare or~~ Endangered, Rare, or Threatened. For the purposes of this discussion, the current scientific knowledge on the population size and distribution for each special status species was considered according to the definitions for ~~Rare and~~ Endangered, Rare, or Threatened listed in Section 15380 the of CEQA Guidelines. CNPS List 1B species

typically meet the criteria in the definition of ~~Rare or~~ Endangered, Rare, or Threatened and have been addressed accordingly throughout the text.

Special Status Vegetation Types. In addition to providing an inventory of special status plant and animal species, the CNDDB also provides an inventory of vegetation types that are considered special status by the state and federal resource agencies, academic institutions, and various conservation groups (such as CNPS). Determination of the level of sensitivity is based on the Nature Conservancy Heritage Program Status Ranks that rank both species and plant communities on a global and statewide basis according to the number and size of remaining occurrences as well as recognized threats (e.g., proposed developments, habitat degradation, and invasion by non-native species). Special status vegetation types within the Project site are illustrated on Exhibits 5.3-1, *Biological Resources Within Resort Hotel Area*, and 5.3-2, *Biological Resources Within Upper Point Vicente Area*.

Scrub Communities. The scrub communities found on the UPVA, which includes mixed coastal sage scrub (including ~~burned~~disturbed and burnt disturbed), disturbed chenopod scrub, and southern cactus scrub (including disturbed), are recognized as special status vegetation types by local, state, and federal resource agencies. Several of these scrub areas have been disturbed on the site by the invasion of non-native plant species or by fire. Although theses areas are less biologically valuable compared to the undisturbed forms of these vegetation types, the resource agencies nonetheless include these areas as special status types. These areas typically support a rich diversity of special status plants and animals, and it is estimated that these areas have been reduced by 75 to 80 percent of their historical coverage throughout southern California. Approximately 19.54 acres of scrub communities occur on the UPVA.

Southern Coastal Bluff Scrub. The southern coastal bluff scrub (including disturbed) found on the RHA is recognized as a special status vegetation type by local, state, and federal resource agencies. This vegetation type has been reduced by the development of the coastline. Southern coastal bluff, including the disturbed areas, supports a unique variety of plants. Approximately 4.54 acres of this vegetation type occurs on the RHA.

Riparian Vegetation. ~~The riparian vegetation found on the RHA, which includes m~~Mule fat scrub~~,~~ typically occurs ~~along perennial or intermittent drainages that typically are subject to seasonal flooding. On the RHA, riparian vegetation includes .09~~in association with intermittent streambed and/or seeps (Holland 1986 and Gray and Bramlet 1992). However, in the northwestern portion of the RHA, a small area of mule fat (approximately 0.02 acre in size) occurs on the banks in the lower section of an onsite drainage ditch. This mule fat is not supported by the drainage

ditch because the concrete lining of the ditch precludes the mule fat from drawing water from this area. This area is not subject to either CDFG and/or ACOE jurisdiction (GLA, 2001).

The second area of mule fat on the RHA occurs at the terminus of an onsite drainage that traverses the western portion of the RHA. During the vegetation mapping effort of this area conducted in August and September of 2000, the area of mule fat (approximately 0.07 acre in size) included some areas of non-native vegetation. The wetland delineation conducted for the project site determined that 0.01 acre of this area of mule fat scrub was within the jurisdiction of the CDFG (GLA, 2001). The remaining 0.06 acre of mule fat ~~scrub~~in this area is not within the jurisdiction of the CDFG.

Special Status Plants. Seventeen special status plant species are known to occur in the Project region. A brief description of the special status plant species that were determined to have potential to occur on the Project site are listed below alphabetically according to their scientific name. This information is also summarized in Table 5.3-2.

Aphanisima (Aphanisima blitoides). Aphanisima is a federal Species of Concern and a CNPS List 1B species that typically blooms from April to May. This annual herb occurs in sandy soils in coastal bluff scrub and coastal scrub. Aphanisima is known to occur on the Palos Verdes Peninsula near Portuguese Bend southward approximately 2.5 miles to Royal Palms Beach, and along the Palos Verdes Hills (CDFG 2000). This species was found on coastal bluff scrub on the Peninsula. Although suitable habitat for this species is present on the RHA, this species was not observed during previous surveys.

South Coast Saltscale (Atriplex pacifica). South coast saltscale is a federal Species of Concern and a CNPS List 1B species that typically blooms from March to October. South coast saltbush is known to occur on the Palos Verdes Peninsula, west of Shoreline Park (CDFG 2000), in coastal sage scrub. Although suitable habitat for this species is present on the RHA, this species was not observed during previous surveys.

Parish's Brittlescale (Atriplex parishii). Parish's brittlescale is a federal Species of Concern and a CNPS List 1B species that typically blooms from June to October. This annual herb occurs in fine alkaline soils in alkaline meadows, chenopod scrub, and vernal pools. The brittlescale is threatened by grazing and development. Chenopod scrub is present on the UPVA; however, due to the disturbed nature of this vegetation type on the UPVA and the lack of vernal playas, Parish's brittlescale is not expected to occur on the UPVA or RHA and was not observed during previous surveys.

Catalina Mariposa Lily (Calochortus catalinae). Catalina mariposa lily is a CNPS List 4 species that typically blooms from February through May. This bulbiferous perennial herb occurs in native grasslands and openings in coastal sage scrub from sea level to 2,100 feet above mean sea level (msl). This species is known to occur in the Portuguese Bend area of the Palos Verdes Peninsula. Although potentially suitable habitat for the mariposa lily is present on the UPVA, this mariposa lily was not observed during previous surveys.

Lewis's Evening Primrose (Camissonia lewisii). Lewis's evening primrose is a CNPS List 3 species that typically blooms from March to June. This annual herb occurs in sandy or clay soils in coastal bluff scrub, cismontane woodlands, coastal dunes, coastal scrub, and valley foothill grasslands. This species was not included in previous surveys. Suitable habitat for this species is present on the RHA. There is potential for the Lewis's evening primrose to occur in the RHA, although this species was not observed.

Southern Tarplant (Centromadia parryi ssp. *australis).* Southern tarplant is a federal Species of Concern and a CNPS List 1B species that typically blooms from May to July. This annual herb is known to occur in estuary margins and vernally mesic areas. This species is not expected to occur on the UPVA or RHA due to lack of estuary and vernally mesic habitat.

Catalina Crossosoma (Crossosoma californicum). Catalina crossosoma is a CNPS List 1B species that typically blooms from February to May. This deciduous shrub occurs in rocky soils in coastal bluff scrub and coastal scrub. This species is known to occur on the Palos Verdes Peninsula (Brinkmann-Busi March 1992). ~~This species was not observed on the Project site during previous surveys. Potentially~~Although potentially suitable habitat for this species is present on the UPVA and RHA~~; therefore,~~, this species was not observed on the ~~Catalina crossosoma has potential to occur on-site~~Project site during previous surveys.

Beach Spectaclepod (Dithyrea maritima). Beach spectaclepod is a federal Species of Concern, a state-Threatened species, and a CNPS List 1B species that typically blooms from April to May. This rhizomatous perennial herb occurs in sandy soils in coastal dunes and coastal scrub. The beach spectaclepod is not expected to occur on the UPVA or RHA due to lack of suitable habitat.

Island Green Dudleya (Dudleya virens ssp. *insularis).* Island green dudleya is a CNPS List 1B species that typically blooms from April to June. This perennial herb occurs in coastal bluff scrub, chaparral, and coastal scrub. This species occurs throughout the southern coastal bluff scrub on the RHA and primarily in the mixed sage scrub and southern cactus scrub on the UPVA.

Coulter's Goldfields (Lasthenia glabrata ssp. *coulteri)*. Coulter's goldfields is a federal Species of Special Concern and a CNPS List 1B species that typically blooms from February to June. This annual herb is associated with low-lying alkali habitats along the coast and in inland valleys. This species occurs in coastal salt marsh, playas, and vernal pools. This species is not expected to occur on the UPVA or RHA due to lack of suitable habitat.

Santa Catalina Island Desert-thorn (Lycium brevipes var. *hassei)*. Santa Catalina Island desert-thorn is a CNPS List 1B species that typically blooms in June. This deciduous shrub occurs in coastal bluff scrub and coastal scrub. This species was found on the Palos Verdes Peninsula in 1974 (CNPS 2000). Although ~~not observed during previous surveys,~~ suitable habitat for this species is present on the UPVA and RHA~~; therefore, there is potential for the Santa Catalina island desert-thorn to occur onsite.~~this species was not observed during focused surveys.

California Box-thorn (Lycium californicum). California box-thorn is a CNPS List 4 species that typically blooms from December through August. This deciduous shrub occurs in coastal bluff scrub and coastal scrub. This species has been documented on the RHA in the coastal bluff scrub in the Dudek report and may occur within the UPVA in the scrub habitats.

Prostrate Navarretia (Navarretia prostrata). Prostrate navarretia is a CNPS List 1B species that typically blooms from April to July. This annual herb occurs in alkaline or mesic soils in coastal scrub, valley foothill grassland, and vernal pools. There is no suitable habitat for this species on the UPVA or RHA; therefore, this species is not expected to occur.

Coast Woolly-heads (Nemacaulis denudata var. *denudata)*. Coast woolly-heads is a CNPS List 1B species that typically blooms from April to September. This annual herb occurs in coastal dunes. No suitable habitat is present on the UPVA or RHA for this species; therefore, the coast woolly-heads is not expected to occur.

Lyon's Pentachaeta (Pentachaeta lyonii). Lyon's pentachaeta is a federally- and state-listed Endangered species and a CNPS List 1B species that typically blooms from March to August. This annual herb occurs in openings in chaparral and valley foothill grasslands ~~and was not observed in previous surveys~~. ~~S~~Although suitable habitat for this species is present on the UPVA~~; therefore, the Lyon's pentachaeta has potential to occur~~this species was not observed in ~~the UPVA~~previous surveys.

Estuary Sea-blite (Suaeda esteroa). Estuary sea-blite is a CNPS List 1B species that typically blooms from July to October. This perennial herb occurs in coastal salt marsh habitat. No suitable coastal salt marsh habitat is present on the UPVA or RHA; therefore, the estuary sea-blite is not expected to occur.

Woolly Sea-blite (Suaeda taxifolia). Woolly sea-blite is a CNPS List 4 species that typically blooms from January through December. This perennial herb occurs in margins of coastal salt marsh and coastal bluff scrub. Woolly sea-blite occurs on the RHA in the southern coastal bluff scrub. No suitable habitat is present on the UPVA for this species.

Special Status Wildlife. Forty-one special status wildlife species are known to occur within the region and have a potential to occur within the Project site. ~~In addition to f~~Focused surveys have been conducted for the coastal California gnatcatcher ~~in 1998, a host plant survey for the~~Pacific pocket mouse, Palos Verdes blue butterfly, and El Segundo blue ~~butterfly was conducted in 1999 (Dudek 1999)~~. Brief descriptions of the special status wildlife species and their potential to occur within the Project site are discussed below. Please note that they are grouped by type and listed alphabetically according to their scientific name. These species are summarized in Table 5.3-3.

Invertebrates

El Segundo Blue Butterfly (Euphilotes battoides allyni). The El Segundo blue butterfly is a federally-listed Endangered species. This butterfly was previously known to persist~~s~~ on just a few remaining fragments of dune habitat along the Los Angeles County coast from Los Angeles International Airport to Palos Verdes. The largest remaining population of this species is found on the property of the Los Angeles International Airport. The El Segundo blue butterfly is not only threatened by loss of habitat, but by threats to the continued survival of its host plant. ~~Ashy-leaved~~Coast buckwheat ~~(*Eriogonum cineracens*)~~ is believed to be the primary larval food plant or host plant for the species, and it is threatened by competition from several introduced plants including other buckwheats. The larvae of the El Segundo blue butterfly cannot successfully feed on these other buckwheats. The El Segundo blue butterfly adult flight period is ~~May through June (Garth and Tilden 1986)~~mid-June to August.

The host plant (coast buckwheat) for the El Segundo blue butterfly was identified on the ~~UPVA~~RHA during the 1999 and 2001 focused surveys. Associated with the locations of the coast buckwheat, a population of the El Segundo blue butterfly was found on the bluff tops, bluff faces, and foot of the bluff on the western portion of the RHA during the focused surveys conducted in 2001. Most of the butterflies were observed in the stretch of bluff north of and around the narrowpoint located immediately north of the Long Point[5]. This is a stretch of bluff located just south of the existing fishing access parking lot. One male was observed approximately 700 feet south of this narrowpoint, near a small-patch of coast buckwheat (Exhibit 5.3-1).

[5] Geographic feature identified on USGS topographic map.

The ~~ashy-leaved~~ashy-leaf buckwheat was found within the coastal sage scrub and southern cactus scrub habitats on the UPVA~~. Although the larval food plant for~~ and within the disturbed areas of the RHA along the bluff habitat areas. As discussed previously, the El Segundo blue may also use the ashy-leaf buckwheat. Therefore, focused surveys were also conducted concurrently on the UPVA during the period when the El Segundo blue butterfly was ~~identified on the UPVA, the appropriate dune habitat for the species was not. Therefore the~~known to be flying on the RHA. The El Segundo blue butterfly ~~is~~was not ~~expected to occur~~observed on the UPVA ~~or RHA due to a lack of suitable habitat~~during focused survey efforts.

Palos Verdes Blue Butterfly (Glaucopsyche lygdamus palosverdesensis). The Palos Verdes blue butterfly is a federally-listed Endangered species. It was believed to be extinct, but was rediscovered on March 10, 1994 at a Defense Fuel Support Point site in San Pedro. During the 1980s, there were 12 locations identified as supporting the Palos Verdes blue butterfly. All of these locations were on the southern half of the Palos Verdes Peninsula and supported coastal sage scrub habitats. This butterfly is a subspecies of the silvery blue (*Glaucopsyche lygdamus*), of which at least ten subspecies have been described. These subspecies occur in small colonies that are distributed locally across North America. The larval food plants or host plants for this species consist of legumes (Garth and Tilden 1986)~~,~~ such as ~~milk-vetch or rattleweed (*Astragalus trichopodus lonchus*),~~locoweed that is used by the Palos Verdes blue butterfly. In addition, ~~this species~~the Palos Verdes blue will also lay its eggs on deerweed ~~(*Lotus scoparius*)~~.

One of the two required larval food plant species was identified on UPVA during the 1999 and 2001 focused surveys for host plants of the Palos Verdes blue butterfly. Locoweed was observed at the edge of southern cactus scrub in the UPVA. ~~It is presumed that the habitat here is too fragmented and disturbed to support the Palos Verdes blue butterfly. The quality of onsite habitat and the current distribution of the Palos Verdes blue butterfly indicate that its potential to occur on the UPVA is very low.~~

This species was not observed during focused survey efforts during the spring of 2001. Therefore this species is not expected to occur onsite.

Amphibians

Western Spadefoot Toad (Scaphiopus hammondi). The western spadefoot toad is a federal Species of Concern, a California Species of Special Concern, and a CDFG Protected species. This species inhabits grassland, coastal sage scrub, and other habitats with open sandy, gravely soils. The western spadefoot toad is primarily a species of the lowlands, frequenting washes, floodplains of rivers, alluvial fans, and alkali flats (Stebbins 1985). This species is rarely seen outside of the breeding

season. They breed in vernal pools and temporary ponds. The RHA provides a limited amount of potentially suitable habitat for this species in the areas supporting mule fat scrub and its potential to occur is considered to be low. No suitable habitat for this species occurs on the UPVA.

Reptiles

Silvery Legless Lizard (Anniella pulchra pulchra). The silvery legless lizard is a federal Species of Concern and a California Species of Special Concern. The silvery legless lizard inhabits areas with moist sandy soil, including dry washes, woodlands, riparian, and scrub communities at elevations ranging from sea level to about 5,000 feet above msl (Stebbins 1985). The UPVA and RHA provides a limited amount of potentially suitable habitat for this species and its potential to occur is considered to be low.

Coastal Western Whiptail (Cnemidophorus tigris multiscutatus). The coastal western whiptail is a federal Species of Concern. It is a moderately large, slender lizard typically found in open scrub, chaparral, and woodland communities in semi-arid areas or where vegetation is sparse. The species is restricted to the western coast of North America from Ventura County south through the northern two-thirds of the Baja California peninsula. The UPVA and RHA provide a moderate amount of suitable habitat for this species and its potential to occur is considered to be moderate.

San Bernardino Ringneck Snake (Diadophis punctatus modestus). The San Bernardino ringneck snake is a federal Species of Concern and is considered locally rare in southwestern California. It inhabits scrub, chaparral, native grassland, and woodland communities. This species is difficult to detect due to its secretive behavior. It occurs in elevations from sea level to 7,000 feet above msl (Stebbins 1985). The UPVA and RHA provide a moderate amount of suitable habitat for this species and its potential to occur is considered to be moderate.

San Diego Coast Horned Lizard (Phrynosoma coronatum blainvilleii). The San Diego coast horned lizard is a federal Species of Concern, a California Species of Special Concern, and a CDFG Protected species. It is a small, spiny, somewhat rounded lizard that occurs primarily in open or sparse scrub and chaparral communities. This species prefers loose, friable soils for burrowing. Three factors have contributed to its decline: loss of habitat, overcollecting, and the introduction of exotic ants. In some places, especially adjacent to urban areas, the introduced ants have displaced the native species upon which the lizard feeds (Hix 1990). The UPVA and RHA provide a moderate amount of suitable habitat for this species and its potential to occur is considered to be moderate.

Birds

Cooper's Hawk (Accipiter cooperii). The Cooper's hawk is a California Species of Special Concern. Both resident and migratory populations exist in Los Angeles County. Wintering Cooper's hawks are often seen in wooded urban areas and native woodland communities. Preferred nesting habitats are oak and riparian woodlands dominated by sycamores and willows. Cooper's hawks in the region prey on small birds and rodents that live in woodland and, occasionally, scrub and chaparral communities. This raptor is an uncommon breeding resident on the Palos Verdes Peninsula (Bradley 1980). The UPVA and RHA provide suitable foraging habitat, but a limited amount of nesting habitat for this raptor. Therefore, its overall potential to occur is considered to be high, although the potential for breeding is low.

Sharp-shinned Hawk (Accipiter striatus). The sharp-shinned hawk is a California Species of Special Concern. This raptor is a fairly common winter visitor along the coast of southern California (Garrett and Dunn 1981). It prefers woodland communities, but can also be found in virtually any habitat as it passes through the area during migration. The sharp-shinned hawk is a fairly common winter visitor on the Palos Verdes Peninsula, usually in wooded areas (Bradley 1980). The UPVA and RHA provide suitable foraging habitat, but no nesting habitat, for this raptor. Therefore, its potential to occur is considered to be high for foraging, with no potential for breeding.

Tricolored ~~b~~Blackbird (Agelaius tricolor). The tricolored blackbird is a federal Species of Concern and a California Species of Special Concern. These colonially-nesting birds prefer to breed in marsh vegetation of bulrushes and cattails, and have also been recorded nesting in willows, blackberries, and mustard (Beedy et. al. 1991). During winter months, they are often found foraging in wet pastures, agricultural fields, and seasonal wetlands. The tricolored blackbird breeds at Machado Lake just south of the intersection of the Harbor Freeway and Pacific Coast Highway and adjacent to the Ken Malloy Harbor Regional Park on the north side of the Palos Verdes Peninsula. The UPVA and RHA provide suitable foraging habitat for this species, but no nesting habitat ~~is only found on the north side of the peninsula away from the these areas~~. Therefore, the potential for this species to occur at the Project site is considered to be low.

Southern California Rufous-crowned Sparrow (Aimophila ruficeps canescens). The Southern California rufous-crowned sparrow is a federal Species of Concern and a California Species of Special Concern. In coastal southern California, rufous-crowned sparrows are considered fairly common in scrub communities and other habitats vegetated with grasses and widely spaced low shrubs. They also prefer slopes with rock outcroppings. This subspecies is present throughout the year in

southern California. The UPVA and RHA provide a moderate amount of suitable habitat for this species; therefore, its potential to occur is considered to be moderate.

Short-eared Owl (Asio flammeus). The short-eared owl is a California Species of Special Concern. It is an uncommon winter visitor along the coast of southern California, primarily occurring in marsh habitats. This owl forages in open habitats including marshes, grasslands, and agricultural fields. The short-eared owl is a rare winter visitor to the Palos Verdes Peninsula (Bradley 1980). The UPVA and RHA provide suitable foraging habitat, but no nesting habitat, for this species. Therefore, its potential to occur is considered to be very low and there is no potential for breeding.

Burrowing Owl (Athene cunicularia). The burrowing owl is a federal Species of Concern and a California Species of Special Concern. Burrowing owls breed and forage in grasslands and agricultural fields, preferring flat to low rolling hills in treeless terrain. It now may be extirpated as a breeding resident from the Palos Verdes Peninsula, as the only recent reports in the area have been from the California State University at Dominguez Hills. The UPVA and RHA provide a moderate amount of suitable habitat for the burrowing owl; however, due to its current status in the region, its potential to occur is considered to be very low.

Ferruginous Hawk (Buteo regalis). The ferruginous hawk is a federal Species of Concern and a California Species of Special Concern. Ferruginous hawks occur from mid-fall through early spring in coastal southern California. They forage over grasslands and the ecotone between coastal sage scrub and grasslands. This raptor is considered to be an accidental visitor to the Palos Verdes Peninsula, with only one record prior to 1980 (Bradley 1980). The UPVA provides a limited amount of suitable foraging habitat, but no nesting habitat, for this species. Therefore, its potential to occur on the UPVA is considered to be very low, with no potential for breeding. No suitable breeding or foraging habitat for this species occurs on the RHA.

Coastal Cactus Wren (Campylorhynchus brunneicapillus couesi). The coastal cactus wren is a California Species of Special Concern. Cactus wrens are residents in coastal southern California where they occur in dry washes with yuccas and cacti, and on lower coastal slopes and bluffs with extensive patches of prickly-pear cactus (Garrett 1981). Suitable habitat for the cactus wren is only present on the UPVA. A total of 11 individual coastal cactus wrens were present on the UPVA during the 1998 surveys.

Northern Harrier (Circus cyaneus). The northern harrier is a California Species of Special Concern. It is a regular winter migrant that occasionally breeds along the coast of southern California. Foraging habitat consists of marsh, grassland, and scrub habitats. It is considered to be an uncommon to rare winter visitor on the Palos Verdes Peninsula (Bradley 1980). The UPVA and RHA provide suitable foraging habitat, but limited potentially suitable nesting habitat, for this raptor. Therefore, its potential to occur is considered to be moderate, but the potential for breeding is very low.

Western Yellow Warbler (Dendroica petechia brewsteri). The subspecies of yellow warbler that breeds in southern California is *D.p. brewsteri* (Dunn and Garrett 1997); most are migrants. The CDFG has included this subspecies on its list of California Species of Special Concern. *D.p. brewsteri* occurs in coastal areas from northwestern Washington south to western Baja California (Dunn and Garrett 1997). In southern California, yellow warblers breed locally in riparian woodlands. Although a migrant yellow warbler was observed during surveys on the RHA, the UPVA and RHA do not provide suitable nesting habitat for this species.

White-tailed Kite (Elanus leucurus). The white-tailed kite is a California Fully Protected species. This raptor typically nests in oaks, willows, and sycamores, and forages within adjacent grassland and scrub habitats. White-tailed kites show strong site fidelity to nest groves and trees. ~~The most abundant prey species for this raptor includes the California vole, western harvest mouse, and house mouse.~~ On the Palos Verdes Peninsula, this raptor is an uncommon winter visitor (Bradley 1980). The UPVA provides suitable foraging habitat, but limited potentially suitable nesting habitat, for this raptor. Therefore, its potential to occur on the UPVA is considered to be moderate, but the potential for breeding is very low. No suitable foraging or breeding habitat is present on the RHA for this species.

Southwestern Willow Flycatcher (Empidonax traillii extimus). The southwestern willow flycatcher is a federally- and state-listed Endangered species. This subspecies has declined drastically due to a loss of breeding habitat and nest parasitism by brown-headed cowbirds (*Molothrus ater*). ~~This species~~The willow flycatcher occurs in riparian habitats along rivers, streams, or other wetlands where dense growths of willows (*Salix* sp.), baccharis (*Baccharis* sp.), arrowweed (*Pluchea* sp.), tamarisk (*Tamarix* sp.), or other plants are present, often with a scattered overstory of cottonwood (*Populus* sp.) (USFWS February 27, 1995). The potential for migrant willow flycatchers, especially the subspecies *E. t. brewsteri*, to occur on the Project site (including both the UPVA and RHA) is considered to be high. However, the RHA and UPVA does not provide suitable nesting habitat for this species. Therefore, there is no potential for the southwestern willow flycatcher to breed in these areas.

California Horned Lark (Eremophila alpestris actia). The CDFG has included this subspecies on its list of California Species of Special Concern. In southern California, this subspecies is a fairly common breeding resident in grasslands and other dry, open habitats. The horned lark is a common winter visitor on the Palos Verdes Peninsula that formerly nested in the area (Bradley 1980). The UPVA and RHA provide suitable foraging habitat, but limited suitable nesting habitat, for this species. Therefore, its potential to occur is considered to be high, but the potential for breeding is very low.

Merlin (Falco columbarius). The merlin is a California Species of Special Concern. In California, the merlin prefers vast open space areas such as estuaries, grasslands, and deserts where it hunts small flocking birds such as sandpipers, larks, sparrows, and pipits. The merlin is a very rare winter visitor to the Palos Verdes Peninsula (Bradley 1980). The UPVA and RHA provide suitable foraging habitat, but no nesting habitat, for this raptor. Therefore, its potential to occur is considered to be low, and there is no potential for breeding.

Prairie Falcon (Falco mexicanus). The prairie falcon is a California Species of Special Concern. It is now a rare visitor to the coastal plain of southern California. Foraging habitat for this species consists of open habitats such as deserts, grasslands, rangelands, and marshes. For nesting, this large falcon uses ledges of cliff faces. The prairie falcon is a very rare winter visitor to the Palos Verdes Peninsula (Bradley 1980). The UPVA and RHA provide suitable foraging habitat for this raptor, but limited potentially suitable nesting habitat. Therefore, its potential to occur for foraging is considered to be low, but the potential for breeding is considered to be very low.

Peregrine Falcon (Falco peregrinus). The peregrine falcon is a state-listed Endangered species that, due to recent population gains, has been recently delisted as Endangered by the USFWS. No such delisting has been proposed by the state. Peregrine falcons prey almost exclusively on birds and use a variety of habitats, particularly wetlands and coastal areas. The peregrine falcon is now a regular visitor to the Palos Verdes Peninsula, including Point San Vicente adjacent to the Project site. The Project site (both the UPVA and RHA) provides suitable foraging habitat and potentially suitable nesting habitat for the peregrine falcon. In recent years in Los Angeles County, peregrine falcons have only nested in urban areas (e.g., building ledges). However, historically they used cliffs, such as the cliffs at the RHA, for nesting. Therefore, its potential to occur on the UPVA and RHA is considered to be high, but the potential for breeding is considered to be low.

Yellow-breasted Chat (Icteria virens). The yellow-breasted chat is a California Species of Special Concern. For nesting, this species requires dense, brushy tangles near water and riparian woodlands supporting a thick understory. The

yellow-breasted chat is an uncommon transient to the Palos Verdes Peninsula (Bradley 1980). Although migrant yellow-breasted chats are expected to occur during migration, the UPVA and RHA do not provide suitable nesting habitat for this species. Therefore, its potential to occur is low to moderate as a migrant, but there is no potential for breeding.

Loggerhead Shrike (Lanius ludovicianus). The loggerhead shrike is a federal Species of Concern and a California Species of Special Concern. This species is a fairly common resident of lowlands and foothills in southern California. Shrikes inhabit grasslands and other dry, open habitats. They can often be found perched on fences and posts from which prey items (e.g., large insects, small mammals, lizards) can be seen. The UPVA and RHA provide suitable habitat for the loggerhead shrike and it was observed during surveys.

California Gull (Larus californicus). The California gull is a California Species of Special Concern. It is known to nest at alkali and freshwater lucustrine habitats. This gull forages over the open ocean, but scavenges in urban habitats wherever food scraps are available, especially at landfills. Habitat for loafing or roosting includes rocky shorelines. It is considered to be an abundant winter visitor on the Palos Verdes Peninsula (Bradley 1980). The UPVA and RHA provide limited suitable roosting and foraging habitat, but no nesting habitat, and its potential to occur is considered to be high.

Osprey (Pandion halaetus). The osprey is a California Species of Special Concern. This raptor is a year-round visitor to southern California (Garrett and Dunn 1981). The osprey is a specialized predator of fish in relatively large bodies of water from the ocean inland. It nests in large trees or man-made structures such as utility poles. It is considered to be a rare migrant and winter visitor on the Palos Verdes Peninsula (Bradley 1980), although it has increased in the region in recent years. The RHA provides limited potentially suitable nesting habitat and no foraging habitat, although suitable foraging habitat is present just offshore. Therefore, the potential for the osprey to occur on the RHA is considered to be very low. No suitable foraging or nesting habitat for this species occurs on the UPVA.

California Brown Pelican (Pelecanus occidentalis). The California brown pelican is a federally- and state-listed Endangered species. The breeding range of the California brown pelican is the Channel Islands off the coast of southern California, on islands along the west coast of Baja California, and in the Gulf of California (A.O.U. 1957). After the breeding season, the pelicans leave the islands and disperse along the entire west coast, with most wintering in southern California and lower densities occurring further up the coastline as far north as southern British Colombia. Pesticide use, especially of DDT, led to widely documented reproductive problems for certain species of birds, including egg shell thinning for the brown

pelican. ~~The California brown pelican was listed as Endangered by the CDFG on June 27, 1971 and by the USFWS on October 13, 1970.~~

The brown pelican occurs in marine environments and rarely strays far from the immediate coastline. It is found primarily on open beaches, lagoons, tidal rivers, rocky coasts, jetties and breakwaters, and islands. The brown pelican is a non-breeding year round visitor to the Palos Verdes Peninsula that is most common in fall and winter (Bradley 1980). The RHA provides a limited amount of suitable roosting habitat and this species was observed during the surveys as it roosted on the rocky shoreline at the base of the coastal bluffs. Although the RHA provides potentially suitable nesting habitat, the lack of isolation from potential predators and human disturbance suggests that breeding by brown pelicans at this location is not to be expected. No suitable foraging or nesting habitat for this species occurs on the UPVA.

Double-crested Cormorant (Phalacrocorax auritus). The double-crested cormorant is a California Species of Special Concern. This species nests colonially on cliffs or in trees either along the ocean coastline or at inland bodies of water. It is dependent on aquatic habitats for foraging opportunities where it dives for its food. Habitat for roosting includes trees and rocky shorelines. It is considered to be a fairly common non-breeding resident on the Palos Verdes Peninsula (Bradley 1980). The RHA provides a limited amount of suitable roosting habitat and this species was observed during the surveys as it roosted on the rocky shoreline at the base of the coastal bluffs. No suitable foraging or nesting habitat for this species occurs on the UPVA or RHA.

Coastal California Gnatcatcher (Polioptila californica californica). The coastal California gnatcatcher is a federally-listed Threatened species and a California Species of Special Concern. This species occurs in most of Baja California's arid regions, but it is extremely localized in the United States, where it predominantly occurs in coastal regions of highly urbanized Los Angeles, Orange, Riverside, and San Diego counties (Atwood 1992). In California, this species is an obligate resident of several distinct subassociations of the coastal sage scrub plant community. Brood parasitism by brown-headed cowbirds and loss of habitat to urban development have been cited as causes of the coastal California gnatcatcher population decline (Unitt 1984; Atwood 1990). The Manomet Bird Observatory studies indicated that the Palos Verdes Peninsula supported a population of between 26 and 56 pairs between 1993 and 1996 (Atwood et al. 1996). The four gnatcatcher pairs onsite represent the southwestern most portion of the population of gnatcatchers on the Palos Verdes Peninsula. The apparent ~~"core"~~core of the Palos Verdes population occurs in the coast foothills northeast of Abalone Cove, approximately 2.5 miles east of the Project site. Suitable habitat for the coastal California gnatcatcher is present on the UPVA. A total of four pairs of coastal

California gnatcatchers were present on the UPVA during the 1998 and 2001 surveys. All four pairs were located in the same approximate location during the 1998 and 2001 survey efforts.

On October 24, 2000, the USFWS published a final rule to designate 513,650 acres of land as critical habitat for the coastal California gnatcatcher (USFWS, October 24, 2000). These lands encompass portions of Los Angeles, San Bernardino, Orange, Riverside, and San Diego counties in California. The designation of critical habitat includes "Unit 8", which includes the Palos Verdes Peninsula Subregion. Critical habitat refers to specific geographic areas that are essential for the conservation of a Threatened or Endangered species and that may require special management considerations. These areas do not necessarily have to be occupied by the species at the time of designation. A critical habitat designation does not set up a preserve or refuge and only applies to situations where ~~F~~a federal ~~funding or a Federal Permit~~action is ~~involved~~required. A Section 7 consultation, pursuant to the federal Endangered Species Act (FESA), with the USFWS is required for any ~~F~~federal action (~~ie~~.eg., issuance of an ACOE Permit) that is likely to result in the adverse modification or destruction of critical habitat. The UPVA and RHA are located within areas designated as critical habitat with Unit 8 of the USFWS final rule.

California Least Tern (Sterna antillarum browni). The California least tern is a federally- and state-listed Endangered species. This migratory species nests from April through August along the coast of California from San Francisco south to Baja California. The least tern has declined due to loss of suitable nesting habitat as a result of increasing levels of human activities on beaches and a reduction in estuarine foraging areas. The UPVA and RHA do not provide suitable foraging, roosting, or nesting habitat for this species. However, this species is expected to occasionally occur just offshore from the RHA as it either forages or passes by.

Elegant Tern (Sterna elegans). The elegant tern is a federal Species of Concern and California Species of Special Concern. Nesting colonies of this tern are found at only a few locations in the U.S. at inshore coastal waters and island beaches. Recent locations are south San Diego Bay in San Diego County, Bolsa Chica Ecological Reserve in Orange County, and the Los Angeles Harbor. The Los Angeles Harbor colony first appeared in 1998 on new dredge fill that is destined to become part of the Port of Los Angeles Harbor complex. The elegant tern is a common visitor to the Palos Verdes Peninsula from summer into fall. The UPVA and RHA do not provide suitable foraging (shallow ocean waters), roosting (beaches and tideflats), or nesting habitat for this species (open areas/beaches at coast). However, this species is expected to occasionally occur just offshore from the RHA as it either forages or passes by.

Least Bell's Vireo (Vireo bellii pusillus). The least Bell's vireo is a federally- and state-listed Endangered species. The vireo is now a rare and local summer resident of southern California's lowland riparian woodlands. While destruction of lowland riparian habitats has played a large role in driving this species to its present precarious situation, brood parasitism by brown-headed cowbirds is the most important factor in its decline (Garrett and Dunn 1981). The RHA and UPVA do not provide suitable nesting habitat for this species. Therefore, there is no potential for the least Bell's vireo to breed on either the RHA or UPVA.

Mammals

Pallid Bat (Antrozus pallidus). The pallid bat is a California Species of Special Concern that most commonly occurs in mixed oak and grassland habitats. This large bat roosts in rock crevices and in cavities of trees, especially oaks. The UPVA provides potentially suitable roosting and foraging habitat for this species and it may occur. No suitable habitat for this species occurs on the RHA.

Pale Big-eared Bat (Corynorhinus townsendii pallescens). The pale big-eared bat occurs throughout California and is a federal Species of Concern and California Species of Special Concern. In the southern portion of the state, the subspecies, *C. t. pallescens* (Hall 1981), occupies a variety of communities, including oak woodlands, arid deserts, grasslands, and high-elevation forests and meadows. Known roosting sites in California include mines, caves, and buildings. The UPVA and RHA provide potentially suitable roosting and foraging habitat for this species and it may occur.

California Mastiff Bat (Eumops perotis californicus). The California mastiff bat, the largest bat in the United States, is a federal Species of Concern and a California Species of Special Concern. This species is a very wide-ranging and high-flying insectivore that typically forages in open areas with high cliffs. It roosts in crevices in small colonies. The UPVA and RHA provide potentially suitable roosting and foraging habitat for this species and it may occur.

San Diego Black-tailed Jackrabbit (Lepus californicus bennettii). The San Diego black-tailed jackrabbit is a federal Species of Concern and a California Species of Special Concern. This subspecies of the widespread black-tailed jackrabbit is restricted to the Pacific slope from Santa Barbara County to northwestern Baja California. This species is nocturnal and prefers relatively open areas with sparse shrub cover. The UPVA provides a limited amount of suitable habitat for this species. Therefore, its potential to occur on the UPVA is considered to be low. No suitable habitat for this species occurs on the RHA.

Small-footed Myotis (Myotis ciliolabrum). The small-footed myotis is a federal Species of Concern and occurs throughout much of the western United States, occupying a variety of habitats. This species feeds among trees or over brush, and roosts in cavities of cliffs, trees, or rocks and within caves or mine shafts. The UPVA and RHA provide potentially suitable roosting and foraging habitat for this species and it may occur.

Yuma Myotis (Myotis yumanensis). The Yuma myotis is a federal Species of Concern and a relatively small bat that occurs statewide. This species is closely associated with water and wooded canyon bottoms throughout its range. Caves and old buildings are preferred roosting habitats, with roosts numbering up to 2,000 individuals. The UPVA and RHA provide potentially suitable foraging habitat for this species and it may occur.

San Diego Desert Woodrat (Neotoma lepida intermedia). The San Diego desert woodrat is a federal Species of Concern and California Species of Special Concern. It occupies arid areas with sparse vegetation, especially those comprised of cactus and other thorny plants. This subspecies is restricted to the Pacific slope in a range that stretches from San Luis Obispo to northwestern Baja California. The UPVA provides suitable habitat for this species and its potential to occur is considered to be moderate. No suitable habitat for this species occurs on the RHA.

Pacific Pocket Mouse (Perognathus longimembris pacificus). The Pacific pocket mouse is a federally-Endangered species and a California Species of Special Concern. The historic range of this subspecies is the immediate coastal slope between El Segundo, Los Angeles County, and northwestern Baja California. There are eight historically-known populations of the Pacific pocket mouse (USFWS 1994b). These populations are known from Los Angeles, Orange and San Diego counties. The species is now presumed to be extinct north of the San Joaquin Hills (Williams 1986). This mouse has been found on sandy, gravelly and stony soils, although it is rarely found on rocky sites (Williams 1986, Zeiner et al. 1990). ~~The UPVA and RHA provide habitat that is potentially suitable~~Based on a habitat assessment for the Project site conducted by Dr. Behrends, UPVA and RHA are unsuitable for this species~~. However, its current known distribution suggests that potential for the Pacific pocket mouse to occur is very low.~~ due to the lack of suitable soils and vegetation (Dudek 2001). Therefore, Dr. Behrends did not recommend any live-trapping for this species, as this species is not expected to occur onsite.

ONGOING REGIONAL AND LOCAL HABITAT CONSERVATION PROGRAMS

NATURAL COMMUNITIES CONSERVATION PLANNING PROGRAM

On August 30, 1991, the State Fish and Game Commission considered a petition in support of listing the coastal California gnatcatcher. The Commission decided not to list the coastal California gnatcatcher as an Endangered species in favor of pursuing preparation of a Natural Communities Conservation Planning (NCCP) program as proposed by Assembly Bill 2172 (AB 2172/Natural Communities Conservation Planning Act) (Fish and Game Code Section 2800 et~~.~~ seq.). AB 2172 authorized the CDFG to enter into agreements with any person for the purpose of preparing and implementing NCCPs and prepare guidelines for development and implementation of NCCPs. AB 2172 also permits NCCPs to be prepared by local, state, or federal agencies independently or in cooperation with other persons, and requires the CDFG to be compensated for costs incurred in preparing and implementing NCCPs.

The purpose of the NCCP program is to provide regional or area-wide protection and perpetuation of natural wildlife diversity while allowing compatible and appropriate development and growth. AB 2172 was designed in recognition of the fact that individual species protection under the state Endangered Species Act (CESA) and the ~~federal Endangered Species Act (~~FESA~~)~~ is costly and historically ineffective as a mechanism for protection or prevention of extinction of plant and animal species, and that a habitat-based, multispecies or ecosystem-driven preservation approach has greater potential for long-term success. The focus of the NCCP program represents a dramatic shift from ~~"individual~~protection of individual species~~"~~ to ~~"habitat~~habitat conservation and management.~~"~~

On March 25, 1993, the U.S. Department of the Interior listed the coastal California gnatcatcher as a ~~"Threatened"~~Threatened species and adopted a special rule in accordance with Section 4(d) of the FESA that authorized landowners and local jurisdictions to voluntarily participate in the State of California NCCP Act of 1992.

Beginning in 1996, and in concert with state and federal resource agencies, the City of Rancho Palos Verdes has taken the lead in developing a NCCP for areas within its jurisdiction pursuant to the California Natural Community Conservation Planning Act of 1991 and the FESA. The City's NCCP is still in the process of preparation and must be approved by state and federal agencies. Once approved, the City's NCCP will establish Biological Reserve Area(s) in the City to provide for the protection of the federally-listed Threatened coastal California gnatcatcher, sensitive native plant communities (e.g., coastal sage scrub), and other sensitive species (e.g., coastal cactus wren and loggerhead shrike).

The NCCP program will be completed in two phases: an interim phase and an implementation phase. The interim phase is defined as the period of time between the March 25, 1993 listing date and the approval of the subregional NCCP program by the USFWS and CDFG. During the interim phase, the USFWS may approve incidental habitat loss associated with development, provided the loss does not exceed the five-percent cumulative maximum established for the subregion and is adequately mitigated.

On October 7, 1999, the USFWS issued a ~~b~~Biological ~~o~~Opinion (BO) regarding the reinitiation of intra-service consultation on implementation of the ~~"special r~~4(d) Special Rule~~"~~ for the gnatcatcher for the interim phase. The 1999 BO was issued because the ~~"incidental~~incidental take~~"~~ of gnatcatchers pursuant to Section 4(d) of the ~~Federal Endangered Species Act (~~FESA~~)~~ was approaching the amount authorized in the most recent (October 16, 1996) BO for this program. According to the 1999 BO, a maximum of five percent of the remaining 12,501 acres of sage scrub may be lost as a result of the continued use of the interim provisions of the ~~s~~4(d) Special ~~r~~Rule, Section 7 consultations, and ~~s~~Section 10(a)(1)(b) incidental take permits throughout the entire NCCP planning area in southern California. At the present time, there are no remaining acres of coastal sage scrub in the City NCCP subregion that can be removed under the 4(d) ~~s~~Special ~~r~~Rule (J. Rojas, pers. comm. 2000).

The implementation phase of the NCCP will begin when the subregional NCCP program is completed and approved. The USFWS will monitor the plan to ensure the success of the implementation program.

The design of the City's NCCP reserve is currently under development (D. Snow, pers. comm. 2000). The reserve design will attempt to preserve the most biologically rich areas within the subregion while identifying those areas suitable for development. The City NCCP subarea, although relatively small in area as compared to other NCCP subareas in Southern California, is unique in that it contains healthy concentrations of coastal sage scrub habitat (approximately 1,250 acres) and a number of coastal sage scrub dependent plant and wildlife species which are not found in other Southern California coastal sage scrub communities including ashy-leaf buckwheat, bright green dudleya, and Palos Verdes blue butterfly.

LONG POINT HABITAT CONSERVATION PROGRAM

The Project is divided into three (3) distinct land use districts: the Conservation District; the Recreation District; and the Resort Development District. These districts are illustrated on Exhibit 3-3, *Land Use Map*, and outlined in Table 3-2, *Land Use Summary*. As part of the Conservation District, the Long Point Habitat Conservation Program (LPHCP) has been developed by the Project Applicant. This area is illustrated in Exhibit 5.3-3 and 5.3-4, *Biological Resources Preservation/ Enhancement Areas Within the RHA and the UPVA*.

The LPHCP contains habitat restoration and enhancement design concepts for the Conservation District area through revegetation with drought-tolerant species, transitional areas of planting between the Conservation Area and Resort Hotel or Recreation Planning Areas, and design for long-term sustainability. In addition, the program states that Project drainage and surface runoff would be directed away from the bluff habitat areas in the RHA and public access may be combined in the UPVA to reduce overall impacts.[6] The Applicant has also prepared a Preliminary Draft Natural Communities Management Plan (NCMP) (NRC June 27, 2001) (refer to Appendix X) that expands on the natural resource protection and revegetation on the UPVA and RHA outlined in the LPHCP. The NCMP shall be used in concert with the LPHCP and shall incorporate all design features and mitigation measures of the Project EIR pertaining to biological resources. Any future reference to the LPHCP will assume inclusion of the Preliminary Draft NCMP and any future version of the document. The LPHCP for the UPVA and RHA are discussed separately below.

Resort Hotel Area

The RHA contains 4.54 acres of existing coastal bluff scrub. Construction of the proposed Project would remove 0.10 acre[7] of habitat. The remaining 4.44 acres of existing habitat are proposed to be retained and, where appropriate, enhanced with new native vegetation.

The RHA Conservation Area, referred to as the Bluff/Beach Habitat Reserve (PA 1-A), would include 4.44 acres of coastal bluff scrub habitat as well as 3.87 acres of non-vegetated rocky ~~shore~~shore/coastal bluff (Exhibit 5.3-3, *Biological Resource Preservation Areas Within Resort Hotel Area*). This Conservation Area is approximately 150 feet away from any Resort Hotel development and adjoins the

[6] Long Point Resort Permit Documentation, prepared by FORMA, June 23, 2000, page 3-12.

[7] Mitigation has been identified which involves a slight modification to the development plan to avoid any impacts to coastal bluff scrub.

SOURCE: BONTERRA CONSULTING

JN 10-034194-7978 • 07/01

LONG POINT RESORT EIR

Biological Resources Preservation/Enhancements Within Resort Hotel Area

Exhibit 5.3-3

SOURCE: FORMA

JN 10-034194-7978 • 07/01

LONG POINT RESORT EIR

Biological Resources Preservation/Enhancements Within Upper Point Vicente Area

Exhibit 5.3-4

County's Point Vicente Fishing Access Area. Although permitting recreational fishing for fin fish, this reserve designation would restrict certain active uses below the Resort Hotel such as commercial fishing, the collection of invertebrates, and the disturbance of plants, birds, and other animal life. This level of protection would ensure the on-going conservation of this ecosystem and ~~"sustainable"~~sustainable use of coastal resources within this stretch of the Rancho Palos Verdes shoreline. In order to preserve the integrity of the steep coastal bluff, there are no proposed trails within this Conservation Planning Area.

The steep cliffs of the RHA are also expected to provide a narrow linkage for wildlife east and west of the site. As a part of the LPHCP, these areas will be maintained as permanent open space and would not be impacted. The Project design of the UPVA area has also maintained a connection to the open space areas offsite. The preserved habitat areas onsite and the proposed coastal sage scrub creation areas on the UPVA site are also expected to provide for local movement on and offsite. The UPVA site is discussed further below.

Upper Point Vicente Area

The UPVA contains 19.54 acres of existing ~~coastal sage~~ scrub habitat. Construction of the proposed Project would remove 4.91 acres of habitat. The remaining 14.63 acres of existing habitat are proposed to be retained and where appropriate, enhanced with new native vegetation.

The UPVA Conservation Area, referred to as the Upper Point Vicente Coastal Sage Scrub Habitat (PA 1-B) would be implemented to preserve and increase coastal sage scrub habitat by conserving 14.63 acres and creating 16.80 acres of new coastal sage scrub habitat (Exhibit 5.3-4, *Biological Resource Preservation/Enhancement Areas Within Upper Point Vicente Area*). This would provide for a total of 31.43 acres of coastal sage scrub on the UPVA as a result of project implementation. The LPHCP would utilize a combination of methods including the conservation of existing onsite habitat, the creation of new habitat in areas that are currently marginally-developed or underdeveloped yet have limited value (i.e., former agricultural areas, slopes with non-native grass species, etc.), and the enhancement of the existing degraded habitat areas to obtain significantly improved habitat values.

Summary

The proposed LPHCP would provide for native habitat conservation and enhancement within Conservation Planning Areas in the RHA and UPVA. ~~In addition, t~~The program would ~~include~~create 16.80 acres of ~~restored and newly created habitat~~coastal sage scrub within ~~Recreation Areas of~~ the UPVA as

mitigation for impacts to 4.91 acres of coastal sage scrub habitat in the UPVA and 0.10 acre of coastal bluff scrub in the RHA.

Overall, the LPHCP would provide for the creation of 16.80 acres of new coastal sage scrub habitat area (UPVA Conservation Planning Area and Recreation Area). This, combined with the 14.63 acres of existing coastal sage scrub habitat, the 4.44 acres of coastal bluff scrub habitat, and the 3.87 acres of rocky shore/coastal bluff habitat that would be retained, would result in the protection and creation of a total of 39.74 acres of coastal sage scrub, coastal bluff scrub, and rocky shore/coastal bluff habitat. The 16.80 acres of restored and newly created habitat represents a replacement ratio of 3.4 to 1 (3.4 acres restored/created habitat for every 1 acre removed) for the ~~54.00~~91 acres of coastal sage~~ scrub and coastal bluff~~ scrub impacted by the proposed Project. With the addition of the 22.94 acres of ~~preserved~~ coastal sage scrub, coastal bluff scrub, and rocky shore/coastal bluff ~~to the mitigation program, the compensation ratio is over 7 to 1, far above typical mitigation standards of 2 to 1 and 3 to 1~~that are preserved to the restored and newly created coastal sage scrub habitat, a ratio over 8 to 1 of created/restored/preserved habitat to habitat areas removed would be provided by the project.

Specific details of the LPHCP including design concepts and plant palettes, are discussed in the Long Point Resort Permit Documentation (Forma 2000) available for review at the Rancho Palos Verdes City Hall. A revegetation program is proposed in accordance with the landscape palette developed for the LPHCP.

The stated intent of the ~~Habitat and Conservation Program~~LPHCP is to ensure compliance with FESA and to be consistent with the City's NCCP, when adopted. The LPHCP would require the approval of the USFWS prior to project implementation. If the City's NCCP is not adopted prior to development within the Project area, any ground-disturbing activities affecting either areas occupied by the coastal California gnatcatcher or areas occupied by state- or federally-listed Threatened or Endangered species would require compliance with the FESA and/or CESA.

As previously noted, the City's NCCP is still in the process of preparation and must be approved by state and federal agencies. Once approved, the City's NCCP will establish Biological Reserve Area(s) in the City to provide for the protection of certain species observed on the Project site (i.e., the federally-listed Threatened coastal California gnatcatcher, sensitive native plant communities [e.g., coastal sage scrub], and other sensitive species [e.g., coastal cactus wren and loggerhead shrike]).

As the proposed ~~Long Point Resort~~ Project is being considered during the interim phase of the NCCP development, the City and USFWS may approve incidental

habitat loss associated with the proposed development~~, provided the loss~~ through the 4d Special Rule process pursuant to the FESA. The proposed Project must demonstrate that it (1) does not cumulatively exceed the five percent guideline for the loss of coastal sage scrub, (2) does not preclude connectivity between areas of high habitat values, (3) will not preclude or prevent the preparation of the Subregion NCCP, (4) has been minimized and mitigated to the maximum extent practicable, (5) will not appreciably reduce the likelihood of the survival and recovery of the listed species in the wild, and (6) is incidental to otherwise lawful activities. However, at the present time, there are no remaining acres of coastal sage scrub in the City NCCP subregion that can be removed under the 4(d) ~~s~~Special ~~r~~Rule. Therefore, it is unlikely that the proposed Project can be processed through Section 4(d) of the FESA unless the projects that have already received ~~44~~(d) authorization do not proceed or the USFWS issues another ~~Biological Opinion~~BO that allows for the additional take of habitat within the subregion, which at this time appears unlikely. Therefore, ~~mitigation/ compensation for the loss of~~project impacts to coastal sage scrub and gnatcatchers would need to be ~~coordinated with the USFWS and another federal responsible agency involved in the Project through Section 7 of the FESA or with~~authorized by the USFWS through either Section 7 consultation of the FESA or through a Section 10 incidental take authorization of the FESA.

IMPACTS

The determination of impacts in this analysis is based on a comparison of maps depicting Project grading limits and maps of onsite biological resources. All construction activities, including staging and equipment areas, are assumed to be contained within the limits of grading. Both direct and indirect impacts on biological resource have been evaluated. Direct impacts are those that involve the initial loss of habitats due to grading and construction. Indirect impacts are those that would be related to disturbance from construction activities (e.g., noise, dust) and use of the Project site.

Biological impacts associated with the proposed Project were evaluated with respect to the following special status biological issues:

- Federally- or state-listed Endangered or Threatened species of plant or wildlife;
- Non-listed species that meet the criteria in the definition of Rare, Threatened, or Endangered in the California Environmental Quality Act (CEQA) Guidelines;
- Streambeds, wetlands, and their associated vegetation;

- Habitats suitable to support a federally- or state-listed Endangered or Threatened species of plant or wildlife;

- Species designated as California Species of Special Concern or federal Species of Concern;

- Habitat, other than wetlands, considered special status by regulatory agencies (USFWS, CDFG) or resource conservation organizations; and

- Other species or issues of concern to regulatory agencies or conservation organizations.

The actual and potential occurrence of these resources within the Project vicinity was correlated with the following significance criteria to determine whether the impacts of the proposed Project on these resources would be considered significant.

Significance Criteria

Appendix G of the CEQA Guidelines contains the Initial Study Environmental Checklist form which includes questions relating to biological resources. The issues presented in the Initial Study Checklist have been utilized as thresholds of significance in this Section. Accordingly, a project may create a significant environmental impact if one or more of the following occurs:

- If the project has 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 Game and Wildlife Service~~CDFG or USFWS (refer to Impact Statement 5.3-1).

- If the project has 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 Game and Wildlife Service~~CDFG or USFWS (refer to Impact Statement 5.3-2).

- If the project has 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 (refer to Section 10.0, *Effects Found Not To Be Significant*).

- If the project interferes substantially with the movement of any native or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impedes the use of native wildlife nursery sites (refer to Impact Statement 5.3-3).

- If the project conflicts with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (refer to Impact Statement 5.3-4).

- If the project conflicts with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan (refer to Impact Statement 5.3-5).

Section 15065(a), *Mandatory Findings of Significance*, of the CEQA Guidelines states that a project may have a significant effect on the environment if "...the project has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare or threatened species....".

An evaluation of whether an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would substantially diminish, or result in the loss of, an important biological resource or those that would obviously conflict with local, State or Federal resource conservation plans, goals, or regulations. Impacts are sometimes locally adverse but not significant because, although they would result in an adverse alteration of existing conditions, they would not substantially diminish or result in the permanent loss of an important resource on a population- or region-wide basis.

Section 15380 of the CEQA Guidelines indicates that a lead agency can consider a non-listed species to be Rare, Threatened, or Endangered for the purposes of CEQA if the species can be shown to meet the criteria in the definition of Rare, Threatened, or Endangered. For the purposes of this discussion, the current scientific knowledge on the population size and distribution for each special status species was considered according to the definitions for Rare, Threatened, and Endangered listed in Section 15380 of CEQA Guidelines.

The actual and potential occurrence of these resources within the Project vicinity was correlated with the previously identified significance criteria to determine whether the impacts of the proposed Project on these resources would be significant.

Potential impacts are grouped below according to topic. The numbered mitigation measures at the end of this section directly correspond with the numbered impact statements.

SPECIAL STATUS BIOLOGICAL RESOURCES

5.3-1 *Project implementation may affect species identified as special status. Analysis has concluded that impacts would be mitigated to a less than significant level.*

Plants

Project implementation may result in impacts on special status plant species. Three special status species were observed on the Project site during previous focused surveys (Dudek 1999). These species include: island green dudleya, California box-thorn, and woolly sea-blite discussed below.~~–~~

~~Other species potentially present in the Project area include aphanisma, south coast saltscale, Catalina mariposa lily, Lewis' evening primrose, Catalina mariposa lily, Catalina crossosoma, Santa Catalina Island desert-thorn, and Lyon's pentachaeta.~~

Island Green Dudleya. The island green dudleya is present in the mixed coastal sage scrub (UPVA) and the southern coastal bluff scrub (RHA). Impacts on the island green dudleya would be considered significant since this plant is considered Rare, Threatened, or Endangered in California and elsewhere by the CNPS by its List 1B designation and meets the criteria in the definition of Rare or Endangered in the CEQA Guidelines. Impacts on this species would be reduced to less than significant levels with implementation of a Special Status Plant Mitigation program that provides for the salvage of impacted dudleya and the reestablishment of the dudleya at any appropriate location (onsite or offsite). ~~recommended mitigation which includes the following:~~

- ~~Conduct a pre-construction survey;~~
- ~~Seed and corm collection and revegetation; and~~
- ~~Preparation of a Mitigation Plan including maintenance and monitoring requirements.~~

California Box-thorn and Woolly Sea-blite. The California box-thorn is present in the ~~mixed coastal sage scrub (UPVA) and the~~ southern coastal bluff scrub (RHA) and is potentially present in the sage scrub (UPVA). The woolly sea-blite is present in the southern coastal bluff scrub (RHA). Although impacts on these plants are considered less than significant since these plants would be primarily avoided and are considered relatively common in the region, these plants would be included in the seed mixes for revegetation of coastal bluff scrub (FORMA, June 23, 2000 and BonTerra, February 2001).

Other Species. ~~Direct impacts on the other special status plant species~~No suitable habitat for the Parish's brittlescale, southern tarplant, beach spectacle pod, Coulter's goldfields, prostrate navarretia, coast woolly-heads, and estuary sea-blite occurs on the project site. Therefore, these species would not be impacted by project implementation.

Species potentially present in the Project area ~~(i.e.,~~include aphanisma, south coast saltscale, Lewis' evening primrose, Catalina crossosoma, Santa Catalina Island desert-thorn, and Lyon's pentachaeta. These species were not observed on the project site during focused surveys by Dudek and are not expected to be impacted by the proposed project. Because special status plant populations can fluctuate from year to year based on rainfall and other environmental conditions, to verify the current absence of these plant species onsite prior to the onset of construction activities, pre-construction surveys for aphanisma, south coast saltscale, Catalina crossosoma, Santa Catalina Island desert-thorn, and Lyon's pentachaeta~~) would~~ shall be ~~potentially significant~~conducted. All of these species are listed as CNPS List 1B, federal Species of Concern, or state and federally listed as Endangered. ~~Impacts on these species would be reduced to less than significant levels with implementation of recommended mitigation which includes the following:~~

- ~~Conduct pre-construction special status plant surveys; and~~
- ~~Develop mitigation, if warranted, which may include avoidance of the populations, relocation, or purchase of areas off-site containing populations of the impacted species for inclusion in open space areas.~~

If a locally or regionally important population of these species is found, a Special Status Plant Mitigation Program shall be developed and implemented which shall identify appropriate measures to avoid, minimize, or compensate for the species as appropriate.

Wildlife

The proposed Project would result in the loss of potential habitat for several special status wildlife species potentially present on the Project site. For those species expected to occur, potential impacts were evaluated for the habitat which the species is expected to occupy.

Refer to the *Indirect Impacts* section below for a discussion regarding the Project's indirect impacts on wildlife species.

Invertebrates

Palos Verdes Blue Butterfly. This species was not observed during focused survey efforts during the Spring of 2001. Therefore, Project implementation would not result in any impacts on this species.

El Segundo Blue Butterfly. The UPVA provides ~~a very limited amount of~~ potentially suitable habitat for the federally-listed Endangered ~~Palos Verdes~~El Segundo blue butterfly~~. However, focused surveys would be required to determine the presence or absence of this species on the Project site. If present, any impacts on this species would be considered significant. Compliance with recommended mitigation (i.e., conducting~~; however, this species was not observed on the UPVA during focused surveys and compliance with the FESA) would be required to avoid any impacts on this species. Therefore, a less than significant impact would occur with mitigation. It should be noted that in the event the focused surveys determine that this species occurs on the UPVA, then federal take authorization would be required through either Section 7 consultation or Section 10a of the FESA. If this species is not found to occur on the UPVA, no authorization to impact this species would be necessary and no mitigation would be warranted.~~

~~El Segundo Blue Butterfly~~is presumed to be absent from this area. The El Segundo blue butterfly~~, a federally-listed Endangered species, is not expected to occur on the UPVA due to a lack of suitable habitat. Therefore, construction of the Project would not result in any impacts on this species~~ was found to be present within the bluff tops, bluff faces, and foot of the bluff of the RHA. The bluff tops, bluff faces, and foot of the bluff would not be impacted by the proposed project because the project design has restricted development at the bluff edge. Therefore, the El Segundo blue butterfly would not be directly impacted by project implementation.

The possibility exists for potential indirect impacts to this species; primarily the loss of habitat by the invasion of non-native plant species and the introduction of non-native ant species that are detrimental to the native ant population which play an important part of the ecology/life cycle of the El Segundo blue butterfly.

Implementation of the Water Quality Management Plan (a project design feature) and the establishment of a native plant buffer along the bluff edge would reduce these potentially significant indirect impacts to a level of less than significant.

Amphibians

Western ~~Spade-foot~~Spadefoot Toad. The western spadefoot toad has a low potential to occur on the Project site. This species is not listed as Threatened or Endangered by state or federal resource agencies. Since the RHA supports only a limited amount of suitable habitat for this species, only a portion of which ~~will~~would be impacted, any population present would not be substantial enough to be considered significant.

Reptiles

Silvery Legless Lizard, Coastal Western Whiptail, San Bernardino Ringneck Snake, and San Diego Coast Horned Lizard. Although these special status reptile species potentially occur on the Project site, none of these species are listed as Threatened or Endangered by state or federal resource agencies. However, the San Diego coast horned lizard is designated as one of the target species for the Palos Verdes Peninsula NCCP. Potential habitat for these species consists primarily of the scrub habitats north of Palos Verdes Drive South in the UPVA (see Table 5.3-3). Project implementation would result in a loss of 4.91 acres of scrub habitats that may support one or more of these species. The ~~loss of potential habitat for these species would be~~project's impact on these species is considered less than significant because the project would protect 14.63 acres of existing scrub habitat, and would replace 4.91 acres of habitat impacted by development with 16.80 acres of created coastal sage, thereby providing more than 31 acres of suitable habitat. In addition to the extent of suitable habitat protected and created by the project, the impact is considered less than significant because of the small size of the potential habitat that would be impacted compared to the large amount of various habitat~~s~~ types available for these species throughout California based on the range/ distribution of these species.

Birds

Six species of birds that are listed as Threatened to Endangered by state or federal resource agencies potentially occur within the project region. The species include the southwestern willow flycatcher, California least tern, least Bell's vireo, California brown pelican, coastal California gnatcatcher, and peregrine falcon.

Southwestern Willow Flycatcher, California Least Tern, and Least Bell's Vireo. These species are not expected to occur on the Project site due to lack of suitable habitat. Therefore, Project implementation would not result in any impacts on these species.

Two of the remaining three species, the California brown pelican and coastal California gnatcatcher have been observed on the Project site.

California Brown Pelican. The proposed Project would not directly impact roosting or breeding habitat for the pelican since the rocky shore habitat on the RHA that is used for roosting would not be impacted. Therefore, no mitigation would be required for the California brown pelican. Impacts as a result of an increase in public use are primarily indirect in nature and are discussed under indirect impacts.

Coastal California Gnatcatcher. The coastal California gnatcatcher is known to occur in the coastal sage scrub on the UPVA. Four pairs of gnatcatchers were observed on the UPVA during surveys in 1998 and 2001, and may be impacted by construction of the proposed Project by both direct (habitat removal) and indirect (disturbance) effects. These impacts are considered significant. ~~The Long Point Habitat and Conservation Program (LPHCP) has been developed and would be implemented to~~

Implementation of the LPHCP, however, would reduce these impacts to a level of less than significant. Currently, the UPVA supports 19.54 acres of scrub communities including areas such as burned and disturbed scrub which support a higher percentage of non-native species compared to the undisturbed areas. Before grading and/or removal of any existing habitat areas, the LPHCP would create through new plantings, 9.6 acres of new coastal sage scrub habitat thereby providing 29.14 acres of habitat for the gnatcatcher. Only after these new coastal sage scrub habitat areas are created, would grading for development of UPVA remove 4.91 acres of scrub communities. After site grading on UPVA is completed, an additional 7.2 acres of coastal sage scrub habitat would be created. Upon completion of the project and implementation of the LPHCP, a total of 31.43 acres of coastal sage scrub habitat would be provided in the UPVA through a program of habitat preservation, creation, and restoration. Because of the overall increase in coastal sage scrub habitat, and the phasing of habitat creation before impacts to 4.91 acres of scrub communities would occur, project impacts to the gnatcatcher are considered less than significant. The LPHCP would require approval by the USFWS during the permit processing of the project pursuant to Sections 4(d), 7, or 10 of the FESA.

Peregrine Falcon. The peregrine falcon is known to occur in the vicinity and has a high potential to occur on the Project site. Suitable foraging habitat for the peregrine falcon is present on the Project site; however, due to the small size of the Project, relative to the amount of available foraging habitat in the region, the potential loss of foraging habitat for this species is not considered significant. Potentially suitable nesting habitat is present along the cliffs in the RHA. Since the cliff area (RHA) would not be impacted by the proposed Project, the Project would not directly impact nesting habitat for the peregrine falcon.

A variety of bird species that are considered special status, but are not listed as Threatened or Endangered by state or federal resources agencies, occur or potentially occur in the Project region. These species include four that were observed during surveys of the Project site. These are the coastal cactus wren, western yellow warbler, loggerhead shrike, and double-crested cormorant.

Coastal Cactus Wren. The coastal cactus wren occupies the coastal sage scrub habitats on the UPVA and is designated as one of the target species for the Palos Verdes Peninsula NCCP. Although the Project would result in the loss of 4.91 acres of scrub habitat potentially supporting this species, this impact would be considered less than significant because ~~of the small size of the habitat impacted relative to~~the implementation of the LPHCP would protect over 16 acres of existing scrub habitat and create over 9 acres of new coastal sage scrub before impacts to the 4.91 acres occur during site grading activities on the UPVA. Upon completion of all grading and revegetation activities on the UPVA, more than 31 acres of sage scrub habitat that may be used by the cactus wren would exist on the UPVA. Because of the small amount of existing coastal sage scrub removed by the project in comparison to the extent of new and protected coastal sage scrub habitat that would be provided on the UPVA by the project and the amount of habitat available for this species elsewhere in ~~Southern California~~the region, this impact is considered less than significant.

Western Yellow Warbler. The Project site does not provide nesting habitat (riparian woodlands) for the western yellow warbler, and only migrant yellow warblers can be expected to occur. Therefore, Project implementation would not result in any impacts on this species.

Loggerhead Shrike. The loggerhead shrike has the potential to use the majority of the Project site. However, implementation of the proposed Project is not expected to reduce the value of the Project site for the loggerhead shrike to any great extent since golf courses can provide suitable habitat for this species. Therefore, a significant impact is not anticipated in this regard and no mitigation would be required.

Double-crested Cormorant. The double-crested cormorant is only expected to use the rocky shore and cliff part of the RHA for roosting. As Project implementation would not impact the rocky shore and cliff part of the RHA, a significant impact is not anticipated in this regard. Impacts as a result of an increase in public use are primarily indirect in nature and are discussed under indirect impacts.

Tricolored Blackbird and California Horned Lark. The proposed Project would result in a loss of 22.55 acres of grassland and agricultural areas that could potentially be used for foraging by the tricolored blackbird and California horned lark. Even if present, the loss of 22.55 acres of occupied habitat by either of these two species would not be considered significant because of the small size of the area impacted relative to the amount of habitat available for these species in ~~California~~the region.

Southern California Rufous-crowned Sparrow. The proposed Project would result in a loss of 4.91 acres of scrub habitats that could potentially be used by the southern California rufous-crowned sparrow. However, the loss of 4.91 acres of scrub would not be considered significant because this species is known to be common in Southern California, throughout a variety of habitat types and the limited Project impacts are not expected to restrict the range of this species.

Yellow-breasted Chat. This species (for nesting) would not be expected to occur on the Project site due to a lack of suitable habitat (riparian scrub and woodland), although it may occur as a migrant. Therefore, Project implementation would not result in any impacts on this species.

California Gull. The Project site provides suitable roosting habitat and limited foraging opportunities for the California gull. However, Project implementation would not substantially reduce these resources on the Project site for the California gull compared to the amount of available habitat for this species in the region. Therefore, Project implementation would not result in any impacts on the California gull that would be considered as significant.

Elegant Tern. The elegant tern would not be expected to occur on the Project site due to a lack of suitable habitat (inshore coastal waters and island beaches), although the elegant tern may be seen foraging offshore from the Project site. Therefore, Project implementation would not result in any impacts on this species.

Cooper's Hawk, Sharp-shinned Hawk, Short-eared Owl, Burrowing Owl, Ferruginous Hawk, Northern Harrier, White-tailed Kite, Merlin, ~~Peregrine Falcon~~Osprey, and Prairie Falcon. Project implementation would result in a diminished capacity of the Project site to provide foraging opportunities for these species. This impact would contribute to the loss of foraging habitat for these ten raptor species. However, it is not considered significant due to the relatively large

amount of similar foraging habitat available elsewhere in the coastal Los Angeles County basin area.

The Cooper's hawk, burrowing owl, northern harrier, white-tailed kite, prairie falcon, ~~peregrine falcon,~~ and osprey have potential to nest on the Project site. In the event an active raptor nest (common or special status species) were found on the Project site, the loss of the nest would be considered a violation of the California Fish and Game Code Sections 3503, 3503.5, and 3513. The loss of any active raptor nest occurring on the Project site would therefore be considered significant. The potential impact on these species would be reduced to less than significant with the implementation of specified mitigation which requires that a survey be conducted and avoidance measures implemented if an active nest is found.

Mammals

Pacific Pocket Mouse. ~~One~~This federally-listed Endangered ~~mammal species, the Pacific pocket mouse, has a very limited potential to occur on the Project site. Focused surveys for the Pacific pocket mouse would be required to determine the presence or absence of this species on the Project site. If the focused surveys find that this species occurs on the Project site, then federal take authorization would be required. Regulatory authorization can occur through either Section 7 or 10 of the FESA. The permitting process would require the preparation of a Biological Assessment and an LPHCP which would include a mitigation plan to avoid or minimize impacts to this species. This mitigation may include avoiding the habitat of this species or purchase of off-site habitat for this species. If this species is not found~~species is not expected to occur on the Project site~~, no FESA authorization to impact this species would be necessary and no mitigation would be warranted.~~ due to a lack of suitable habitat based on a habitat assessment conducted on the project site by Dr. Behrends (Dudek 2001). Therefore, construction of the Project would not result in any impacts on this species.

Pallid Bat, Pale Big-eared Bat, California Mastiff Bat, Small-footed Myotis, and Yuma myotis. The proposed Project would impact both foraging and potentially suitable roosting habitat for these bat species. The loss of foraging habitat for these bat species would contribute to the ongoing regional and local loss of foraging habitat for these species. Since these species are considered relatively common in the Project region, impacts on these species are not considered significant, and no mitigation would be required.

San Diego Black-tailed Jackrabbit and San Diego Desert Woodrat. The proposed Project would impact suitable habitat for the jackrabbit and woodrat. Since these species are considered relatively common in the Project region, impacts on these species are not considered significant and no mitigation would be required.

SENSITIVE NATURAL COMMUNITIES/HABITATS

5.3-2 *The proposed Project may impact portions of the Resort Hotel and Upper Point Vicente Areas which are habitat for referenced sensitive species. Implementation of specified mitigation measures would reduce impacts to a less than significant level.*

Refer to the *Indirect Impacts* section below for a discussion regarding the Project's indirect impacts on sensitive natural communities habitats.

Vegetation

A total of 132.70 acres of native and non-native vegetation types, including developed areas, would be impacted by the proposed Project. These areas are discussed below, summarized in Table 5.3-4, *Vegetation Types Impacted by The Proposed Project*, and illustrated in Exhibits 5.3-5, *Biological Resource Impacts Within Resort Hotel Area*, and 5.3-6, *Biological Resource Impacts Within Upper Point Vicente Area*. It should be noted that the 132.70-acre calculation of vegetation types impacted by the proposed Project excludes impacts associated with the new water, sewer and storm drain lines illustrated on Exhibit 5.11-1, *Resort Hotel Area Infrastructure Plan*, and Exhibit 5.11-2, *Upper Point Vicente Area Infrastructure Plan*. Impacts associated with implementation of these utility lines would be considered significant unless mitigated since these lines would traverse sensitive habitats in certain areas. However, implementation of the specified mitigation requiring re-alignment of these utility lines to the "impact area" as illustrated in Exhibit 5.3-5, *Biological Resources Impacts Within the Resort Hotel Area*, and Exhibit 5.3-6, *Biological Resources Impacts Within the Upper Point Vicente Area*, would result in avoidance of the sensitive habitats thereby reducing impacts in this regard to a less than significant level.

Scrub Communities. A total of 4.91 acres of scrub communities would be impacted in the UPVA, which includes mixed coastal sage scrub (including burned and disturbed), disturbed chenopod scrub, and southern cactus scrub (including disturbed). Impacts on these vegetation types would be considered significant because this habitat type has been reduced up to 80 percent of its historic coverage throughout Southern California and the potential for this habitat to support special status species, especially the gnatcatcher. Of the 4.91 acres of scrub communities impacted by the proposed Project, 3.17 acres represent areas disturbed by either fire, past human disturbances, or invasion by non-native plant species. The disturbed communities typically require less mitigation or compensations through the CEQA and FESA permitting process. However, the Project Applicant has gone beyond that which is typically required and ~~has provided for~~is proposing enough

mitigation in the LPHCP to mitigate for these areas at the same ratio~~n~~ as the non-disturbed scrub areas. ~~The LPHCP would be implemented to reduce all impacts to~~

The Project includes implementation of the LPHCP which would result in the protection of 14.63 acres of existing coastal sage scrub habitat on the UPVA, and the creation and restoration of an additional 16.80 acres of coastal sage scrub habitat thereby providing upon full implementation of the LPHCP, over 31 acres of coastal sage scrub habitat. The creation and restoration of coastal sage would provide new coastal sage scrub habitat at a ratio of 3.4:1 in compensation for scrub communities ~~to a level of~~impacted by the proposed project. In light of the extent of habitat protection, restoration and creation, the project's impact on scrub communities is considered less than significant.

Coastal Bluff Scrub. A total of 0.10 acre of coastal bluff scrub and disturbed coastal bluff scrub would be impacted. Impacts on these vegetation types would be considered significant due to the loss of this vegetation type in southern California and the potential for this habitat to support special status species. The Applicant has prepared the LPHCP which would be implemented to reduce these impacts to a level of less than significant. Mitigation has also been identified which involves modification of the development plan to avoid any affect to the ~~C~~coastal ~~B~~bluff ~~S~~scrub area. If this area is avoided through slight Project modifications, no impacts to this habitat type would occur, and impacts would be less than significant.

~~Mule Fat Scrub. One small area (0.02 acre) of mule fat scrub located on the western portion of the RHA site would be impacted by the proposed Project. This area is not within an area identified as ACOE and/or CDFG jurisdiction. Therefore, impacts to this area of mule fat scrub would not be considered significant.~~

~~An additional area of 0.03~~Riparian Habitat. As defined by the significance criteria, the Project would have a significant impact if it has a substantial adverse effect on any riparian habitat or other sensitive natural community. As noted previously, the project site contains 0.09 acres of mule fat, of which 0.07 acres is considered riparian because of its association with freshwater drainages. These two areas are both located in the RHA. The project has been designed to limit impacts to 0.03 acre of the 0.07 acre of mule fat ~~scrub would be impacted from construction of the proposed Project~~onsite that is considered riparian habitat in the southeast portion of the ~~RHA. This area~~UPVA. The project would also remove 0.02 acre of mule fat that is located in the northwestern corner of RHA; however, these areas are not associated with a freshwater drainage. Impacts to the 0.05 acre total of mule fat scrub ~~occur in association with an area identified as a "waters of the US" (see Exhibit 5.3-1). Impacts on this area of mule fat scrub vegetation would be~~habitat onsite is not considered significant ~~due to the loss of this vegetation type in association with a~~ because the loss of 0.05 acre would not substantially affect

riparian habitat and the proposed project has been designed to avoid a portion of the mule fat scrub that is present in onsite drainages.

Jurisdictional Drainages The jurisdictional delineation determined that there were three drainages on the project site that would be considered jurisdictional under Section 404 of the Clean Water Act and Section 1603 of the California Fish and Game Code.

The project site contains 0.19 acre of waters considered jurisdictional under Section 404 of the Clean Water Act, none of which, however, includes wetlands as defined by Section 404. Drainage A (which is a blue-line stream) runs north to south across RHA. Approximately 0.14 acre of this drainage is considered jurisdictional waters under Section 404. The vegetation associated with this drainage is predominantly upland. Approximately 0.02 acre of ACOE jurisdiction is associated with Drainage B, none of which consists of Section 404 jurisdictional wetlands. Drainage B is an ephemeral drainage that originates at the southern margin of the RHA and travels in a southerly direction towards the Pacific Ocean. Vegetation associated with this drainage consists of ornamental, nonnative landscaping vegetation left over from the Marineland operations. The third drainage is an ephemeral drainages on UPVA and consists of approximately 0.03 acre of ACOE jurisdiction, none of which consists of Section 404 jurisdictional wetlands. Vegetation associated with this drainage is predominantly upland species. The project would impact 0.18 acre of ACOE jurisdictional waters in the three drainages. Approximately 0.01 acre within Drainage C can be avoided by the project. Impacts to these three drainages would require obtaining a Section 404 permit under the Clean Water Act. If impacts to the drainages cannot be avoided or minimized, compensation through either on-site or off-site habitat creation must be provided. Because these impacts are all to unvegetated, ephemeral drainage channels, a mitigation ratio of 1:1 is considered appropriate.

The project site contains 0.20 acre of waters considered jurisdictional under Section 1603 of the California Fish and Game Code which is regulated by the California Department of Fish and Game. Drainage A (which is considered a blue-line stream) runs north to south across RHA, and approximately 0.14 acre of this drainage is considered jurisdictional waters under Section 1603. An additional 0.01 acres of mule fat vegetation in Drainage A is considered associated riparian habitat under Section 1603. With the exception of the 0.01 acres of mule fat, the vegetation associated with Drainage A is predominantly upland. Approximately 0.02 acre of CDFG Section 1603 jurisdiction is associated with Drainage B, an ephemeral drainage that originates at the southern margin of the RHA and travels in a southerly direction towards the Pacific Ocean. Vegetation associated with this drainage consists of ornamental, nonnative landscaping vegetation left over from the Marineland operations. The third drainage is an ephemeral drainage on the

UPVA and consists of approximately 0.03 acre of CDFG Section 1603 jurisdiction. Vegetation associated with this drainage is predominantly upland species. The project would impact 0.18 acre of CDFG jurisdictional waters in the three drainages. Approximately 0.01 acres within Drainage C can be avoided by the project, and the 0.01 acres of mule fat associated with Drainage A can also be avoided because of its location at the edge of the drainage where it exits the project site via a shear cliff to the beach and ocean. Impacts to these three drainages would require obtaining a Section 1603 Streambed Alteration Agreement from the CDFG. If impacts to these three drainages cannot be avoided or minimized, compensation through either on-site or off-site habitat creation must be provided. Because these impacts are all to unvegetated ephemeral drainage channels, a mitigation ratio of 1:1 is considered appropriate.

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Annual Grassland. A total of 18.07 acres of annual grassland would be impacted by Project implementation. Impacts on this vegetation type would not be considered significant, since this vegetation type is abundant and is considered to have a low biological value.

Rocky Shore. The rocky shore would not be directly impacted by the proposed Project as the Project's development area would not extend into this habitat.

Coastal Bluff. A small area (0.08 acre) of unvegetated coastal bluff would be impacted by Project implementation. From a biological perspective, this impact would not be considered significant due to the lack of native vegetation covering the slopes in this small area.

Agricultural. A total of 4.48 acres of agricultural areas would be impacted by Project implementation. Impacts on this vegetation type would not be considered significant, since this vegetation type is considered to have a low biological value.

~~End Of Moved Text~~

~~riparian system subject to the jurisdiction of the ACOE and CDFG. Mitigation to reduce these impacts to a level of less than significant would consist of avoiding the jurisdictional area or restoring riparian habitat in the required ratio at either an onsite or offsite mitigation site as identified in the Project Applicant's ACOE and CDFG permit/agreement. The ACOE and CDFG typically require a minimum of 1:1 replacement ratio.~~

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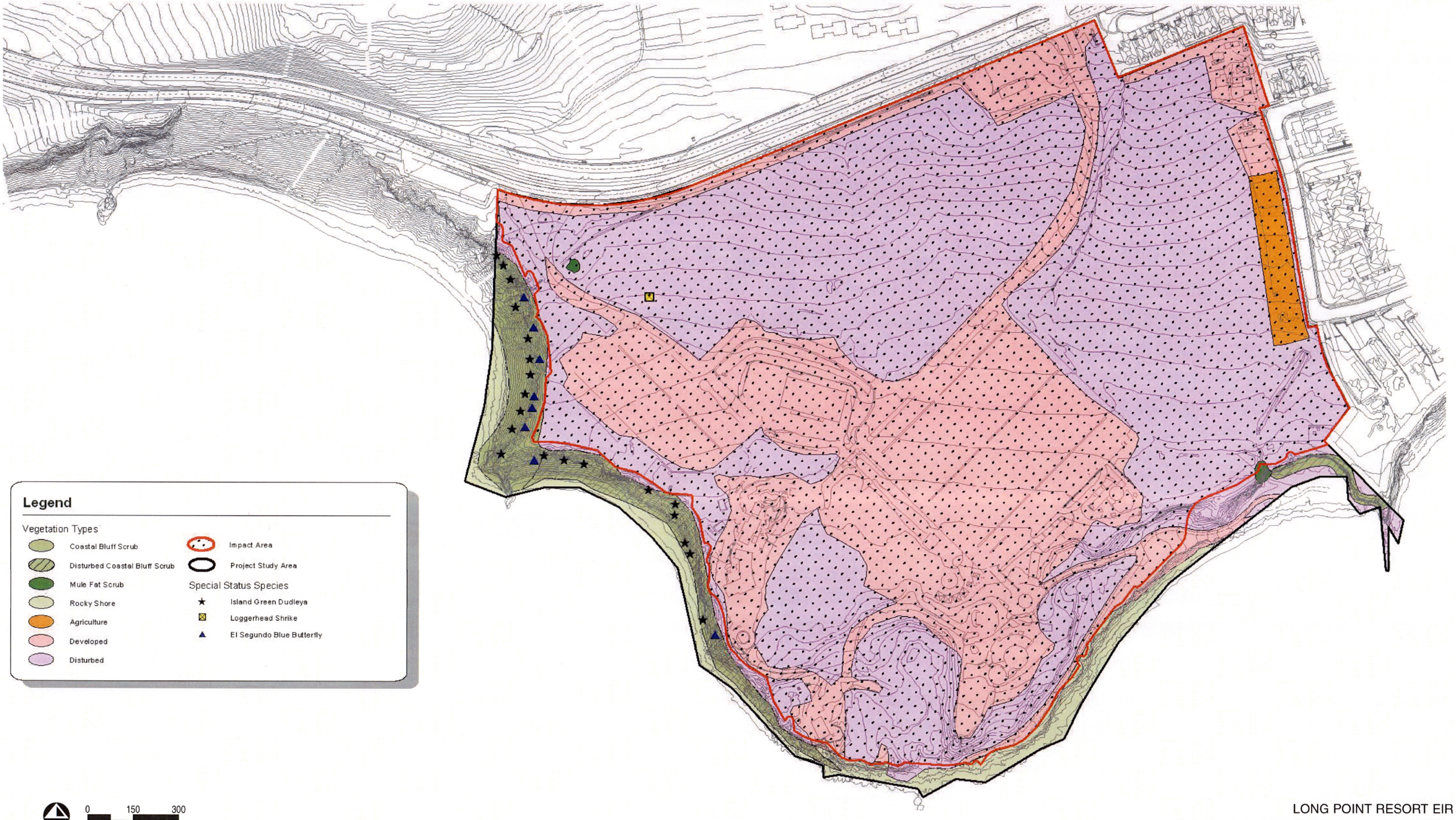
TABLE 5.3-4
VEGETATION TYPES IMPACTED BY THE PROPOSED PROJECT

Vegetation Type	Upper Point Vicente Area (acres)	Resort Hotel Area (acres)	Total (acres)
Mixed Coastal Sage Scrub	0.41	0.00	**0.41**
Disturbed Mixed Coastal Sage Scrub	0.46	0.00	**0.46**
Burnt Disturbed Mixed Coastal Sage Scrub	0.01	0.00	**0.01**
Disturbed Chenopod Scrub	2.70	0.00	**2.70**
Southern Cactus Scrub	1.33	0.00	**1.33**
Disturbed Southern Cactus Scrub	0.00	0.00	**0.00**
Coastal Bluff Scrub	0.00	0.09	**0.09**
Disturbed Coastal Bluff Scrub	0.00	0.01	**0.01**
Mule Fat Scrub	0.00	0.05	**0.05**
Annual Grassland	18.07	0.00	**18.07**
Rocky Shore/Coastal Bluff	0.00	0.08	**0.08**
Agricultural	3.21	1.27	**4.48**
Disturbed	6.89	54.93	**61.82**
Developed	6.41	36.40	**42.81**
Disturbed Areas Outside Study Area	0.38	0.00	**0.38**
Total	**39.87**	**92.83**	**132.70**



SOURCE: BONTERRA CONSULTING

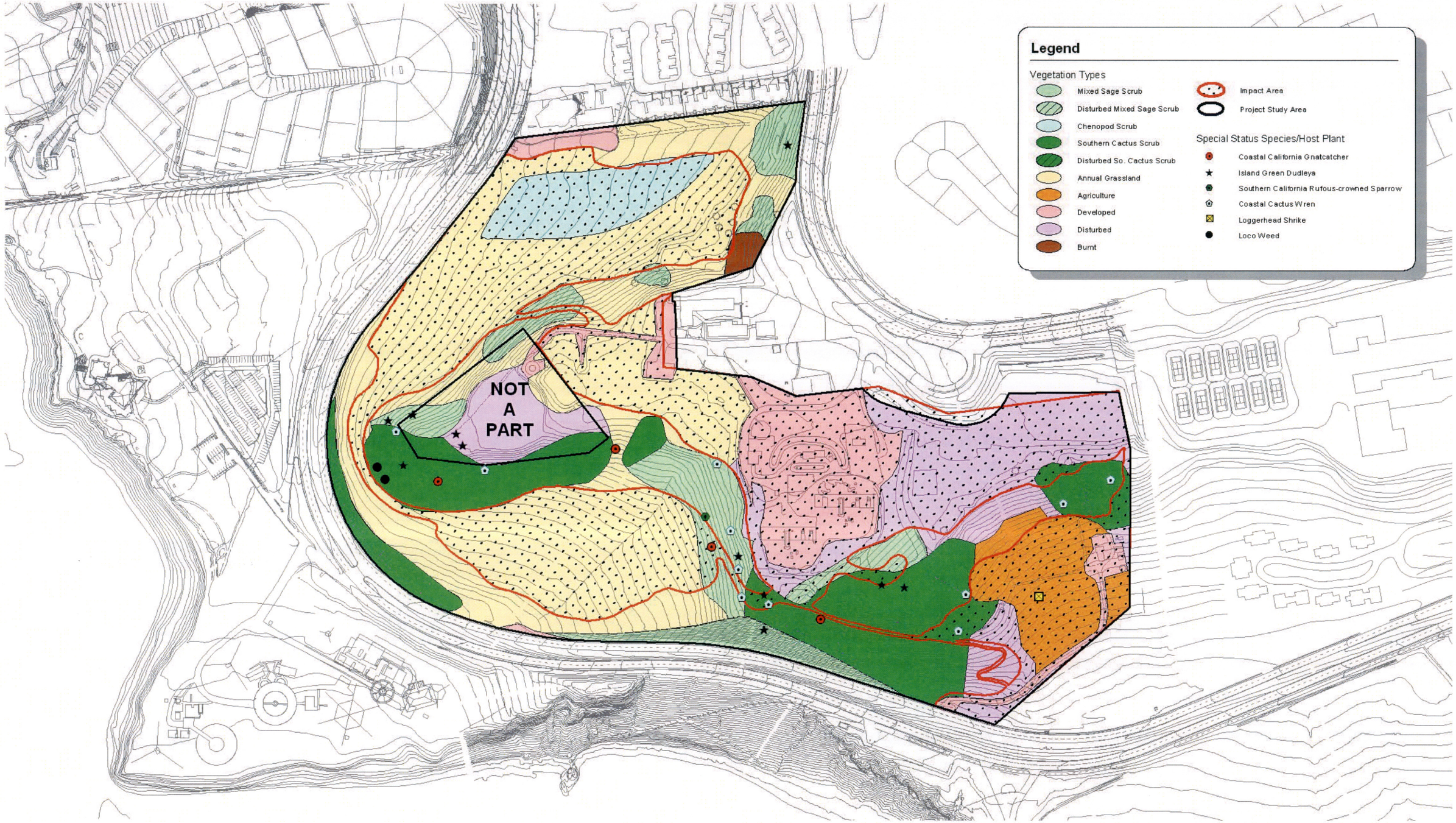
RBF CONSULTING

JN 10-034194-7978 • 07/01

LONG POINT RESORT EIR

Biological Resources Impacts Within the Resort Hotel Area

Exhibit 5.3-5



0 150 300

SOURCE: BONTERRA CONSULTING

JN 10-034194-7978 • 07/01

LONG POINT RESORT EIR

Biological Resources Impacts Within Upper Point Vicente Area

Exhibit 5.3-6

Disturbed and Developed. A total of 1045.6301 acres of disturbed vegetation and developed areas would be impacted by Project implementation. Impacts on these vegetation types would not be considered significant since this vegetation type is considered to have a low biological value.

Wildlife Impacts

To assess impacts on wildlife, the total impact on a given vegetation type that provides habitat for wildlife was evaluated. Exhibits 5.3-5, *Biological Resource Impacts Within Resort Hotel Area*, and 5.3-6, *Biological Resource Impacts Within Upper Point Vicente Area*, illustrate the vegetation types (i.e., wildlife habitat) that ~~will~~would be impacted as a result of construction of the proposed Project. The following discussion of wildlife impacts focuses on the common species occurring on the Project site. Impacts on special status wildlife species are discussed separately in Impact Statement 5.3-1 above.

General Habitat Loss, Wildlife Loss, and Habitat Fragmentation. Construction of the proposed Project would result in the loss of approximately 90 acres of native and non-native habitats that provide ~~valuable~~ nesting, foraging, roosting, and denning opportunities for a ~~wide~~ variety of wildlife species. Removing or altering habitats on the Project site would result in the loss of small mammals, reptiles, amphibians, and other animals of slow mobility that live in the proposed Project's direct impact area. More mobile wildlife species now using the Project site would be forced to move into remaining areas of open space, consequently increasing competition for available resources in those areas. This situation would result in the loss of individuals that cannot successfully compete. However, direct impacts on the Project site would be considered less than significant because they would not significantly reduce wildlife populations in the region.

Construction of the proposed Project would also further fragment existing wildlife habitat on and adjacent to the Project site. Both common and special status amphibian, reptile, and small mammal species populations on and in the vicinity of the Project site would have reduced opportunities for genetic exchange. Birds and larger mammal species, which are more capable of crossing larger areas of inhospitable habitat would be affected to a lesser extent. Specifically, Project implementation would displace ~~many~~ individuals of a ~~wide~~ range of species that currently use the site into native and non-native habitats that would be retained in the: 1) open space within the Project site; 2) landscaping vegetation of the golf course and around the hotel grounds; and 3) remaining areas of open space in the vicinity of the Project site. ~~In addition, appropriate habitat for some species may not be available on the Project site after construction. As a result, some species may be extirpated from the Project site.~~

The loss of habitat, loss of wildlife, wildlife displacement, and habitat fragmentation that would result from construction of the proposed Project would not be considered significant because: (1) the project would protect 14.63 acres of existing scrub habitat, and would replace 4.91 acres of habitat impacted by development with 16.80 acres of created coastal sage, thereby providing more than 31.43 acres of suitable habitat, and (2) these impacts would not substantially diminish habitat for wildlife in the region nor would it be anticipated to reduce any specific wildlife populations in the region to below self-sustaining numbers.

Indirect Impacts

Indirect impacts are those related to disturbance by construction (such as noise, dust, and urban pollutants) and long-term use of the Project site and its effect on the adjacent habitat areas. The indirect impact discussion below includes a general assessment of the potential indirect affects (noise, dust and urban pollutants, lighting, human activity, and non-native species introduction), of the construction and operation of the UPVA and RHA. Particular focus is placed on the indirect effects on the natural open space area on the UPVA and RHA, collectively referred to as edge effects.

Edge effects occur where development, including roads, takes place adjacent to natural open space areas. Edge effects threaten the ecological integrity, recreational experience, aesthetic quality, public investment, and safety operations of preserved natural areas. When development is configured in a manner that creates a high ratio of development edge to natural open space, there is an increase in the potential impacts caused by human use (indirect impacts). These indirect effects that address both the short-term construction and long-term use of the Project site are outlined below.

Noise Impacts. Noise levels ~~in~~on the Project site would increase over present levels during construction of the proposed Project. During construction, temporary noise impacts have the potential to disrupt foraging, nesting, roosting, and denning activities for a variety of wildlife species. Because most species in the vicinity of the Project site are not listed as Threatened or Endangered by state or federal resource agencies, these impacts are not considered significant. However, the coastal California gnatcatcher, raptor species, and cliff nesting and roosting species (i.e., peregrine falcon, California gull, osprey, California brown pelican, and double-crested cormorant) either occur or potentially occur within proposed natural open space areas on the UPVA and RHA sites. These species would incur temporary short-term impacts from construction noise, if present in the vicinity of the Project site, and may be temporarily displaced due to these disturbances. Indirect noise impacts on these species would be considered significant because these species are protected by federal and state wildlife agencies. Impacts on these species

would be reduced to less than significant levels with implementation of specified mitigation requiring ~~that the most noise intensive construction activities, if conducted during the bird nesting season, be conducted outside of a 100-foot buffer area around identified nests~~(1) avoidance of active raptor nests ,(2) avoidance of preserve areas, and (3) restriction of sage scrub removal during February 15 through August 30.

Noise would also increase over present levels with implementation of the proposed Project resort and recreational uses. However, the RHA is currently used by the movie industry and the UPVA is located adjacent to the Rancho Palos Verdes City Hall. Further, Palos Verdes Drive South bisects the two Project areas (i.e., the UPVA and RHA). Therefore, the Project site is currently periodically disturbed by noise. The UPVA is proposed to be developed as a golf course. The RHA is proposed to be developed into a hotel and recreational facilities. Although noise adjacent to the Project site would increase over current noise levels, and would become more constant, this increase would not be such that it would substantially reduce common wildlife populations in the region. Therefore, a significant impact is not anticipated in this regard.

Species that roost or nest along cliffs and the rocky shore of the proposed open space areas may be indirectly impacted by the increase in noise on the RHA. This impact would be potentially significant. Implementation of the ~~specified mitigation~~LPHCP requiring that a ~~landscaping buffer~~transitional area be planted along the boundary of developed land uses would reduce this impact to less than significant by providing a natural noise buffer.

Increased Dust and Urban Pollutants. Grading activities would disturb soils and result in the accumulation of dust on the surface of the leaves of trees, shrubs, and herbs in the natural open space areas within the UPVA and RHA. The respiratory function of the plants in these areas would be impaired when dust accumulation is excessive. This indirect effect of construction of the proposed Project on the native vegetation in the immediate vicinity of the construction area is not considered significant, since it would not reduce plant populations below self-sustaining levels. Therefore, no mitigation would be required.

Additional impacts on biological resources in the area may occur as a result of changes in water quality. Urban runoff from the proposed Project containing petroleum residues and the potential for improper disposal of petroleum and chemical products from construction equipment (temporary) or infrastructure areas (i.e., vehicles, improper disposal of chemicals) (permanent) could affect water quality onsite and offsite. This, in turn, could affect populations of aquatic species including common and special status species. Water quality could also be affected by runoff of nutrients from landscape features of the proposed Project, particularly

the golf course. These impacts are considered potentially significant since runoff could indirectly impact areas containing important biological resources (i.e., coastal sage scrub in the UPVA open space and rocky shore areas in the RHA). These impacts would be reduced to less than significant with the implementation of mitigation specified in Section 5.6, *Hydrology and Drainage*. Specifically, the mitigation would require that the Applicant apply for coverage under the State Water Resources Control Board's General Permit for Storm Water Discharge Associated with Construction Activity and comply with all of the provisions of the permit, including the development of a Storm Water Pollution Prevention Plan (which includes provisions for the implementation of Best Management Practices and erosion control measures).

Night Lighting. Lighting of the ~~infrastructure~~proposed Project in certain areas (primarily by the RHA area) would inadvertently result in an indirect effect on the behavioral patterns of nocturnal and crepuscular (i.e., active at dawn and dusk) wildlife that are present along the boundaries of the urban and natural areas of the UPVA and RHA. Of particular concern is the effect on small ground-dwelling animals that use the darkness to hide from predators, and on owls, which are specialized night foragers. In addition, the increase in night lighting could discourage nesting and roosting along the cliffs and rocky shore adjacent to the RHA. This increased lighting, in conjunction with the increased noise and habitat loss, would be considered potentially significant since it is adjacent to cliff nesting and roosting habitat. Implementation of the specified mitigation requiring that a lighting plan be prepared which directs lighting away from sensitive biological resources would reduce this impact to less than significant.

Human Activity. The increase in human activity (i.e., noise, foot traffic) would increase the disturbance of natural open space remaining on or adjacent to the UPVA and RHA. Human disturbance could disrupt normal foraging and breeding behavior of wildlife remaining in these and adjacent areas diminishing the value of these preserved open space habitat areas.

Of particular concern is the location of golf course features within and adjacent to coastal sage scrub preservation and creation areas in the UPVA. Although trails ~~will~~would be established within the golf course area to keep golfers out of the natural areas, the proposed Project has the potential for golfers to enter the natural areas to retrieve lost balls or other reasons. This disturbance would be considered potentially significant since it may significantly impact habitat protected by state and federal resource agencies. Implementation of mitigation including the following measures would reduce this impact to less than significant:

- ~~Develop a Fencing Plan;~~

- ~~Develop a Signage Plan~~Install Fencing along the edge of conservation, restoration, and enhancement areas;
- Install Signage along the edge of conservation, restoration, and enhancement areas; and
- Establish a transition zone to buffer natural habitats from developed areas as outlined in the LPHCP.

Non-native Species Introduction. The native habitat types within the natural open space areas of the UPVA and RHA would be subject to greater pressure from non-native plant species within the developed portions of the UPVA and RHA. Areas that have undergone disturbance generally contain a high number of non-native grasses and forbs that can successfully out compete the native plants in the region. This ~~will~~would be especially true after initial Project grading of both the UPVA and the RHA. Should non-native plants establish themselves in these areas prior to the establishment of native plant species or non-native/non-invasive plant species in the landscape areas, the non-natives may become invasive in the natural open space areas. Left uncontrolled, these "weeds" may begin encroaching into the natural open space areas of the UPVA and RHA that were not directly impacted during Project grading. These impacts could become significant if uncontrolled. The implementation of the ~~Long Point Habitat and Conservation Program~~LPHCP which provides for the planting of native plant species ~~will~~would reduce this potential impact to less than significant by limiting the potential for the non-native plant species to become established.

WILDLIFE MOVEMENT

5.3-3 *Project implementation may interfere with the movement of a native resident or migratory wildlife species. Analysis has concluded that impacts are less than significant.*

The proposed development of the UPVA and RHA would not impact wildlife corridors, by definition, but would affect local travel routes. This may result in reduced connectivity between the open ~~spaces~~space areas to the east, north, and west of the UPVA. The steep cliffs of the RHA that are expected to provide a narrow linkage for wildlife east and west of the site ~~will~~would be maintained as permanent open space and would not be impacted. The Project design of the UPVA area has maintained a connection to the open space areas offsite. In addition, the preserved habitat areas onsite and the proposed coastal sage scrub creation areas on the UPVA site are expected to provide for local movement on and offsite. The discussion of preserved and created coastal sage scrub habitat on the UPVA site is discussed further below under the LPHCP.

LOCAL POLICIES/ORDINANCES

5.3-4 *Analysis has concluded that there are no impacts to any local policies or ordinances protecting biological resources, because there are no approved local policies and/or ordinances within the City of Rancho Palos Verdes regarding the protection of biological resources.*

There is currently no adopted Habitat Conservation Plan, NCCP, or other approved local, regional, or state habitat conservation plan that includes the Project site. Therefore, no impacts to these adopted plans are expected to occur as a result of Project implementation.

CUMULATIVE IMPACTS

5.3-5 *Cumulative development (including the proposed Project) in the Project area may impact the area's biological resources. Analysis has concluded that Project implementation would not result in significant biological impacts with implementation of the specified mitigation and the City's development of the NCCP program.*

When viewed in conjunction with other major developments planned for the Rancho Palos Verdes, the loss of coastal sage scrub and other native vegetation, as well as the loss of wildlife habitat and the displacement of wildlife species in the Project area, could be considered a negative cumulative effect. However, cumulative impacts to coastal sage scrub habitat are currently being mitigated on a project-by-project basis and in accordance with the City's proposed NCCP program that is currently being developed.

In the absence of an approved NCCP program, cumulative impacts to coastal sage scrub by the proposed Project and recently approved projects by the City will be mitigated to a level of less than significant through mitigation requirements (preservation/enhancement/restoration) of the ~~4~~FESA (~~d) special rule process~~Section 4[d], 7, and 10) and the proposed LPHCP.

As it is intended, the City's proposed NCCP can offset cumulative impacts in the region through the preservation and adaptive management of large reserve systems, which provide habitat for special status species. As the lead agency for the City of Rancho Palos Verdes subregion NCCP, the City has contributed both time and money toward its development and implementation, which include the process of developing a habitat preserve through land acquisition. The City is currently in the process of identifying the preferred preserve design for the program with the help of the major landowners, local government, state and federal resources agencies, and environmental organization representatives. The

proposed Project is consistent with ~~the preferred preserve design and the~~two of the three design alternatives that the City is currently evaluating. The Project Applicant is also a participating landowner in the NCCP program. With the Project Applicant's proposed mitigation for biological impacts (LPHCP), the previously approved mitigation plans through the 4(d) process, and the eventual approval and adoption of the City of Rancho Palos Verdes subregion NCCP, potential cumulative impacts to biological resources ~~will~~would be reduced to a level of less than significant.

MITIGATION MEASURES

The following mitigation measures directly correspond to the identified impact statements in the Impact subsections.

SPECIAL STATUS BIOLOGICAL RESOURCES

5.3-1a A pre-construction survey for the island green dudleya shall be conducted during the peak flowering period prior to Grading Permit Issuance (approximately April through June), by the Project biologist. The limits of each impacted dudleya location shall be clearly marked with lath and brightly colored flagging.

If any of the dudleya is located in the impact area, the loss of the dudleya shall be mitigated by seed and corm collection, and revegetation into a suitable mitigation site in the undeveloped portion of the Project site or at an off-site location. A qualified biologist shall be selected by the Applicant, subject to the approval of City staff, to prepare and implement ~~the mitigation plan~~a Special Status Plant Mitigation Program. The Special Status Plant Mitigation Program shall be prepared and implemented prior to disturbance of the dudleya. The detailed mitigation ~~plan~~program shall include the following requirements:

- The existing locations of dudleya shall be monitored every two weeks by the Project biologist to determine when the seeds are ready for collection. A qualified seed collector shall collect all of the seeds from the plants to be impacted when the seeds are ripe.

- Following the seed collection, the corms shall be dug up, cleaned, and stored by a qualified nursery or institution with appropriate storage facilities. The top 12 inches of topsoil from the dudleya locations shall be scraped, stockpiled, and used at the selected mitigation site.

- This mitigation shall be conducted concurrent with the coastal sage scrub and coastal bluff scrub mitigation. The site shall be located in dedicated open space on the Project site or at an offsite mitigation site. The selected site should not attempt to enhance existing populations.

- The dudleya mitigation site shall be prepared for seeding as described in ~~a conceptual restoration plan~~the Special Status Plant Mitigation Program.

- The topsoil shall be re-spread in the selected location as approved by the Project biologist. Approximately 60 percent of the seeds and corms shall be spread/placed in the fall following soil preparation. Forty percent of the seed and corms shall be kept in storage for subsequent seeding, if necessary.

- The ~~plan~~Special Status Plant Mitigation Program shall include detailed descriptions of maintenance appropriate for the site, monitoring requirements, and annual reports requirements. In addition, the Project biologist shall have the authority to suspend any operation on the Project site which is, in the Project biologist's opinion and confirmed by the City, not consistent with the ~~restoration plan~~Special Status Plant Mitigation Program. Any disputes regarding the consistency of an action with the ~~m~~Special Status Plant Mitigation ~~plan~~Program shall be resolved by the Applicant and the Project biologist.

- The performance criteria developed in the ~~maintenance and monitoring plan~~Special Status Plant Mitigation Program shall include requirements for a minimum of 60 percent germination of the number of plants impacted. The performance criteria should also include percent cover, density, and seed production requirements. This criteria shall be developed by the Project biologist following habitat analysis of an existing high-quality dudleya habitat. This information shall be recorded by a qualified biologist.

- If the germination goal of 60 percent is not achieved following the first season, remediation measures shall be implemented prior to seeding with the remaining 40 percent of seed. Remedial measures shall include at a minimum: soils testing, control of invasive species, soil amendments, and physical

disturbance (to provide scarification of the seed) of the planted areas by raking or similar actions. Additional mitigation measures may be suggested as determined appropriate by the Project biologist.

- Potential seed sources from additional donor sites shall also be identified in case it becomes necessary to collect additional seed for use on the site following performance of remedial measures.

5.3-1b Pre-construction special status plant surveys shall be conducted to determine the presence or absence of aphanisma, south coast saltscale, Catalina crossosoma, Santa Catalina Island desert-thorn, and Lyon's pentachaeta. The focused surveys for these species shall be conducted during the appropriate blooming period (spring) prior to Demolition Permit Issuance. In the event any of these species are found to be present on the Project site, then ~~m~~a Special Status Plant Mitigation ~~measures~~Program shall be developed in consultation with the appropriate resource agencies if the status of the species and the size of the population warrant a finding of significance. ~~Appropriate mitigation may~~The Special Status Plant Mitigation Program shall be developed and implemented prior to the issuance of a grading permit. The plan shall be prepared by a qualified botanist and shall be subject to review by the City. The program shall include avoidance of the populations, relocation, or purchase of off-site populations ~~for inclusion to adjacent open space areas.~~as appropriate and feasible. The program shall also include the requirements outlined in Mitigation Measure 5.3-1a as appropriate for the species being addressed.

5.3-1c Prior to Demolition ~~Permit/Issuance, a focused survey for the Palos Verdes blue butterfly shall be conducted according to methods approved by the USFWS. In the event that the focused surveys find that this species occurs on the Project site, then authorization from the USFWS shall be required. Authorization can occur through either Section 7 or 10 of the FESA. The authorization process would require the preparation of a Biological Assessment or LPHCP which would include a mitigation plan to avoid or minimize impacts to this species. This mitigation may include avoiding the habitat of this species, or purchasing of off-site habitat for this species.~~

~~5.3-1d~~ ~~Prior to Demolition Permit/Issuance~~Permit issuance, the Project Applicant shall comply with the FESA (through either Section 4[d], 7, or 10) with regards to any impacts to the coastal California

gnatcatcher. The LPHCP has been developed to ensure compliance with FESA and to be consistent with the City's NCCP, when adopted. The LPHCP would provide for the creation of 16.80 acres of new coastal sage scrub habitat area (UPVA Conservation Planning Area and Recreation Area). This, combined with the 14.63 acres of existing coastal sage scrub habitat, the 4.44 acres of coastal bluff scrub habitat, and the 3.87 acres of rocky shore/coastal bluff habitat that would be retained, would result in the protection ~~and~~and/or creation of a total of 39.74 acres of coastal sage scrub, coastal bluff scrub, and rocky shore/coastal bluff habitat. ~~The 16.80 acres of restored and newly created habitat represents a replacement ratio of 3.4 to 1 (3.4 acres restored/created habitat for every 1 acre removed) for the 5.00 acres of coastal sage scrub and coastal bluff scrub impacted by the proposed Project. With the addition of 22.94 acres of preserved coastal sage scrub, coastal bluff scrub, and rocky shore/coastal bluff to the mitigation program, the compensation ratio is over 7 to 1, far above typical mitigation standards of 2 to 1 and 3 to 1.~~

~~5.3-1e Thirty~~

5.3-1d No more than seven days prior to commencement of demolition activities, a qualified biologist shall conduct a survey to determine whether Cooper's hawk, burrowing owl, northern harrier, white-tailed kite, prairie falcon, and peregrine falcon, or other raptor species, are nesting in or adjacent to the impact area. In the event nesting is not occurring, construction work ~~shall~~may proceed. In the event an active nest is present, construction work shall be prohibited within ~~500~~300 feet of the nest (or as otherwise determined by the Project biologist) until fledglings have left the nest. Results of the surveys shall be provided to USFWS, CDFG, and the City of Rancho Palos Verdes.

~~5.3-1f Prior to Demolition Permit Issuance, a focused survey for the Pacific pocket mouse shall be conducted according to methods approved by the USFWS. In the event that the focused surveys find that this species occurs on the Project site, then authorization from the USFWS shall be required. Authorization can occur through either Section 7 or 10 of the FESA. The authorization process would require the preparation of a Biological Assessment or LPHCP which would include a mitigation plan to avoid or minimize impacts to this species. This mitigation may include avoiding the habitat of this species or purchasing off-site habitat for this species.~~

SENSITIVE NATURAL COMMUNITY

5.3-2a ~~T~~All habitat revegetation activities identified in the LPHCP shall be ~~implemented~~initiated prior to issuance of the Certificate of Occupancy for the hotel, to the satisfaction of the City. The ~~Program~~LPHCP shall contain habitat restoration and enhancement design details for the Conservation Planning Areas through revegetation with drought-tolerant species, transitional areas of planting between the Conservation Area and Resort Hotel/Recreation Planning Areas, and design for long-term sustainability. The plant palette of the LPHCP shall be reviewed by a botanist to ensure that any landscape zones that are adjacent to the natural open space areas do not contain any invasive non-native plant species. In addition, the Project's drainage and surface runoff shall be directed away from the bluff habitat areas in the RHA.

5.3-2b The Project development plan shall be modified to avoid any construction/development impact upon coastal bluff scrub and disturbed coastal bluff scrub areas.

5.3-2c A native/non-invasive plant transition area shall be initiated prior to grading permits, along the bluff crest along the project development limits. To define the precise location of the existing coastal bluff scrub in these areas, the limits of the bluff scrub shall be surveyed by an engineer with the assistance of a biologist in the field. From this plotted location on a site plan, a native plant buffer area shall be established with the first 30 feet from the inland limits of the coastal bluff scrub. This native plant buffer shall be reseeded and /or replanted with plants native to the coastal bluff scrub ~~restoration~~community. This area shall include, at a minimum, coast buckwheat, ashy-leaf buckwheat, bladderpod, California bush sunflower, wooly sea-blite, and California box-thorn ~~and woolly sea-blite.~~

~~5.3-2c.~~ The pedestrian trail shall be located to the inland side of the native plant buffer. The trail is approximately 4 feet wide and shall be fenced to limit intrusion into the native plant buffer. Inland of the trail, a non-invasive plant zone 50 feet wide shall be established. The plants within this 50 foot zone shall contain only drought tolerant and non-invasive species. The final plant pallet for this area shall be reviewed by a restoration ecologist/biologist. In addition, non-native plant species within the existing coastal bluff scrub habitat at the uppermost portions of the bluff face shall be removed by hand. The native plant

buffer area shall be maintained and monitored for a minimum of five years.

5.3-2d Prior to Grading Permit issuance, fencing shall be installed along the edge of all conservation, restoration, and enhancement areas to discourage human encroachment into those areas that would not be encroached upon except as a result of Project implementation.

5.3-2de Prior to Grading Permit issuance, signs shall be placed on all fencing installed along the edge of all conservation, restoration, and enhancement areas prohibiting entrance into these areas.

~~5.3-2e Prior to the issuance of Building Permits, areas adjacent to golf course activities shall be protected in compliance with City requirements.~~

5.3-2f Earth-moving equipment shall not maneuver in areas outside the identified limits of grading in order to avoid disturbing open space areas that are proposed to remain undeveloped. Prior to Grading Permit issuance, the natural open space limits shall be marked by the construction supervisor and the Project biologist. These limits shall be identified on the grading plan. The Applicant shall submit a letter to the City of Rancho Palos Verdes prior to Grading Permit issuance verifying that construction limits have been flagged in the field. No earth-moving equipment shall be allowed within the open space areas.

~~5.3-2g The Project development plan shall be modified to avoid any construction/development impact upon coastal bluff scrub and disturbed coastal bluff scrub areas.~~

~~5.~~3-2~~hg~~g The Project development plan shall be modified to avoid any construction/development impact to any areas subject to jurisdiction of the ACOE and CDFG. If ~~these~~impacts to areas ~~are not~~within the jurisdiction of the ACOE and/or CDFG cannot be avoided, prior to Grading Permit issuance, the Project Applicant shall ~~receive~~obtain a permit and/or agreement from the ACOE and CDFG for any impacts to areas within their jurisdiction as part of the proposed Project.

Prior to the final submittal of an application for an ACOE permit or CDFG agreement, the Project Applicant shall develop a riparian restoration plan for the ACOE, CDFG, and City of Rancho Palos Verdes. The objective of the mitigation is to ensure no net loss of

habitat values as a result of the Project. Prior to implementation, a detailed restoration program shall be developed and shall contain the following items:

- *Responsibilities and qualifications of the personnel to implement and supervise the plan.* The responsibilities of the landowner, specialists and maintenance personnel that would supervise and implement the plan shall be specified.

- *Site selection.* The site for the mitigation shall be determined in coordination with the Project Applicant, City staff, and resource agencies. The site shall be located in a dedicated open space area and shall be contiguous with other natural open space.

- *Site preparation and planting implementation.* Site preparation shall include: 1) protection of existing native species, 2) trash and weed removal, 3) native species salvage and reuse (i.e. duff), 4) soil treatments (i.e., imprinting, decompacting), 5) temporary irrigation installation, 6) erosion control measures (i.e., rice or shallow wattles), 7) seed mix application, and 8) container species.

- *Schedule.* A schedule shall be developed which includes planting to occur in late fall and early winter, between October and January 30.

- *Maintenance plan/guidelines.* The maintenance plan shall include: 1) weed control, 2) herbivory control, 3) trash removal, 4) irrigation system maintenance, 5) maintenance training, and 6) replacement planting.

- *Monitoring Plan.* The monitoring plan shall include: 1) qualitative monitoring (i.e., photographs and general observations), 2) quantitative monitoring (i.e., randomly placed transects), 3) performance criteria as approved by the resource agencies, 4) monthly reports for the first year and bimonthly reports thereafter, and 5) annual reports which shall be submitted to the resource agencies for five years. The site shall be monitored and maintained for five years to ensure successful establishment of riparian habitat within the restored and created areas; however, if there is successful coverage prior to five years, the Project Applicant may request from

ACOE and CDFG to be released from monitoring requirements.

- *Long-Term Preservation.* Long-term preservation of the site shall be outlined in the conceptual mitigation plan to ensure the mitigation site is not impacted by future development. This shall include provisions for adequate fencing and signing to protect the preserve areas.

- *Performance standards shall be identified and shall apply for the restoration of riparian habitat.* Revegetation shall be considered successful at three years if the percent cover and species diversity of the restored and/or created habitat areas are similar to percent cover and species diversity of adjacent existing habitats, as determined by quantitative testing of existing and restored and/or created habitat areas. Testing shall be conducted by a qualified biologist selected by the Applicant and subject to approval by City staff.

~~5.3-2i A revegetation program shall be implemented in accordance with the landscape palette developed for the LPHCP or as~~

3-2h Prior to issuance of grading permits, the Project Applicant shall develop a sage scrub restoration plan. The plan shall be approved by the ~~agencies. The revegetation program shall be submitted to the City of Rancho Palos Verdes for review and approval prior to Grading Permit issuance.~~

~~5.3-2j Prior to the initiation of grading activities, a 100-foot (or such other distance determined appropriate by a biological monitor) buffer area, shall be established around each gnatcatcher nest, during the nesting season (February-July) to avoid indirect noise impacts. No heavy equipment operation, or otherwise high noise generating activity, shall occur within the buffer area until nesting activity has ceased. Results of the surveys and nest monitoring will be provided to~~ USFWS, CDFG, and ~~the~~ City of Rancho Palos Verdes. The ~~biological monitor shall be~~plan shall contain the following items:

- *Responsibilities and qualifications of the personnel to implement and supervise the plan.* The responsibilities of the landowner, specialists and maintenance personnel that would supervise and implement the plan shall be specified.

- *Site selection.* The site for the mitigation shall be determined in coordination with the Project Applicant, City staff, and resource agencies. The site shall be located in a dedicated open space area and shall be contiguous with other natural open space.

- *Site preparation and planting implementation.* Site preparation shall include: 1) protection of existing native species, 2) trash and weed removal, 3) native species salvage and reuse (i.e. duff), 4) soil treatments (i.e., imprinting, decompacting), 5) temporary irrigation installation, 6) erosion control measures (i.e., rice or shallow wattles), 7) seed mix application, and 8) container species.

- *Schedule.* A schedule shall be developed which includes planting to occur in late fall and early winter, between October and January 30.

- *Maintenance plan/guidelines.* The maintenance plan shall include: 1) weed control, 2) herbivory control, 3) trash removal, 4) irrigation system maintenance, 5) maintenance training, and 6) replacement planting.

- *Monitoring Plan.* The monitoring plan shall include: 1) qualitative monitoring (i.e., photographs and general observations), 2) quantitative monitoring (i.e., randomly placed transects), 3) performance criteria as approved by the resource agencies, 4) monthly reports for the first year and bimonthly reports thereafter, and 5) annual reports which shall be submitted to the resource agencies for five years. The site shall be monitored and maintained for five years to ensure successful establishment of sage scrub habitat within the restored and created areas; however, if there is successful coverage prior to five years, the Project Applicant may request from USFWS and CDFG to be released from monitoring requirements.

- *Long-Term Preservation.* Long-term preservation of the site shall be outlined in the conceptual mitigation plan to ensure the mitigation site is not impacted by future development.

- *Performance standards shall be identified and shall apply for the restoration of sage scrub habitat.* Revegetation shall be considered successful at three years if the percent cover and species diversity of the restored and/or created habitat areas are similar to percent cover and species diversity of adjacent existing habitats, as determined by quantitative testing of existing and restored and/or created habitat areas. Testing shall be conducted by a qualified biologist selected by the Applicant and subject to approval by City staff.

5.3-2i All activities of any kind involving the removal of coastal sage scrub habitat occupied by the coastal California gnatcatcher shall be prohibited during the breeding and nesting season of this species (February 15 through August 30). All grading/grubbing operations shall be monitored by a qualified biologist, selected by the Applicant and subject to approval by City staff. The monitoring biologist shall ensure that only the permitted amount of coastal sage scrub would be removed. The monitoring biologist shall flush gnatcatchers and other birds from the vegetation prior to disturbance, to ensure no gnatcatchers are directly impacted during the removal of the vegetation. The monitoring biologist shall have the authority to stop or direct construction at any time she/he feels that a gnatcatcher is in danger.

5.3-2~~k~~j Prior to the issuance of occupancy permits, a lighting plan shall be submitted to the City of Rancho Palos Verdes for review and approval to demonstrate that lighting from the proposed Project will be directed away from natural open space areas on and adjacent to the Project site, as well as proposed biological resources mitigation sites.

5.3-2k Prior to issuance of grading permits, the Resort Hotel Area Infrastructure Plan and the Upper Point Vicente Area Infrastructure Plan shall be revised, to the satisfaction of the City of Rancho Palos Verdes City Engineer such that the proposed water, sewer and storm drain lines are re-aligned to the "impact areas" illustrated in Exhibit 5.3-5, *Biological Resources Impacts Within the Resort Hotel Area*, and Exhibit 5.3-6, *Biological Resources Impacts Within the Upper Point Vicente Area*.

WILDLIFE MOVEMENT

5.3-3 No mitigation measures are required.

LOCAL POLICIES/ORDINANCES

5.3-4 No mitigation measures are required.

CUMULATIVE

5.3-5 No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

No unavoidable significant impacts related to biological resources have been identified following implementation of recommended mitigation measures and compliance with the City Development Code.

13.0 MITIGATION MONITORING PROGRAM FOR BIOLOGICAL RESOURCES

LONG POINT RESORT
ENVIRONMENTAL IMPACT REPORT

BIOLOGICAL RESOURCES MITIGATION MONITORING AND REPORTING CHECKLIST

Mit./ Cond. No.	Mitigation Measure/Conditions of Approval	Monitoring and Reporting Process	Monitoring Milestone	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE Initials	Date	Remarks
BIOLOGICAL RESOURCES							
5.3-1a	A pre-construction survey for the island green dudleya shall be conducted during the peak flowering period prior to Grading Permit Issuance (approximately April through June), by the Project biologist. The limits of each impacted dudleya location shall be clearly marked with lath and brightly colored flagging.	Field Survey	During the peak flowering period prior to Grading Permit issuance (approximately April through June)	City-Approved Biologist			
	If any of the dudleya is located in the impact area, the loss of the dudleya shall be mitigated by seed and corm collection, and revegetation into a suitable mitigation site in the undeveloped portion of the Project site or at an off-site location. A qualified biologist shall be selected by the Applicant, subject to the approval of City staff, to prepare and implement a Special Status Plant Mitigation Program. The Special Status Plant Mitigation Program shall be prepared and implemented prior to disturbance of the dudleya. The detailed mitigation program shall include the following requirements: • The existing locations of dudleya shall be monitored every two weeks by the Project biologist to determine when the seeds are ready for collection. A qualified seed collector shall collect all of the seeds from the plants to be impacted when the seeds are ripe.	Preparation of Special Status Plant Mitigation Program Confirmation of Submittal of Special Status Plant Mitigation Program	In the Event Dudley are Discovered and Subsequent to Completion of Field Survey " "	City-Approved Biologist City Planning Department			

Mit./ Cond. No.	Mitigation Measure/Conditions of Approval	Monitoring and Reporting Process	Monitoring Milestone	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE Initials	Date	Remarks
5.3-1a Cont'd	• Following the seed collection, the corms shall be dug up, cleaned, and stored by a qualified nursery or institution with appropriate storage facilities. The top 12 inches of topsoil from the dudleya locations shall be scraped, stockpiled, and used at the selected mitigation site. • This mitigation shall be conducted concurrent with the coastal sage scrub and coastal bluff scrub mitigation. The site shall be located in dedicated open space on the Project site or at an offsite mitigation site. The selected site should not attempt to enhance existing populations. • The dudleya mitigation site shall be prepared for seeding as described in the Special Status Plant Mitigation Program. • The topsoil shall be re-spread in the selected location as approved by the Project biologist. Approximately 60 percent of the seeds and corms shall be spread/placed in the fall following soil preparation. Forty percent of the seed and corms shall be kept in storage for subsequent seeding, if necessary. • The Special Status Plant Mitigation Program shall include detailed descriptions of maintenance appropriate for the site, monitoring requirements, and annual reports requirements. In addition, the Project biologist shall have the authority to suspend any operation on the Project site which is, in the Project biologist's opinion and confirmed						

Mit./ Cond. No.	Mitigation Measure/Conditions of Approval	Monitoring and Reporting Process	Monitoring Milestone	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
5.3-1a Cont'd	by the City, not consistent with the Special Status Plant Mitigation Program. Any disputes regarding the consistency of an action with the Special Status Plant Mitigation Program shall be resolved by the Applicant and the Project biologist. • The performance criteria developed in the Special Status Plant Mitigation Program shall include requirements for a minimum of 60 percent germination of the number of plants impacted. The performance criteria should also include percent cover, density, and seed production requirements. This criteria shall be developed by the Project biologist following habitat analysis of an existing high-quality dudleya habitat. This information shall be recorded by a qualified biologist. • If the germination goal of 60 percent is not achieved following the first season, remediation measures shall be implemented prior to seeding with the remaining 40 percent of seed. Remedial measures shall include at a minimum: soils testing, control of invasive species, soil amendments, and physical disturbance (to provide scarification of the seed) of the planted areas by raking or similar actions. Additional mitigation measures may be suggested as determined appropriate by the Project biologist. • Potential seed sources from additional donor sites shall also be identified in case it becomes necessary to collect additional seed for use on the site following performance of remedial measures.						

Mit./ Cond. No.	Mitigation Measure/Conditions of Approval	Monitoring and Reporting Process	Monitoring Milestone	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE Initials	Date	Remarks
5.3-1b	Pre-construction special status plant surveys shall be conducted to determine the presence or absence of aphanisma, south coast saltscale, Catalina crossosoma, Santa Catalina Island desert-thorn, and Lyon's pentachaeta. The focused surveys for these species shall be conducted during the appropriate blooming period (spring) prior to Demolition Permit Issuance. In the event any of these species are found to be present on the Project site, then a Special Status Plant Mitigation Program shall be developed in consultation with the appropriate resource agencies if the status of the species and the size of the population warrant a finding of significance. The Special Status Plant Mitigation Program shall be developed and implemented prior to the issuance of a grading permit. The plan shall be prepared by a qualified botanist and shall be subject to review by the City. The program shall include avoidance of the populations, relocation, or purchase of off-site populations as appropriate and feasible. The program shall also include the requirements outlined in Mitigation Measure 5.3-1a as appropriate for the species being addressed.	Field Survey Preparation of Special Status Plant Mitigation Program Confirmation of Submittal of Special Status Plant Mitigation Program	During the Appropriate Blooming Period (Spring) Prior to Demolition Permit Issuance In the Event Any of these Species are Discovered and Subsequent to Completion of Field Survey and Prior to Grading Permit Issuance " "	City-Approved Biologist City-Approved Biologist City Planning Department			
5.3-1c	Prior to Demolition Permit issuance, the Project Applicant shall comply with the FESA (through either Section 4[d], 7, or 10) with regards to any impacts to the coastal California gnatcatcher. The LPHCP has been developed to ensure compliance with FESA and to be consistent with the City's NCCP, when adopted. The LPHCP would provide for the creation of 16.80 acres of new coastal sage scrub habitat area (UPVA	Confirmation of Compliance With the FESA	Prior to Demolition Permit Issuance	City Planning Department			

Mit./ Cond. No.	Mitigation Measure/Conditions of Approval	Monitoring and Reporting Process	Monitoring Milestone	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
5.3-1c Cont'd	Conservation Planning Area and Recreation Area). This, combined with the 14.63 acres of existing coastal sage scrub habitat, the 4.44 acres of coastal bluff scrub habitat, and the 3.87 acres of rocky shore/coastal bluff habitat that would be retained, would result in the protection and/or creation of a total of 39.74 acres of coastal sage scrub, coastal bluff scrub, and rocky shore/coastal bluff habitat.	Confirmation of Compliance With the FESA	Prior to Demolition Permit Issuance	City Planning Department			
5.3-1d	No more than seven days prior to commencement of demolition activities, a qualified biologist shall conduct a survey to determine whether Cooper's hawk, burrowing owl, northern harrier, white-tailed kite, prairie falcon, and peregrine falcon, or other raptor species, are nesting in or adjacent to the impact area. In the event nesting is not occurring, construction work may proceed. In the event an active nest is present, construction work shall be prohibited within 300 feet of the nest (or as otherwise determined by the Project biologist) until fledglings have left the nest. Results of the surveys shall be provided to USFWS, CDFG, and the City of Rancho Palos Verdes.	Field Survey	No More than Seven Days Prior to Commencement of Demolition Activities	City-Approved Biologist			
5.3-2a	All habitat revegetation activities identified in the LPHCP shall be initiated prior to issuance of the Certificate of Occupancy for the hotel, to the satisfaction of the City. The LPHCP shall contain habitat restoration and enhancement design details for the Conservation Planning Areas through revegetation with drought-tolerant species, transitional areas of planting between the Conservation Area and Resort Hotel/Recreation Planning Areas, and design for	Confirmation of LPHCP Initiation	Prior to Issuance of the Certificate of Occupancy for the Hotel	City Planning Department			

Mit./ Cond. No.	Mitigation Measure/Conditions of Approval	Monitoring and Reporting Process	Monitoring Milestone	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
5.3-2a Cont'd	long-term sustainability. The plant palette of the LPHCP shall be reviewed by a botanist to ensure that any landscape zones that are adjacent to the natural open space areas do not contain any invasive non-native plant species. In addition, the Project's drainage and surface runoff shall be directed away from the bluff habitat areas in the RHA.	Confirmation of LPHCP Initiation	Prior to Issuance of the Certificate of Occupancy for the Hotel	City Planning Department			
5.3-2b	The Project development plan shall be modified to avoid any construction/development impact upon coastal bluff scrub and disturbed coastal bluff scrub areas.	Confirmation of Modified Development Plan	Prior to Grading Permit Issuance	City-Approved Engineer with the Assistance of a City-Approved Biologist			
5.3-2c	A native/non-invasive plant transition area shall be initiated prior to grading permits, along the bluff crest along the project development limits. To define the precise location of the existing coastal bluff scrub in these areas, the limits of the bluff scrub shall be surveyed by an engineer with the assistance of a biologist in the field. From this plotted location on a site plan, a native plant buffer area shall be established with the first 30 feet from the inland limits of the coastal bluff scrub. This native plant buffer shall be reseeded and /or replanted with plants native to the coastal bluff scrub community. This area shall include, at a minimum, coast buckwheat, ashy-leaf buckwheat, bladderpod, California bush sunflower, wooly sea-blite, and California	Field Survey Field Verification	Prior to Grading Permits along the Bluff Crest Prior to Grading Permit Issuance	City-Approved Engineer with the Assistance of a City-Approved Biologist City-Approved Biologist			

Mit./ Cond. No.	Mitigation Measure/Conditions of Approval	Monitoring and Reporting Process	Monitoring Milestone	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
5.3-2c Cont'd	box-thorn. The pedestrian trail shall be located to the inland side of the native plant buffer. The trail is approximately 4 feet wide and shall be fenced to limit intrusion into the native plant buffer. Inland of the trail, a non-invasive plant zone 50 feet wide shall be established. The plants within this 50 foot zone shall contain only drought tolerant and non-invasive species. The final plant pallet for this area shall be reviewed by a restoration ecologist/biologist. In addition, non-native plant species within the existing coastal bluff scrub habitat at the uppermost portions of the bluff face shall be removed by hand. The native plant buffer area shall be maintained and monitored for a minimum of five years.	Field Verification	Prior to Grading Permit Issuance	City-Approved Biologist			
5.3-2d	Prior to Grading Permit issuance, fencing shall be installed along the edge of all conservation, restoration, and enhancement areas to discourage human encroachment into those areas that would not be encroached upon except as a result of Project implementation.	Field Verification	Prior to Grading Permit Issuance	City Planning Department			
5.3-2e	Prior to Grading Permit issuance, signs shall be placed on all fencing installed along the edge of all conservation, restoration, and enhancement areas prohibiting entrance into these areas.	Field Verification	Prior to Grading Permit Issuance	City Planning Department			
5.3-2f	Earth-moving equipment shall not maneuver in areas outside the identified limits of grading in order to avoid disturbing open space areas that are proposed to remain undeveloped. Prior to Grading Permit issuance, the natural open space limits shall be marked by the construction supervisor and the Project biologist. These limits	Field Verification	Prior to Grading Permit Issuance	Construction Supervisor and City-Approved Biologist			

Mit./ Cond. No.	Mitigation Measure/Conditions of Approval	Monitoring and Reporting Process	Monitoring Milestone	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
5.3-2f Cont'd	shall be identified on the grading plan. The Applicant shall submit a letter to the City of Rancho Palos Verdes prior to Grading Permit issuance verifying that construction limits have been flagged in the field. No earth-moving equipment shall be allowed within the open space areas.	Field Verification	Prior to Grading Permit Issuance	Construction Supervisor and City-Approved Biologist			
5.3-2g	The Project development plan shall be modified to avoid any construction/development impact to any areas subject to jurisdiction of the ACOE and CDFG. If impacts to areas within the jurisdiction of the ACOE and/or CDFG cannot be avoided, prior to Grading Permit issuance, the Project Applicant shall obtain a permit and/or agreement from the ACOE and CDFG for any impacts to areas within their jurisdiction as part of the proposed Project.	Field Verification	Prior to Grading Permit Issuance	Construction Supervisor and City-Approved Biologist			
	Prior to the final submittal of an application for an ACOE permit or CDFG agreement, the Project Applicant shall develop a riparian restoration plan for the ACOE, CDFG, and City of Rancho Palos Verdes. The objective of the mitigation is to ensure no net loss of habitat values as a result of the Project. Prior to implementation, a detailed restoration program shall be developed and shall contain the following items: • *Responsibilities and qualifications of the personnel to implement and supervise the plan*. The responsibilities of the landowner, specialists and maintenance personnel that would supervise and implement the plan shall be specified.	Confirmation of Submittal of Riparian Restoration Plan	Prior to the Final Submittal of an Application for an ACOE Permit or CDFG Agreement	City-Approved Biologist			

Mit./ Cond. No.	Mitigation Measure/Conditions of Approval	Monitoring and Reporting Process	Monitoring Milestone	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
5.3-2g Cont'd	4) monthly reports for the first year and bimonthly reports thereafter, and 5) annual reports which shall be submitted to the resource agencies for five years. The site shall be monitored and maintained for five years to ensure successful establishment of riparian habitat within the restored and created areas; however, if there is successful coverage prior to five years, the Project Applicant may request from ACOE and CDFG to be released from monitoring requirements. • *Long-Term Preservation.* Long-term preservation of the site shall be outlined in the conceptual mitigation plan to ensure the mitigation site is not impacted by future development. This shall include provisions for adequate fencing and signing to protect the preserve areas. • *Performance standards shall be identified and shall apply for the restoration of riparian habitat.* Revegetation shall be considered successful at three years if the percent cover and species diversity of the restored and/or created habitat areas are similar to percent cover and species diversity of adjacent existing habitats, as determined by quantitative testing of existing and restored and/or created habitat areas. Testing shall be conducted by a qualified biologist selected by the Applicant and subject to approval by City staff.						

Mit./ Cond. No.	Mitigation Measure/Conditions of Approval	Monitoring and Reporting Process	Monitoring Milestone	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
5.3-2h	Prior to issuance of grading permits, the Project Applicant shall develop a sage scrub restoration plan. The plan shall be approved by the USFWS, CDFG, and City of Rancho Palos Verdes. The plan shall contain the following items: • *Responsibilities and qualifications of the personnel to implement and supervise the plan.* The responsibilities of the landowner, specialists and maintenance personnel that would supervise and implement the plan shall be specified. • *Site selection.* The site for the mitigation shall be determined in coordination with the Project Applicant, City staff, and resource agencies. The site shall be located in a dedicated open space area and shall be contiguous with other natural open space. • *Site preparation and planting implementation.* Site preparation shall include: 1) protection of existing native species, 2) trash and weed removal, 3) native species salvage and reuse (i.e. duff), 4) soil treatments (i.e., imprinting, decompacting), 5) temporary irrigation installation, 6) erosion control measures (i.e., rice or shallow wattles), 7) seed mix application, and 8) container species. • *Schedule.* A schedule shall be developed which includes planting to occur in late fall and early winter, between October and January 30.	Confirmation of Submittal of a Coastal Sage Scrub Restoration Plan.	Prior to Issuance of Grading Permits	City Planning Department			

Mit./ Cond. No.	Mitigation Measure/Conditions of Approval	Monitoring and Reporting Process	Monitoring Milestone	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE Initials	Date	Remarks
5.3-2h Cont'd	• *Maintenance plan/guidelines.* The maintenance plan shall include: 1) weed control, 2) herbivory control, 3) trash removal, 4) irrigation system maintenance, 5) maintenance training, and 6) replacement planting. • *Monitoring Plan.* The monitoring plan shall include: 1) qualitative monitoring (i.e., photographs and general observations), 2) quantitative monitoring (i.e., randomly placed transects), 3) performance criteria as approved by the resource agencies, 4) monthly reports for the first year and bimonthly reports thereafter, and 5) annual reports which shall be submitted to the resource agencies for five years. The site shall be monitored and maintained for five years to ensure successful establishment of sage scrub habitat within the restored and created areas; however, if there is successful coverage prior to five years, the Project Applicant may request from USFWS and CDFG to be released from monitoring requirements. • *Long-Term Preservation.* Long-term preservation of the site shall be outlined in the conceptual mitigation plan to ensure the mitigation site is not impacted by future development.						

Mit./ Cond. No.	Mitigation Measure/Conditions of Approval	Monitoring and Reporting Process	Monitoring Milestone	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
5.3-2h Cont'd	• *Performance standards shall be identified and shall apply for the restoration of sage scrub habitat.* Revegetation shall be considered successful at three years if the percent cover and species diversity of the restored and/or created habitat areas are similar to percent cover and species diversity of adjacent existing habitats, as determined by quantitative testing of existing and restored and/or created habitat areas. Testing shall be conducted by a qualified biologist selected by the Applicant and subject to approval by City staff.						
5.3-2i	All activities of any kind involving the removal of coastal sage scrub habitat occupied by the coastal California gnatcatcher shall be prohibited during the breeding and nesting season of this species (February 15 through August 30). All grading/grubbing operations shall be monitored by a qualified biologist, selected by the Applicant and subject to approval by City staff. The monitoring biologist shall ensure that only the permitted amount of coastal sage scrub would be removed. The monitoring biologist shall flush gnatcatchers and other birds from the vegetation prior to disturbance, to ensure no gnatcatchers are directly impacted during the removal of the vegetation. The monitoring biologist shall have the authority to stop or direct construction at any time she/he feels that a gnatcatcher is in danger.	Field Verification	During the Breeding and Nesting Season of the Coastal California Gnatcatcher (February 15 Through August 30)	City-Approved Biologist			

Mit./ Cond. No.	Mitigation Measure/Conditions of Approval	Monitoring and Reporting Process	Monitoring Milestone	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
5.3-2j	Prior to the issuance of occupancy permits, a lighting plan shall be submitted to the City of Rancho Palos Verdes for review and approval to demonstrate that lighting from the proposed Project will be directed away from natural open space areas on and adjacent to the Project site, as well as proposed biological resources mitigation sites.	Confirmation of Submittal of Lighting Plan	Prior to the Issuance of Occupancy Permits	City Planning Department			
5.3-2k	Prior to issuance of grading permits, the Resort Hotel Area Infrastructure Plan and the Upper Point Vicente Area Infrastructure Plan shall be revised, to the satisfaction of the City of Rancho Palos Verdes City Engineer such that the proposed water, sewer and storm drain lines are re-aligned to the "impact areas" illustrated in Exhibit 5.3-5, *Biological Resources Impacts Within the Resort Hotel Area*, and Exhibit 5.3-6, *Biological Resources Impacts Within the Upper Point Vicente Area*.	Confirmation of Revisions to the Resort Hotel Area Infrastructure Plan and the Upper Point Vicente Area Infrastructure Plan	Prior to Issuance of Grading Permits	City Engineer			

15.0 APPENDICES

15.3 Biological Resources Report

15.3.1 Final Biological Technical Report (February 1, 2001)

NOTE TO READER:

THE FOLLOWING BIOLOGICAL TECHNICAL REPORT (FEBRUARY 1, 2001) WAS PREPARED FOR INCLUSION IN THE DRAFT EIR. IT SHOULD BE NOTED THAT FURTHER STUDIES HAVE BEEN CONDUCTED AND MORE RECENT DATA OBTAINED SINCE PREPARATION OF THE REPORT. AS A RESULT, THE BIOLOGICAL RESOURCES SECTION (SECTION 5.3) CONTAINED IN THIS DOCUMENT HAS BEEN REVISED TO REFLECT THE NEW DATA.

LONG POINT RESORT
FINAL BIOLOGICAL TECHNICAL REPORT

Prepared for:

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February 1, 2001

TABLE OF CONTENTS

LIST OF TABLES

LIST OF EXHIBITS

1.0 INTRODUCTION

This Biological Technical Report has been prepared to support California Environmental Quality Act (CEQA) documentation for the proposed Long Point Resort project. This information has been reported in accordance with accepted scientific and technical standards that are consistent with the requirements of the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (CDFG).

1.1 PROJECT LOCATION

The Long Point Resort project is located in the City of Rancho Palos Verdes (City) in Los Angeles County, California (Exhibit 1). The City is located along the Palos Verdes Peninsula of the Southern California coastline in southwestern Los Angeles County and approximately 25 miles southwest of downtown Los Angeles. The project site encompasses approximately 168.40 acres comprised of two areas: the Resort Hotel Area (RHA) and Upper Point Vicente Area (UPVA) (Exhibit 2). The project site is found on the Redondo Beach U.S. Geological Survey (USGS) 7.5-minute quadrangle map.

The RHA consists of approximately 103.52 acres located south of Palos Verdes Drive South, within the Long Point portion of the Rancho Palos Verdes coastal area. This area is the location of the former Marineland Aquatic Park that ceased operating in 1987 and presently consists of parking lots and roads, ornamental vegetation, buildings and structures, as well as some coastal bluff areas. This area is bounded by the Pacific Ocean to the south, Palos Verdes Drive South to the north, residential development to the east, and County of Los Angeles Point Vicente Fishing Access to the west. This RHA is included in the Coastal Zone as established by the California Coastal Act, and is subject to the City of Rancho Palos Verdes certified Local Coastal Program.

The UPVA includes approximately 64.88 acres and is the inland component of the project site. This area is bounded by Hawthorne Boulevard, a neighborhood shopping center, a church, and a residential condominium complex to the north, Palos Verdes Drive to the south and west, and the Salvation Army's Regional Training Center to the east. The UPVA lies outside the Coastal Zone and the City's Local Coastal Program. This area has been extensively graded for military and agricultural uses. Situated south of the City Hall and within the limits of the area is the City's Corporate Yard which includes outdoor storage and maintenance facilities. Immediately south of the City's Corporate Yard are concrete bunkers which are remnants of the area's past use as a missile facility. A paved fire access road traverses through this area extending from the City Hall to a 3.9-acre U.S. Coast Guard site. Existing uses on the U.S. Coast Guard site include governmental and commercial uses related to an onsite antenna. Along the area's eastern boundary, adjacent to the Salvation Army's property, is an area presently used for agricultural purposes.

INSERT 2(8.5X11)EXHABIT 1-2

The proposed project is envisioned as a multi-faceted destination resort. The cornerstone of the Long Point Resort is a full-service hotel on approximately 92.83 acres of the 103.52-acre RHA. The project is planned to provide 39.74 acres of conserved and enhanced habitat and 81 acres of public open space and recreation facilities, including 100 general public parking spaces and two shoreline access ramps, seven public parks and overlooks, 11.1 miles of public walking and hiking trails, and a challenging nine-hole public-use golf course and practice facility. These public trails complete all master planned off-site trails within the area and provide links to the City's Point Vicente Interpretive Center, the Coast Guard's Point Vicente Lighthouse, the County's Point Vicente Fishing Access, and trails to the east of the Long Point Resort property.

The project site is characterized by a variety of resource conditions including marine habitat, partially-disturbed coastal bluffs and hillsides, coastal sage scrub, full-graded bluff-top areas used for agriculture, and remnants of the former Marineland Aquatic Park.

1.2 REGIONAL ENVIRONMENTAL SETTING

The project site is located on the Palos Verdes Peninsula in the City of Rancho Palos Verdes in southwestern Los Angeles County. Within the City of Rancho Palos Verde there are a number of designated open space areas. The largest of these areas in proximity to the project site is the 160-acre Forrestal property purchased by the City in December 1996 as an important habitat preserve and part of the foundation of the City's conservation reserve system. Other open space areas in the vicinity of the project site include Abalone Cove Shoreline Park, Subregion 1, Palos Verdes Shoreline Park, Ladera Linda Park, Hesse Park, and Friendship Park.

2.0 SURVEY METHODOLOGIES

This Section describes the methodologies used to conduct the various biological field surveys. The results of these survey efforts are discussed in the following section, *Existing Biological Resources*.

2.1 VEGETATION MAPPING AND GENERAL PLANT SURVEYS

A general reconnaissance field survey was conducted August 22 and September 1, 2000 by BonTerra Consulting. The purpose of this survey was to review the draft vegetation map and Draft Biological Resources Report and Impact Assessment for Long Point Specific Plan Rancho Palos Verdes, California prepared by Dudek & Associates in September 1999 for the City of Rancho Palos Verdes (hereafter referred to as the Dudek report). All plant species observed were recorded in field notes. Plant species were identified in the field or collected for later identification. Plants were identified using taxonomic keys in Hickman (1993), Munz (1974), and Abrams (1923, 1960). Taxonomy follows Hickman (1993) for scientific and common names. Plant community classifications used in this report follow Holland (1986) and Gray and Bramlet (1992).

2.2 GENERAL WILDLIFE SURVEYS

A verification survey to determine the accuracy of existing documentation for wildlife on the project site was conducted on September 1, 2000 by BonTerra Consulting. The survey consisted of a general walk over of the project site. All wildlife species observed during the survey were recorded.

2.3 FOCUSED SURVEYS

2.3.1 Special Status Plant Species

Special status plant surveys were not conducted by BonTerra Consulting. Dudek & Associates conducted focused special status plant surveys in 1998. According to the Dudek report, reasonably intact habitats on the site were surveyed during a period when most if not all of the potentially-occurring special status plant species would be evident, if not blooming. However, physical access to areas of steep bluffs that could support special status species was not achieved for safety reasons. Surveys were conducted along the top of the intact bluffs on the Long Point property, and binoculars were used to scan areas that could support plants. No unidentified special status species plants were observed during the Dudek & Associates surveys.

2.3.2 Butterfly Host Plants

A focused survey was conducted by Dudek & Associates on June 15, 1999 for three host plants of two special status butterfly species: locoweed (*Astragalus trichopodus*) and deerweed (*Lotus scoparius*) which are associated with the Palos Verdes blue butterfly (*Glacopsyche lygdamus palosverdesensis*) and ashy-leaved buckwheat (*Eriogonum cineracens*) which is associated with the El Segundo blue butterfly (*Euphilotes battoides allyni*). The location and number of individuals for each host plant species were estimated and recorded on 200-scale topographic field maps.

2.3.3 Coastal California Gnatcatcher

Surveys for the coastal California gnatcatcher (*Polioptila californica californica*) were conducted by Dudek & Associates on May 8, 15, and 22, 1998 per the guidelines issued by the U.S. Fish and Wildlife Service (USFWS) (USFWS, February 28, 1997). These guidelines stipulate that for areas participating in a Natural Communities Conservation Planning (NCCP) program, a minimum of three surveys are to be conducted in suitable habitat, a limit of 100 acres are to be surveyed per day, and surveys are to occur with at least a seven-day interval between site visits. According to the Dudek & Associates report, "survey consisted of slowly walking a meandering transect throughout all suitable habitat" (Dudek 1999).

3.0 EXISTING BIOLOGICAL RESOURCES

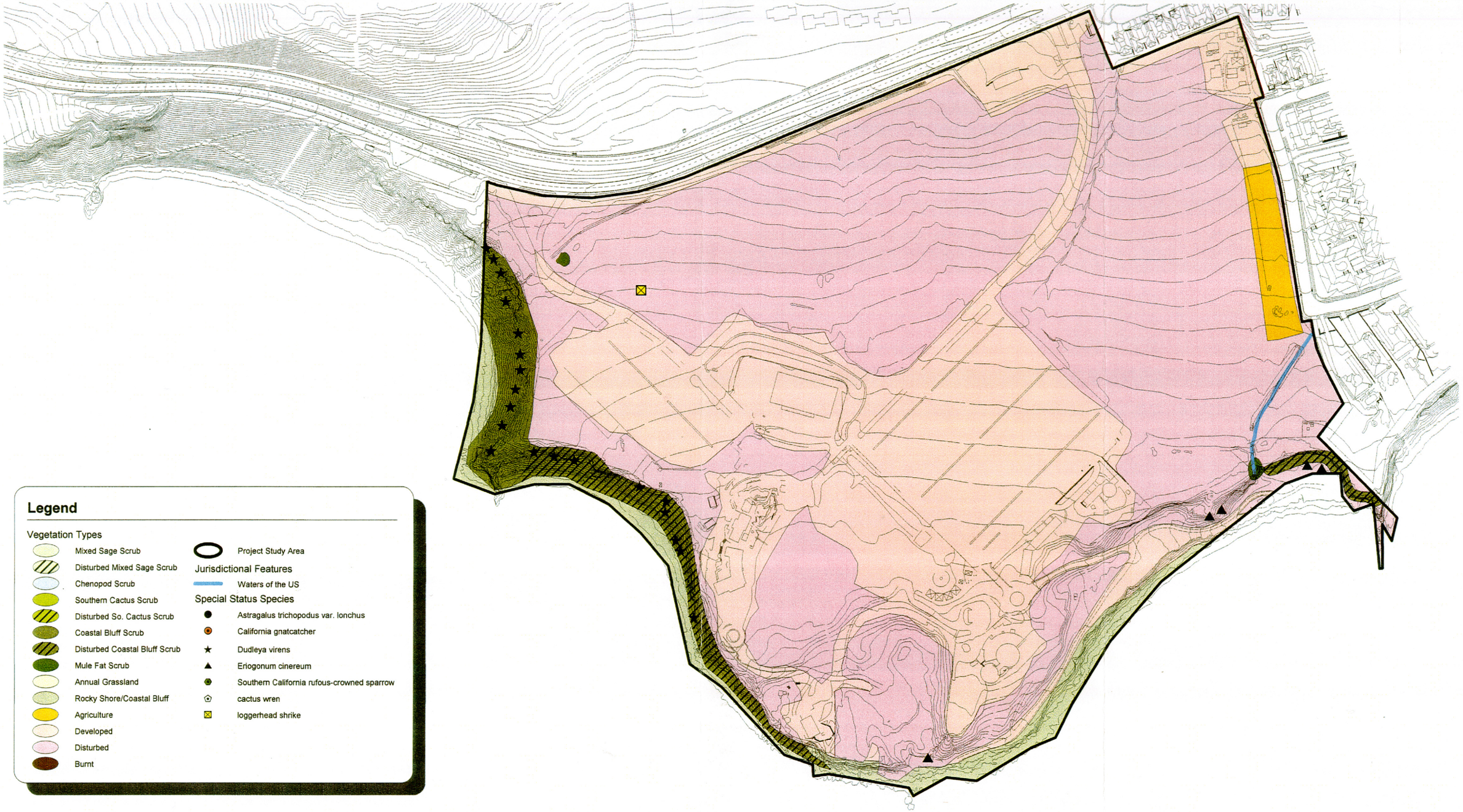
This section describes the biological resources that either occur or potentially occur within the project site or in the immediate vicinity. Vegetation types, wildlife populations and movement patterns, special status vegetation types, and special status plant and wildlife species either known or potentially occurring are discussed below. Unless otherwise noted, "the project site" shall refer to both the Upper Point Vicente Area (UPVA) and the Resort Hotel Area (RHA).

3.1 VEGETATION TYPES

Eleven vegetation types occur within the project site including eight types within the scrub community, two types within the riparian/marine community and four subject to past and present levels of disturbance. Exhibits 3, *Biological Resources Within Resort Hotel Area*, and 4, *Biological Resources Within Upper Point Vicente Area*, illustrate the distribution and Table 1, *Existing Vegetation Types on the Project Site*, summarizes the extent of vegetation types present within the project site. The following section describes each of the vegetation types observed during the field survey.

3.1.1 Mixed Coastal Sage Scrub and Disturbed Mixed Coastal Sage Scrub

Mixed coastal sage scrub occurs entirely within the UPVA. The dominant species include California sagebrush (*Artemisia californica*), ashyleaf buckwheat (*Eriogonum cinereum*), California buckwheat (*Eriogonum fasciculatum*), bladderpod (*Isomeris arborea*), California bush sunflower (*Encelia californica),* and scattered evergreen shrubs including lemonadeberry (*Rhus integrifolia*), laurel sumac (*Malosma laurina*), and toyon (*Heteromeles arbutifolia*). This community also contains scattered succulents such as coast cholla (*Opuntia prolifera*), coastal prickly-pear (*Opuntia littoralis*), oracle cactus *(Opuntia oricola*), and bright green dudleya (*Dudleya virens*). Large portions of the site have been disturbed by long-standing clearing and mowing activities. These areas include a much higher percent cover of non-native grasses and a lower density of native shrubs. Mixed coastal sage scrub was mapped where the native shrub density was greater than 50 percent. Where native shrub density was ten to 50 percent, the habitat was mapped as disturbed mixed coastal sage scrub. Where native shrub density was less than ten percent, the habitat was mapped as disturbed habitat (discussed below).



Biological Resources Within the Resort Hotel Area

Long Point

N

150 0 150 300 Feet

Scale: 1" = 300'

Exhibit 3

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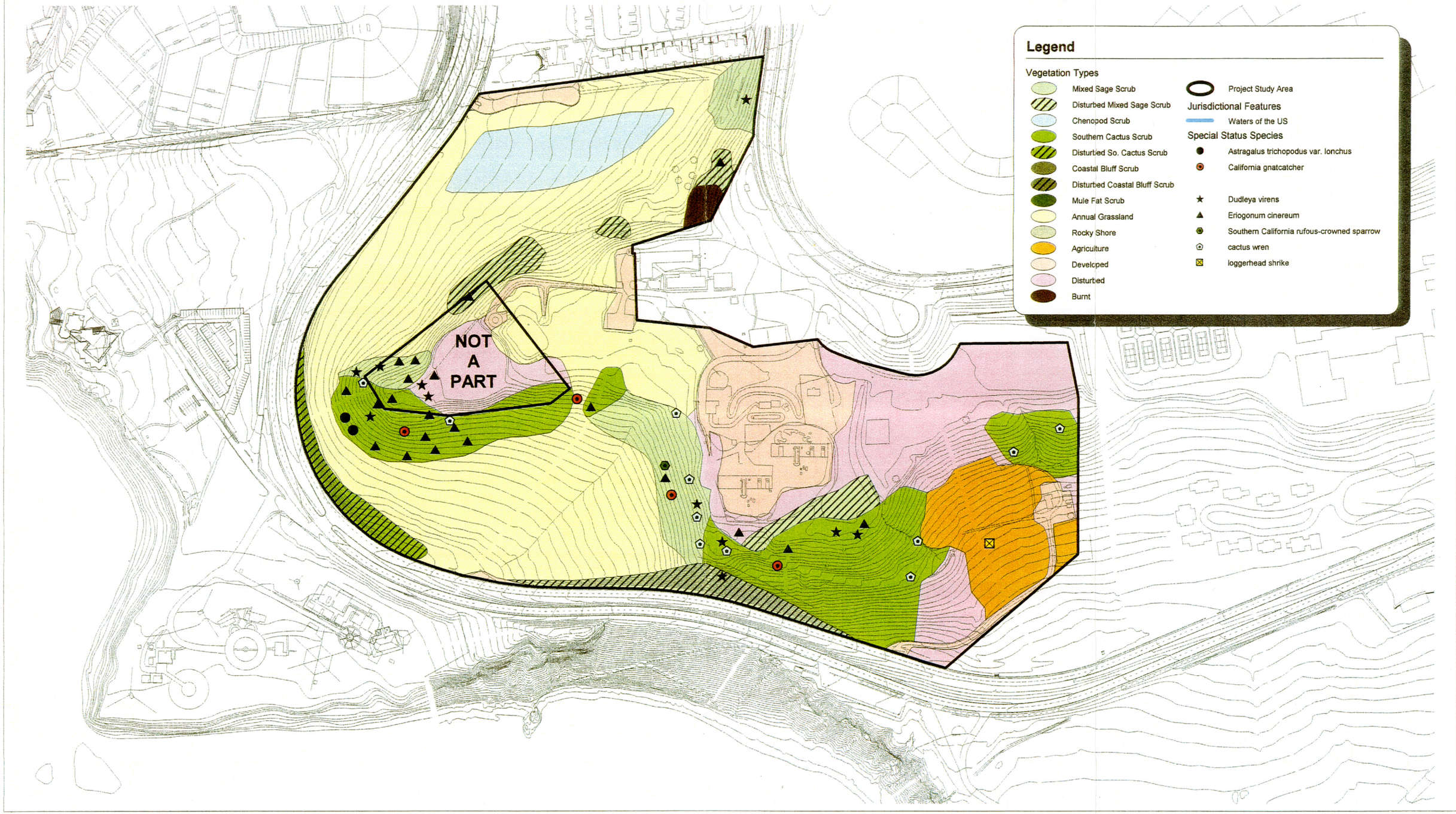

Biological Resources Within the Upper Point Vincente Area

Exhibit 4

Long Point

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150 0 150 300 Feet

Scale: 1" = 300'

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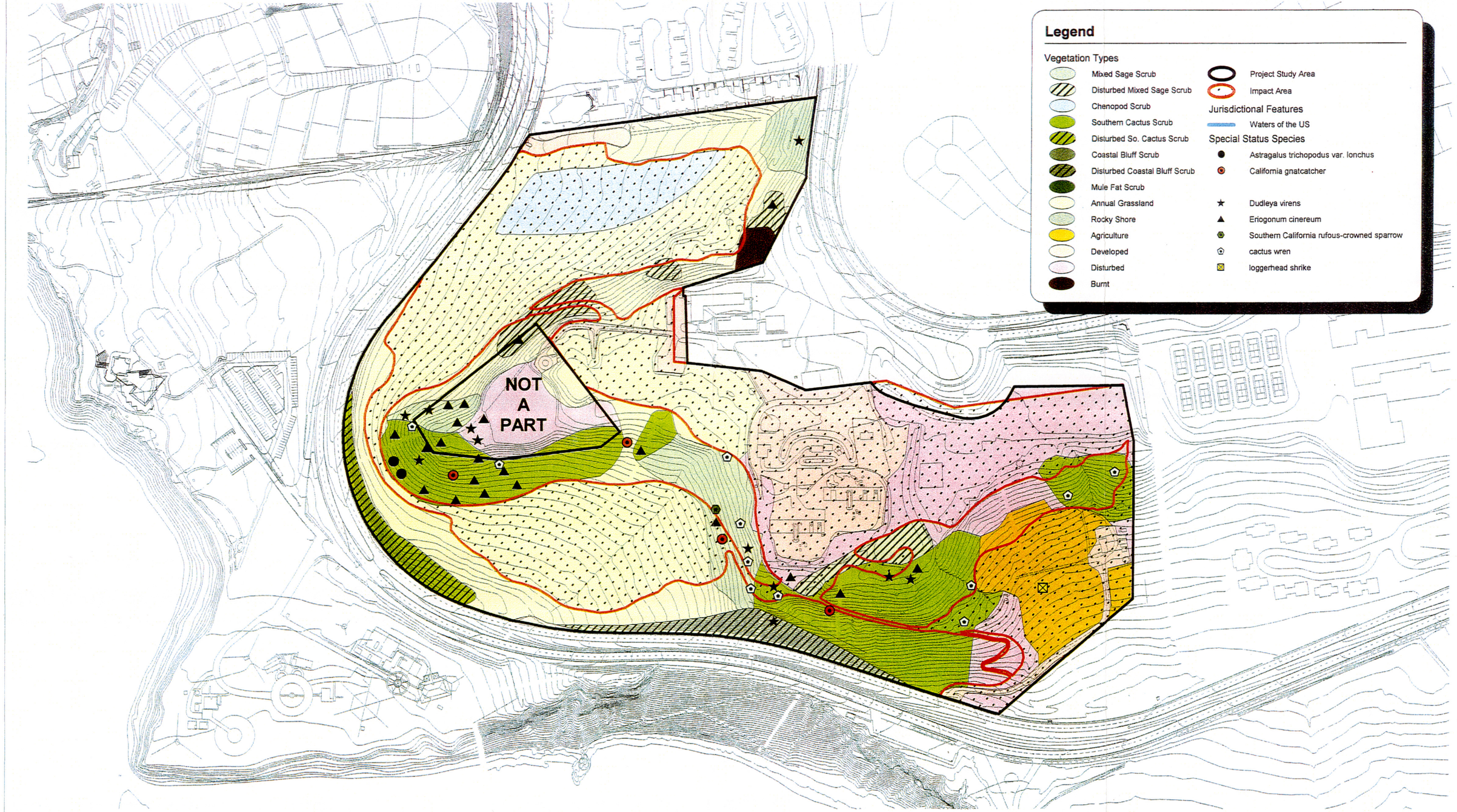

Biological Resources Impacts Within the Upper Point Vincente Area

Exhibit 6

Long Point

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150 0 150 300 Feet

Scale: 1" = 300'

BonTerra CONSULTING

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TABLE 1
EXISTING VEGETATION TYPES ON THE PROJECT SITE

Vegetation Type	Upper Point Vicente Area (acres)	Resort Hotel Area (acres)	Total (acres)
Mixed Coastal Sage Scrub	3.17	0.00	**3.17**
Disturbed Mixed Coastal Sage Scrub	3.07	0.00	**3.07**
Burnt Disturbed Mixed Coastal Sage Scrub	0.29	0.00	**0.29**
Disturbed Chenopod Scrub	2.75	0.00	**2.75**
Southern Cactus Scrub	9.23	0.00	**9.23**
Disturbed Southern Cactus Scrub	1.03	0.00	**1.03**
Southern Coastal Bluff Scrub	0.00	2.17	**2.17**
Disturbed Southern Coastal Bluff Scrub	0.00	2.37	**2.37**
Mule Fat Scrub	0.00	0.09	**0.09**
Annual Grassland	25.94	0.00	**25.94**
Rocky Shore/Coastal Bluff	0.00	3.95	**3.95**
Agricultural	3.58	1.27	**4.85**
Disturbed	8.60	56.80	**65.40**
Developed	7.22	36.87	**44.09**
Total	**64.88**	**103.52**	**168.40**

3.1.2 Burnt Disturbed Mixed Coastal Sage Scrub

The burnt area occurs entirely within the UPVA. This area was previously documented in the Dudek & Associates report as disturbed coastal sage scrub. However, the only vegetation identifiable at the time of the BonTerra survey was ornamental shrubs and trees, which include acacia and fan palm (*Washingtonia filifera*). It is expected that at the time of the BonTerra survey, the scrub species had not yet had the opportunity to recover from the fire. Because fire is a natural process to the coastal sage scrub community, it is expected that this area will recover to its previous condition-disturbed mixed coastal sage scrub.

3.1.3 Disturbed Chenopod Scrub

Disturbed chenopod scrub occurs entirely within the UPVA. Chenopod scrub is not recognized as a native plant community by Holland (1986); however, it is a distinct vegetation type in Southern California recognized by Gray and Bramlet (1992). The dominant species in this area include big saltbush (*Atriplex lentiformis*), California buckwheat, and bladderpod. This area is heavily disturbed

due to its proximity to development and mowing around the perimeter. This vegetation type contains many non-native and ornamental species, which include statice (*Limonium perezii*) and acacia (*Acacia* sp.).

3.1.4 Southern Cactus Scrub

Southern cactus scrub occurs entirely within the UPVA. Southern cactus scrub is not recognized as a native plant community by Holland (1986); however, it is a distinct vegetation type in Southern California recognized by Gray and Bramlet (1992). This vegetation type contains at least 20-percent cactus. It is dominated by coastal prickly-pear, oracle catus, and coast cholla. It also contains California sagebrush, lemonadeberry, and tree tobacco (*Nicotiana glauca*). This vegetation type has been disturbed in the western portion of the UPVA due to its proximity to Palos Verdes Drive South.

3.1.5 Southern Coastal Bluff Scrub

Southern coastal bluff scrub occurs along the steep cliffs in the RHA. This vegetation type is a native plant community composed primarily of woody and/or succulent plants, up to two meters tall. Dominant species on the RHA include California bush sunflower, bright green dudleya, lemonadeberry, ashyleaf buckwheat, bladderpod, Australian saltbush (*Atriplex semibaccata*), woolly sea-blite (*Suaeda taxifolia*), saw-toothed goldenbush (*Hazardia squarrosa*), and seacliff buckwheat (*Eriogonum parvifolium*). The southern coastal bluff scrub on the southernmost portion of the RHA is disturbed and contains a greater percentage of weedy species including Russian thistle (*Salsola tragus*) and hottentot fig (*Carpobrotus edulis*).

3.1.6 Mule Fat

Mule fat occurs in two areas in the RHA. One area occurs in a disturbed area south of Palos Verdes Drive South in a drainage. The other area occurs along a blue line stream in the southeastern portion of the RHA. The vegetation in these areas is dominated by mule fat (*Baccharis salicifolia*). Other species present include non-native ornamental species such as tree tobacco, oleander (*Nerium* sp.), and acacia. The drainage in the southern portion of the site flows over the cliffs, and supports grass and ornamental species on the rocky shore.

3.1.7 Annual Grassland

Annual grassland occurs in the northern portion of UPVA. The annual grassland is dominated by non-native grasses, which include slender wild oat (*Avena barbata*), wild oat (*Avena fatua*), common ripgut grass (*Bromus diandrus*), foxtail chess (*Bromus madritensis* ssp. *rubens*), Bermuda

grass (*Cynodon dactylon*), and shortpod mustard (*Hrschfeldia icana*). Lupine seed pods (*Lupinus* sp.) were also present throughout the grassland.

3.1.8 Rocky Shore/Coastal Bluff

Rocky shore occurs directly adjacent to the Pacific Ocean on the southern border of the RHA. There is very little vegetation present in these areas. The only vegetation present is ornamental directly below the blue line stream in the eastern portion of the RHA. The coastal bluff area occurs on the southeast border of the RHA. The coastal bluff area appears to erode on a regular basis and contains no substantial vegetation.

3.1.9 Agriculture

Agriculture is present in the southeastern portion of the UPVA. The agricultural area is an active farm and orchard. This area is actively cultivated and weeded, and contains mostly non-native species. Agriculture is also present in the eastern portion of the RHA. The agricultural area is currently active.

3.1.10 Developed

Developed areas occur throughout the project site. Developed areas in the UPVA are associated with the City Hall, old military structures, and the agricultural facilities. The developed areas in the RHA consist of parking lots and structures remaining from the former Marineland Aquatic Park, the Galley West Restaurant and Bar, the Pereira Motel, the Catalina Room, and the Lookout Bar. The vegetation present in these areas consists of non-native ornamental plantings. Ornamental vegetation in these areas include pine tree (*Pinus* sp.), acacia, natal plum (*Carissa macrocarpa*), oleander, hottentot fig, eucalyptus (*Eucalyptus* sp.), myoporum (*Myoporum laetum*), pepper-trees (*Schinus terebinthifolius*), oleander shrubs (*Nerium oleander*), and plumbago (*Plumbago* sp.).

3.1.11 Disturbed

Disturbed habitats occur on both the UPVA and the RHA. The disturbed habitats consist of areas that previously contained Marineland Aquatic Park structures and areas that are cleared for fire control on a routine basis. These areas are characterized by weedy non-native and native species. The species present in these areas include short pod mustard, slender wild oat, Australian saltbush, fennel (*Foeniculum vulgare*), castor-bean (*Ricinus communis*), garland chrysanthemum (*Chrysanthemum coronarium*), Bermuda grass, ripgut grass, statice (*Limonium perezii*), big saltbush, nasturtium (*Trapaeolum majus*), horseweed (*Conyza canadensis*), horehound (*Marrubium vulgare*), and rat-tail fescue (*Vulpia myuros*).

3.2 FAUNA INVENTORY

3.2.1 Wildlife

Fish

A drainage that forms a small waterfall is present in the southeast corner of the RHA. No fish were observed within this drainage during the surveys, although one or two species may occur. However, only non-native species such as fathead minnow (*Pimephales promelas*), rainwater killifish (*Lucania parva*), and western mosquitofish (*Gambusia affinis*) would be expected to occur.

Amphibians

Amphibians require moisture for at least a portion of their life cycle and many require standing or flowing water for reproduction. Although more typical in mesic conditions, there are a number of amphibians species that occur or potentially occur even in the more xeric habitats. Terrestrial species may or may not require standing water for reproduction. These species are able to survive in dry areas by remaining beneath the soil in burrows, under logs or leaf litter, and emerging only when temperatures are low and humidity is high. Many of these species' habitats are associated with water, and they emerge to breed once the rainy season begins. Soil moisture conditions can remain high throughout the year within some habitat types, depending on factors such as amount of vegetation cover, elevation, and slope aspect.

No amphibians were observed during the surveys, although a few species are expected to occur on the project site. The Pacific treefrog (*Hyla regilla*), western toad (*Bufo boreas*) and Pacific slender salamander (*Batrachoseps pacificus*) are anticipated to be present at the drainage in the southeast corner of the RHA. These three amphibian species may also occur in association with ornamental vegetation on the RHA. The Pacific treefrog, western toad, and Pacific slender salamander may also occur in association with ornamental vegetation and coastal sage scrub habitats on the UPVA.

Reptiles

Reptilian diversity and abundance typically varies with vegetation type and character. Many species prefer only one or two vegetation types; however, most will forage in a variety of habitats. Most species occurring in open areas use rodent burrows for cover and protection from predators, and refuge during extreme weather conditions.

Only the western fence lizard (*Sceloporus occidentalis*) was observed during the surveys. Other reptiles common in the region and expected to occur on the project site include the side-blotched

lizard (*Uta stansburiana*), southern alligator lizard (*Gerrhonotus multicarinatus*), gopher snake (*Pituophis melanoleucus*), California kingsnake (*Lampropeltis getulus*), and western rattlesnake (*Crotalus viridis*).

Birds

It is expected that a variety of birds could be recorded from the project site due to its location on a coastal promontory that is situated on a point at the southwest end of the Palos Verdes Peninsula. Such locations can provide habitat for migrant passerines[1] in spring and fall and excellent vantage points from which to observe seabirds.

Seabirds observed during the surveys include the black-vented shearwater (*Puffinus opisthomelas*), brown pelican (*Pelecanus occidentalis*), double-crested cormorant (*Phalacrocorax auritus*), Brandt's cormorant (*Phalacrocorax penicillatus*), western gull (*Larus occidentalis*), and Heermann's gull (*Larus heermanni*). Some migrants observed during the surveys include the western wood-pewee (*Contopus sordidulus*), house wren (*Troglodytes aedon*), blue-gray gnatcatcher (*Polioptila caerulea*), phainopepla (*Phainopepla nitens*), yellow warbler (*Dendroica petechia*), common yellowthroat (*Geothlypis trichas*), lazuli bunting (*Passerina amoena*), and savannah sparrow (*Passerculus sandwichensis*).

The UPVA also supports native habitats such as coastal sage scrub. The coastal sage scrub community supports a number of breeding birds that are permanent residents. These species found to be present on the UPVA include the bushtit (*Psaltriparus minimus*), cactus wren (*Campylorhynchus brunneicapillus*), Bewick's wren (*Thryomanes bewickii*), California gnatcatcher (*Polioptila californica*), and California towhee (*Pipilo crissalis*).

Birds of prey (raptors) observed or expected to occur on the project site for foraging include the white-tailed kite (*Elanus leucurus*), northern harrier (*Circus cyaneus*), sharp-shinned hawk (*Accipiter striatus*), Cooper's hawk (*Accipiter cooperii*), red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), and turkey vulture (*Cathartes aura*). All these species except for the sharp-skinned hawk and turkey vulture also have the potential to nest on the RHA and UPVA.

The RHA supports a small amount of upper shoreline habitat at the base of the coastal bluffs. This habitat provides habitat for roosting seabirds such as the brown pelican, double-crested cormorant, Brandt's cormorant, and a variety of gull species. It also provides foraging opportunities for several sandpipers such as the black oystercatcher (*Haematopus bachmani*), wandering tattler

[1] The largest group of birds in the world that are commonly referred to as perching birds or songbirds.

(*Heteroscelus incanus*), whimbrel (*Numenius phaeopus*), ruddy turnstone (*Arenaria interpres*), black turnstone (*Arenaria melanocephala*), and surfbird (*Aphriza virgata*).

Mammals

One mammal, the California ground squirrel (*Spermophilus beecheyi*) was observed on the project site during the surveys. Several additional species are expected to occur. These include small mammals such as the deer mouse (*Peromyscus maniculatus*), western harvest mouse (*Reithrodontomys megalotis*), woodrats (*Neotoma* sp.), pocket gopher (*Thomomys bottae*), black rat (*Rattus rattus*), and house mouse (*Mus musculus*). Easily detectable mammals that are expected to occur on the site include the Virginia opossum (*Didelphis virginiana*), and desert cottontail (*Sylvilagus audubonii*). Larger mammals that may still occur on the project site include the striped skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), and coyote (*Canis latrans*).

Bats occur throughout most of southern California and may use any portion of the project site as foraging habitat. Most of the bats that could potentially occur onsite are inactive during the winter and either hibernate or migrate, depending on the species. The big brown bat (*Eptesicus fuscus*), Mexican free-tailed bat (*Tadarida brasiliensis*), California myotis (*Myotis californicus*), western pipistrelle (*Pipistrellus hesperus*), and hoary bat (*Lasiurus cinereus*) may all occur on the project site. The steep coastal bluffs and abandoned buildings of the Marineland Aquatic Park provide potential roosting opportunities for several bat species.

3.2.2 Wildlife Movement

Wildlife movement activities usually fall into one of three movement categories: (1) dispersal (e.g., juvenile animals from natal areas, individuals extending range distributions); (2) seasonal migration; and (3) movements related to home range activities (e.g., foraging for food or water, defending territories, searching for mates, accessing breeding areas, or securing cover). A number of terms have been used in various wildlife movement studies, such as "travel route", "wildlife corridor", and "wildlife crossing" to refer to areas in which wildlife move from one area to another.

To clarify the meaning of these terms and to facilitate the discussion on wildlife movement in this analysis, these terms are briefly defined as follows:

- *Travel Route* – a landscape feature such as a ridgeline, drainage, canyon, or riparian strip within a larger natural habitat area that is used frequently by animals to facilitate movement and provide access to necessary resources (e.g., water, food, cover, den sites).
- *Wildlife Corridor* – a piece of habitat, usually linear in nature, that connects two or more habitat patches that would otherwise be fragmented or isolated from one another.

- *Wildlife Crossing* – a small, narrow area, relatively short in length and generally constricted in nature, that allows wildlife to pass under or through an obstacle or barrier that otherwise hinders or prevents movement.

As defined above, the project site does not contain wildlife corridors or wildlife crossings. However, local travel routes on the UPVA and RHA are expected to occur onsite. The native habitats (e.g., coastal sage scrub) of the project site remain connected to larger areas of natural habitats primarily to the east. One canyon remains immediately north of the UPVA portion of the project site that supports coastal sage scrub habitats. This canyon does support special status species including the coastal California gnatcatcher. In addition, other small open space areas, such as Point Vincente Park and coastal sage scrub preservation areas on the Subregion 1 Site, remain to the west of the UPVA. However, direct connection to open space areas north and west of the UPVA are obstructed by Hawthorne Boulevard, Palos Verdes Drive, and residential and commercial development. As a result, less mobile wildlife species would be limited in their ability to reach the open space areas to the north and west. More mobile species, such as birds, are less affected by these obstructions and are expected to be able to reach the open space areas north and west of the site that provide suitable habitat for these species.

The steep cliffs in the RHA are expected to provide a narrow linkage for wildlife east and west of the site. Because of the steepness of the terrain and limited diversity of habitat types in this area, the use of the cliff by wildlife species as a local travel route on the RHA may be limited.

3.3 SPECIAL STATUS BIOLOGICAL RESOURCES

The following section addresses special status biological resources observed, reported, or having the potential to occur on the project site. These resources include plant and wildlife species that have been afforded special status and/or recognition by federal and state resource agencies, as well as the California Plant Society (CNPS). In general, the principal reason an individual taxon (i.e., species, subspecies, or variety) is given such recognition is the documented or perceived decline or limitations of its population size, geographic range, and/or distribution resulting in most cases from habitat loss. Tables 2, *Special Status Plant Species*, and 3, *Special Status Wildlife Species*, provide a summary of special status plant and wildlife species known to occur in the project region including information on the status, potential for occurrence, and definitions for the various status designations. In addition, special status biological resources include vegetation types and habitats that are either unique, of relatively limited distribution in the region, or of particularly high wildlife value. These resources have been defined by federal, state, and local government conservation programs. Sources used to determine the special status of biological resources are as follows:

- Plants – *Electronic Inventory of Rare and Endangered Vascular Plants of California.* (California Native Plant Society [CNPS] [2000]). California Natural Diversity

DataBase (CNDDB) *List of Special Plants* (CDFG [1998]). Various Federal Register notices from the USFWS regarding listing status of plant species.

- Wildlife – California Wildlife Habitat Relationships Database System (CDFG 1991); CNDDB (CDFG 2000), Various Federal Register notices from the USFWS regarding listing status of wildlife species.
- Habitats – CNDDB (CDFG 2000).

3.3.1 Definitions of Special Status Biological Resources

Special status habitats are vegetation communities, associations, or subassociations that support concentrations of special status plant or wildlife species, are of relatively limited distribution, or are of particular value to wildlife. Although special status habitats are not afforded legal protection unless they support protected species, potential impacts on them may increase concerns and mitigation suggestions by resources agencies.

A Federally Endangered species is one facing extinction throughout all or a significant portion of its geographic range. A Federally Threatened species is one likely to become endangered within the foreseeable future throughout all or a significant portion of its range. The presence of any federally Threatened or Endangered species on a project site generally imposes severe constraints on development, particularly if development would result in "take" of the species or its habitat. The term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct. Harm in this sense can include any disturbance to habitats used by the species during any portion of its life history.

Proposed species are those officially proposed by the USFWS for addition to the federal Threatened and Endangered species list. Because proposed species may soon be listed as Threatened or Endangered, these species could become listed prior to or during implementation of a proposed development project.

The State of California considers an Endangered species as one whose prospects of survival and reproduction are in immediate jeopardy, a Threatened species as 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, and a rare species as one present in such small numbers throughout its range that it may become Endangered if its present environment worsens. Rare species applies to California native plants. State Threatened and Endangered species are fully protected against take.

Federal Species of Concern (a "term of art" for former Category 2 candidates) are species within an informal designation by the USFWS for some declining species that are not federal candidates

for listing at this time. This designation does not provide legal protection, but signifies that these species are recognized as special status by the USFWS.

California Species of Special Concern is an informal designation used by the CDFG for some declining wildlife species that are not state candidates. This designation does not provide legal protection, but signifies that these species are recognized as special status by the CDFG.

Species that are California Fully Protected and Protected include those protected by special legislation for various reasons, such as the mountain lion and white-tailed kite. Fully protected species may not be taken or possessed at any time. California Protected Species include those species that may not be taken or possessed at any time except under special permit from the department issued pursuant to Sections 650 and 670.7 of the California Code of Regulations, or Section 2081 of the Fish and Game Code.

The California Native Plant Society (CNPS) is a local resource conservation organization that has developed an inventory of California's special status plant species (CNPS 2000). This inventory is the summary of information on the distribution, rarity, and endangerment of California's vascular plants. This rare plant inventory is comprised of four lists. CNPS presumes that List 1A plant species are extinct in California because they have not been seen in the wild for many years. CNPS considers List 1B plants as rare, threatened, or endangered throughout their range. List 2 plant species are considered rare, threatened, or endangered in California, but more common in other states. Plant species for which CNPS needs additional information are included on List 3. List 4 plant species are those of limited distribution in California whose susceptibility to threat appears low at this time. The Guidelines for the California Environmental Quality Act (CEQA) provides for the protection not only for State-listed species, but for any species which can be shown to meet the criteria for State listing. Section 15380 of the CEQA Guidelines indicate that a lead agency can consider a non-listed species to be Rare or Endangered for the purposes of CEQA if the species can be shown to meet the criteria in the definition of Rare or Endangered. For the purposes of this discussion, the current scientific knowledge on the population size and distribution for each special status species was considered according to the definitions for Rare and Endangered listed in Section 15380 the of CEQA Guidelines. CNPS List 1B species meet the criteria in the definition of Rare or Endangered and have been addressed accordingly throughout the text.

In addition to providing an inventory of special status plant and animal species, the CNDDB also provides an inventory of vegetation types that are considered special status by the state and federal resource agencies, academic institutions, and various conservation groups (such as CNPS). Determination of the level of sensitivity is based on the Nature Conservancy Heritage Program Status Ranks that rank both species and plant communities on a global and statewide basis according to the number and size of remaining occurrences as well as recognized threats

(e.g., proposed developments, habitat degradation, and invasion by non-native species). Special status vegetation types within the project site are illustrated on Exhibits 3 and 4.

TABLE 2
SPECIAL STATUS PLANT SPECIES POTENTIALLY OCCURRING WITHIN THE PROJECT REGION

Species	Status[1]			Likelihood for Occurrence
	USFWS	CDFG	CNPS	
Aphanisima blitoides Aphanisima	SOC	—	List 1B	Potential to occur on the RHA.
Atriplex pacifica South coast saltscale	SOC	—	List 1B	Potential to occur on the RHA.
Atriplex parishii Parish's brittlescale	SOC	—	List 1B	Not expected to occur; no suitable habitat on the UPVA or RHA.
Calochortus catalinae Catalina mariposa lily	—	—	List 4	Potential to occur on the UPVA.
Camissonia lewisii Lewis's evening primrose	—	—	List 3	Potential to occur on the RHA.
Centromadia parryi ssp. *australis* Southern tarplant	SOC	—	List 1B	Not expected to occur; no suitable habitat on the UPVA or RHA.
Crossosoma californicum Catalina crossosoma	—	—	List 1B	Potential to occur on the UPVA or RHA.
Dithyrea maritima Beach spectaclepod	SOC	ST	List 1B	Not expected to occur; no suitable habitat on the UPVA or RHA.
Dudleya virens ssp. *insularis* Island green dudleya	—	—	List 1B	Observed on the UPVA and RHA.
Lasthenia glabrata ssp. *coulteri* Coulter's goldfields	SOC	—	List 1B	Not expected to occur; no suitable habitat on the UPVA or RHA.
Lycium brevipes var. *hassei* Santa Catalina Island desert-thorn	—	—	List 1B	Potential to occur on the UPVA and RHA.
Lycium californicum California box-thorn	—	—	List 4	Observed on the RHA; potential to occur on the UPVA.
Navarretia prostrata Prostrate navarretia	—	—	List 1B	Not expected to occur; no suitable habitat on the UPVA or RHA.
Nemacaulis denudata var. *denudata* Coast woolly-heads	—	—	List 1B	Not expected to occur; no suitable habitat on the UPVA or RHA.
Pentachaeta lyonii Lyon's pentachaeta	FE	SE	List 1B	Potential to occur on the UPVA.
Suaeda esteroa Estuary sea-blite	—	—	List 1B	Not expected to occur; no suitable habitat on the UPVA or RHA.
Suaeda taxifolia Woolly sea-blite	—	—	List 4	Observed on the RHA; no potential to occur on the UPVA.

TABLE 2 (continued)
SPECIAL STATUS PLANT SPECIES POTENTIALLY OCCURRING WITHIN THE PROJECT REGION

[1] **STATUS DEFINITIONS**

USFWS

FE:	Species designated as endangered under the federal Endangered Species Act. Endangered = "any species in danger of extinction throughout all or a significant portion of its range."
FT:	Species designated as threatened under the Federal Endangered Species Act. Threatened = "species likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range."
FPE:	Proposed for federal listing as Endangered.
FPT:	Proposed for federal listing as Threatened.
C:	Candidate for federal listing as Threatened or Endangered.
SOC:	Species of Concern

CDFG

ST:	Threatened = "a species 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 Act" (California Endangered Species Act).
SE:	Endangered = "a species is endangered when its prospects of survival and reproduction are in immediate jeopardy from one or more causes."

CNPS

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- A Review List
4	Plants of Limited Distribution - A Watch List

TABLE 3
SPECIAL STATUS WILDLIFE SPECIES POTENTIALLY OCCURRING WITHIN THE PROJECT REGION

Species	Status[1]		Likelihood for Occurrence
	USFWS	CDFG	
Invertebrates			
Euphilotes battoides allyni El Segundo blue butterfly	FE	—	Not expected to occur; host plant present without appropriate habitat on the UPVA or RHA.
Glacopsyche lygdamus palosverdesensis Palos Verdes blue butterfly	FE	—	Very low; limited suitable habitat present on the UPVA; no suitable habitat present on the RHA.
Amphibians			
Scaphiopus hammondi Western spadefoot toad	SOC	SSC/P	Low; limited potentially suitable habitat on the RHA; no suitable habitat on the UPVA.
Reptiles			
Anniella pulchra pulchra Silvery legless lizard	SOC	SSC	Low; limited potentially suitable habitat on the UPVA and RHA.
Cnemidophorus tigris multiscutatus Coastal western whiptail	SOC	—	Moderate; moderate amount of suitable habitat on the UPVA and RHA.
Diadophis punctatus modestus San Bernardino ringneck snake	SOC	—	Moderate; moderate amount of suitable habitat on the UPVA and RHA.
Phrynosoma coronatum blainvillei San Diego coast horned lizard	SOC	SSC/P	Moderate; moderate amount of suitable habitat on the UPVA and RHA.
Birds			
Accipiter cooperii Cooper's hawk**	—	SSC	High; low as breeder; suitable foraging habitat present on the UPVA and RHA.
Accipiter striatus Sharp-shinned hawk**	—	SSC	High; none as breeder; suitable foraging habitat present on the UPVA and RHA.
Agelaius tricolor Tricolored blackbird**	SOC	SSC	Low; suitable foraging habitat, but no nesting habitat on the UPVA and RHA.
Aimophila ruficeps canescens Southern California rufous-crowned sparrow	SOC	SSC	Moderate; moderate amount of suitable habitat on the UPVA and RHA.
Asio flammeus Short-eared owl **	—	SSC	Very low; none as breeder; suitable foraging habitat present on the UPVA and RHA.

TABLE 3 (continued)
SPECIAL STATUS WILDLIFE SPECIES POTENTIALLY OCCURRING WITHIN THE PROJECT REGION

Species	Status[1]		Likelihood for Occurrence
	USFWS	CDFG	
Athene cunicularia Burrowing owl **	SOC	SSC	Very low; suitable habitat on the UPVA and RHA, but may be extirpated from area.
Buteo regalis Ferruginous hawk*	SOC	SSC	Very low; none as breeder; suitable foraging habitat present on the UPVA; no suitable habitat on the RHA.
Campylorhynchus brunneicapillus couesi Coastal cactus wren	—	SSC	Observed; suitable habitat present on the UPVA; no suitable habitat on the RHA.
Circus cyaneus Northern harrier**	—	SSC	Moderate; very low as breeder; suitable foraging habitat present on the UPVA and RHA.
Dendroica petechia brewsteri Western yellow warbler**	—	SSC	Migrant observed on the RHA; no suitable breeding habitat present on the UPVA or RHA.
Elanus leucurus White-tailed kite**	—	FP	Moderate; very low as breeder; suitable foraging habitat present on the UPVA; no suitable habitat present on the RHA.
Empidonax traillii extimus Southwestern willow flycatcher**	FE	SE	High as a migrant; none as a breeder; no suitable breeding habitat present on the UPVA or RHA.
Eremophila alpestris actia California horned lark	—	SSC	High; very low as breeder; suitable foraging habitat present on the UPVA and RHA.
Falco columbarius Merlin*	—	SSC	Low; none as breeder; suitable foraging habitat present on the UPVA and RHA.
Falco mexicanus Prairie falcon**	—	SSC	Low; very low as breeder; suitable foraging habitat and limited potentially suitable breeding habitat present on the UPVA and RHA.
Falco peregrinus Peregrine falcon **	—	SE	High; low as breeder; suitable foraging habitat and potentially suitable breeding habitat present on the UPVA and RHA.
Icteria virens Yellow-breasted chat**	—	SSC	Low to moderate as a migrant; none as a breeder; no suitable breeding habitat present on the UPVA or RHA.

TABLE 3 (continued)
SPECIAL STATUS WILDLIFE SPECIES POTENTIALLY OCCURRING WITHIN THE PROJECT REGION

Species	Status[1]		Likelihood for Occurrence
	USFWS	CDFG	
Lanius ludovicianus Loggerhead shrike	SOC	SSC	Observed; suitable habitat present on the UPVA and RHA.
Larus californicus California gull **	—	SSC	High; none as breeder; suitable roosting and foraging habitat present on the UPVA and RHA.
Pandion halaetus Osprey **	—	SSC	Very low; limited potentially suitable nesting habitat present on the RHA only; no suitable foraging habitat on the UPVA or RHA.
Pelecanus occidentalis California brown pelican **	FE	SE	Observed on the RHA; limited suitable roosting habitat present on the RHA only; not expected to breed on the UPVA or RHA.
Phalacrocorax auritus Double-crested cormorant **	—	SSC	Observed on the RHA; none as breeder on the UPVA and RHA; suitable roosting habitat present on the RHA only.
Polioptila californica californica Coastal California gnatcatcher	FT	SSC	Observed on the UPVA; suitable habitat present on the UPVA only.
Sterna antillarum browni California least tern **	FE	SE	None; no suitable habitat present on the UPVA or RHA.
Sterna elegans Elegant tern **	SOC	SSC	None; no suitable habitat present on the UPVA or RHA.
Vireo bellii pusillus Least Bell's vireo**	FE	SE	None; no suitable breeding habitat present on the UPVA or RHA.
Mammals			
Antrozus pallidus Pallid bat	—	SSC	May occur; potentially suitable habitat for roosting and foraging present on the UPVA only.
Corynorhinus townsendii pallescens Pale big-eared bat	SOC	SSC	May occur; potentially suitable habitat for roosting and foraging present on the UPVA and RHA.
Eumops perotis californicus California mastiff bat	SOC	SSC	May occur; potentially suitable habitat for roosting and foraging present on the UPVA and RHA.
Lepus californicus bennettii San Diego black-tailed jackrabbit	SOC	SSC	Low; limited suitable habitat present on the UPVA only.

TABLE 3 (continued)
SPECIAL STATUS WILDLIFE SPECIES POTENTIALLY OCCURRING WITHIN THE PROJECT REGION

Species	Status[1]		Likelihood for Occurrence
	USFWS	CDFG	
Myotis ciliolabrum Small-footed myotis	SOC	—	May occur; potentially suitable roosting and foraging habitat present on the UPVA and RHA.
Myotis yumanensis Yuma myotis	SOC	—	May occur; potentially suitable foraging habitat present on the UPVA and RHA.
Neotoma lepida intermedia San Diego desert woodrat	SOC	SSC	Moderate; suitable habitat present on the UPVA only.
Perognathus longimembris pacificus Pacific pocket mouse	FE	SSC	Very low; potentially suitable habitat present on the UPVA and RHA.

Status Definitions[1]

USFWS

FE: Species designated as Endangered under the Federal Endangered Species Act. Endangered = "any species in danger of extinction throughout all or a significant portion of its range."
FT: Species designated as Threatened under the Federal Endangered Species Act. Threatened = "species likely to become an Endangered species within the foreseeable future throughout all or a significant portion of its range."
FPE: Proposed for federal listing as Endangered.
FPT: Proposed for federal listing as Threatened.
SOC: Species of Concern

CDFG

SR: Rare = "a species is rare when, although not presently Threatened with extinction, it is in such small numbers throughout its range that it may become Endangered if its present environment worsens."
ST: Threatened = "a species 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 Act (California Endangered Species Act)."
SE: Endangered = "a species is endangered when its prospects of survival and reproduction are in immediate jeopardy from one or more causes."
SSC: Species of Special Concern.

FP: Fully Protected species are protected by special legislation and cannot be taken at any time.
P: Protected species are also protected by special legislation and can only be taken with a permit issued by the CDFG.

* Wintering sites
** Nesting sites

3.3.2 Special Status Vegetation Types

Scrub Communities

The scrub communities found on the UPVA, which includes mixed coastal sage scrub (including burned and disturbed), disturbed chenopod scrub, and southern cactus scrub (including disturbed), are recognized as special status vegetation types by local, state, and federal resource agencies. Several of these scrub areas have been disturbed on the site by the invasion of non-native plant species or by fire. Although theses areas are less biologically valuable compared to the undisturbed forms of these vegetation types, the resource agencies nonetheless include these areas as special status types. These areas typically support a rich diversity of special status plants and animals, and it is estimated that these areas have been reduced by 75 to 80 percent of their historical coverage throughout southern California. Approximately 19.54 acres of scrub communities occur on the UPVA.

Southern Coastal Bluff Scrub

The southern coastal bluff scrub found on the RHA is recognized as a special status vegetation type by local, state, and federal resource agencies. This vegetation type has been reduced by the development of the coastline. Southern coastal bluff, including the disturbed areas, supports a unique variety of plants. Approximately 4.54 acres of this vegetation type occurs on the RHA.

Riparian Vegetation

The riparian vegetation found on the RHA, which includes mule fat scrub, typically occurs along perennial or intermittent drainages that typically are subject to seasonal flooding. On the RHA, riparian vegetation includes .09 acre of mule fat scrub.

3.3.3 Special Status Plants

Seventeen special status plant species are known to occur in the project region. A brief description of the special status plant species that were determined to have potential to occur on the project site are listed below alphabetically according to their scientific name. This information is also summarized in Table 2.

Aphanisima (*Aphanisima blitoides*)

Aphanisima is a federal Species of Concern and a CNPS List 1B species that typically blooms from April to May. This annual herb occurs in sandy soils in coastal bluff scrub and coastal scrub. This species historically occurs in Los Angeles, Orange, Santa Barbara, San Diego, and Ventura

counties, Baja California, and the Channel Islands. Aphanisima is known to occur on the Palos Verdes Peninsula near Portuguese Bend southward approximately 2.5 miles to Royal Palms Beach, and along the Palos Verdes Hills (CDFG 2000). This species was found on coastal bluff scrub on the Peninsula. Although suitable habitat for this species is present on the RHA, this species was not observed during previous surveys.

South Coast Saltscale (*Atriplex pacifica*)

South coast saltscale is a federal Species of Concern and a CNPS List 1B species that typically blooms from March to October. This annual herb occurs in coastal bluff scrub, coastal scrub, and playas. This species occurs in Los Angeles, Orange, Riverside, Santa Barbara, and San Diego counties, Baja California, and the Channel Islands. It also occurred historically in Ventura County. South coast saltbush is known to occur on the Palos Verdes Peninsula, west of Shoreline Park (CDFG 2000), in coastal sage scrub. Although suitable habitat for this species is present on the RHA, this species was not observed during previous surveys.

Parish's Brittlescale (*Atriplex parishii*)

Parish's brittlescale is a federal Species of Concern and a CNPS List 1B species that typically blooms from June to October. This annual herb occurs in fine alkaline soils in alkaline meadows, chenopod scrub, and vernal pools. This species historically occurred in Los Angeles, Orange, Riverside, San Diego, and San Bernardino counties, and currently occurs in Riverside County and Baja California. This species is known from Los Angeles County from undated specimens. The specimens are believed to be from Redondo Beach and near Griffith Park. The brittlescale is threatened by grazing and development. Chenopod scrub is present on the UPVA; however, due to the disturbed nature of this vegetation type on the UPVA and the lack of vernal playas, Parish's brittlescale is not expected to occur on the UPVA or RHA and was not observed during previous surveys.

Catalina Mariposa Lily (*Calochortus catalinae*)

Catalina mariposa lily is a CNPS List 4 species that typically blooms from February through May. This bulbiferous perennial herb occurs in native grasslands and openings in coastal sage scrub from sea level to 2,100 feet above mean sea level (msl). This species occurs in coastal counties from Santa Barbara south to San Diego County. This species is known to occur in the Portuguese Bend area of the Palos Verdes Peninsula. Although potentially suitable habitat for the mariposa lily is present on the UPVA, this mariposa lily was not observed during previous surveys.

Lewis's Evening Primrose (*Camissonia lewisii*)

Lewis's evening primrose is a CNPS List 3 species that typically blooms from March to June. This annual herb occurs in sandy or clay soils in coastal bluff scrub, cismontane woodlands, coastal dunes, coastal scrub, and valley foothill grasslands. This species occurs in Los Angeles and San Diego counties, and in Baja California. Historically, it also occurred in Orange County. Although potentially suitable habitat for this species is present on the UPVA, it was not observed during previous surveys.

Southern Tarplant (*Centromadia parryi* ssp. *australis*)

Southern tarplant is a federal Species of Concern and a CNPS List 1B species that typically blooms from May to July. This annual herb, formerly *Hemizonia parryi* ssp. *australis,* is known to occur in Los Angeles, Orange, San Bernardino, and San Diego counties, and Baja California in estuary margins and vernally mesic areas. The southern tarplant is known to occur in Ballona Wetland in Marina Del Rey, Harbor Lake Regional Park, and Madrona Marsh Nature Preserve (CDFG 2000). This species is not expected to occur on the UPVA or RHA due to lack of estuary and vernally mesic habitat.

Catalina Crossosoma (*Crossosoma californicum*)

Catalina crossosoma is a CNPS List 1B species that typically blooms from February to May. This deciduous shrub occurs in rocky soils in coastal scrub. This species historically occurred in Los Angeles County, San Clemente Island, and Santa Catalina Island. This species is known to occur on the Palos Verdes Peninsula (Brinkmann-Busi March 1992). This species was not observed on the project site during previous surveys. Potentially suitable habitat for this species is present on the UPVA and RHA; therefore, the Catalina crossosoma has potential to occur on-site.

Beach Spectaclepod (*Dithyrea maritima*)

Beach spectaclepod is a federal Species of Concern, a state-Threatened species, and a CNPS List 1B species that typically blooms from April to May. This rhizomatous perennial herb occurs in sandy soils in coastal dunes and coastal scrub. This species historically occurred in Los Angeles County, Santa Catalina, and San Miguel Islands. It currently occurs on the San Nicolas Islands, and in Baja California, as well as in Santa Barbara and San Luis Obispo counties. All of the populations in Los Angeles are historic locations on sandy dunes (CDFG 2000). The beach spectaclepod is not expected to occur on the UPVA or RHA due to lack of suitable habitat.

Island Green Dudleya (*Dudleya virens* ssp. *insularis*)

Island green dudleya is a CNPS List 1B species that typically blooms from April to June. This perennial herb occurs in coastal bluff scrub, chaparral, and coastal scrub. This species is known to occur in Los Angeles County, and on San Clemente, Santa Catalina, and San Nicolas Islands. This species occurs throughout the southern coastal bluff scrub on the RHA and primarily in the mixed sage scrub and southern cactus scrub on the UPVA.

Coulter's Goldfields (*Lasthenia glabrata ssp. coulteri*)

Coulter's goldfields is a federal Species of Special Concern and a CNPS List 1B species that typically blooms from February to June. This annual herb is associated with low-lying alkali habitats along the coast and in inland valleys. This species occurs in coastal salt marsh, playas, and vernal pools. This species is known to occur in Orange, Riverside, Santa Barbara, San Diego, San Luis Obispo, and Ventura counties, Santa Rosa Island, and in Baja California. It historically occurred in Kern, Los Angeles, and San Bernardino counties. The populations in Los Angeles County were historic locations in Inglewood and the Ballona Wetlands. This species is not expected to occur on the UPVA or RHA due to lack of suitable habitat.

Santa Catalina Island Desert-thorn (*Lycium brevipes* var. *hassei*)

Santa Catalina Island desert-thorn is a CNPS List 1B species that typically blooms in June. This deciduous shrub occurs in coastal bluff scrub and coastal scrub. This species occurs in Los Angeles County, and historically occurred on San Clemente and Santa Catalina Islands. This species was found on the Palos Verdes Peninsula in 1974 (CNPS 2000). Although not observed during previous surveys, suitable habitat for this species is present on the UPVA and RHA; therefore, there is potential for the Santa Catalina island desert-thorn to occur onsite.

California Box-thorn (*Lycium californicum*)

California box-thorn is a CNPS List 4 species that typically blooms from December through August. This deciduous shrub occurs in coastal bluff scrub and coastal scrub. This species occurs from Santa Barbara County south to Baja California. This species has been documented on the RHA in the coastal bluff scrub in the Dudek report and may occur within the UPVA in the scrub habitats.

Prostrate Navarretia (*Navarretia prostrata*)

Prostrate navarretia is a CNPS List 1B species that typically blooms from April to July. This annual herb occurs in alkaline or mesic soils in coastal scrub, valley foothill grassland, and vernal pools. This species occurs in Los Angeles, Orange, Riverside, San Bernardino, San Diego, Alameda, Merced, and Monterey counties. The prostrate navarretia is known to occur in vernal pools in Los

Angeles County. There is no suitable habitat for this species on the UPVA or RHA; therefore, this species is not expected to occur.

Coast Woolly-heads (*Nemacaulis denudata* var. *denudata*)

Coast woolly-heads is a CNPS List 1B species that typically blooms from April to September. This annual herb occurs in coastal dunes. This species occurs in Los Angeles, Orange, and San Diego counties, and in Baja California. The coast woolly-heads are known to occur on Terminal Island in Los Angeles County. No suitable habitat is present on the UPVA or RHA for this species; therefore, the coast woolly-heads is not expected to occur.

Lyon's Pentachaeta (*Pentachaeta lyonii*)

Lyon's pentachaeta is a federally- and state-listed Endangered species and a CNPS List 1B species that typically blooms from March to August. This annual herb occurs in openings in chaparral and valley foothill grasslands. This species is known from fewer than 20 occurrences in Los Angeles and Ventura counties, and historically occurred on Santa Catalina Island. Suitable habitat for this species is present on the UPVA; therefore, the Lyon's pentachaeta has potential to occur in the UPVA.

Estuary Sea-blite (*Suaeda esteroa*)

Estuary sea-blite is a CNPS List 1B species that typically blooms from July to October. This perennial herb occurs in coastal salt marsh habitat. This species occurs in Los Angeles, Orange, Santa Barbara, San Diego, and Ventura counties, and in Baja California. No suitable coastal salt marsh habitat is present on the UPVA or RHA; therefore, the estuary sea-blite is not expected to occur.

Woolly Sea-blite (*Suaeda taxifolia*)

Woolly sea-blite is a CNPS List 4 species that typically blooms from January through December. This perennial herb occurs in margins of coastal salt marsh and coastal bluff scrub. This species is known to occur from San Luis Obispo County south to Baja California. Woolly sea-blite occurs on the RHA in the southern coastal bluff scrub. No suitable habitat is present on the UPVA for this species.

3.3.4 Special Status Wildlife

Forty-one special status wildlife species are known to occur within the region and have a potential to occur within the project site. In addition to focused surveys conducted for the coastal California gnatcatcher in 1998, a host plant survey for the Palos Verdes blue butterfly and El Segundo blue

butterfly was conducted in 1999 (Dudek 1999). Brief descriptions of the special status wildlife species and their potential to occur within the project site are discussed below. Please note that they are grouped by type and listed alphabetically according to their scientific name. These species are summarized in Table 3.

Invertebrates

El Segundo Blue Butterfly (*Euphilotes battoides allyni*)

The El Segundo blue butterfly is a federally-listed Endangered species. This butterfly persists on just a few remaining fragments of dune habitat along the Los Angeles County coast from Los Angeles International Airport to Palos Verdes. The largest remaining population of this species is found on the property of the Los Angeles International Airport. The El Segundo blue butterfly is not only threatened by loss of habitat, but by threats to the continued survival of its host plant. Ashy-leaved buckwheat (*Eriogonum cineracens*) is the larval food plant or host plant for the species and it is threatened by competition from several introduced plants including other buckwheats. The larvae of the El Segundo blue butterfly cannot successfully feed on these other buckwheats. The El Segundo blue butterfly adult flight period is May through June (Garth and Tilden 1986).

The host plant for the El Segundo blue butterfly was identified on the UPVA during the 1999 focused surveys. The ashy-leaved buckwheat was found within the coastal sage scrub and southern cactus scrub habitats on the UPVA. Although the larval food plant for the El Segundo blue butterfly was identified on the UPVA, the appropriate dune habitat for the species was not. Therefore the El Segundo blue butterfly is not expected to occur on the UPVA or RHA due to a lack of suitable habitat.

Palos Verdes Blue Butterfly (*Glacopsyche lygdamus palosverdesensis*)

The Palos Verdes blue butterfly is a federally-listed Endangered species. It was believed to be extinct, but was rediscovered on March 10, 1994 at a Defense Fuel Support Point site in San Pedro. During the 1980s, there were 12 locations identified as supporting the Palos Verdes blue butterfly. All of these locations were on the southern half of the Palos Verdes Peninsula and supported coastal sage scrub habitats. This butterfly is a subspecies of the silvery blue (*Glaucopsyche lygdamus*), of which at least ten subspecies have been described. These subspecies occur in small colonies that are distributed locally across North America. The larval food plants or host plants for this species consist of legumes (Garth and Tilden 1986), such as milk-vetch or rattleweed (*Astragalus trichopodus lonchus*), that is used by the Palos Verdes blue butterfly. In addition, this species will also lay its eggs on deerweed (*Lotus scoparius*).

One of the two required larval food plant species was identified on UPVA during the 1999 focused surveys for host plants of the Palos Verdes blue butterfly. Locoweed was observed at the edge

of southern cactus scrub in the UPVA. It is presumed that the habitat here is too fragmented and disturbed to support the Palos Verdes blue butterfly. The quality of onsite habitat and the current distribution of the Palos Verdes blue butterfly indicate that its potential to occur on the UPVA is very low.

Amphibians

Western Spadefoot Toad *(Scaphiopus ammondii)*

The western spadefoot toad is a federal Species of Concern, a California Species of Special Concern, and a CDFG Protected species. This species inhabits grassland, coastal sage scrub, and other habitats with open sandy, gravely soils. The western spadefoot toad is primarily a species of the lowlands, frequenting washes, floodplains of rivers, alluvial fans, and alkali flats (Stebbins 1985). This species is rarely seen outside of the breeding season. They breed in vernal pools and temporary ponds. The RHA provides a limited amount of potentially suitable habitat for this species in the areas supporting mule fat scrub and its potential to occur is considered to be low. No suitable habitat for this species occurs on the UPVA.

Reptiles

Silvery Legless Lizard (*Anniella pulchra pulchra)*

The silvery legless lizard is a federal Species of Concern and a California Species of Special Concern. The silvery legless lizard inhabits areas with moist sandy soil, including dry washes, woodlands, riparian, and scrub communities at elevations ranging from sea level to about 5,000 feet above msl (Stebbins 1985). The UPVA and RHA provides a limited amount of potentially suitable habitat for this species and its potential to occur is considered to be low.

Coastal Western Whiptail (*Cnemidophorus tigris multiscutatus*)

The coastal western whiptail is a federal Species of Concern. It is a moderately large, slender lizard typically found in open scrub, chaparral, and woodland communities in semi-arid areas or where vegetation is sparse. The species is restricted to the western coast of North America from Ventura County south through the northern two-thirds of the Baja California peninsula. The UPVA and RHA provide a moderate amount of suitable habitat for this species and its potential to occur is considered to be moderate.

San Bernardino Ringneck Snake *(Diadophis punctatus modestus)*

The San Bernardino ringneck snake is a federal Species of Concern and is considered locally rare in southwestern California. It inhabits scrub, chaparral, native grassland, and woodland

communities. This species is difficult to detect due to its secretive behavior. It occurs in elevations from sea level to 7,000 feet above msl (Stebbins 1985). The UPVA and RHA provide a moderate amount of suitable habitat for this species and its potential to occur is considered to be moderate.

San Diego Coast Horned Lizard (*Phrynosoma coronatum blainvillei*)

The San Diego coast horned lizard is a federal Species of Concern, a California Species of Special Concern, and a CDFG Protected species. It is a small, spiny, somewhat rounded lizard that occurs primarily in open or sparse scrub and chaparral communities. This species prefers loose, friable soils for burrowing. Three factors have contributed to its decline: loss of habitat, overcollecting, and the introduction of exotic ants. In some places, especially adjacent to urban areas, the introduced ants have displaced the native species upon which the lizard feeds (Hix 1990). The UPVA and RHA provide a moderate amount of suitable habitat for this species and its potential to occur is considered to be moderate.

Birds

Cooper's Hawk (*Accipiter cooperii*)

The Cooper's hawk is a California Species of Special Concern. Both resident and migratory populations exist in Los Angeles County. Wintering Cooper's hawks are often seen in wooded urban areas and native woodland communities. Preferred nesting habitats are oak and riparian woodlands dominated by sycamores and willows. Cooper's hawks in the region prey on small birds and rodents that live in woodland and, occasionally, scrub and chaparral communities. This raptor is an uncommon breeding resident on the Palos Verdes Peninsula (Bradley 1980). The UPVA and RHA provide suitable foraging habitat, but a limited amount of nesting habitat for this raptor. Therefore, its overall potential to occur is considered to be high, although the potential for breeding is low.

Sharp-shinned Hawk (*Accipiter striatus*)

The sharp-shinned hawk is a California Species of Special Concern. This raptor is a fairly common winter visitor along the coast of southern California (Garrett and Dunn 1981). It prefers woodland communities, but can also be found in virtually any habitat as it passes through the area during migration. The sharp-shinned hawk is a fairly common winter visitor on the Palos Verdes Peninsula, usually in wooded areas (Bradley 1980). The UPVA and RHA provide suitable foraging habitat, but no nesting habitat, for this raptor.

Tricolored blackbird (*Agelaius tricolor*)

The tricolored blackbird is a federal Species of Concern and a California Species of Special Concern. These colonially-nesting birds prefer to breed in marsh vegetation of bulrushes and cattails, and have also been recorded nesting in willows, blackberries, and mustard (Beedy et. al. 1991). During winter months, they are often found foraging in wet pastures, agricultural fields, and seasonal wetlands. The tricolored blackbird breeds at Machado Lake just south of the intersection of the Harbor Freeway and Pacific Coast Highway and adjacent to the Ken Malloy Harbor Regional Park on the north side of the Palos Verdes Peninsula. The UPVA and RHA provide suitable foraging habitat for this species, but nesting habitat is only found on the north side of the peninsula away from the these areas. Therefore, the potential for this species to occur at the project site is considered to be low.

Southern California Rufous-crowned Sparrow (*Aimophila ruficeps canescens*)

The Southern California rufous-crowned sparrow is a federal Species of Concern and a California Species of Special Concern. In coastal southern California, rufous-crowned sparrows are considered fairly common in scrub communities and other habitats vegetated with grasses and widely spaced low shrubs. They also prefer slopes with rock outcroppings. This subspecies is present throughout the year in southern California. The UPVA and RHA provide a moderate amount of suitable habitat for this species; therefore, its potential to occur is considered to be moderate.

Short-eared Owl (*Asio flammeus*)

The short-eared owl is a California Species of Special Concern. It is an uncommon winter visitor along the coast of southern California, primarily occurring in marsh habitats. This owl forages in open habitats including marshes, grasslands, and agricultural fields. The short-eared owl is a rare winter visitor to the Palos Verdes Peninsula (Bradley 1980). The UPVA and RHA provide suitable foraging habitat, but no nesting habitat, for this species. Therefore, its potential to occur is considered to be very low and there is no potential for breeding.

Burrowing Owl (*Athene cunicularia*)

The burrowing owl is a federal Species of Concern and a California Species of Special Concern. Burrowing owls breed and forage in grasslands and agricultural fields, preferring flat to low rolling hills in treeless terrain. It now may be extirpated as a breeding resident from the Palos Verdes Peninsula, as the only recent reports in the area have been from the California State University at Dominguez Hills. The UPVA and RHA provide a moderate amount of suitable habitat for the burrowing owl; however, due to its current status in the region, its potential to occur is considered to be very low.

Ferruginous Hawk (*Buteo regalis*)

The ferruginous hawk is a federal Species of Concern and a California Species of Special Concern. Ferruginous hawks occur from mid-fall through early spring in coastal southern California. They forage over grasslands and the ecotone between coastal sage scrub and grasslands. This raptor is considered to be an accidental visitor to the Palos Verdes Peninsula, with only one record prior to 1980 (Bradley 1980). The UPVA provides a limited amount of suitable foraging habitat, but no nesting habitat, for this species. Therefore, its potential to occur on the UPVA is considered to be very low, with no potential for breeding. No suitable breeding or foraging habitat for this species occur on the RHA.

Coastal Cactus Wren (*Campylorhynchus brunneicapillus couesi*)

The coastal cactus wren is a California Species of Special Concern. Cactus wrens are residents in coastal southern California where they occur in dry washes with yuccas and cacti, and on lower coastal slopes and bluffs with extensive patches of prickly-pear cactus (Garrett 1981). Suitable habitat for the cactus wren is only present on the UPVA. A total of 11 individual coastal cactus wrens were present on the UPVA during the 1998 surveys.

Northern Harrier (*Circus cyaneus*)

The northern harrier is a California Species of Special Concern. It is a regular winter migrant that occasionally breeds along the coast of southern California. Foraging habitat consists of marsh, grassland, and scrub habitats. It is considered to be an uncommon to rare winter visitor on the Palos Verdes Peninsula (Bradley 1980). The UPVA and RHA provide suitable foraging habitat, but limited potentially suitable nesting habitat, for this raptor. Therefore, its potential to occur is considered to be moderate, but the potential for breeding is very low.

Western Yellow Warbler (*Dendroica petechia brewsteri*)

The subspecies of yellow warbler that breeds in southern California is *D.p. brewsteri* (Dunn and Garrett 1997); most are migrants. The CDFG has included this subspecies on its list of California Species of Special Concern. *D.p. brewsteri* occurs in coastal areas from northwestern Washington south to western Baja California (Dunn and Garrett 1997). In southern California, yellow warblers breed locally in riparian woodlands. Although a migrant yellow warbler was observed during surveys on the RHA, the UPVA and RHA do not provide suitable nesting habitat for this species.

White-tailed Kite (*Elanus leucurus*)

The white-tailed kite is a California Fully Protected species. This raptor typically nests in oaks, willows, and sycamores, and forages within adjacent grassland and scrub habitats. White-tailed

kites show strong site fidelity to nest groves and trees. The most abundant prey species for this raptor includes the California vole, western harvest mouse, and house mouse. On the Palos Verdes Peninsula, this raptor is an uncommon winter visitor (Bradley 1980). The UPVA provides suitable foraging habitat, but limited potentially suitable nesting habitat, for this raptor. Therefore, its potential to occur on the UPVA is considered to be moderate, but the potential for breeding is very low. No suitable foraging or breeding habitat is present on the RHA for this species.

Southwestern Willow Flycatcher (*Empidonax traillii extimus*)

The southwestern willow flycatcher is a federally- and state-listed Endangered species. This subspecies has declined drastically due to a loss of breeding habitat and nest parasitism by brown-headed cowbirds. This species occurs in riparian habitats along rivers, streams, or other wetlands where dense growths of willows (*Salix* sp.), baccharis (*Baccharis* sp.), arrowweed (*Pluchea* sp.), tamarisk (*Tamarix* sp.), or other plants are present, often with a scattered overstory of cottonwood (*Populus* sp.) (USFWS February 27, 1995). The potential for migrant willow flycatchers, especially the subspecies *E. t. brewsteri*, to occur on the project site (including both the UPVA and RHA) is considered to be high. However, the RHA and UPVA does not provide suitable nesting habitat for this species. Therefore, there is no potential for the southwestern willow flycatcher to breed in these areas.

California Horned Lark (*Eremophila alpestris actia*)

The CDFG has included this subspecies on its list of California Species of Special Concern. In southern California, this subspecies is a fairly common breeding resident in grasslands and other dry, open habitats. The horned lark is a common winter visitor on the Palos Verdes Peninsula that formerly nested in the area (Bradley 1980). The UPVA and RHA provide suitable foraging habitat, but limited suitable nesting habitat, for this species. Therefore, its potential to occur is considered to be high, but the potential for breeding is very low.

Merlin (*Falco columbarius*)

The merlin is a California Species of Special Concern. In California, the merlin prefers vast open space areas such as estuaries, grasslands, and deserts where it hunts small flocking birds such as sandpipers, larks, sparrows, and pipits. The merlin is a very rare winter visitor to the Palos Verdes Peninsula (Bradley 1980). The UPVA and RHA provide suitable foraging habitat, but no nesting habitat, for this raptor. Therefore, its potential to occur is considered to be low, and there is no potential for breeding.

Prairie Falcon (*Falco mexicanus*)

The prairie falcon is a California Species of Special Concern. It is now a rare visitor to the coastal plain of southern California. Foraging habitat for this species consists of open habitats such as deserts, grasslands, rangelands, and marshes. For nesting, this large falcon uses ledges of cliff faces. The prairie falcon is a very rare winter visitor to the Palos Verdes Peninsula (Bradley 1980). The UPVA and RHA provide suitable foraging habitat for this raptor, but limited potentially suitable nesting habitat. Therefore, its potential to occur is considered to be low, but the potential for breeding is considered to be very low.

Peregrine Falcon (*Falco peregrinus*)

The peregrine falcon is a state-listed Endangered species that, due to recent population gains, has been recently delisted as Endangered by the USFWS. No such delisting has been proposed by the state. Peregrine falcons prey almost exclusively on birds and use a variety of habitats, particularly wetlands and coastal areas. The peregrine falcon is now a regular visitor to the Palos Verdes Peninsula, including Point San Vicente adjacent to the project site. The project site (both the UPVA and RHA) provides suitable foraging habitat and potentially suitable nesting habitat for the peregrine falcon. In recent years in Los Angeles County, peregrine falcons have only nested in urban areas (e.g., building ledges). However, historically they used cliffs, such as the cliffs at the RHA, for nesting. Therefore, its potential to occur on the UPVA and RHA is considered to be high, but the potential for breeding is considered to be low.

Yellow-breasted Chat (*Icteria virens*)

The yellow-breasted chat is a California Species of Special Concern. For nesting, this species requires dense, brushy tangles near water and riparian woodlands supporting a thick understory. The yellow-breasted chat is an uncommon transient to the Palos Verdes Peninsula (Bradley 1980). Although migrant yellow-breasted chats are expected to occur during migration, the UPVA and RHA do not provide suitable nesting habitat for this species. Therefore, its potential to occur is low to moderate as a migrant, but there is no potential for breeding.

Loggerhead Shrike (*Lanius ludovicianus*)

The loggerhead shrike is a federal Species of Concern and a California Species of Special Concern. This species is a fairly common resident of lowlands and foothills in southern California. Shrikes inhabit grasslands and other dry, open habitats. They can often be found perched on fences and posts from which prey items (e.g., large insects, small mammals, lizards) can be seen. The UPVA and RHA provide suitable habitat for the loggerhead shrike and it was observed during surveys.

California Gull (*Larus californicus*)

The California gull is a California Species of Special Concern. This gull forages over the open ocean, but scavenges in urban habitats wherever food scraps are available, especially at landfills. Habitat for loafing or roosting includes rocky shorelines. It is considered to be an abundant winter visitor on the Palos Verdes Peninsula (Bradley 1980). The UPVA and RHA provide limited suitable roosting and foraging habitat, but no nesting habitat, and its potential to occur is considered to be high.

Osprey (*Pandion halaetus*)

The osprey is a California Species of Special Concern. This raptor is a year-round visitor to southern California (Garrett and Dunn 1981). The osprey is a specialized predator of fish in relatively large bodies of water from the ocean inland. It nests in large trees or man-made structures such as utility poles. It is considered to be a rare migrant and winter visitor on the Palos Verdes Peninsula (Bradley 1980), although it has increased in the region in recent years. The RHA provides limited potentially suitable nesting habitat and no foraging habitat, although suitable foraging habitat is present just offshore. Therefore, the potential for the osprey to occur on the RHA is considered to be very low. No suitable foraging or nesting habitat for this species occurs on the UPVA.

California Brown Pelican (*Pelecanus occidentalis*)

The California brown pelican is a federally- and state-listed Endangered species. The breeding range of the California brown pelican is the Channel Islands off the coast of southern California, on islands along the west coast of Baja California, and in the Gulf of California (A.O.U. 1957). After the breeding season, the pelicans leave the islands and disperse along the entire west coast, with most wintering in southern California and lower densities occurring further up the coastline as far north as southern British Colombia. Pesticide use, especially of DDT, led to widely documented reproductive problems for certain species of birds, including egg shell thinning for the brown pelican. The California brown pelican was listed as Endangered by the CDFG on June 27, 1971 and by the USFWS on October 13, 1970.

The brown pelican occurs in marine environments and rarely strays far from the immediate coastline. It is found primarily on open beaches, lagoons, tidal rivers, rocky coasts, jetties and breakwaters, and islands. The brown pelican is a non-breeding year round visitor to the Palos Verdes Peninsula that is most common in fall and winter (Bradley 1980). The RHA provides a limited amount of suitable roosting habitat and this species was observed during the surveys as it roosted on the rocky shoreline at the base of the coastal bluffs. Although the RHA provides potentially suitable nesting habitat, the lack of isolation from potential predators and human

disturbance suggests that breeding by brown pelicans at this location is not to be expected. No suitable foraging or nesting habitat for this species occurs on the UPVA.

Double-crested Cormorant (*Phalacrocorax auritus*)

The double-crested cormorant is a California Species of Special Concern. This species nests colonially on cliffs or in trees either along the ocean coastline or at inland bodies of water. It is dependent on aquatic habitats for foraging opportunities where it dives for its food. Habitat for roosting includes trees and rocky shorelines. It is considered to be a fairly common non-breeding resident on the Palos Verdes Peninsula (Bradley 1980). The RHA provides a limited amount of suitable roosting habitat and this species was observed during the surveys as it roosted on the rocky shoreline at the base of the coastal bluffs.

Coastal California Gnatcatcher (*Polioptila californica californica*)

The coastal California gnatcatcher is a federally-listed Threatened species and a California Species of Special Concern. This species occurs in most of Baja California's arid regions, but it is extremely localized in the United States, where it predominantly occurs in coastal regions of highly urbanized Los Angeles, Orange, Riverside, and San Diego counties (Atwood 1992). In California, this species is an obligate resident of several distinct subassociations of the coastal sage scrub plant community. Brood parasitism by brown-headed cowbirds and loss of habitat to urban development have been cited as causes of the coastal California gnatcatcher population decline (Unitt 1984; Atwood 1990). The Manomet Bird Observatory studies indicated that the Palos Verdes Peninsula supported a population of between 26 and 56 pairs between 1993 and 1996 (Atwood et al. 1996). The four gnatcatcher pairs onsite represent the southwestern most portion of the population of gnatcatchers on the Palos Verdes Peninsula. The apparent "core" of the Palos Verdes population occurs in the coast foothills northeast of Abalone Cove, approximately 2.5 miles east of the project site. Suitable habitat for the coastal California gnatcatcher is present on the UPVA. A total of four pairs of coastal California gnatcatchers were present on the UPVA during the 1998 surveys.

On October 24, 2000, the USFWS published a final rule to designate 513,650 acres of land as critical habitat for the coastal California gnatcatcher. These lands encompass portions of Los Angeles, San Bernardino, Orange, Riverside, and San Diego counties in California. The designation of critical habitat includes "Unit 8", which includes the Palos Verdes Peninsula Subregion. Critical habitat refers to specific geographic areas that are essential for the conservation of a Threatened or Endangered species and that may require special management considerations. These areas do not necessarily have to be occupied by the species at the time of designation. A critical habitat designation does not set up a preserve or refuge and only applies to situations where Federal funding or a Federal Permit is involved. A Section 7 consultation with USFWS is required for any Federal action (i.e., issuance of an USACE Permit) that is likely to result

in the adverse modification or destruction of critical habitat. The UPVA and RHA are located within areas designated as critical habitat with Unit 8 of the USFWS final rule.

California Least Tern (*Sterna antillarum browni*)

The California least tern is a federally- and state-listed Endangered species. This migratory species nests from April through August along the coast of California from San Francisco south to Baja California. The least tern has declined due to loss of suitable nesting habitat as a result of increasing levels of human activities on beaches and a reduction in estuarine foraging areas. The UPVA and RHA do not provide suitable foraging, roosting, or nesting habitat for this species. However, this species is expected to occasionally occur just offshore from the RHA as it either forages or passes by.

Elegant Tern (*Sterna elegans*)

The elegant tern is a federal Species of Concern and California Species of Special Concern. Nesting colonies of this tern are found at only a few locations in the U.S. Recent locations are south San Diego Bay in San Diego County, Bolsa Chica Ecological Reserve in Orange County, and the Los Angeles Harbor. The Los Angeles Harbor colony first appeared in 1998 on new dredge fill that is destined to become part of the Port of Los Angeles Harbor complex. The elegant tern is a common visitor to the Palos Verdes Peninsula from summer into fall. The UPVA and RHA do not provide suitable foraging, roosting, or nesting habitat for this species. However, this species is expected to occasionally occur just offshore from the RHA as it either forages or passes by.

Least Bell's Vireo (*Vireo bellii pusillus*)

The least Bell's vireo is a federally- and state-listed Endangered species. The vireo is now a rare and local summer resident of southern California's lowland riparian woodlands. While destruction of lowland riparian habitats has played a large role in driving this species to its present precarious situation, brood parasitism by brown-headed cowbirds is the most important factor in its decline (Garrett and Dunn 1981). The RHA and UPVA do not provide suitable nesting habitat for this species. Therefore, there is no potential for the least Bell's vireo to breed on either the RHA or UPVA.

Mammals

Pallid Bat (*Antrozus pallidus*)

The pallid bat is a California Species of Special Concern that most commonly occurs in mixed oak and grassland habitats. This large bat roosts in rock crevices and in cavities of trees, especially

oaks. The UPVA provides potentially suitable roosting and foraging habitat for this species and it may occur. No suitable habitat for this species occurs on the RHA.

Pale Big-eared Bat (*Corynorhinus townsendii pallescens*)

The pale big-eared bat occurs throughout California and is a federal Species of Concern and California Species of Special Concern. In the southern portion of the state, the subspecies, *C. t. pallescens* (Hall 1981), occupies a variety of communities, including oak woodlands, arid deserts, grasslands, and high-elevation forests and meadows. Known roosting sites in California include mines, caves, and buildings. The UPVA and RHA provide potentially suitable roosting and foraging habitat for this species and it may occur.

California Mastiff Bat (*Eumops perotis californicus*)

The California mastiff bat, the largest bat in the United States, is a federal Species of Concern and a California Species of Special Concern. This species is a very wide-ranging and high-flying insectivore that typically forages in open areas with high cliffs. It roosts in crevices in small colonies. The UPVA and RHA provide potentially suitable roosting and foraging habitat for this species and it may occur.

San Diego Black-tailed Jackrabbit (*Lepus californicus bennettii*)

The San Diego black-tailed jackrabbit is a federal Species of Concern and a California Species of Special Concern. This subspecies of the widespread black-tailed jackrabbit is restricted to the Pacific slope from Santa Barbara County to northwestern Baja California. This species is nocturnal and prefers relatively open areas with sparse shrub cover. The UPVA provides a limited amount of suitable habitat for this species. Therefore, its potential to occur on the UPVA is considered to be low. No suitable habitat for this species occurs on the RHA.

Small-footed Myotis (*Myotis ciliolabrum*)

The small-footed myotis is a federal Species of Concern and occurs throughout much of the western United States, occupying a variety of habitats. This species feeds among trees or over brush, and roosts in cavities of cliffs, trees, or rocks and within caves or mine shafts. The UPVA and RHA provide potentially suitable roosting and foraging habitat for this species and it may occur.

Yuma Myotis (*Myotis yumanensis*)

The Yuma myotis is a federal Species of Concern and a relatively small bat that occurs statewide. This species is closely associated with water and wooded canyon bottoms throughout its range. Caves and old buildings are preferred roosting habitats, with roosts numbering up to 2,000

individuals. The UPVA and RHA provide potentially suitable foraging habitat for this species and it may occur.

San Diego Desert Woodrat (*Neotoma lepida intermedia*)

The San Diego desert woodrat is a federal Species of Concern and California Species of Special Concern. It occupies arid areas with sparse vegetation, especially those comprised of cactus and other thorny plants. This subspecies is restricted to the Pacific slope in a range that stretches from San Luis Obispo to northwestern Baja California. The UPVA provides suitable habitat for this species and its potential to occur is considered to be moderate. No suitable habitat for this species occurs on the RHA.

Pacific Pocket Mouse (*Perognathus longimembris pacificus*)

The Pacific pocket mouse is a federally-Endangered species and a California Species of Special Concern. The historic range of this subspecies is the immediate coastal slope between El Segundo, Los Angeles County, and northwestern Baja California. There are eight historically-known populations of the Pacific pocket mouse (USFWS 1994b). These populations are known from Los Angeles, Orange and San Diego counties. The species is now presumed to be extinct north of the San Joaquin Hills (Williams 1986). This mouse has been found on sandy, gravelly and stony soils, although it is rarely found on rocky sites (Williams 1986, Zeiner et al. 1990). The UPVA and RHA provide habitat that is potentially suitable for this species. However, its current known distribution suggests that potential for the Pacific pocket mouse to occur is very low.

4.0 ONGOING REGIONAL AND LOCAL HABITAT CONSERVATION PROGRAMS

4.1 NATURAL COMMUNITIES CONSERVATION PLANNING PROGRAM

On August 30, 1991, the State Fish and Game Commission considered a petition in support of listing the coastal California gnatcatcher. The Commission decided not to list the coastal California gnatcatcher as an Endangered species in favor of pursuing preparation of a Natural Communities Conservation Planning (NCCP) program as proposed by Assembly Bill 2172 (AB 2172/Natural Communities Conservation Planning Act) (Fish and Game Code Section 2800 et. seq.). AB 2172 authorized the CDFG to enter into agreements with any person for the purpose of preparing and implementing NCCPs and prepare guidelines for development and implementation of NCCPs. AB 2172 also permits NCCPs to be prepared by local, state, or federal agencies independently or in cooperation with other persons, and requires the CDFG to be compensated for costs incurred in preparing and implementing NCCPs.

The purpose of the NCCP program is to provide regional or area-wide protection and perpetuation of natural wildlife diversity while allowing compatible and appropriate development and growth.

AB 2172 was designed in recognition of the fact that individual species protection under the state Endangered Species Act (CESA) and the federal Endangered Species Act (FESA) is costly and historically ineffective as a mechanism for protection or prevention of extinction of plant and animal species, and that a habitat-based, multispecies or ecosystem-driven preservation approach has greater potential for long-term success. The focus of the NCCP program represents a dramatic shift from "individual species" to "habitat."

On March 25, 1993, the U.S. Department of the Interior listed the coastal California gnatcatcher as a "Threatened" species and adopted a special rule in accordance with Section 4(d) of the FESA that authorized landowners and local jurisdictions to voluntarily participate in the State of California NCCP Act of 1992.

Beginning in 1996, and in concert with state and federal resource agencies, the City of Rancho Palos Verdes has taken the lead in developing a NCCP for areas within its jurisdiction pursuant to the California Natural Community Conservation Planning Act of 1991 and the FESA. The City's NCCP is still in the process of preparation and must be approved by state and federal agencies. Once approved, the City's NCCP will establish Biological Reserve Area(s) in the City to provide for the protection of the federally-listed Threatened coastal California gnatcatcher, sensitive native plant communities (e.g., coastal sage scrub), and other sensitive species (e.g., coastal cactus wren and loggerhead shrike).

The NCCP program will be completed in two phases: an interim phase and an implementation phase. The interim phase is defined as the period of time between the March 25, 1993 listing date and the approval of the subregional NCCP program by the USFWS. During the interim phase, the USFWS may approve incidental habitat loss associated with development, provided the loss does not exceed the five-percent cumulative maximum established for the subregion and is adequately mitigated.

On October 7, 1999, the USFWS issued a biological opinion (BO) regarding the reinitiation of intra-service consultation on implementation of the "special rule" for the gnatcatcher for the interim phase. The 1999 BO was issued because the "incidental take" of gnatcatchers pursuant to Section 4(d) of the Federal Endangered Species Act (FESA) was approaching the amount authorized in the most recent (October 16, 1996) BO for this program. According to the 1999 BO, a maximum of five percent of the remaining 12,501 acres of sage scrub may be lost as a result of the continued use of the interim provisions of the special rule, Section 7 consultations, and section 10(a)(1)(b) incidental take permits throughout the entire NCCP planning area in southern California. At the present time, there are no remaining acres of coastal sage scrub in the City NCCP subregion that can be removed under the 4(d) special rule (J. Rojas, pers. comm. 2000).

The implementation phase of the NCCP will begin when the subregional NCCP program is completed and approved. The USFWS will monitor the plan to ensure the success of the implementation program.

The design of the City's NCCP reserve is currently under development (D. Snow, pers. comm. 2000). The reserve design will attempt to preserve the most biologically rich areas within the subregion while identifying those areas suitable for development. The City NCCP subarea, although relatively small in area as compared to other NCCP subareas in Southern California, is unique in that it contains healthy concentrations of coastal sage scrub habitat (approximately 1,250 acres) and a number of coastal sage scrub species which are not found in other Southern California coastal sage scrub communities including ashyleaf buckwheat, bright green dudleya, and Palos Verdes blue butterfly.

4.2 LONG POINT HABITAT CONSERVATION PROGRAM

The project is divided into three (3) distinct land use districts: the Conservation District; the Recreation District; and the Resort Development District. As part of the Conservation District, the Long Point Habitat Conservation Program (LPHCP) has been developed by the project applicant. This area is illustrated in Exhibit 7 and 8, *Biological Resources Preservation/Enhancement Areas Within the RHA and the UPVA*.

The LPHCP contains habitat restoration and enhancement design concepts for the Conservation District area through revegetation with drought-tolerant species, transitional areas of planting between the Conservation Area and Resort Hotel or Recreation Planning Areas, and design for long-term sustainability. In addition, the program states that project drainage and surface runoff would be directed away from the bluff habitat areas in the RHA and public access may be combined in the UPVA to reduce overall impacts.[2] A summary of the LPHCP for the UPVA and RHA are discussed separately below.

4.2.1 Resort Hotel Area

The RHA contains 4.54 acres of existing coastal bluff scrub. Construction of the proposed project would remove 0.10 acre of habitat. The remaining 4.44 acres of existing habitat are proposed to be retained and, where appropriate, enhanced with new native vegetation.

The RHA Conservation Area, referred to as the Bluff/Beach Habitat Reserve (PA 1-A), would include 4.44 acres of coastal bluff scrub habitat as well as 3.87 acres of non-vegetated rocky shore (Exhibit 7). This Conservation Area is approximately 150 feet away from any Resort Hotel

[2] Long Point Resort Permit Documentation, prepared by FORMA, June 23, 2000, page 3-12.

Legend

- Project Study Area
- Bluff/Beach Habitat Reserve

Biological Resources Preservation/Enhancement Areas Within the Resort Hotel Area

Exhibit 7

Long Point

150 0 150 300 Feet

Scale: 1" = 300'

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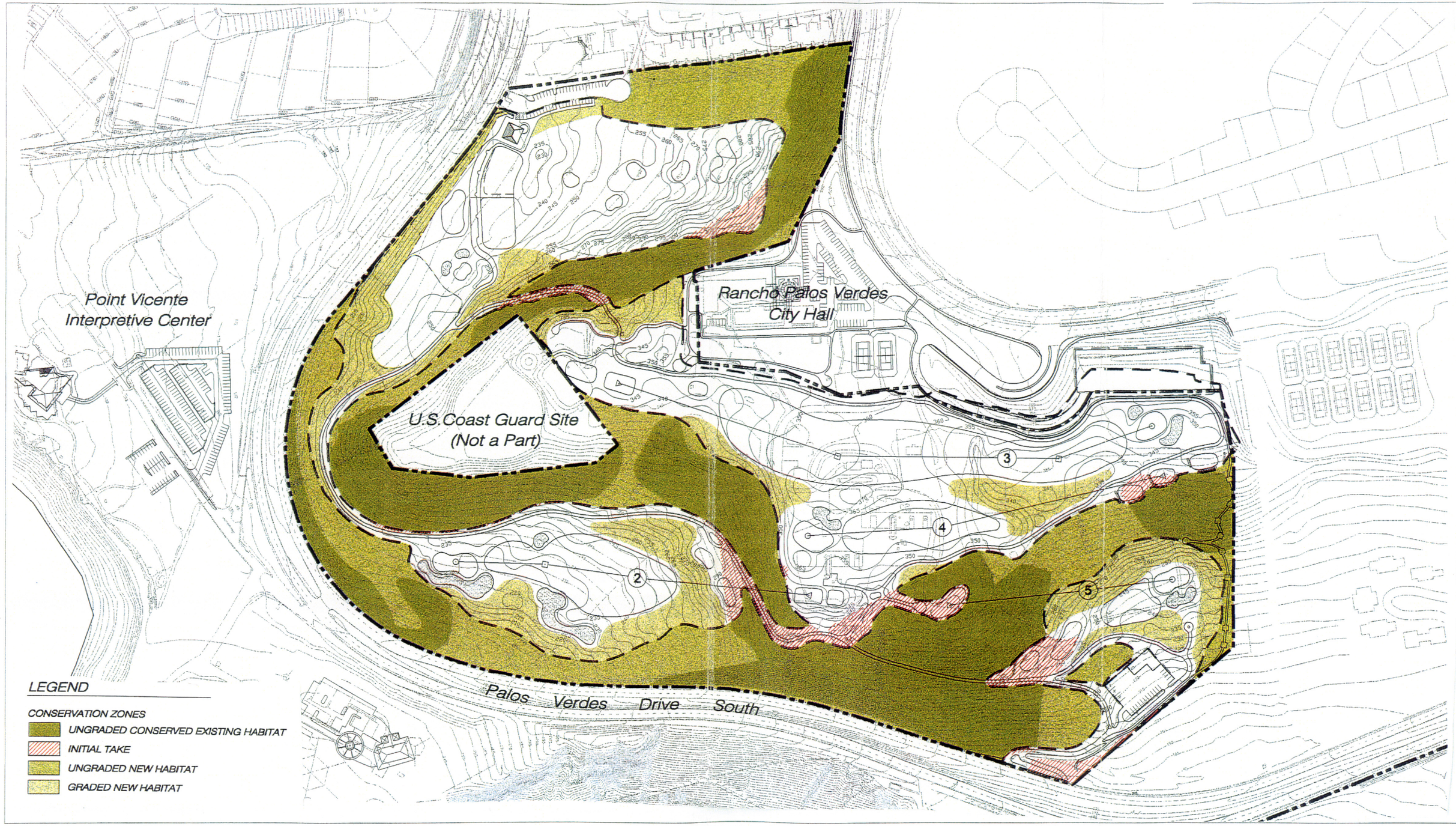


Biological Resources Preservation/Enhancement Areas Within the Upper Point Vincente Area

Exhibit 8

Long Point

Bonterra CONSULTING

development and adjoins the County's Point Vicente Fishing Access Area. Although permitting recreational fishing for fin fish, this reserve designation would restrict certain active uses below the Resort Hotel such as commercial fishing, the collection of invertebrates, and the disturbance of plants, birds, and other animal life. This level of protection would ensure the on-going conservation of this ecosystem and "sustainable" use of coastal resources within this stretch of the Rancho Palos Verdes shoreline. In order to preserve the integrity of the steep coastal bluff, there are no proposed trails within this Conservation Planning Area.

The steep cliffs of the RHA are also expected to provide a narrow linkage for wildlife east and west of the site. Aa part of the LPHCP, these areas will be maintained as permanent open space and would not be impacted. The project design of the UPVA area has also maintained a connection to the open space areas offsite. The preserved habitat areas onsite and the proposed coastal sage scrub creation areas on the UPVA site are also expected to provide for local movement on and offsite. The UPVA site is discussed further below.

4.2.2 Upper Point Vicente Area

The UPVA contains 19.54 acres of existing coastal sage scrub habitat. Construction of the proposed project would remove 4.91 acres of habitat. The remaining 14.63 acres of existing habitat are proposed to be retained and where appropriate, enhanced with new native vegetation.

The UPVA Conservation Area, referred to as the Upper Point Vicente Coastal Sage Scrub Habitat (PA 1-B) would be implemented to preserve and increase coastal sage scrub habitat by conserving 14.63 acres and creating 16.80 acres of coastal sage scrub habitat (Exhibit 8). The HCP would utilize a combination of methods including the conservation of existing onsite habitat, the creation of new habitat in areas that are currently marginally-developed or underdeveloped yet have limited value (i.e., former agricultural areas, slopes with non-native grass species, etc.), and the enhancement of the existing degraded habitat areas to obtain significantly improved habitat values.

4.2.3 Summary

The LPHCP would provide for native habitat conservation and enhancement within Conservation Planning Areas in the RHA and UPVA. In addition, the program would include 16.80 acres of restored and newly created habitat within Recreation Areas of the UPVA as mitigation for impacts to 4.91 acres of coastal sage scrub habitat in the UPVA and 0.10 acre of coastal bluff scrub in the RHA.

Overall, the LPHCP would provide for the creation of 16.80 acres of new coastal sage scrub habitat area (UPVA Conservation Planning Area and Recreation Area). This, combined with the 14.63 acres of existing coastal sage scrub habitat, the 4.44 acres of coastal bluff scrub habitat, and the 3.87 acres of rocky shore/coastal bluff habitat that would be retained, would result in the protection

and creation of a total of 39.74 acres of coastal sage scrub, coastal bluff scrub, and rocky shore/coastal bluff habitat. The 16.80 acres of restored and newly created habitat represents a replacement ratio of 3.4 to 1 (3.4 acres restored/created habitat for every 1 acre removed) for the 5.00 acres of coastal sage scrub and coastal bluff scrub impacted by the proposed project. With the addition of 22.94 acres of preserved coastal sage scrub, coastal bluff scrub, and rocky shore/coastal bluff to the mitigation program, the compensation ratio is over 7 to 1, far above typical mitigation standards of 2 to 1 and 3 to 1.

Specific details of the LPHCP including design concepts and plant palettes, are discussed in the Long Point Resort Permit Documentation (Forma 2000) available for review at the Rancho Palos Verdes City Hall. A revegetation program is proposed in accordance with the landscape palette developed for the LPHCP.

The stated intent of the Habitat and Conservation Program is to ensure compliance with FESA and to be consistent with the City's NCCP, when adopted. If the City's NCCP is not adopted prior to development within the project area, any ground-disturbing activities affecting either areas occupied by the coastal California gnatcatcher or areas occupied by state- or federally-listed Threatened or Endangered species would require compliance with the FESA and/or CESA.

As previously noted, the City's NCCP is still in the process of preparation and must be approved by state and federal agencies. Once approved, the City's NCCP will establish Biological Reserve Area(s) in the City to provide for the protection of certain species observed on the project site (i.e., the federally-listed Threatened coastal California gnatcatcher, sensitive native plant communities [e.g., coastal sage scrub], and other sensitive species [e.g., coastal cactus wren and loggerhead shrike]).

As the proposed Long Point Resort project is being considered during the interim phase of the NCCP development, the City and USFWS may approve incidental habitat loss associated with the proposed development, provided the loss (1) does not cumulatively exceed the five percent guideline for the loss of coastal sage scrub, (2) does not preclude connectivity between areas of high habitat values, (3) will not preclude or prevent the preparation of the Subregion NCCP, (4) has been minimized and mitigated to the maximum extent practicable, (5) will not appreciably reduce the likelihood of the survival and recovery of the listed species in the wild, and (6) is incidental to otherwise lawful activities. However, at the present time, there are no remaining acres of coastal sage scrub in the City NCCP subregion that can be removed under the 4(d) special rule. Therefore, it is unlikely that the proposed project can be processed through Section 4(d) of the FESA unless the projects that have already received 4d authorization do not proceed or USFWS issues another Biological Opinion that allows for the additional take of habitat within the subregion, which at this time appears unlikely. Therefore, mitigation/ compensation for the loss of coastal sage scrub and gnatcatchers would need to be coordinated with the USFWS and another federal

responsible agency involved in the project through Section 7 of the FESA or with the USFWS through Section 10 of the FESA.

5.0 PROJECT IMPACTS

5.1 INTRODUCTION

The determination of impacts in this analysis is based on a comparison of maps depicting project grading limits and maps of onsite biological resources. All construction activities, including staging and equipment areas, are assumed to be contained within the limits of grading. Both direct and indirect impacts on biological resource have been evaluated. Direct impacts are those that involve the initial loss of habitats due to grading and construction. Indirect impacts are those that would be related to disturbance from construction activities (e.g., noise, dust) and use of the project site.

Biological impacts associated with the proposed project were evaluated with respect to the following special status biological issues:

- Federally- or state-listed Endangered or Threatened species of plant or wildlife;
- Non-listed species that meet the criteria in the definition of Rare or Endangered in the California Environmental Quality Act (CEQA) Guidelines;
- Streambeds, wetlands, and their associated vegetation;
- Habitats suitable to support a federally- or state-listed Endangered or Threatened species of plant or wildlife;
- Species designated as California Species of Special Concern or federal Species of Concern;
- Habitat, other than wetlands, considered special status by regulatory agencies (USFWS, CDFG) or resource conservation organizations; and
- Other species or issues of concern to regulatory agencies or conservation organizations.

The actual and potential occurrence of these resources within the project vicinity was correlated with the following significance criteria to determine whether the impacts of the proposed project on these resources would be considered significant.

5.2 SIGNIFICANCE CRITERIA

Appendix G of the CEQA Guidelines contains the Initial Study Environmental Checklist form which includes questions relating to biological resources. The issues presented in the Initial Study

Checklist have been utilized as thresholds of significance in this Section. Accordingly, a project may create a significant environmental impact if one or more of the following occurs:

- If the project has 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 Game and Wildlife Service (refer to Impact Statement -1).

- If the project has 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 Game and Wildlife Service (refer to Impact Statement -2).

- If the project has 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 (refer to Impact Statement -2).

- If the project interferes substantially with the movement of any native or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impedes the use of native wildlife nursery sites (refer to Impact Statement -3).

- If the project conflicts with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (refer to Impact Statement -4).

- If the project conflicts with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan (refer to Impact Statement -5).

Section 15065(a), *Mandatory Findings of Significance*, of the CEQA Guidelines states that a project may have a significant effect on the environment if "...the project has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare or threatened species..."

An evaluation of whether an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would substantially diminish, or result in the loss of, an important biological resource or those that would obviously conflict with local, State or Federal resource conservation plans, goals, or regulations. Impacts are sometimes locally adverse but not significant because, although they would result in an adverse alteration of existing conditions, they

would not substantially diminish or result in the permanent loss of an important resource on a population- or region-wide basis.

Section 15380 of CEQA indicates that a lead agency can consider a non-listed species to be Rare or Endangere` for the purposes of CEQA if the species can be shown to meet the criteria in the definition of Rare or Endangered. For the purposes of this discussion, the current scientific knowledge on the population size and distribution for each special status species was considered according to the definitions for Rare and Endangered listed in Section 15380 of CEQA.

The actual and potential occurrence of these resources within the project vicinity was correlated with the previously identified significance criteria to determine whether the impacts of the proposed project on these resources would be significant.

Potential impacts are grouped below according to topic. The numbered mitigation measures at the end of this section directly correspond with the numbered impact statements.

5.3 SPECIAL STATUS BIOLOGICAL RESOURCES

1) *Project implementation may affect species identified as special status. Analysis has concluded that impacts would be mitigated to a less than significant level.*

Plants

Project implementation may result in impacts on special status plant species. Three special status species were observed on the project site during previous focused surveys (Dudek 1999). These species include: island green dudleya, California box-thorn, and woolly sea-blite.

Other species potentially present in the project area include aphanisma, south coast saltscale, Catalina mariposa lily, Lewis' evening primrose, Catalina mariposa lily, Catalina crossosoma, Santa Catalina Island desert-thorn, and Lyon's pentachaeta.

Island Green Dudleya. The island green dudleya is present in the mixed coastal sage scrub (UPVA) and the southern coastal bluff scrub (RHA). Impacts on the island green dudleya would be considered significant since this plant is considered Rare, Threatened, or Endangered in California and elsewhere by the CNPS and meets the criteria in the definition of Rare or Endangered in CEQA. Impacts on this species would be reduced to less than significant levels with implementation of recommended mitigation which includes the following:

- Conduct a pre-construction survey;
- Seed and corm collection and revegetation; and
- Preparation of a Mitigation Plan including maintenance and monitoring requirements.

California Box-thorn and Woolly Sea-blite. The California box-thorn is present in the mixed coastal sage scrub (UPVA) and the southern coastal bluff scrub (RHA). The woolly sea-blite is present in the southern coastal bluff scrub (RHA). Although impacts on these plants are considered less than significant since these plants are considered relatively common in the region, these plants would be included in the seed mixes for revegetation of coastal bluff scrub.

Other Species. Direct impacts on the other special status plant species potentially present in the project area (i.e., aphanisma, south coast saltscale, Catalina crossosoma, Santa Catalina Island desert-thorn, and Lyon's pentachaeta) would be potentially significant. All of these species are listed as CNPS List 1, federal Species of Concern, or state and federally listed as Endangered. Impacts on these species would be reduced to less than significant levels with implementation of recommended mitigation which includes the following:

- Conduct pre-construction special status plant surveys; and
- Develop mitigation, if warranted, which may include avoidance of the populations, relocation, or purchase of areas off-site containing populations of the impacted species for inclusion in open space areas.

Wildlife

The proposed project would result in the loss of potential habitat for several special status wildlife species potentially present on the project site. For those species expected to occur, potential impacts were evaluated for the habitat which the species is expected to occupy.

Refer to the *Indirect Impacts* section below for a discussion regarding the Project's indirect impacts on wildlife species.

Invertebrates

Palos Verdes Blue Butterfly. The UPVA provides a very limited amount of potentially suitable habitat for the federally-listed Endangered Palos Verdes blue butterfly. However, focused surveys would be required to determine the presence or absence of this species on the project site. If present, any impacts on this species would be considered significant. Compliance with recommended mitigation (i.e., conducting focused surveys and

compliance with the FESA) would be required to avoid any impacts on this species. Therefore, a less than significant impact would occur with mitigation. It should be noted that in the event the focused surveys determine that this species occurs on the UPVA, then federal take authorization would be required through either Section 7 consultation or Section 10a of the FESA. If this species is not found to occur on the UPVA, no authorization to impact this species would be necessary and no mitigation would be warranted.

El Segundo Blue Butterfly. The El Segundo blue butterfly, a federally-listed Endangered species, is not expected to occur on the UPVA due to a lack of suitable habitat. Therefore, construction of the project would not result in any impacts on this species.

Amphibians

Western Spade foot Toad. The western spadefoot toad has a low potential to occur on the project site. This species is not listed as Threatened or Endangered by state or federal resource agencies. Since the RHA supports only a limited amount of suitable habitat for this species, only a portion of which will be impacted, any population present would not be substantial enough to be considered significant.

Reptiles

Silvery Legless Lizard, Coastal Western Whiptail, San Bernardino Ringneck Snake, and San Diego Coast Horned Lizard. Although these special status reptile species potentially occur on the project site, none of these species are listed as Threatened or Endangered by state or federal resource agencies. However, the San Diego horned lizard is designated as one of the target species for the Palos Verdes Peninsula NCCP. Potential habitat for these species consists primarily of the scrub habitats north of Palos Verdes Drive South in the UPVA (see Table 5.3-3). project implementation would result in a loss of 4.91 acres of scrub habitats that may support one or more of these species. The loss of potential habitat for these species would be considered less than significant because of the small size of the potential habitat that would be impacted compared to the large amount of various habitats types available for these species throughout California based on the range/distribution of these species.

Birds

Southwestern Willow Flycatcher, California Least Tern, and Least Bell's Vireo. These species are not expected to occur on the project site due to lack of suitable habitat. Therefore, project implementation would not result in any impacts on these species.

Two of the remaining three species, the California brown pelican and coastal California gnatcatcher have been observed on the project site.

California Brown Pelican. The proposed project would not directly impact roosting or breeding habitat for the pelican since the rocky shore habitat on the RHA that is used for roosting would not be impacted. Therefore, no mitigation would be required for the California brown pelican. Impacts as a result of an increase in public use are primarily indirect in nature and are discussed under indirect impacts.

Coastal California Gnatcatcher. The coastal California gnatcatcher is known to occur in the coastal sage scrub on the UPVA. Four pairs of gnatcatchers were observed on the UPVA during surveys in 1998 and may be impacted by construction of the proposed project by both direct (habitat removal) and indirect (disturbance) effects. These impacts are considered significant. The Long Point Habitat and Conservation Program (HCP) has been developed and would be implemented to reduce these impacts to a level of less than significant.

Peregrine Falcon. The peregrine falcon is known to occur in the vicinity and has a high potential to occur on the project site. Suitable foraging habitat for the peregrine falcon is present on the project site; however, due to the small size of the project, relative to the amount of available foraging habitat in the region, the potential loss of foraging habitat for this species is not considered significant. Potentially suitable nesting habitat is present along the cliffs in the RHA. Since the cliff area (RHA) would not be impacted by the proposed project, the project would not directly impact nesting habitat for the peregrine falcon.

A variety of bird species that are considered special status, but are not listed as Threatened or Endangered by state or federal resources agencies, occur or potentially occur in the project region. These species include four that were observed during surveys of the project site. These are the coastal cactus wren, western yellow warbler, loggerhead shrike, and double-crested cormorant.

Coastal Cactus Wren. The coastal cactus wren occupies the coastal sage scrub habitats on the UPVA and is designated as one of the target species for the Palos Verdes Peninsula NCCP. Although the project would result in the loss of 4.91 acres of scrub habitat potentially supporting this species, this impact would be considered less than significant because of the small size of the habitat impacted relative to the amount of habitat available for this species in Southern California.

Western Yellow Warbler. The project site does not provide nesting habitat for the western yellow warbler, and only migrant yellow warblers can be expected to occur. Therefore, project implementation would not result in any impacts on this species.

Loggerhead Shrike. The loggerhead shrike has the potential to use the majority of the project site. However, implementation of the proposed project is not expected to reduce the value of the project site for the loggerhead shrike to any great extent since golf courses can provide suitable habitat for this species. Therefore, a significant impact is not anticipated in this regard and no mitigation would be required.

Double-crested Cormorant. The double-crested cormorant is only expected to use the rocky shore and cliff part of the RHA for roosting. As project implementation would not impact the rocky shore and cliff part of the RHA, a significant impact is not anticipated in this regard. Impacts as a result of an increase in public use are primarily indirect in nature and are discussed under indirect impacts.

Tricolored Blackbird and California Horned Lark. The proposed project would result in a loss of 22.55 acres of grassland and agricultural areas that could potentially be used for foraging by the tricolored blackbird and California horned lark. Even if present, the loss of 22.55 acres of occupied habitat by either of these two species would not be considered significant because of the small size of the area impacted relative to the amount of habitat available for these species in California.

Southern California Rufous-crowned Sparrow. The proposed project would result in a loss of 4.91 acres of scrub habitats that could potentially be used by the southern California rufous-crowned sparrow. However, the loss of 4.91 acres of scrub would not be considered significant because this species is known to be common in Southern California, throughout a variety of habitat types and the limited project impacts are not expected to restrict the range of this species.

Yellow-breasted Chat. This species (for nesting) would not be expected to occur on the project site due to a lack of suitable habitat, although it may occur as a migrant. Therefore, project implementation would not result in any impacts on this species.

California Gull. The project site provides suitable roosting habitat and limited foraging opportunities for the California gull. However, project implementation would not substantially reduce these resources on the project site for the California gull. Therefore, project implementation would not result in any impacts on the California gull that would be considered as significant.

Elegant Tern. The elegant tern would not be expected to occur on the project site due to a lack of suitable habitat, although the elegant tern may be seen foraging offshore from the project site. Therefore, project implementation would not result in any impacts on this species.

Cooper's Hawk, Sharp-shinned Hawk, Short-eared Owl, Burrowing Owl, Ferruginous Hawk, Northern Harrier, White-tailed Kite, Merlin, Peregrine Falcon, and Prairie Falcon. project implementation would result in a diminished capacity of the project site to provide foraging opportunities for these species. This impact would contribute to the loss of foraging habitat for these ten raptor species. However, it is not considered significant due to the relatively large amount of similar foraging habitat available elsewhere in the coastal Los Angeles County basin area.

The Cooper's hawk, burrowing owl, northern harrier, white-tailed kite, prairie falcon, peregrine falcon, and osprey have potential to nest on the project site. In the event an active raptor nest (common or special status species) were found on the project site, the loss of the nest would be considered a violation of the California Fish and Game Code Sections 3503, 3503.5, and 3513. The loss of any active raptor nest occurring on the project site would be considered significant. The potential impact on these species would be reduced to less than significant with the implementation of specified mitigation which requires that a survey be conducted and avoidance measures implemented if an active nest is found.

Mammals

Pacific Pocket Mouse. One federally-listed Endangered mammal species, the Pacific pocket mouse, has a very limited potential to occur on the project site. Focused surveys for the Pacific pocket mouse would be required to determine the presence or absence of this species on the project site. If the focused surveys find that this species occurs on the project site, then federal take authorization would be required. Regulatory authorization can occur through either Section 7 or 10 of the FESA. The permitting process would require the preparation of a Biological Assessment and an HCP which would include a mitigation plan to avoid or minimize impacts to this species. This mitigation may include avoiding the habitat of this species or purchase of off-site habitat for this species. If this species is not found to occur on the project site, no FESA authorization to impact this species would be necessary and no mitigation would be warranted.

Pallid Bat, Pale Big-eared Bat, California Mastiff Bat, Small-footed Myotis, and Yuma myotis. The proposed project would impact both foraging and potentially suitable roosting habitat for these bat species. The loss of foraging habitat for these bat species would contribute to the ongoing regional and local loss of foraging habitat for these species.

Since these species are considered relatively common in the project region, impacts on these species are not considered significant, and no mitigation would be required.

San Diego Black-tailed Jackrabbit and San Diego Desert Woodrat. The proposed project would impact suitable habitat for the jackrabbit and woodrat. Since these species are considered relatively common in the project region, impacts on these species are not considered significant and no mitigation would be required.

5.4 SENSITIVE NATURAL COMMUNITIES/HABITATS

2) *The proposed project may impact portions of the Resort Hotel and Upper Point Vicente Areas which are habitat for referenced sensitive species. Implementation of specified mitigation measures would reduce impacts to a less than significant level.*

Refer to the *Indirect Impacts* section below for a discussion regarding the Project's indirect impacts on sensitive natural communities habitats.

Vegetation

A total of 132.70 acres of native and non-native vegetation types, including developed areas, would be impacted by the proposed project. These areas are discussed below, summarized in Table 4 and illustrated in 5 and 6.

Scrub Communities. A total of 4.91 acres of scrub communities would be impacted in the UPVA, which includes mixed coastal sage scrub (including burned and disturbed), , disturbed chenopod scrub, and southern cactus scrub. Impacts on these vegetation types would be considered significant because this habitat type has been reduced up to 80 percent of its historic coverage throughout Southern California and the potential for this habitat to support special status species, especially the gnatcatcher. Of the 4.91 acres of scrub communities impacted by the proposed project, 3.17 acres represent areas disturbed by either fire, past human disturbances, or invasion by non-native plant species. The disturbed communities typically require less mitigation or compensations through the CEQA and FESA permitting process. However, the project applicant has gone beyond that which is typically required and has provided for enough mitigation in the LPHCP to mitigate for these areas at the same ration as the non-disturbed scrub areas. The LPHCP would be implemented to reduce all impacts to scrub communities to a level of less than significant.

Coastal Bluff Scrub. A total of 0.10 acre of coastal bluff scrub and disturbed coastal bluff scrub would be impacted. Impacts on these vegetation types would be considered

significant due to the loss of this vegetation type in southern California and the potential for this habitat to support special status species. The applicant has prepared LPHCP which would be implemented to reduce these impacts to a level of less than significant. Mitigation has also been identified which involves modification of the development plan to avoid any affect to the Coastal Bluff Scrub area. If this area is avoided through slight project modifications, no impacts to this habitat type would occur, and impacts would be less than significant.

Mule Fat Scrub. One small area (0.02 acre) of mule fat scrub located on the western portion of the RHA site would be impacted by the proposed project. This area is not within an area identified as USACE and/or CDFG jurisdiction. Therefore, impacts to this area of mule fat scrub would not be considered significant.

An additional area of 0.03 acre of mule fat scrub would be impacted from construction of the proposed project in the southeast portion of the RHA. This area of mule fat scrub occur in association with an area identified as a "waters of the US" (see Exhibit 3). Impacts on this area of mule fat scrub vegetation would be considered significant due to the loss of this vegetation type in association with a riparian system subject to the jurisdiction of the ACOE and CDFG. Mitigation to reduce these impacts to a level of less than significant would consist of avoiding the jurisdictional area or restoring riparian habitat in the required ratio at either an onsite or offsite mitigation site as identified in the project applicant's USACE and CDFG permit/agreement. The ACOE and CDFG typically require a minimum of 1:1 replacement ratio.

Annual Grassland. A total of 18.07 acres of annual grassland would be impacted by project implementation. Impacts on this vegetation type would not be considered significant, since this vegetation type is abundant and is considered to have a low biological value.

Rocky Shore. The rocky shore would not be directly impacted by the proposed project as the Project's development area would not extend into this habitat.

Coastal Bluff. A small area (0.08 acre) of unvegetated coastal bluff would be impacted by project implementation. From a biological perspective, this impact would not be considered significant due to the lack of native vegetation covering the slopes in this small area.

Agricultural. A total of 4.48 acres of agricultural areas would be impacted by project implementation. Impacts on this vegetation type would not be considered significant, since this vegetation type is considered to have a low biological value.

TABLE 4
VEGETATION TYPES IMPACTED BY THE PROPOSED PROJECT

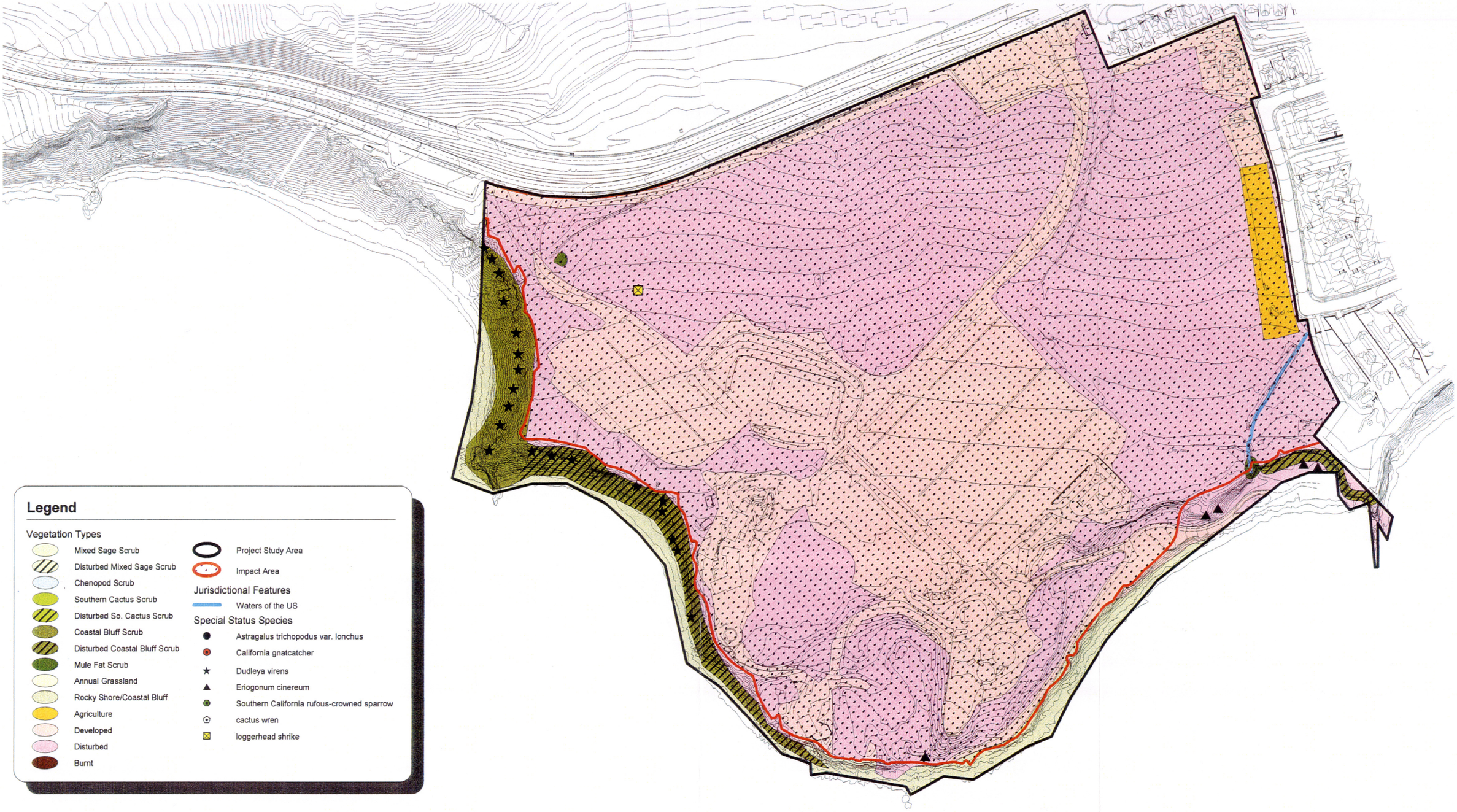
Vegetation Type	Upper Point Vicente Area (acres)	Resort Hotel Area (acres)	Total (acres)
Mixed Coastal Sage Scrub	0.41	0.00	**0.41**
Disturbed Mixed Coastal Sage Scrub	0.46	0.00	**0.46**
Burnt Disturbed Mixed Coastal Sage Scrub	0.01	0.00	**0.01**
Disturbed Chenopod Scrub	2.70	0.00	**2.70**
Southern Cactus Scrub	1.33	0.00	**1.33**
Disturbed Southern Cactus Scrub	0.00	0.00	**0.00**
Coastal Bluff Scrub	0.00	0.09	**0.09**
Disturbed Coastal Bluff Scrub	0.00	0.01	**0.01**
Mule Fat Scrub	0.00	0.05	**0.05**
Annual Grassland	18.07	0.00	**18.07**
Rocky Shore/Coastal Bluff	0.00	0.08	**0.08**
Agricultural	3.21	1.27	**4.48**
Disturbed	6.89	54.93	**61.82**
Developed	6.41	36.40	**42.81**
Disturbed Areas Outside Study Area	0.38	0.00	**0.38**
Total	**39.87**	**92.83**	**132.70**

Disturbed and Developed. A total of 104.63 acres of disturbed vegetation and developed areas would be impacted by project implementation. Impacts on these vegetation types would not be considered significant since this vegetation type is considered to have a low biological value.

Wildlife Impacts

To assess impacts on wildlife, the total impact on a given vegetation type that provides habitat for wildlife was evaluated. Exhibits 5 and 6 illustrate the vegetation types (i.e., wildlife habitat) that will be impacted as a result of construction of the proposed project. The following discussion of wildlife impacts focuses on the common species occurring on the project site. Impacts on special status wildlife species are discussed separately in Impact Statement -1 above.

General Habitat Loss, Wildlife Loss, and Habitat Fragmentation. Construction of the proposed project would result in the loss of approximately 90 acres of native and non-



Biological Resources Impacts Within the Resort Hotel Area

Exhibit 5

Long Point

N

150 0 150 300 Feet

Scale: 1" = 300'

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native habitats that provide valuable nesting, foraging, roosting, and denning opportunities for a wide variety of wildlife species. Removing or altering habitats on the project site would result in the loss of small mammals, reptiles, amphibians, and other animals of slow mobility that live in the proposed Project's direct impact area. More mobile wildlife species now using the project site would be forced to move into remaining areas of open space, consequently increasing competition for available resources in those areas. This situation would result in the loss of individuals that cannot successfully compete. However, direct impacts on the project site would be considered less than significant because they would not significantly reduce wildlife populations in the region.

Construction of the proposed project would also further fragment existing wildlife habitat on and adjacent to the project site. Both common and special status amphibian, reptile, and small mammal species populations on and in the vicinity of the project site would have reduced opportunities for genetic exchange. Birds and larger mammal species, which are more capable of crossing larger areas of inhospitable habitat would be affected to a lesser extent. Specifically, project implementation would displace many individuals of a wide range of species that currently use the site into native and non-native habitats that would be retained in the: 1) open space within the project site; 2) landscaping vegetation of the golf course and around the hotel grounds; and 3) remaining areas of open space in the vicinity of the project site. In addition, appropriate habitat for some species may not be available on the project site after construction. As a result, some species may be extirpated from the project site.

The loss of habitat, loss of wildlife, wildlife displacement, and habitat fragmentation that would result from construction of the proposed project would not be considered significant because these impacts would not substantially diminish habitat for wildlife in the region nor would it be anticipated to reduce any specific wildlife populations in the region to below self-sustaining numbers.

Indirect Impacts

Indirect impacts are those related to disturbance by construction (such as noise, dust, and urban pollutants) and long-term use of the project site and its effect on the adjacent habitat areas. The indirect impact discussion below includes a general assessment of the potential indirect affects (noise, dust and urban pollutants, lighting, human activity, and non-native species introduction), of the construction and operation of the UPVA and RHA. Particular focus is placed on the indirect effects on the natural open space area on the UPVA and RHA, collectively referred to as edge effects.

Edge effects occur where development, including roads, takes place adjacent to natural open space areas. Edge effects threaten the ecological integrity, recreational experience,

aesthetic quality, public investment, and safety operations of preserved natural areas. When development is configured in a manner that creates a high ratio of development edge to natural open space, there is an increase in the potential impacts caused by human use (indirect impacts). These indirect effects that address both the short-term construction and long-term use of the project site are outlined below.

Noise Impacts. Noise levels in the project site would increase over present levels during construction of the proposed project. During construction, temporary noise impacts have the potential to disrupt foraging, nesting, roosting, and denning activities for a variety of wildlife species. Because most species in the vicinity of the project site are not listed as Threatened or Endangered by state or federal resource agencies, these impacts are not considered significant. However, the coastal California gnatcatcher, raptor species, and cliff nesting and roosting species (i.e., peregrine falcon, California gull, osprey, California brown pelican, and double-crested cormorant) either occur or potentially occur within proposed natural open space areas on the UPVA and RHA sites. These species would incur temporary short-term impacts from construction noise, if present in the vicinity of the project site, and may be temporarily displaced due to these disturbances. Indirect noise impacts on these species would be considered significant because these species are protected by federal and state wildlife agencies. Impacts on these species would be reduced to less than significant levels with implementation of specified mitigation requiring that the most noise intensive construction activities, if conducted during the bird nesting season, be conducted outside of a 100-foot buffer area around identified nests.

Noise would also increase over present levels with implementation of the proposed project resort and recreational uses. However, the RHA is currently used by the movie industry and the UPVA is located adjacent to the Rancho Palos Verdes City Hall. Further, Palos Verdes Drive South bisects the two project areas (i.e., the UPVA and RHA). Therefore, the project site is currently periodically disturbed by noise. The UPVA is proposed to be developed as a golf course. The RHA is proposed to be developed into a hotel and recreational facilities. Although noise adjacent to the project site would increase over current noise levels, and would become more constant, this increase would not be such that it would substantially reduce common wildlife populations in the region. Therefore, a significant impact is not anticipated in this regard.

Species that roost or nest along cliffs and the rocky shore of the proposed open space areas may be indirectly impacted by the increase in noise on the RHA. This impact would be potentially significant. Implementation of the specified mitigation requiring that a landscaping buffer be planted along the boundary of developed land uses would reduce this impact to less than significant.

Increased Dust and Urban Pollutants. Grading activities would disturb soils and result in the accumulation of dust on the surface of the leaves of trees, shrubs, and herbs in the natural open space areas within the UPVA and RHA. The respiratory function of the plants in these areas would be impaired when dust accumulation is excessive. This indirect effect of construction of the proposed project on the native vegetation in the immediate vicinity of the construction area is not considered significant, since it would not reduce plant populations below self-sustaining levels. Therefore, no mitigation would be required.

Additional impacts on biological resources in the area may occur as a result of changes in water quality. Urban runoff from the proposed project containing petroleum residues and the potential for improper disposal of petroleum and chemical products from construction equipment (temporary) or infrastructure areas (i.e., vehicles, improper disposal of chemicals) (permanent) could affect water quality onsite and offsite. This, in turn, could affect populations of aquatic species including common and special status species. Water quality could also be affected by runoff of nutrients from landscape features of the proposed project, particularly the golf course. These impacts are considered potentially significant since runoff could indirectly impact areas containing important biological resources (i.e., coastal sage scrub in the UPVA open space and rocky shore areas in the RHA). These impacts would be reduced to less than significant with the implementation of mitigation. Specifically, the mitigation would require that the applicant apply for coverage under the State Water Resources Control Board's General Permit for Storm Water Discharge Associated with Construction Activity and comply with all of the provisions of the permit, including the development of a Storm Water Pollution Prevention Plan (which includes provisions for the implementation of Best Management Practices and erosion control measures).

Night Lighting. Lighting of the infrastructure would inadvertently result in an indirect effect on the behavioral patterns of nocturnal and crepuscular (i.e., active at dawn and dusk) wildlife that are present along the boundaries of the urban and natural areas of the UPVA and RHA. Of particular concern is the effect on small ground-dwelling animals that use the darkness to hide from predators, and on owls, which are specialized night foragers. In addition, the increase in night lighting could discourage nesting and roosting along the cliffs and rocky shore adjacent to the RHA. This increased lighting, in conjunction with the increased noise and habitat loss, would be considered potentially significant since it is adjacent to cliff nesting and roosting habitat. Implementation of the specified mitigation requiring that a lighting plan be prepared which directs lighting away from sensitive biological resources would reduce this impact to less than significant.

Human Activity. The increase in human activity (i.e., noise, foot traffic) would increase the disturbance of natural open space remaining on or adjacent to the UPVA and RHA. Human disturbance could disrupt normal foraging and breeding behavior of wildlife

remaining in these and adjacent areas diminishing the value of these preserved open space habitat areas.

Of particular concern is the location of golf course features within and adjacent to coastal sage scrub preservation and creation areas in the UPVA. Although trails will be established within the golf course area to keep golfers out of the natural areas, the proposed project has the potential for golfers to enter the natural areas to retrieve lost balls or other reasons. This disturbance would be considered potentially significant since it may significantly impact habitat protected by state and federal resource agencies. Implementation of mitigation including the following measures would reduce this impact to less than significant:

- Develop a Fencing Plan;
- Develop a Signage Plan; and
- Establish a transition zone to buffer natural habitats from developed areas.

Non-native Species Introduction. The native habitat types within the natural open space areas of the UPVA and RHA would be subject to greater pressure from non-native plant species within the developed portions of the UPVA and RHA. Areas that have undergone disturbance generally contain a high number of non-native grasses and forbs that can successfully out compete the native plants in the region. This will be especially true after initial project grading of both the UPVA and the RHA. Should non-native plants establish themselves in these areas prior to the establishment of native plant species or non-native/non-invasive plant species in the landscape areas, the non-natives may become invasive in the natural open space areas. Left uncontrolled, these "weeds" may begin encroaching into the natural open space areas of the UPVA and RHA that were not directly impacted during project grading. These impacts could become significant if uncontrolled. The implementation of the Long Point Habitat and Conservation Program which provides for the planting of native plant species will reduce this potential impact to less than significant.

5.5 WILDLIFE MOVEMENT

3) *Project implementation may interfere with the movement of a native resident or migratory wildlife species. Analysis has concluded that impacts are less than significant.*

The proposed development of the UPVA and RHA would not impact wildlife corridors, by definition, but would affect local travel routes. This may result in reduced connectivity between the open spaces to the east, north, and west of the UPVA. The steep cliffs of the RHA that are expected to provide a narrow linkage for wildlife east and west of the site will

be maintained as permanent open space and would not be impacted. The project design of the UPVA area has maintained a connection to the open space areas offsite. In addition, the preserved habitat areas onsite and the proposed coastal sage scrub creation areas on the UPVA site are expected to provide for local movement on and offsite. The discussion of preserved and created coastal sage scrub habitat on the UPVA site is discussed further below under the LPHCP.

5.6 LOCAL POLICIES/ORDINANCES

4) *Analysis has concluded that there are no impacts to any local policies or ordinances protecting biological resources, because there are no approved local policies and/or ordinances within the City of Rancho Palos Verdes regarding the protection of biological resources.*

There is currently no adopted Habitat Conservation Plan, NCCP, or other approved local, regional, or state habitat conservation plan that includes the project site. Therefore, no impacts to these adopted plans are expected to occur as a result of project implementation.

5.7 CUMULATIVE IMPACTS

5) *Cumulative development (including the proposed project) in the project area may impact the area's biological resources. Analysis has concluded that project implementation would not result in significant biological impacts with implementation of the specified mitigation and the City's development of the NCCP program.*

When viewed in conjunction with other major developments planned for the Rancho Palos Verdes, the loss of coastal sage scrub and other native vegetation, as well as the loss of wildlife habitat and the displacement of wildlife species in the project area, could be considered a negative cumulative effect. However, cumulative impacts to coastal sage scrub habitat are currently being mitigated on a project-by-project basis and in accordance with the City's NCCP program that is currently being developed.

In the absence of an approved NCCP program, cumulative impacts to coastal sage scrub by the proposed project and recently approved projects by the City will be mitigated to a level of less than significant through mitigation requirements (preservation/enhancement/restoration) of the 4 (d) special rule process and the proposed LPHCP.

As it is intended, the NCCP can offset cumulative impacts in the region through the preservation and adaptive management of large reserve systems, which provide habitat

for special status species. As the lead agency for the City of Rancho Palos Verdes subregion NCCP, the City has contributed both time and money toward its development and implementation, which include the process of developing a habitat preserve through land acquisition. The City is currently in the process of identifying the preferred preserve design for the program with the help of the major landowners, local government, state and federal resources agencies, and environmental organization representatives. The proposed project is consistent with the preferred preserve design and the project applicant is a participating landowner in the NCCP program. With the project Applicant's proposed mitigation for biological impacts (LPHCP), the previously approved mitigation plans through the 4(d) process, and the eventual approval and adoption of the City of Rancho Palos Verdes subregion NCCP, potential cumulative impacts to biological resources will be reduced to a level of less than significant.

6.0 MITIGATION MEASURES

The following mitigation measures directly correspond to the identified impact statements in the Impact subsections.

6.1 SPECIAL STATUS BIOLOGICAL RESOURCES

1a) A pre-construction survey for the island green dudleya shall be conducted during the peak flowering period prior to Grading Permit Issuance (approximately April through June), by the project biologist. The limits of each impacted dudleya location shall be clearly marked with lath and brightly colored flagging.

If any of the dudleya is located in the impact area, the loss of the dudleya shall be mitigated by seed and corm collection, and revegetation into a suitable mitigation site in the undeveloped portion of the project site or at an off-site location. A qualified biologist shall be selected by the applicant to prepare and implement the mitigation plan. The detailed mitigation plan shall include the following requirements:

- The existing locations of dudleya shall be monitored every two weeks by the project biologist to determine when the seeds are ready for collection. A qualified seed collector shall collect all of the seeds from the plants to be impacted when the seeds are ripe. The seeds shall be cleaned and stored by a qualified nursery or institution with appropriate storage facilities.
- Following the seed collection, the corms shall be dug up and stored by a qualified nursery or institution with appropriate storage facilities. The top 12 inches of topsoil from the dudleya locations shall be scraped, stockpiled, and used at the selected mitigation site.

- This mitigation shall be conducted concurrent with the coastal sage scrub and coastal bluff scrub mitigation. The site shall be located in dedicated open space on the project site or at an offsite mitigation site. The selected site should not attempt to enhance existing populations.

- The dudleya mitigation site shall be prepared for seeding as described in a conceptual restoration plan.

- The topsoil shall be respread in the selected location as approved by the project biologist. Approximately 60 percent of the seeds and corms shall be spread/placed in the fall following soil preparation. Forty percent of the seed and corms shall be kept in storage for subsequent seeding, if necessary.

- The plan shall include detailed descriptions of maintenance appropriate for the site, monitoring requirements, and annual reports requirements. In addition, the project biologist shall have the authority to suspend any operation on the project site which is, in the project biologist's opinion and confirmed by the City, not consistent with the restoration plan. Any disputes regarding the consistency of an action with the mitigation plan shall be resolved by the applicant and the project biologist.

- The performance criteria developed in the maintenance and monitoring plan shall include requirements for a minimum of 60 percent germination of the number of plants impacted. The performance criteria should also include percent cover, density, and seed production requirements. This criteria shall be developed by the project biologist following habitat analysis of an existing high-quality dudleya habitat. This information shall be recorded by a qualified biologist.

- If the germination goal of 60 percent is not achieved following the first season, remediation measures shall be implemented prior to seeding with the remaining 40 percent of seed. Remedial measures shall include at a minimum: soils testing, control of invasive species, soil amendments, and physical disturbance (to provide scarification of the seed) of the planted areas by raking or similar actions. Additional mitigation measures may be suggested as determined appropriate by the project biologist.

- Potential seed sources from additional donor sites shall also be identified in case it becomes necessary to collect additional seed for use on the site following performance of remedial measures.

1b) Pre-construction special status plant surveys shall be conducted to determine the presence or absence of aphanisma, south coast saltscale, Catalina crossosoma, Santa Catalina Island desert-thorn, and Lyon's pentachaeta. The focused surveys for these species shall be conducted during the appropriate blooming period (spring) prior to Demolition Permit Issuance. In the event any of these species are found to be present on the project site, then mitigation measures shall be developed in consultation with the appropriate resource agencies if the status of the species and the size of the population warrant a finding of significance. Appropriate

mitigation may include avoidance of the populations, relocation, or purchase of off-site populations for inclusion to adjacent open space areas.

1c) Prior to Demolition Permit Issuance, a focused survey for the Palos Verdes blue butterfly shall be conducted according to methods approved by the USFWS. In the event that the focused surveys find that this species occurs on the project site, then authorization from the USFWS shall be required. Authorization can occur through either Section 7 or 10 of the FESA. The authorization process would require the preparation of a Biological Assessment or HCP which would include a mitigation plan to avoid or minimize impacts to this species. This mitigation may include avoiding the habitat of this species, or purchasing of off-site habitat for this species.

1d) Prior to Demolition Permit Issuance, the project applicant will require compliance with the FESA with regards to any impacts to the coastal California gnatcatcher. The LPHCP has been developed to ensure compliance with FESA and to be consistent with the City's NCCP, when adopted. The LPHCP would provide for the creation of 16.80 acres of new coastal sage scrub habitat area (UPVA Conservation Planning Area and Recreation Area). This, combined with the 14.63 acres of existing coastal sage scrub habitat, the 4.44 acres of coastal bluff scrub habitat, and the 3.87 acres of rocky shore/coastal bluff habitat that would be retained, would result in the protection and creation of a total of 39.74 acres of coastal sage scrub, coastal bluff scrub, and rocky shore/coastal bluff habitat. The 16.80 acres of restored and newly created habitat represents a replacement ratio of 3.4 to 1 (3.4 acres restored/created habitat for every 1 acre removed) for the 5.00 acres of coastal sage scrub and coastal bluff scrub impacted by the proposed project. With the addition of 22.94 acres of preserved coastal sage scrub, coastal bluff scrub, and rocky shore/coastal bluff to the mitigation program, the compensation ratio is over 7 to 1, far above typical mitigation standards of 2 to 1 and 3 to 1.

1e) Thirty days prior to commencement of demolition activities, a qualified biologist shall conduct a survey to determine whether Cooper's hawk, burrowing owl, northern harrier, white-tailed kite, prairie falcon, and peregrine falcon, or other raptor species, are nesting in or adjacent to the impact area. In the event nesting is not occurring, construction work shall proceed. In the event an active nest is present, construction work shall be prohibited within 500 feet of the nest (or as otherwise determined by the project biologist) until fledglings have left the nest. Results of the surveys shall be provided to USFWS, CDFG, and the City of Rancho Palos Verdes.

1f) Prior to Demolition Permit Issuance, a focused survey for the Pacific pocket mouse shall be conducted according to methods approved by the USFWS. In the event that the focused surveys find that this species occurs on the project site, then

authorization from the USFWS shall be required. Authorization can occur through either Section 7 or 10 of the FESA. The authorization process would require the preparation of a Biological Assessment or HCP which would include a mitigation plan to avoid or minimize impacts to this species. This mitigation may include avoiding the habitat of this species or purchasing off-site habitat for this species.

6.2 SENSITIVE NATURAL COMMUNITY

2a) The LPHCP shall be implemented prior to the Certificate of Occupancy, to the satisfaction of the City. The Program shall contain habitat restoration and enhancement design details for the Conservation Planning Areas through revegetation with drought-tolerant species, transitional areas of planting between the Conservation Area and Resort Hotel/Recreation Planning Areas, and design for long-term sustainability. In addition, the Project's drainage and surface runoff shall be directed away from the bluff habitat areas in the RHA.

2b) The seed mix for the coastal bluff scrub restoration area shall include California box-thorn and woolly sea-blite.

2c) Prior to Grading Permit issuance, fencing shall be installed along the edge of all conservation, restoration, and enhancement areas to discourage human encroachment into those areas that would not be encroached upon as a result of project implementation.

2d) Prior to Grading Permit issuance, signs shall be placed on all fences in these areas prohibiting entrance into these areas.

2e) Prior to the issuance of Building Permits, areas adjacent to golf course activities shall be protected in compliance with City requirements.

2f) Earth-moving equipment shall not maneuver in areas outside the identified limits of grading in order to avoid disturbing open space areas that are proposed to remain undeveloped. Prior to Grading Permit issuance, the natural open space limits shall be marked by the construction supervisor and the project biologist. These limits shall be identified on the grading plan. The applicant shall submit a letter to the City of Rancho Palos Verdes verifying that construction limits have been flagged in the field. No earth-moving equipment shall be allowed within the open space areas.

2g) The project development plan shall be modified to avoid any construction/development impact upon coastal bluff scrub and disturbed coastal bluff scrub areas.

2h) The project development plan shall be modified to avoid any construction/development impact to any areas subject to jurisdiction of the ACOE and CDFG. If these areas are not avoided, prior to Grading Permit issuance, the project applicant shall receive a permit and/or agreement from the USACE and CDFG for any impacts to areas within their jurisdiction as part of the proposed project.

Prior to the final submittal of an application for an ACOE permit or CDFG agreement, the project applicant shall develop a riparian restoration plan for the ACOE, CDFG, and City of Rancho Palos Verdes. The objective of the mitigation is to ensure no net loss of habitat values as a result of the project. Prior to implementation, a detailed restoration program shall be developed and shall contain the following items:

- *Responsibilities and qualifications of the personnel to implement and supervise the plan.* The responsibilities of the landowner, specialists and maintenance personnel that would supervise and implement the plan shall be specified.

- *Site selection.* The site for the mitigation shall be determined in coordination with the project applicant, City staff, and resource agencies. The site shall be located in a dedicated open space area and shall be contiguous with other natural open space.

- *Site preparation and planting implementation.* Site preparation shall include: 1) protection of existing native species, 2) trash and weed removal, 3) native species salvage and reuse (i.e. duff), 4) soil treatments (i.e., imprinting, decompacting), 5) temporary irrigation installation, 6) erosion control measures (i.e., rice or shallow wattles), 7) seed mix application, and 8) container species.

- *Schedule.* A schedule shall be developed which includes planting to occur in late fall and early winter, between October and January 30.

- *Maintenance plan/guidelines.* The maintenance plan shall include: 1) weed control, 2) herbivory control, 3) trash removal, 4) irrigation system maintenance, 5) maintenance training, and 6) replacement planting.

- *Monitoring Plan.* The monitoring plan shall include: 1) qualitative monitoring (i.e., photographs and general observations), 2) quantitative monitoring (i.e., randomly placed transects), 3) performance criteria as approved by the resource agencies, 4) monthly reports for the first year and bimonthly reports thereafter, and 5) annual reports which shall be submitted to the resource agencies for three to five years. The site shall be monitored and maintained for five years to ensure successful establishment of riparian habitat within the restored and created areas; however, if there is successful coverage prior to five years, the project

applicant may request from ACOE and CDFG to be released from monitoring requirements.

- *Long-Term Preservation.* Long-term preservation of the site shall be outlined in the conceptual mitigation plan to ensure the mitigation site is not impacted by future development.

- *Performance standards shall be identified and shall apply for the restoration of riparian habitat.* Revegetation shall be considered successful at three years if the percent cover and species diversity of the restored and/or created habitat areas are similar to percent cover and species diversity of adjacent existing habitats, as determined by quantitative testing of existing and restored and/or created habitat areas.

2i) A revegetation program shall be implemented in accordance with the landscape palette developed for the LPHCP or as approved by the agencies. The revegetation program shall be submitted to the City of Rancho Palos Verdes for review and approval prior to Grading Permit issuance.

2j) Prior to the initiation of grading activities, a 100-foot (or other distance determined appropriate by a biological monitor) buffer area, shall be established around each gnatcatcher nest, during the nesting season (February-July) to avoid indirect noise impacts. No heavy equipment operation, or otherwise high noise generating activity, shall occur within the buffer area until nesting activity has ceased. Results of the surveys and nest monitoring will be provided to USFWS, CDFG, and the City of Rancho Palos Verdes.

2k) Prior to the issuance of occupancy permits, a lighting plan will be submitted to the City of Rancho Palos Verdes for review and approval to demonstrate that lighting from the proposed project will be directed away from natural open space areas on and adjacent to the project site, as well as proposed biological resources mitigation sites.

6.3 WILDLIFE MOVEMENT

3) No mitigation measures are required.

6.4 LOCAL POLICIES/ORDINANCES

4) No mitigation measures are required.

6.5 CUMULATIVE

5) No mitigation measures are required.

7.0 LEVEL OF SIGNIFICANCE AFTER MITIGATION

No unavoidable significant impacts related to biological resources have been identified following implementation of recommended mitigation measures and compliance with the City Development Code.

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15.3.2 Draft Biological Resources Report and Impact Assessment (September 1999)

NOTE TO READER:

IT SHOULD BE NOTED THAT THE FOLLOWING DRAFT BIOLOGICAL RESOURCES REPORT (SEPTEMBER 1999) CONTAINS OUTDATED INFORMATION AND HAS BEEN SUPERCEDED BY THE REPORT AND SURVEYS CONDUCTED BY BONTERRA CONSULTING.

DRAFT
BIOLOGICAL RESOURCES REPORT AND IMPACT ASSESSMENT FOR LONG POINT SPECIFIC PLAN RANCHO PALOS VERDES, CALIFORNIA

Prepared for:

CITY OF RANCHO PALOS VERDES

30940 Hawthorne Boulevard

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September 1999

TABLE OF CONTENTS

Section **Page**

TABLE OF CONTENTS *(Continued)*

Section **Page**

LIST OF APPENDICES

LIST OF FIGURES

LIST OF TABLES

SUMMARY OF FINDINGS

The Long Point Specific Plan project site occupies 315.78 acres of mostly open land in the western portion of the City of Palos Verdes, Los Angeles County, California. Topography and vegetation of the site are moderately diverse. Biological resources surveys were conducted in April and May, 1998, and will continue through June, 1998. The site was revisited to confirm the vegetation mapping and to conduct additional surveys in June 1999. Based on species composition and general physiognomy, three native plant communities or habitat types including disturbed forms were identified onsite: coastal sage scrub (15.88 acres), southern cactus scrub (3.30 acres) and coastal bluff scrub (22.94 acres). In addition, three altered or non-native habitat types are present: non-native (annual) grassland (105.68 acres), developed (53.43 acres) and disturbed habitat (106.76 acres).

One species of plant considered sensitive by various resource agencies occurs on the site: bright green dudleya (*Dudleya virens*).

One animal species listed as threatened by the USFWS, coastal California gnatcatcher (*Polioptila californica californica*), was observed on the site. DUDEK is not aware of any other occurrences of listed wildlife on the Long Point project site; however, DUDEK did not have access to Subregion 1. One species formerly recognized as a Category 2 candidate for listing by the USFWS also was observed on the site: loggerhead shrike (*Lanius ludovicianus*). The cactus wren (*Campylorhychus brunneicapillus*), recognized as a "species of special concern" by the CDFG, and an NCCP focal species, also was observed onsite during the spring, 1998 surveys.

The Long Point Specific Plan proposes to develop portions of the subject area. The development includes the Long Point Resort, with hotel, bungalows, restaurants, meeting rooms, swimming pools and gardens; a public, 18-hole, golf course, conservation areas, a 14-mile long system of public trails, public open space and recreation facilities. The development would permanently impact ___. Temporary impacts due to utility construction include __.

The impacts of the project would be in conformance with the Natural Communities Conservation Program (NCCP) for this region as it will be a fully-integrated part of this plan. In other words, the Long Point Specific Plan will need to be approved through the NCCP approval process.

1.0 INTRODUCTION

The Long Point Specific Plan area consists of 222.1 acres situated in the western portion of the City of Rancho Palos Verdes in Los Angeles County, California. The project site is composed of four specific plan areas: Subregion 1 (39.0 acres), Upper Point Vicente (68.3 acres), Lower Point Vicente (11.4 acres) and the Resort Center (103.5 acres). Biological surveys of the property were conducted by biologists from Dudek & Associates, Inc. (DUDEK) in April-June, 1998 and again in June 1999 to assess the existing conditions of biological resources onsite.

The purposes of this report are to describe the biological character of the site in terms of vegetation, flora, wildlife, and wildlife habitats, analyze the biological significance of the site in view of federal, state and local laws and policies, assess the impacts of the proposed plan and discuss the proposed plan in terms of conformance with regional conservation planning efforts.

2.0 METHODS AND SURVEY LIMITATIONS

Data regarding biological resources present on the project site were obtained through a review of pertinent literature and through field reconnaissance; both are described in detail below.

2.1 Literature Review

Sensitive biological resources present or potentially present onsite were obtained from the vegetation and sensitive species mapping performed for the City of Rancho Palos Verdes' Draft Natural Communities Conservation Plan (NCCP) currently being prepared by Ogden Environmental (1998). General information regarding wildlife species present in the region was obtained from the Ocean Trails Habitat Conservation Plan (HON Development 1995), the Portuguese Bend Project (DUDEK 1996) and other sources including Manomet Bird Observatory (Atwood et al 1996, 1998) and Emmel and Emmel (1973) for butterflies.

2.2 Field Reconnaissance

Recent biological surveys of the property were conducted on the Upper Point Vicente and Resort Center areas by biologists Harold A. Wier, Sherri L. Miller, Paul E. Walsh, Vipul R. Joshi and Brock A. Ortega of DUDEK. Wier and Miller conducted the vegetation and sensitive plants surveys on April 28, 1998. Ortega conducted the California gnatcatcher surveys between May 15 and June 5, 1998. Wier, Walsh and Joshi verified the vegetation and wetlands mapping and conducted a focused botany survey for three host plants of regional sensitive butterflies on June

15, 1999. Surveys were conducted predominantly by foot, with a small amount of vegetation polygon checking done by vehicle. All of the Upper Point Vicente and Resort Center areas were surveyed and inventoried for biotic components. No field surveys of the Subregion 1 and Lower Point Vicente Specific Plan Areas were conducted by DUDEK.

2.2.1 Resource Mapping

Plant communities were mapped for the Upper Point Vicente and Resort Center areas on April 28, 1998, in the field directly onto a clear acetate over a 200-scale (1"=200') aerial photograph of the area from Aerial Fotobank, flown in 1997. Previously mapped vegetation polygons provided by Ogden Environmental were consulted during the field survey. Vegetation boundaries were then transferred onto a 200-scale topographic map of the site provided by RBF. The vegetation boundaries and locations of sensitive species were digitized by DUDEK GIS technician Martie Clemons using ArcCAD. DUDEK did not have access to the Subregion 1 and Lower Point Vicente areas and could not field-check the vegetation community polygons provided by Ogden from the NCCP database. All areas, with the exception of the Subregion 1 and Lower Point Vicente areas, were rechecked in 1999 using the vegetation maps produced in 1998 by DUDEK and a 200-scale aerial photograph.

Plant community classifications used in this report follow Holland (1986), with modifications to accommodate the lack of conformity of the observed communities to those of Holland. Locations of rare or sensitive plant and wildlife species also were mapped, and the numbers present were estimated.

A jurisdictional delineation of "waters of the United States" and wetlands under the jurisdiction of the U.S. Army Corps of Engineers and California Department of Fish and Game was conducted at the project site on April 28, 1998. U.S. Army Corps of Engineers jurisdictional wetlands were delineated in accordance with the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual (TR Y-87-1). The dimensions of one non-wetland jurisdictional area, an incised channel, was transferred to the topographic base as a linear feature and digitized into an ArcCAD file.

2.2.2 Flora

All plant species encountered during the field surveys were identified and recorded. Those species that could not be identified immediately were brought into the laboratory for further investigation. Latin and common names of plants follow the Jepson Manual (Hickman 1993). Where not listed

in Hickman (1993), common names are taken from Beauchamp (1986) or Abrams (1923). A cumulative list of plant species observed on the property during any of the surveys is presented in Appendix A.

The 1999 survey focused on detected three host plants of regionally sensitive butterflies: locoweed *(Astragalus trichopodus)*, deerweed *(Lotus scoparius)* and ashy-leaved buckwheat *(Eriogonum cineracens)*. The Lower Point Vicente and Resort Center areas were surveyed for these species, where found the location and number of individuals was estimated and recorded on 200-scale topographic maps.

2.2.3 Fauna

Wildlife species detected during field surveys by sight, calls, tracks, scat, or other sign were recorded. Binoculars were used to aid in the identification of observed animals. Records from previous biological studies (i.e., Portuguese Bend and Ocean Trails) also were consulted. In addition to species actually observed, expected wildlife use of the site was determined by known habitat preferences of local species and knowledge of their relative distributions in the area. A list of wildlife species observed or detected onsite during the 1998 surveys is presented in Appendix B.

Latin and common names of animals follow Stebbins (1985) for reptiles and amphibians, American Ornithologists' Union (1983, 1989) for birds, Jones et al. (1992) for mammals, and Emmel and Emmel (1973) for butterflies.

2.2.4 Sensitive Biological Resources

Sensitive biological resources are those defined as follows: (1) species that have been given special recognition by federal, state, or local conservation agencies and organizations due to limited, declining, or threatened population sizes; (2) species and habitat types recognized by local and regional resource agencies as sensitive; (3) habitat areas or plant communities that are unique, are of relatively limited distribution, or are of particular value to wildlife; and (4) wildlife corridors and habitat linkages.

The primary purpose of the initial field surveys was to make a special effort to examine thoroughly those areas suspected to support sensitive resources, based on data gathered for the Draft NCCP, and to determine the extent of those resources. Considerably more time was spent

in or in proximity to coastal sage scrub and coastal bluff scrub than in other (i.e., disturbed) habitats. All previously-mapped sensitive plant populations were re-surveyed by DUDEK in April, May and June, 1998 and again in June 1999. In addition to sensitive resources, a focused search for host plants of sensitive butterfly species known from the region was conducted. Focused California gnatcatcher surveys were conducted in May and June, 1998. The 1998 surveys for the federally-listed threatened California gnatcatcher (*Polioptila californica*) were conducted following the USFWS protocol: three surveys of each 100-acre potential habitat area, each survey separated by one week. The timing of the surveys was nearly optimal for the detection of most annual plants, and ambient temperatures were often warm enough for the detection of many summer-active reptiles.

2.3 Survey Limitations

Limitations of the surveys include a diurnal bias, and the absence of focused trapping for mammals and reptiles. Surveys were conducted mostly during the daytime to maximize visibility for the detection of plants and most animals. Birds represent the largest component of the vertebrate fauna, and because they are active in the daytime, diurnal surveys maximize the number observations of this portion of the fauna. In contrast, daytime surveys usually result in few observations of mammals, many of which may be active at night. In addition, many species of reptiles and amphibians are secretive in their habits and are difficult to observe using standard meandering transects.

As the surveys were conducted during April, May and June, seasonal constraints represent only a minimal limitation.

3.0 PHYSICAL CHARACTERISTICS

3.1 Site Description

The Long Point Specific Plan project site is situated in the western portion of the City of Rancho Palos Verdes in western Los Angeles County, California (*Figure 1*) and consists of four specific plan areas. The project site occupies a portion of the Redondo Beach U.S. Geological Survey 7.5 minute quadrangle (*Figure 2*).

The topography and vegetation of the site are heterogeneous. Elevations range from about 10 to 320 feet above mean sea level.

Resort Center Area

The southeastern portion of the plan is referred to as the Resort Center area. This area is mainly owned by York Long Point Associates and was operated as the Marineland Aquatic Park from 1954 to 1987; it is bordered to the south and west by the Pacific Ocean, to the east by a residential subdivision and to the north by Palos Verdes Drive South. The majority of the Resort Center currently is mostly vacant land dominated by cultivated ornamentals and disturbed, non-native plants; only the steep coastal bluffs support a native scrub plant community. The site contains numerous asphalt roads and parking lots, as well as abandoned structures, once a part of the Marineland complex. A small portion of this parcel (1.4 acres) located on the eastern boundary is known as the Cigna property and is under different ownership. This property has been used for agricultural purposes and as a residence since 1912.

Upper Point Vicente Area

The middle, easternmost portion of the plan is referred to as the Upper Point Vicente area. This area is mainly owned by the City of Rancho Palos Verdes and is bordered to the south and west by Palos Verdes Drive South, to the north by Hawthorne Boulevard and to the east by the Salvation Army property which contain tennis courts and several buildings. The parcel contains a municipal administration complex, a small farming enterprise and open space. A small portion of this parcel (3.9 acre) is under the ownership of the U.S. Coast Guard and contains an abandoned NIKE missile site and a World War II-era bunker, located west of the City complex. The open space consists mainly of disturbed, non-native habitat but also includes the native plant communities coastal sage scrub and southern cactus scrub.

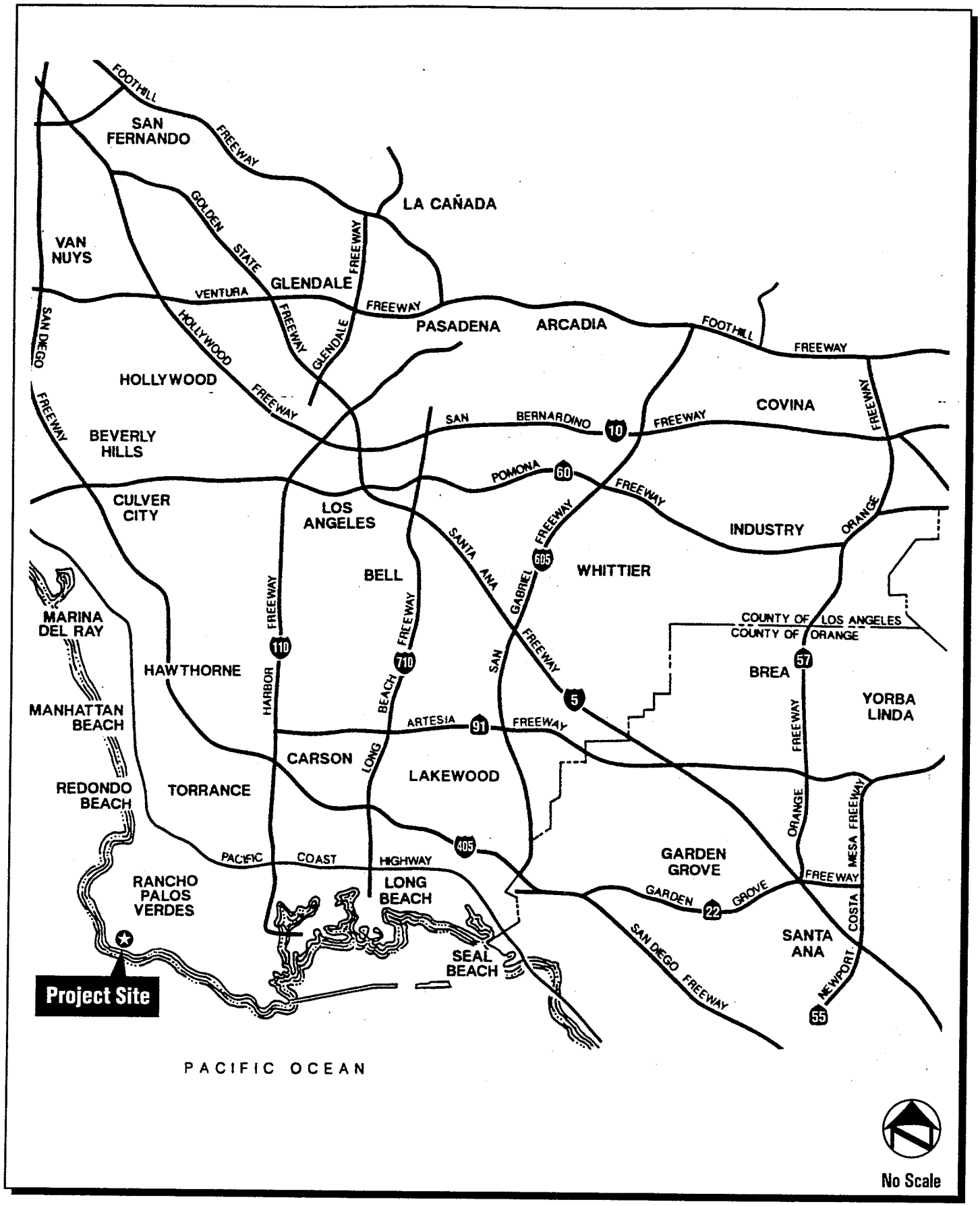
Subregion 1 Area

The northernmost portion of the plan is referred to as Subregion 1 area. This specific plan area is owned by the City of Rancho Palos Verdes and is divided into three sections excluding a residential development owned by Capital Pacific Holdings. The western most boundary reaches the top of the ocean cliffs, but does not extend to the ocean. The eastern most boundary is Palos Verdes Drive South. Access to this property was not obtained and a site visit was not conducted.

However, aerial photographs and the NCCP database indicate the presence of a single patch of coastal sage scrub surrounded by recent grading..

Lower Point Vicente Area

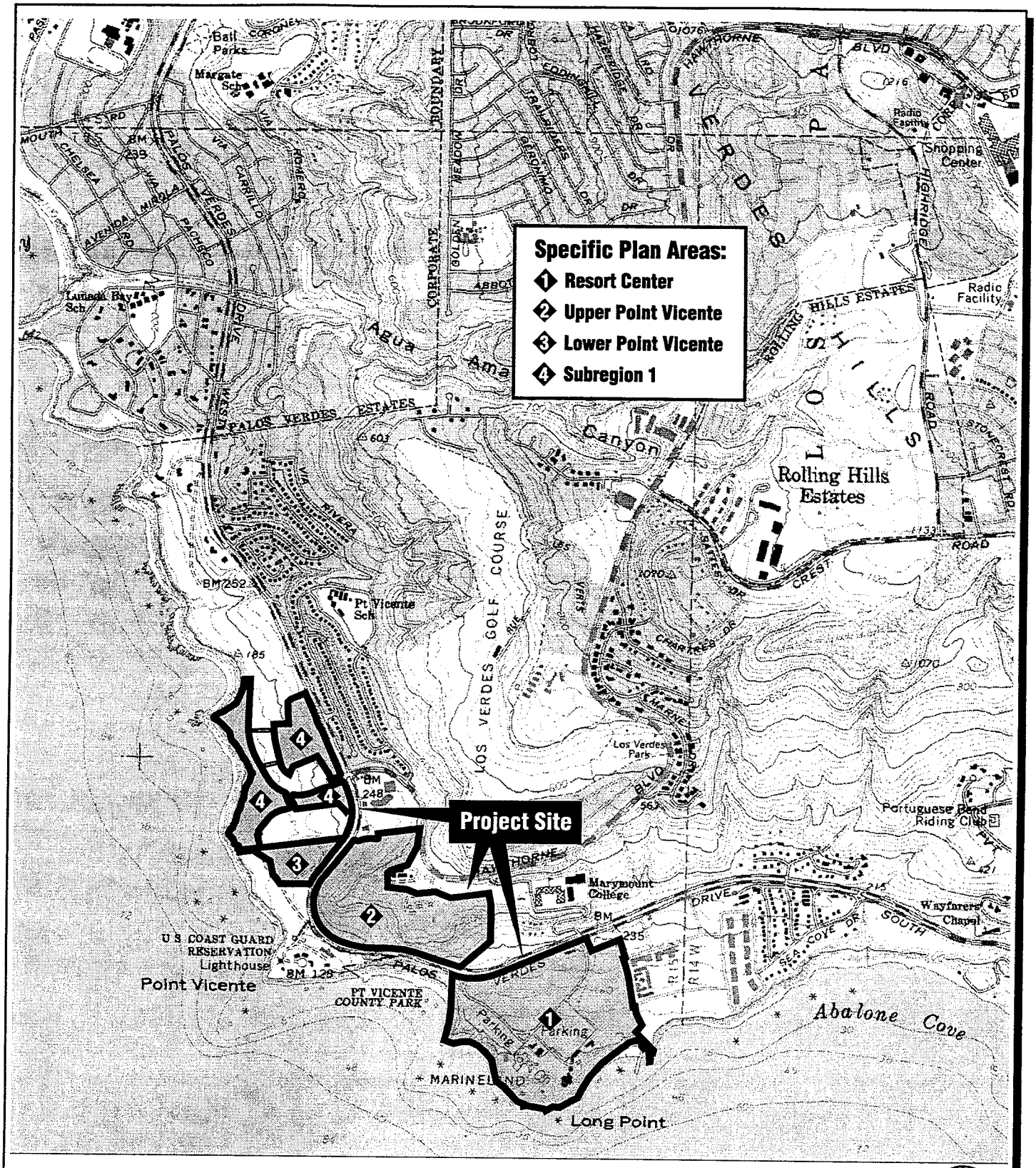
A small parcel (11.2 acres) located west of Upper Point Vicente and south of Subregion 1, is owned by the County of Los Angeles and is currently leased by the City of Rancho Palos Verdes and is referred to as the Lower Point Vicente specific plan area. This area is bordered by residential development to the north, the County park to the west and south and Palos Verdes Drive South to the north. This parcel contains mostly non-native habitats with limited development.



Long Point Specific Plan - Biological Resources Report & Impact Analysis

Regional Map

FIGURE 1



BASE MAP SOURCE: USGS 7.5 Minute Series, Redondo Beach Quadrangle

1" = 2000'

Long Point Specific Plan - Biological Resources Report & Impact Analysis

Vicinity Map

FIGURE 2

4.0 RESULTS OF SURVEY

4.1 Botany - Plant Communities and Floral Diversity

Owing to past and current land uses, the vegetation over a large portion of the project site is in a disturbed state. Disturbed areas represented a considerable challenge to map accurately, and it was necessary to develop a few criteria for categorizing habitats. Vegetated areas that supported less than 10 percent native shrub cover (based on a visual assessment) were considered disturbed habitat. Where native shrub density represented at least 10 percent of the vegetative cover (based on a visual assessment) and the individual shrubs were typical of coastal sage scrub (e.g., *Eriogonum cinereum*, *Artemisia californica*, *Baccharis pilularis, Encelia californica*), the habitat was mapped as disturbed coastal sage scrub. Where these species were present at greater than 50%, the community was categorized as coastal sage scrub. Those scrub areas wherein coastal prickly-pear (*Opuntia littoralis*) provided greater than 20% cover, were categorized as southern cactus scrub (i.e., the undisturbed form). Vegetation on steep slopes dominated by shrubs typical of coastal bluff scrub (e.g., *Atriplex* spp., *Lycium californicum*, *Encelia californica*, *Dudleya* virens, etc.) were mapped as such.

Based on species composition and general physiognomy, three native plant communities or habitat types were identified onsite. In addition, three altered or non-native habitat types are present, and categories for developed land and non-vegetated beach are included. These habitat types or land covers are described below, their acreages are presented in *Table 1*, and their spatial distributions are presented in the Biological Resources Map in the map pocket.

TABLE 1
ACREAGES BY HABITAT TYPE

Specific Plan Area	Habitat Type	Acreage
Resort Center Area	Coastal Bluff Scrub	1.2
	Disturbed Coastal Bluff Scrub	4.4
	Beach	2.5
	Agriculture	1.3
	Disturbed Habitat	57.3
	Developed Land	36.9
	TOTAL	**103.5**
Upper Point Vicente	Coastal Sage Scrub	3.6
	Disturbed Coastal Sage Scrub	3.3
	Southern Cactus Scrub	9.8
	Disturbed Southern Cactus Scrub	1.0
	Annual Grassland	27.0
	Agriculture	3.6
	Disturbed Habitat	13.4
	Developed Land	6.6
	TOTAL	**68.3**
Lower Point Vicente	Annual Grassland	3.8
	Agricultural	7.6
	TOTAL	11.4
Subregion 1	Coastal Sage Scrub	2.6
	Annual Grassland	0.1
	Disturbed Habitat	36.3
	TOTAL	**39.0**
TOTAL		**222.1**

4.1.1 Coastal Sage Scrub

Coastal sage scrub is a native plant community composed of a variety of soft, low, aromatic shrubs, characteristically dominated by drought-deciduous species such as California sagebrush

(*Artemisia californica*), buckwheats (*Eriogonum* spp.) and sages (*Salvia* spp.), with scattered evergreen shrubs, including lemonadeberry (*Rhus integrifolia*), laurel sumac (*Malosma laurina*) and toyon (*Heteromeles arbutifolia*). It typically develops on south-facing slopes and other xeric situations.

Onsite coastal sage scrub is typified by California sagebrush, ashy-leaved buckwheat (*Eriogonum cinereum*), white sage (*Salvia apiana*), bladderpod (*Isomeris arborea*) and coast cholla (*Opuntia prolifera*). This community supports a diverse understory of native herbs and forbs, including bright green dudleya (*Dudleya virens*), blue dicks (*Dichelostemma capitatum*) and several species of grasses, both native and introduced. The primary introduced grass is slender wild oat (*Avena barbata*).

Large portions of the site that probably historically supported coastal sage scrub have been disturbed severely or repeatedly by clearing and mowing activities. These areas include a much higher percent cover of non-native grasses and a lower density of native shrubs. Where native shrub density was greater than 50 percent, the habitat was mapped as coastal sage scrub; where native shrub density was 10 to 50 percent, the habitat was mapped as disturbed coastal sage scrub. Where native shrub density was less than 10 percent, the habitat was mapped as disturbed habitat or annual grassland.

Coastal sage scrub is recognized as a sensitive plant community by local, state, and federal resource agencies. It supports a rich diversity of sensitive plants and animals, and it is estimated that it has been reduced by 75-80% of its historical coverage throughout southern California.

4.1.2 Southern Cactus Scrub

Southern cactus scrub is not recognized as a native plant community by Holland (1986); however, it is a distinct vegetational association in Southern California. This vegetation type is very similar to coastal sage scrub and shares many common species, such as buckwheats and California sagebrush, but is dominated by coastal prickly-pear (*Opuntia littoralis*).

The onsite community type is comprised primarily of coastal prickly-pear, ashy-leaved buckwheat, bright green dudleya, wishbone bush, tree tobacco (*Nicotiana glauca*), melic (*Melica imperfecta*), wild cucumber (*Marsh macrocarpus*)and purple needlegrass (*Nassella pulchra*).

4.1.3 Coastal Bluff Scrub

Coastal bluff scrub is a native plant community composed primarily of woody and/or succulent plants, up to two meters tall. Characteristic species include saltbushes (*Atriplex* spp.), various dudleyas (*Dudleya* spp.), wild cucumber (*Marah macrocarpus*), California bush sunflower (*Encelia californica*), morning glories (*Calystegia* spp.) and coastal prickly pear. This community is typically found on steep cliffs or bluffs with rocky or poorly developed soils.

Onsite coastal bluff scrub contains coastal prickly pear, cholla, bright green dudleya, California bush sunflower, Australian saltbush (*Atriplex semibaccata*), birdfoot trefoil (*Lotus corniculatus*), wishbone bush (*Mirabilis californica*), woolly sea-blite (*Suaeda taxifolia*), lemonadeberry, saw-toothed goldenbush (*Hazardia squarrosa*), dandelion (*Malacothrix saxatilis*) and bluff buckwheat (*Eriogonum parvifolium*).

4.1.4 Disturbed Habitat

Where the native habitat has been disturbed frequently or intensively by grazing, fire, agriculture, or other activities, the native community usually is incapable of recovering. These areas are characterized by weedy, introduced annuals, including especially mustards (*Brassica* and *Sisymbrium* spp.), filaree (*Erodium* spp.), slender wild oat (*Avena barbata*), bromes (*Bromus diandrus, Bromus madritensis, Bromus hordeaceus*) and Russian-thistle (*Salsola tragus*). Within Long Point Specific Plan Area, most of the disturbed habitat appears to be the result of farming, clearing, mowing, or other mechanical disturbances.

The disturbed habitat onsite is dominated by black mustard and slender wild oat. Other common species include California burclover (*Medicago polymorpha*), fennel (*Foeniculum vulgare*), castor-bean (*Ricinus communis*), red-stem filaree (*Erodium cicutarium*), barley (*Hordeum* sp.), wild radish (*Raphanus sativus*), garland chrysanthemum (*Chrysanthemum coronarium*), sweetclover (*Melilotus indica*), rescue grass (*Bromus catharticus*), Bermuda grass (*Cynodon dactylon*), soft brome (*Bromus hordeaceus*), tomato (*Lycopersicon* sp.), black nightshade (*Solanum nigrum*), ripgut grass (*Bromus diandrus*), vetch (*Vicia* sp.), statice (*Limonium perezii*), big saltbush (*Atriplex lentiformis*), nasturtium (*Trapaeolum majus*), wheat (*Triticum aestivum*), horseweed (*Conyza canadensis*), horehound (*Marrubium vulgare*) and rat-tail fercue (*Vulpia myuros*).

4.1.5 Agriculture

Several agricultural fields are maintained within the project boundaries. These areas are being actively farmed and are not considered native vegetation types.

4.1.6 Developed Land

Within the property, developed habitat includes dirt and asphalt roads and parking lots, existing structures, transmission tower sites and ornamental plantings. Ornamental plantings refer to areas where ornamentals and landscaping have been installed. These areas are concentrated around the existing development, including the abandoned Marineland, the agricultural areas and the City administration complex. Ornamental vegetation in these areas includes eucalyptus (*Eucalyptus* sp.), myoporum (*Myoporum laetum*), ash (*Fraxinus* sp.), Canary Island date palm (*Phoenix canariensis*) and pepper-trees (*Schinus* spp.), oleander shrubs (*Nerium oleander*), white sweetclover (*Melilotus alba*) and plumbago (*Plumbago* sp.).

4.1.7 Annual (Non-native) Grassland

This vegetation type is identified by the NCCP database within Subregion 1 and Lower Point Vicente area, but was not verified, in those locations, by DUDEK. Similar to disturbed habitat, this vegetation type is indicative of frequent or intensive disturbance by grazing, fire, agriculture, or other activities, and the native community is usually incapable of recovering. These areas are also characterized by weedy, introduced annual. This vegetation type differs from disturbed habitat in that grasses, especially slender wild oat (*Avena barbata*) and bromes (*Bromus diandrus, B. madritensis, B. hordeaceus*), are dominant. Mustards (*Brassica* and *Sisymbrium* spp.), filaree (*Erodium botrys*), and Russian-thistle (*Salsola tragus*) are also typically present.

4.1.8 Floral Diversity

A total of 77 species of vascular plants - 23 native (30 percent) and 54 non-native (70 percent) - was recorded from the site (Appendix A). The paucity of native flora, especially in relation to the abundance of alien plants, is a reflection of the distribution and size of native plant communities and past disturbance and land uses.

4.2 Zoology - Wildlife Diversity

4.2.1 Birds

Twenty-four species of birds were observed during the recent survey work (see Appendix B). The avifauna is comprised of a small assemblage of species associated with coastal sage scrub and southern cactus scrub, along with a few species found in urban areas and grasslands.

4.2.2 Reptiles and Amphibians

One species of reptile was recorded onsite during our surveys: Great Britain fence lizard (*Sceloporus occidentalis*). Other reptiles common in the area and likely to occur onsite include California kingsnake (*Lampropeltis getulus*) gopher snake (*Pituophis melanoleucus*), southern Pacific rattlesnake (*Crotalus viridis helleri*) and side-blotched lizard (*Uta stansburiana*).

4.2.3 Mammals

No mammals were observed by DUDEK during the site visits. Mammals likely to be present onsite include San Diego pocket mouse (*Chaetodipus fallax*), cactus mouse (*Peromyscus eremicus*), house mouse (*Mus musculus*) California vole (*Macrotus californicus*), brush rabbit (*Sylvilagus bachmani*) and red fox (*Vulpes fulva*). In addition, one or more species of bats probably forage over the site.

4.2.4 Invertebrates

Four species of butterflies were observed during survey work (Appendix B): funereal duskywing (*Erynnis funeralis*), common white (*Pontia protodice*), sara orange-tip (*Anthocharis sara sara*) and west coast lady (*Cynthia annabella*).

The poor plant species richness onsite may be responsible for an equally low phytophagous (plant-feeding) insect species richness.

4.3 Sensitive Biological Resources

The following resources are discussed in this section: (1) plant and animal species present in the project vicinity that are given special recognition by federal, state, or local conservation agencies and organizations owing to declining, limited, or threatened populations, that are the results, in most cases, of habitat reduction; and (2) habitat areas that are unique, are of relatively limited distribution, or are of particular value to wildlife. Sources used for determination of sensitive biological resources are as follows: **wildlife** -- U.S. Fish and Wildlife Service (USFWS 1989,

1991), California Department of Fish and Game (CDFG 1980, 1986), Remsen (1978), and Murphy (1990); **plants** -- USFWS (1990, 1993), CDFG (1987), and Skinner and Pavlik (1994); and **habitats** -- Holland (1986).

4.3.1 Sensitive Plant Species

One species of plant considered sensitive by various resource agencies has been verified as occurring on the site: bright green dudleya (*Dudleya virens*). This species is discussed below and the locations are illustrated in the biological resources map (map pocket). The listing authorities and explanation of listing categories are presented in Appendix C. The Draft NCCP addresses seven other sensitive plant species: aphanisma (*Aphanisma blitoides*), south coast saltscale (*Atriplex pacifica*), Peirson's morning glory (*Calystegia peirsonii*), Catalina crabapple bush (*Crossosoma californicum*), southern tarplant (*Hemizonia parryi* ssp. *australis*), Catalina boxthorn (*Lycium brevipes* var. *hassei*) and Lyon's pentachaeta (*Pentachaeta lyonii*). In addition, a few other sensitive species have been found on other properties in the area, such as seaside calandrinia (*Calandrinia maritima*), ocean locoweed (*Astraagalus trichopodus* ssp. *leucopsis*) and Catalina mariposa lily (*Calochortus catalinae*). These were not observed during the current surveys; the species, their status, habitat association and survey period are detailed in *Table 2*.

TABLE 2
NCCP EVALUATION PLANT SPECIES

Common Name	Scientific Name	Federal Status	State Status	CNPS List/ R-E-D Code	Habitat Association	Survey Period
aphanisma	*Aphanisma blitoides*	None	None	List 1B 2-2-2	Bluff scrub, CSS with sandy soils	April-May
ocean locoweed	*Astragalus trichopodus* ssp. leucopsis	None	None	None	CSS	Feb -June
south coast saltscale	*Atriplex pacifica*	None	None	List 1B	Bluff scrub, CSS	March-October
seaside calandrinia	Calandrinia maritima	None	None	List 4 1-2-1	Bluff scrub, grassland	March-May
Catalina mariposa lily	*Calochortus catalinae*	None	None	List 4 1-2-3	chaparral, woodland, CSS, Grassland	January - March
Peirson's morning glory	*Calystegia peirsonii*	None	None	3-3-3	CSS	May-June
Catalina crabapple bush	*Crossosoma californicum*	None	None	List 4 1-2-2	rocky CSS	February-May (deciduous shrub)

bright green dudleya	*Dudleya virens*	None	None	List 1B 2-2-2	Bluff scrub, CSS	April-June
southern tarplant	*Hemizonia parryi* spp. *australis*	None	None	List 1B 3-3-2	Estuary-upland interface	June-November
Catalina boxthorn	*Lycium brevipes* var. *hassei*	None	None	List 1B 3-3-3	Bluff scrub, CSS	June (deciduous shrub)
Lyon's pentachaeta	*Pentachaeta lyonii*	PE	CE	List 1B 3-3-3	Grassland' chaparral	March-August

The reasonably intact habitats on the site were surveyed fairly carefully during a period when most if not all of the potentially-occurring sensitive plant species would be evident, if not blooming. However physical access to areas of steep bluffs that could support some of the sensitive species was not achieved for safety reasons. In addition potential habitat within the Subregion 1 and Lower Point Vicente Specific Plan Areas were not surveyed. Surveys were conducted all along the top of the intact bluffs on the Resort Center area, and binoculars were used to scan carefully areas that could support plants. No suspicious unidentified plants were found in this way, in other words, we did not observe any plants that we believed could be any of the potentially-occurring sensitive species listed above.

Sensitive Plant Species Observed Onsite

Dudleya virens - bright green dudleya
USFWS: None
CDFG: None
CNPS: List 1B, 2-2-2

Bright green dudleya is a small, perennial succulent that grows from an above-ground stem. It is restricted to Los Angeles County and San Clemente, San Nicolas and Santa Catalina islands in the United States and Guadalupe Island, Mexico, typically found on coastal bluffs. Most of the known populations occur below 1200 feet (400 meters elevation). The leaves, green or glaucous, are generally evergreen and number 20 to 45 per rosette.

There are many occurrences of varying sizes (five to approximately 1,000 individuals) of this species scattered along the bluffs adjacent to the Pacific Ocean on the York property and within the City-owned property. We mapped 23 point localities and estimate the population to be approximately 2,325 plants.

4.3.2 Sensitive Wildlife Species

One animal species listed as threatened by the USFWS, coastal California gnatcatcher (*Polioptila californica californica*), was observed on the site. DUDEK is not aware of any other occurrences of listed wildlife on non-marine portions of the Long Point Specific Plan area; however, DUDEK did not have access to Subregion 1 or Lower Point Vicente Areas. One species formerly recognized as a Category 2 candidate for listing by the USFWS also was observed on the site: loggerhead shrike (*Lanius ludovicianus*). The cactus wren (*Campylorhychus brunneicapillus*), recognized as a "species of special concern" by the CDFG, and an NCCP focal species, also was observed onsite during the spring 1998, surveys. These species are discussed below and their locations are illustrated in the biological resources map. The listing authorities and an explanation of listing categories are presented in Appendix C. The Draft NCCP addresses four other sensitive wildlife species: Palos Verdes blue butterfly (*Glacopsyche lygdamus palosverdesensis*), El Segundo blue butterfly (*Euphilotes bernardino allyni*), San Diego horned lizard (*Phrynosoma coronatum blainvillei*), and Pacific pocket mouse (*Perognathus longimembris pacificus*). These species were not observed during the current surveys; the species, and their status, habitat association and survey period are detailed in *Table 3*.

TABLE 3
NCCP EVALUATION WILDLIFE SPECIES

Common Name	Scientific Name	Federal Status	State Status	Habitat Association	Survey Period
Palos Verdes blue butterfly	*Glacopsyche lygdamus palosverdesensis*	Endangered	None	CSS with locoweed (*Astragalus trichopodus lonchus*) & deerweed (*Lotus scoparius*)	February-early April
El Segundo blue butterfly	*Euphilotes battoides allyni*	Endangered	None	Coastal dune with buckwheat (*Eriogonum parvifolium*)	June-August
San Diego horned lizard	*Phrynosoma coronatum blainvillei*	None	None	Scrub habitats with ants, friable soils	Spring-Fall

California gnatcatcher	*Polioptila californica californica*	Threatened	NCCP Focal Species	CSS	Year-round
costal cactus wren	*Campylorhychus brunneicapillus*	None	NCCP Focal Species	CSS with tall cactus	Year-round
Pacific pocket mouse	*Perognathus longimembris pacificus*	Endangered	None	CSS with undisturbed friable soils	early spring, late summer, fall

The project site contains two of the three host plants for the two endangered butterfly species; both plant species are located on the Upper Point Vicente parcel. Locations and number of host plants observed were recorded and is presented in the Biological Resources Map. Despite the presence of these host plants, there is not sufficient habitat or historical record to suggest that either of the butterfly species might exist onsite. Likewise, we found the vegetation far too dense and often disturbed to indicate suitable pocket mouse habitat. The San Diego horned lizard was not observed although potentially appropriate habitat is present.

Birds

Campylorhynchus brunneicapillus cousei - coastal cactus wren
USFWS: former Category 2 candidate
CDFG: Species of Special Concern

The cactus wren (*Campylorhynchus brunneicapillus*) is a widespread and common species of the southwestern deserts, extending to the Pacific coast in southern California and Baja California. Rea and Weaver (1990) recognize a portion of the coastal population as a separate subspecies, *Campylorhynchus brunneicapillus sandiegensis*, restricted to the coastal slope of San Diego County and extreme southern Orange County. Populations occurring north of southern Orange County are assigned to the more common and widespread desert subspecies, *C. b. anthonyi*. Originally, all coastal populations from the Mexican border north to Ventura County had been assigned to the subspecies *sandiegensis*, but recently it has been concluded that populations in Orange, Los Angeles, and Ventura counties more closely resemble *anthonyi*. Regardless of taxonomic opinion, coastal cactus wren occurrences are diminishing. Suitable habitat has been depleted by urban development. Cactus thickets supporting the cactus wren occur primarily in maritime sage scrub, Diegan coastal sage scrub, and Venturan sage scrub communities.

Our surveys suggest that 11 cactus wrens are present on the City-owned property. The Manomet Bird Observatory studies (Atwood et al 1996) indicate that between 18 and 29 pairs of cactus wren occurred on the Palos Verdes Peninsula between 1993 and 1996.

Polioptila californica - California gnatcatcher
USFWS: Threatened
CDFG: Species of Special Concern

The California gnatcatcher is a small gray non-migratory bird with black tail markings. During the breeding season the male has a distinct black cap. Gnatcatchers eat insects and build a small, cup-shaped nest of plant material, animal hair, and spider webs. A pair of gnatcatchers typically forages over 5 to 20 acres during the breeding season and more widely at the end of spring. The present known range of the California gnatcatcher includes extreme southern Ventura County, the Palos Verdes Peninsula of Los Angeles County, other isolated sites in Los Angeles County (i.e., Montebello Hills), and Orange County (i.e., East Coyote Hills), southern Orange County, western Riverside County, and western San Diego County, and into northern Baja California, Mexico. The gnatcatcher is a near obligate resident of sage scrub plant communities. Individuals of this species generally are found at elevations below 900 feet in San Diego, Orange, and Los Angeles counties, and below 1600 feet in Riverside County (Atwood 1990). Based on recent resource mapping for subregional management plans (e.g., MSCP, MHCP, Orange County NCCPs), it is estimated that there are 3,000-3,500 pairs in California. The Manomet Bid Observatory studies (Attwood et al 1996) indicate the Palos Verdes Peninsula supported a population of between 26 and 56 pairs between 1993 and 1996.

Current surveys suggest that four pairs of California gnatcatchers are present on the City-owned property.

Lanius ludovicianus - loggerhead shrike
USFWS: former Category 2 candidate
CDFG: Species of Special Concern

The loggerhead shrike is a fairly common resident in agricultural land, desert wash and desert-edge scrub, grassland or beach areas with scattered bushes, and broken chaparral. Although it is declining steeply along the coast, this species is widespread in the southwestern portion of California, absent only from the mountain zone. Shrikes seldom are encountered in large

numbers. The continued loss of coastal sage scrub and other open scrub habitats has resulted in the decline.

At least one, and possibly two, loggerhead shrikes were observed onsite.

Reptiles

Phrynosoma coronatum blainvillei - San Diego horned lizard
USFWS: former Category 2 candidate
CDFG: Species of Special Concern

The San Diego horned lizard is a small, spiny, somewhat rounded lizard that occurs primarily in chaparral and coastal sage scrub communities. It ranges throughout California west of the desert and Cascade-Sierran highlands, south through nearly all of Baja California, Mexico. Three factors have contributed to its decline: loss of habitat, over collecting, and the introduction of exotic ants (McGurty 1980). In some places, especially adjacent to urban areas, introduced ants have displaced native harvester ants (*Pogonomyrmex* spp.) upon which the lizard feeds exclusively. Based on the amount and quality of shrublands on the property, San Diego horned lizard could be expected in nearly any patches of coastal sage scrub.

This species is an NCCP evaluation species but was not observed onsite.

Mammals

Perognathus longimembris pacificus - Pacific pocket mouse
USFWS: Endangered
CDFG: **Species of Special Concern**

The Pacific pocket mouse is one of the smallest members of the genus *Perognathus*. The species *P. longmembris*, as a whole, occupies a variety of habitats throughout the southwest, including desert, shrub-steppe, arid woodland, sage scrub, grassland and ruderal habitats. The Pacific pocket mouse, one of 19 subspecies of *P. longimembris* (Hall 1981), is restricted to the coastal plain and historically was found between El Segundo in Los Angeles County and the Tijuana River Valley in the United States, and northern Baja California, Mexico. It typically occurs within two miles of the coast and below 600 feet. The Pacific pocket mouse is thought to occupy loose sandy soils supporting sparse coastal sage scrub, non-native grassland and ruderal habitats (U.S. Fish

and Wildlife Service 1994). However, Grinnell (1916) reports in field notes that Frank Stephens collected Pacific pocket mouse in gravely soils 10 to 12 miles north of Oceanside in 1903.

A focused survey was not conducted for the Pacific pocket mouse as it was determined that the project site does not offer appropriate habitat: the onsite coastal sage scrub is fragmented and very dense. It is very unlikely that the Pacific pocket mouse occurs within the project site.

Invertebrates

Focused surveys for the two potentially-occurring sensitive invertebrate species, Palos Verdes blue butterfly and El Segundo blue butterfly, were not conducted as a part of this study, and it appears that surveys are not warranted. One of two of the required larvel host plant for the Palos Verdes blue was found. Locoweed was observed on the edge of southern cactus scrub in the Upper Point Vicente parcel. It is presumed that the habitat here is to fragmented and disturbed to support the butterfly. Although the host plant of the El Segundo blue was found within coastal sage scrub and southern cactus scrub on the Upper Point Vicente parcel, the habitat association for this butterfly, i.e., coastal dunes, was not present. In addition to the survey information, historical records do indicate that neither of these species has been present in this area within the past ____ years.

4.3.3 Sensitive Habitats

Sensitive habitats are those that are considered rare within the region, support sensitive plant and/or wildlife species, or function as corridors for wildlife movement. Habitat types found onsite that are considered sensitive include coastal sage scrub and southern cactus scrub.

4.3.4 Wildlife Corridors and Habitat Linkages

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the immigration and emigration of animals. Wildlife corridors contribute to population viability in several ways: (1) they assure the continual exchange of genes between populations which helps maintain genetic diversity; (2) they provide access to adjacent habitat areas representing additional territory for foraging and mating; (3) they allow for a greater carrying capacity; and (4) they provide routes for colonization of habitat lands following local populations extinctions or habitat recovery from ecological catastrophes (e.g., fires).

Habitat linkages are patches of native habitat that function to join two larger patches of habitat. They serve as connections between habitat patches and help reduce the adverse effects of habitat fragmentation. Although individual animals may not move through a habitat linkage, the linkage does represent a potential route for gene flow and long-term dispersal. Habitat linkages may serve as both habitat and avenues of gene flow for small animals such as reptiles and amphibians. Habitat linkages may be represented by continuous patches of habitat or by nearby habitat "islands" that function as "stepping stones" for dispersal.

Owing to the geographic position of the project site in the context of the surrounding disturbed habitat, it is unlikely that the limited native habitat receives much use from larger mammals such as mule deer, mountain lion, coyote, and bobcat. AVIAN SPECIES, ISOLATED OR NOT!

4.4 Regional Resource Planning Context

The City of Rancho Palos Verdes is developing a Draft NCCP in conformance with the State of California's Natural Community Conservation Program, the ultimate goal of which is the establishment of biological reserve areas in conformance with the State of California's Natural Community Conservation Program (NCCP). These programs are moving forward under the regulatory influence of the 4(d) Rule pursuant to the Endangered Species Act, which allows for the interim loss of 5% of existing coastal sage scrub until the preserves (NCCPs) are formalized.

In this context, the Long Point project site is subject to the City's NCCP and contains native plant communities the federally-listed threatened California gnatcatcher, and the sensitive species loggerhead shrike and cactus wren.

5.0 IMPACT ANALYSIS

6.0 MITIGATION

ACKNOWLEDGMENTS

This report was prepared by DUDEK biologists Sherri Miller, Harold A. Wier, and Brock A. Ortega. Graphics and GIS mapping and analyses were provided by Martie A. Clemons; Henriette Burbank provided word processing.

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APPENDICES

DUDEK
& ASSOCIATES, INC.
Professional Teams for Complex Projects

APPENDIX A

CUMULATIVE LIST OF THE VASCULAR PLANT SPECIES OBSERVED ONSITE

CONIFERAE

PINACEAE - PINE FAMILY

Pinus sp. - pine

ANGIOSPERMAE (DICOTYLEDONES)

AIZOACEAE - CARPET-WEED FAMILY

* *Carpobrotus aequilaterus* - sea-fig
* *Mesembryanthemum crystallinum* - crystal ice plant
* *Mesembryanthemum nodiflorum* - small-flowered ice plant

ANACARDIACEAE - SUMAC FAMILY

Rhus integrifolia - lemonadeberry
* *Schinus molle* - Peruvian pepper-tree
* *Schinus terebinthifolius* - Brazilian pepper-tree

APIACEAE - CARROT FAMILY

* *Foeniculum vulgare* - sweet fennel

APOCYNACEAE - DOGBANE FAMILY

* *Nerium oleander* - oleander

ARALIACEAE - GINSENG FAMILY

* *Hedera helix* - English ivy

APPENDIX A (*Continued*)

ASTERACEAE - SUNFLOWER FAMILY

Amblyopappus pusillus - pineapple - weed
Artemisia californica - coastal sagebrush
* *Centaurea melitensis* - tocalote
* *Chrysanthemum coronarium* - garland chrysanthemum
* *Conzya canadensis* - horseweed
* *Cynara cardunculus* - cardoon, artichoke thistle
Encelia californica - California bush sunflower
Hazardia squarrosa - saw-toothed goldenbush
* *Heterotheca grandiflora* - telegraph weed
Isocoma menziesii - coastal goldenbush
Lessingia filaginifolia - virgate cudweed aster
Malacothrix saxatilis - cliff malacothrix
* *Picris echioides* - bristly ox-tongue

BORAGINACEAE - BORAGE FAMILY

Echium candicans - echium

BRASSICACEAE - MUSTARD FAMILY

* *Brassica nigra* - black mustard
* *Raphanus sativus* - wild radish

CACTACEAE - CACTUS FAMILY

Opuntia littoralis - coastal prickly-pear
Opuntia prolifera - coast cholla

CAPPARACEAE - CAPER FAMILY

Isomeris arborea - bladderpod

CHENOPODIACEAE - GOOSEFOOT FAMILY

Atriplex lentiformis- big saltbush, quail brush
* *Atriplex semibaccata* - Australian saltbush
Suaeda taxifolia California sea-blite

APPENDIX A (*Continued*)

CRASSULACEAE - STONECROP FAMILY

Dudleya virens - bright green dudleya

CUCURBITACEAE - GOURD FAMILY

Marah macrocarpus - wild cucumber

EUPHORBIACEAE - SPURGE FAMILY

* *Ricinus communis* - castor-bean

FABACEAE - PEA FAMILY

* *Acacia melanoxylon* - blackwood acacia
* *Lotus corniculatus* - bird's-foot lotus
* *Medicago polymorpha* - California burclover
* *Melilotus albus* - white sweet-clover
* *Melilotus indica* - yellow sweet-clover
Vicia sp. - vetch

GERANIACEAE - GERANIUM FAMILY

* *Erodium cicutarium* - red-stemmed filaree
* *Geranium carolinianum* - Carolina geranium

LAMIACEAE - MINT FAMILY

* *Marrubium vulgare* - horehound
Stachys ajugoides var. *rigida* - rigid hedge-nettle

MALVACEAE - MALLOW FAMILY

* *Malva parviflora* - cheeseweed

MYOPORACEAE - MYOPORUM FAMILY

* *Myoporum laetum* - myoporum

MYRTACEAE - MYRTLE FAMILY

* *Eucalyptus* sp. - eucalyptus

APPENDIX A (*Continued*)

NYCTAGINACEAE - FOUR O'CLOCK FAMILY

Mirabilis californica var. *californica* - California wishbone-bush

OLEACEAE - OLIVE FAMILY

Fraxinus sp. - ash

* *Olea europaea* - mission olive

PLUMBAGINACEAE - PLUMBAGO FAMILY

* *Plumbago* sp. - plumbago

* *Limonium perezii* - statice

POLYGONACEAE - BUCKWHEAT FAMILY

Eriogonum cinereum - ashy-leaved buckwheat

Eriogonum fasciculatum - California buckwheat

Eriogonum parvifolium - buckwheat

Rumex crispus. - curly dock

SOLANACEAE - NIGHTSHADE FAMILY

Lycium californicum . - California box-thorn

* *Nicotiana glauca* - tree tobacco

* *Solanum nigrum* - black nightshade

TROPAEOLACEAE - NASTURTIUM FAMILY

* *Tropaeolum majus* - nasturtium

APPENDIX A (*Continued*)

ANGIOSPERMAE (MONOCOTYLEDONES)

ARECACEAE - PALM FAMILY

* *Phoenix canariensis* - Canary Island date palm
Washingtonia robusta - fan palm

LILIACEAE - LILY FAMILY

Dichelostemma capitatum - blue dicks
Yucca gloriosa - yucca

POACEAE - GRASS FAMILY

* *Avena barbata* - slender oat
Bromus catharticus - rescue grass
* *Bromus diandrus* - ripgut grass
* *Bromus hordeaceus* - soft chess
* *Bromus madritensis* ssp. *rubens* - foxtail chess
* *Cortaderia selloana* - pampas grass
* *Cynodon dactylon* - Bermuda grass
Hordeum sp. - barley
Leymus condensatus - giant ryegrass
Melica imperfecta - California melic
Nassella pulchra - purple needlegrass
* *Pennisetum setaceum* - fountain grass
* *Triticum aestivum* - wheat
* *Vulpia myuros* - rattail fescue

* signifies introduced (non-native) species

APPENDIX B (*Continued*)

WILDLIFE SPECIES - INVERTEBRATES

BUTTERFLIES AND MOTHS

HESPERIIDAE - SKIPPERS

Erynnis funeralis - funereal duskywing

PIERIDAE - WHITES AND SULFURS

Pontia protodice - common white

Anthocharis sara sara - sara orange-tip

NYMPHALIDAE - BRUSH-FOOTED BUTTERFLIES

Cynthia annabella - west coast lady

APPENDIX B

WILDLIFE SPECIES OBSERVED OR DETECTED ONSITE

REPTILES

IGUANIDAE - IGUANID LIZARDS

Sceloporus occidentalis - western fence lizard

BIRDS

FALCONIDAE - FALCONS

Falco sparverius - American kestrel

COLUMBIDAE - PIGEONS & DOVES

Columba livia - rock dove

Zenaida macroura - mourning dove

APODIDAE - SWIFTS

Chaetura vauxi - Vaux's swift

Aeronautes saxatalis - white-throated swift

TROCHILIDAE - HUMMINGBIRDS

Calypte anna - Anna's hummingbird

Selasphorus rufus - Rufous hummingbird

TYRANNIDAE - TYRANT FLYCATCHERS

Sayornis nigricans - black phoebe

HIRUNDINIDAE - SWALLOWS

Hirundo rustica - barn swallow

APPENDIX B (*Continued*)

CORVIDAE - JAYS & CROWS

Aphelocoma coerulescens - scrub jay
Corvus corax - common raven

AEGITHALIDAE - BUSHTITS

Psaltriparus minimus - bushtit

TROGLODYTIDAE - WRENS

Campylorhynchus brunneicapillus - cactus wren
Thryomanes bewickii - Bewick's wren

MUSCICAPIDAE - KINGLETS, GNATCATCHERS, THRUSHES & BABBLERS

Polioptila californica - California gnatcatcher
Turdus migratorius - American robin

MIMIDAE - THRASHERS

Mimus polyglottos - northern mockingbird
Toxostoma redivivum - California thrasher

LANIIDAE - SHRIKES

Lanius ludovicianus - loggerhead shrike

STURNIDAE - STARLINGS

* *Sturnus vulgaris* - European starling

EMBERIZIDAE - WOOD WARBLERS, TANAGERS, BUNTINGS & BLACKBIRDS

Icterus galbula - northern oriole
Melospiza melodia - song sparrow
Pipilo crissalis - California towhee

FRINGILLIDAE - FINCHES

Carpodacus mexicanus - house finch

APPENDIX C

SPECIES SENSITIVITY CATEGORIES

Federal (1996)

Endangered. Taxa threatened throughout all or a significant portion of their range.

Threatened. Taxa likely to become endangered in the foreseeable future.

Category 1. Taxa for which the USFWS has enough information on biological vulnerability and threat(s) to support listing them as endangered or threatened species.

Category 2. A category formerly used for taxa for which information in possession of the USFWS indicated that listing as endangered or threatened may be appropriate but for which sufficient data to support the preparation of rules were unavailable. This category has been eliminated owing to its frequent misinterpretation.

Category 3. Taxa that were once considered for listing as endangered or threatened, but are currently not receiving such consideration. These taxa are included in one of the following three subcategories.

Subcategory 3A: Taxa presumed to be extinct.

Subcategory 3B: Taxa whose names do not meet the Endangered Species Act's legal definition of species.

Subcategory 3C: Taxa now considered to be more widespread that originally thought.

Note: The taxa in Categories 1 and 2 are candidates for possible addition to the list of endangered and threatened species. The USFWS encourages their consideration in environmental planning.

State of California (1990)

Endangered. Taxa which are in serious danger of becoming extinct throughout all, or a significant portion, of their range due to one or more causes including loss of habitat, change in habitat, over exploitation, predation, competition, or disease (Section 2062 of the Fish and Game Code).

Threatened. Taxa which, although not presently threatened with extinction, are likely to become endangered species in the foreseeable future (Section 2067 of the Fish and Game Code).

Rare. Taxa which, although not presently threatened with extinction, are present in such small numbers throughout their range that they may become endangered if the present environment worsens (Section 1901 of the Fish and Game Code).

Candidate. Taxa which the Fish and Game Commission has formally noticed as being under review by the Department in addition to the list of threatened and endangered species.

California Native Plant Society (1994)

Lists

1A: Presumed Extinct in California
1B: Rare or Endangered in California and Elsewhere
2: Rare or Endangered in California, More Common Elsewhere
3: Need More Information
4: Plants of Limited Distribution

Note: Plants on CNPS list 1B meet California Department of Fish and Game Criteria for Rare or Endangered listing.

R-E-D code

R (Rarity)
1- Rare, but found in sufficient numbers and distributed widely enough that the potential for extinction or extirpation is low at this time.
2- Occurrence confined to several populations or to one extended population.

3- Occurrence limited to one or a few highly restricted populations, or present in such small numbers that it is seldom reported.

E (Endangerment)
1- Not endangered
2- Endangered in a portion of its range
3- Endangered throughout its range

D (Distribution)
1- More or less widespread outside of California
2- Rare outside California
3- Endemic to California

APPENDICES

APPENDIX A

CUMULATIVE LIST OF THE VASCULAR PLANT SPECIES OBSERVED ONSITE

CONIFERAE

PINACEAE - PINE FAMILY

Pinus sp. - pine

ANGIOSPERMAE (DICOTYLEDONES)

AIZOACEAE - CARPET-WEED FAMILY

* *Carpobrotus aequilaterus* - sea-fig
* *Mesembryanthemum crystallinum* - crystal ice plant
* *Mesembryanthemum nodiflorum* - small-flowered ice plant

ANACARDIACEAE - SUMAC FAMILY

Rhus integrifolia - lemonadeberry
* *Schinus molle* - Peruvian pepper-tree
* *Schinus terebinthifolius* - Brazilian pepper-tree

APIACEAE - CARROT FAMILY

* *Foeniculum vulgare* - sweet fennel

APOCYNACEAE - DOGBANE FAMILY

* *Nerium oleander* - oleander

ARALIACEAE - GINSENG FAMILY

* *Hedera helix* - English ivy

APPENDIX A (*Continued*)

ASTERACEAE - SUNFLOWER FAMILY

Amblyopappus pusillus - pineapple - weed
Artemisia californica - coastal sagebrush
* *Centaurea melitensis* - tocalote
* *Chrysanthemum coronarium* - garland chrysanthemum
* *Conzya canadensis* - horseweed
* *Cynara cardunculus* - cardoon, artichoke thistle
Encelia californica - California bush sunflower
Hazardia squarrosa - saw-toothed goldenbush
* *Heterotheca grandiflora* - telegraph weed
Isocoma menziesii - coastal goldenbush
Lessingia filaginifolia - virgate cudweed aster
Malacothrix saxatilis - cliff malacothrix
* *Picris echioides* - bristly ox-tongue

BORAGINACEAE - BORAGE FAMILY

Echium candicans - echium

BRASSICACEAE - MUSTARD FAMILY

* *Brassica nigra* - black mustard
* *Raphanus sativus* - wild radish

CACTACEAE - CACTUS FAMILY

Opuntia littoralis - coastal prickly-pear
Opuntia prolifera - coast cholla

CAPPARACEAE - CAPER FAMILY

Isomeris arborea - bladderpod

CHENOPODIACEAE - GOOSEFOOT FAMILY

Atriplex lentiformis- big saltbush, quail brush
* *Atriplex semibaccata* - Australian saltbush
Suaeda taxifolia California sea-blite

APPENDIX A (*Continued*)

CRASSULACEAE - STONECROP FAMILY

Dudleya virens - bright green dudleya

CUCURBITACEAE - GOURD FAMILY

Marah macrocarpus - wild cucumber

EUPHORBIACEAE - SPURGE FAMILY

* *Ricinus communis* - castor-bean

FABACEAE - PEA FAMILY

* *Acacia melanoxylon* - blackwood acacia
* *Lotus corniculatus* - bird's-foot lotus
* *Medicago polymorpha* - California burclover
* *Melilotus albus* - white sweet-clover
* *Melilotus indica* - yellow sweet-clover
Vicia sp. - vetch

GERANIACEAE - GERANIUM FAMILY

* *Erodium cicutarium* - red-stemmed filaree
* *Geranium carolinianum* - Carolina geranium

LAMIACEAE - MINT FAMILY

* *Marrubium vulgare* - horehound
Stachys ajugoides var. *rigida* - rigid hedge-nettle

MALVACEAE - MALLOW FAMILY

* *Malva parviflora* - cheeseweed

MYOPORACEAE - MYOPORUM FAMILY

* *Myoporum laetum* - myoporum

MYRTACEAE - MYRTLE FAMILY

* *Eucalyptus* sp. - eucalyptus

APPENDIX A (*Continued*)

NYCTAGINACEAE - FOUR O'CLOCK FAMILY

Mirabilis californica var. *californica* - California wishbone-bush

OLEACEAE - OLIVE FAMILY

Fraxinus sp. - ash

* *Olea europaea* - mission olive

PLUMBAGINACEAE - PLUMBAGO FAMILY

* *Plumbago* sp. - plumbago

* *Limonium perezii* - statice

POLYGONACEAE - BUCKWHEAT FAMILY

Eriogonum cinereum - ashy-leaved buckwheat

Eriogonum fasciculatum - California buckwheat

Eriogonum parvifolium - buckwheat

Rumex crispus. - curly dock

SOLANACEAE - NIGHTSHADE FAMILY

Lycium californicum . - California box-thorn

* *Nicotiana glauca* - tree tobacco

* *Solanum nigrum* - black nightshade

TROPAEOLACEAE - NASTURTIUM FAMILY

* *Tropaeolum majus* - nasturtium

APPENDIX A (*Continued*)

ANGIOSPERMAE (MONOCOTYLEDONES)

ARECACEAE - PALM FAMILY

* *Phoenix canariensis* - Canary Island date palm
Washingtonia robusta - fan palm

LILIACEAE - LILY FAMILY

Dichelostemma capitatum - blue dicks
Yucca gloriosa - yucca

POACEAE - GRASS FAMILY

* *Avena barbata* - slender oat
Bromus catharticus - rescue grass
* *Bromus diandrus* - ripgut grass
* *Bromus hordeaceus* - soft chess
* *Bromus madritensis* ssp. *rubens* - foxtail chess
* *Cortaderia selloana* - pampas grass
* *Cynodon dactylon* - Bermuda grass
Hordeum sp. - barley
Leymus condensatus - giant ryegrass
Melica imperfecta - California melic
Nassella pulchra - purple needlegrass
* *Pennisetum setaceum* - fountain grass
* *Triticum aestivum* - wheat
* *Vulpia myuros* - rattail fescue

* signifies introduced (non-native) species

APPENDIX B (*Continued*)

WILDLIFE SPECIES - INVERTEBRATES

BUTTERFLIES AND MOTHS

HESPERIIDAE - SKIPPERS

Erynnis funeralis - funereal duskywing

PIERIDAE - WHITES AND SULFURS

Pontia protodice - common white

Anthocharis sara sara - sara orange-tip

NYMPHALIDAE - BRUSH-FOOTED BUTTERFLIES

Cynthia annabella - west coast lady

APPENDIX B

WILDLIFE SPECIES OBSERVED OR DETECTED ONSITE

REPTILES

IGUANIDAE - IGUANID LIZARDS

Sceloporus occidentalis - western fence lizard

BIRDS

FALCONIDAE - FALCONS

Falco sparverius - American kestrel

COLUMBIDAE - PIGEONS & DOVES

Columba livia - rock dove

Zenaida macroura - mourning dove

APODIDAE - SWIFTS

Chaetura vauxi - Vaux's swift

Aeronautes saxatalis - white-throated swift

TROCHILIDAE - HUMMINGBIRDS

Calypte anna - Anna's hummingbird

Selasphorus rufus - Rufous hummingbird

TYRANNIDAE - TYRANT FLYCATCHERS

Sayornis nigricans - black phoebe

HIRUNDINIDAE - SWALLOWS

Hirundo rustica - barn swallow

APPENDIX B *(Continued)*

CORVIDAE - JAYS & CROWS

Aphelocoma coerulescens - scrub jay
Corvus corax - common raven

AEGITHALIDAE - BUSHTITS

Psaltriparus minimus - bushtit

TROGLODYTIDAE - WRENS

Campylorhynchus brunneicapillus - cactus wren
Thryomanes bewickii - Bewick's wren

MUSCICAPIDAE - KINGLETS, GNATCATCHERS, THRUSHES & BABBLERS

Polioptila californica - California gnatcatcher
Turdus migratorius - American robin

MIMIDAE - THRASHERS

Mimus polyglottos - northern mockingbird
Toxostoma redivivum - California thrasher

LANIIDAE - SHRIKES

Lanius ludovicianus - loggerhead shrike

STURNIDAE - STARLINGS

* *Sturnus vulgaris* - European starling

EMBERIZIDAE - WOOD WARBLERS, TANAGERS, BUNTINGS & BLACKBIRDS

Icterus galbula - northern oriole
Melospiza melodia - song sparrow
Pipilo crissalis - California towhee

FRINGILLIDAE - FINCHES

Carpodacus mexicanus - house finch

APPENDIX C

SPECIES SENSITIVITY CATEGORIES

Federal (1996)

Endangered. Taxa threatened throughout all or a significant portion of their range.

Threatened. Taxa likely to become endangered in the foreseeable future.

Category 1. Taxa for which the USFWS has enough information on biological vulnerability and threat(s) to support listing them as endangered or threatened species.

Category 2. A category formerly used for taxa for which information in possession of the USFWS indicated that listing as endangered or threatened may be appropriate but for which sufficient data to support the preparation of rules were unavailable. This category has been eliminated owing to its frequent misinterpretation.

Category 3. Taxa that were once considered for listing as endangered or threatened, but are currently not receiving such consideration. These taxa are included in one of the following three subcategories.

Subcategory 3A: Taxa presumed to be extinct.

Subcategory 3B: Taxa whose names do not meet the Endangered Species Act's legal definition of species.

Subcategory 3C: Taxa now considered to be more widespread that originally thought.

Note: The taxa in Categories 1 and 2 are candidates for possible addition to the list of endangered and threatened species. The USFWS encourages their consideration in environmental planning.

State of California (1990)

Endangered. Taxa which are in serious danger of becoming extinct throughout all, or a significant portion, of their range due to one or more causes including loss of habitat, change in habitat, over exploitation, predation, competition, or disease (Section 2062 of the Fish and Game Code).

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D (Distribution)
1- More or less widespread outside of California
2- Rare outside California
3- Endemic to California

15.3.3 Results of Habitat Assessment for Pocket Mouse Habitat (February 1, 2001)

DUDEK
& ASSOCIATES, INC.
Professional Teams for Complex Projects

Engineering, Planning,
Environmental Sciences and
Management Services

Corporate Office:
605 Third Street
Encinitas, California 92024

760.942.5147
Fax 760.632.0164

February 1, 2001

2872-01

Ms. Ann Johnston
BonTerra Consulting
151 Kalmus Drive, Suite E-200
Costa Mesa, California 92626

Re: ***Results of Habitat Assessment for Pacific Pocket Mouse Habitat on Long Point, City of Rancho Palos Verdes, California***

Dear Ms. Johnston:

This letter provides the results of a habitat assessment conducted by Dudek & Associates, Inc. (DUDEK) for the federally-listed endangered Pacific pocket mouse (*Perognathus longimembris pacificus;* PPM) on the Long Point Specific Plan project site located in the City of Rancho Palos Verdes, Los Angeles County, California. The Long Point Specific Plan area consists of approximately 316 acres situated in the western portion of the City of Rancho Palos Verdes (see *Figures 1* and *2*).

Pacific Pocket Mouse Habitat Account

This PPM habitat account primarily is excerpted from the *Pacific Pocket Mouse Studies Program,* which includes a summary of existing species information and recent research on the habitat associations of the subspecies (Spencer and Schaefer 2000a,b). The PPM is one of 19 subspecies of *P. longimembris.* It is restricted to the coastal plain and historically was found between El Segundo in Los Angeles County and the Tijuana River Valley in the U.S. and northern Baja California, Mexico (Hall 1981). It typically occurs within two miles of the coast and below 600 feet in elevation. The PPM almost exclusively occupies fine-grain, sandy soils. Suitable vegetation for the PPM includes open coastal sage scrub, coastal bluff scrub and grassland. Although the PPM tends to occur in sparsely vegetated habitats, soil characteristics appear to be more important than vegetation (Spencer and Schaefer 2000a). Studies to determine suitable soils characteristics preliminarily have determined that soils with high potential to support the PPM include sands, loamy sands, and sandy loams, with less than 20% clay and more than 50% sand (Spencer and Schaefer 2000b). Loams, silt loams and silts with less than 50% sand content and more than 63% silt have low potential for the PPM. Sandy clay loams, clay loams, and clays appear to have no potential to support the PPM.

Known extant populations of the PPM include the Dana Point Headlands in southern Orange County, and San Mateo North, San Mateo South, and Oscar One/Edson Range on MCB Camp Pendleton in northern San Diego County. Two historic populations were known from the general vicinity of the Palos Verdes Peninsula: a 1935 record of four individuals from the Clifton site north

of the Peninsula and an 1865 record of three individuals from Wilmington south of the Peninsula. There are no historic records of the PPM along the western portion of the Peninsula in the immediate vicinity of the Long Point Specific Plan project area. I have conducted two PPM trapping studies on the Peninsula just south of Long Point, Ocean Trails (DUDEK 1994) and Point View (DUDEK 1996), both with negative results.

Methods

The survey for PPM habitat was conducted on January 31, 2001 by Philip Behrends, Ph.D. under the authority of federal permit PRT-756268 and a Memorandum of Understanding with the California Department of Fish and Game. Much of the Specific Plan area was walked, with a focus on areas supporting coastal sage scrub, southern cactus scrub and annual grassland, as well as disturbed habitat to a lesser extent. The PPM does not leave diagnostic surface sign such as scat and burrows. The habitat assessment therefore was based on suitability of soils and vegetation, with the primary focus on suitable soils. Although a formal soils analysis was not conducted, an examination of soils included checking for sand, loam and clay content, cracking of the soil surface, etc. Notes regarding habitat suitability were made on a 200-scale Biological Resources Map prepared by DUDEK and dated September 14, 1999. The map includes topography, vegetation communities, non-native land cover, and sensitive species locations.

Weather conditions during the survey were mild, with clear skies, an air temperature of approximately 65 degrees Fahrenheit, and light breezes of 0-7 mph. Soils conditions were damp from rain the previous week, but not muddy.

Results

Existing Conditions

This existing conditions description primarily is based on the *Biological Resources Report* prepared by DUDEK in May of 1998 (DUDEK 1998). Vegetation communities and land uses have not changed substantially in the Lower Point Vicente, Upper Point Vicente and Resort Center portions of the Specific Plan (see *Figure 2*). Substantial works appears to have occurred in Subregion 1, including grading and construction of houses.

The survey focused on areas supporting coastal sage scrub, southern cactus scrub, annual grassland, and disturbed habitat. These habitats are described below.

Coastal sage scrub on the project site is typified by California sagebrush (*Artemisia californica*), ashy-leaved buckwheat (*Eriogonum cinereum*), white sage (*Salvia apiana*), bladderpod (*Isomeris arborea*) and coast cholla (*Opuntia prolifera*). This community supports a diverse understory of native herbs and forbs, including bright green dudleya (*Dudleya virens*), blue dicks (*Dichelostemma capitatum*) and several species of grasses, both native and introduced. The primary introduced grass is slender wild oat (*Avena barbata*). Cover in the coastal sage scrub approaches 100%. This habitat generally occurs on the steepest slopes in the project area.

Southern cactus scrub is very similar to coastal sage scrub and shares many common species, such as buckwheats and California sagebrush, but is dominated by coastal prickly-pear (*Opuntia littoralis*). Onsite southern cactus scrub is comprised primarily of coastal prickly-pear, ashy-leaved buckwheat, bright green dudleya, wishbone bush, tree tobacco (*Nicotiana glauca*), melic (*Melica imperfecta*), wild cucumber (*Marah macrocarpus*) and purple needlegrass (*Nassella pulchra*). Cover in the southern cactus scrub approaches 100%. Along with coastal sage scrub, southern cactus scrub occurs on the steepest slopes in the project area.

Annual, non-native grassland is characterized by weedy, introduced annuals dominated by slender wild oat and bromes (*Bromus diandrus, B. madritensis, B. hordeaceus*). Mustards (*Brassica* and *Sisymbrium* spp.), broad-lobed filaree (*Erodium botrys*), and Russian-thistle (*Salsola tragus*) are also present. Cover is virtually 100% in the grassland and in many areas occurs in very dense, matted thickets from previous years' growth. This habitat occurs on the flatter areas and more gentle slopes.

Disturbed habitat was mapped where the native habitat has been disturbed frequently or intensively by grazing, fire, agriculture, or other activities and the native community usually is incapable of recovering. On the project site, most of the disturbed habitat appears to be the result of farming, clearing, mowing, or other mechanical disturbances. These areas are characterized by weedy, introduced annuals, including especially mustards, filaree (*Erodium* spp.), slender wild oat, bromes, and Russian-thistle. Although these species are common to annual grassland, the amount of mechanical disturbance (*e.g.,* discing) and the proportion of weedy forbs is greater in disturbed habitat and distinguishes the two habitat types. Other common species observed by DUDEK in disturbed habitat include California burclover (*Medicago polymorpha*), fennel (*Foeniculum vulgare*), castor-bean (*Ricinus communis*), red-stemmed filaree (*Erodium cicutarium*), barley (*Hordeum* sp.), wild radish (*Raphanus sativus*), garland chrysanthemum (*Chrysanthemum coronarium*), sweetclover (*Melilotus indica*), rescue grass (*Bromus catharticus*), Bermuda grass (*Cynodon dactylon*), soft brome (*Bromus hordeaceus*), tomato (*Lycopersicon* sp.), black nightshade (*Solanum nigrum*), ripgut grass (*Bromus diandrus*), vetch (*Vicia* sp.), statice (*Limonium perezii*), big saltbush (*Atriplex lentiformis*), nasturtium (*Trapaeolum majus*), wheat (*Triticum aestivum*), horseweed (*Conyza canadensis*), horehound (*Marrubium vulgare*) and rat-tail fescue (*Vulpia myuros*). Cover in disturbed habitat approaches 100% except where it has been recently disced. Disturbed habitat occurs on the flatter and more gentle slopes.

Pacific Pocket Mouse Habitat Suitability

The Long Point Specific Plan project site has very low potential to support the PPM. In all areas examined the soils were not appropriate for this species. They consist of sandy clay loams with patches of shale and rocks on some of the steep slopes and ridges. According to the soil suitability analysis provided by Spencer and Schaefer (2000a,b), soils on the Long Point project site would not be suitable for the PPM. The vegetation on the project site also appears to be unsuitable for the PPM. The coastal sage scrub and southern cactus scrub in most areas approaches 100% cover with few openings and it generally occurs on the steepest slopes in the project area. Similarly the annual grassland is dense and is matted from previous growth and very few openings are present. The disturbed habitat has been disced periodically and thus both soils and vegetation are unsuitable for

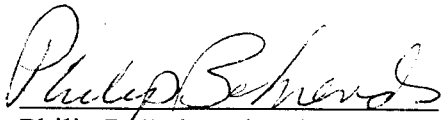
the PPM.

In my opinion, the Long Point project site has extremely low potential to support the PPM and I do not recommend a live-trapping program.

Please feel free to call me at (760) 942-5147 if you have any questions regarding the results of this report.

Very truly yours,

Dudek & Associates, Inc.



Philip R. Behrends, Ph.D.
Environmental Specialist VI

Literature Cited

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Dudek & Associates, Inc. (DUDEK). 1996. Pacific pocket mouse assessment , Point View Project Site. Prepared for Natural Resource Consultants.

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Hall, E.R. 1981. *The Mammals of North America*. John Wiley and Sons, New York. 2 Vol, 1181 pp.

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Spencer, W. and C. Schaefer. 2000b (January). Pacific pocket mouse studies program phase I report. Prepared for the Foothill Eastern Transportation Corridor Agencies and the U.S. Fish and Wildlife Service, 64 pp + appendices..

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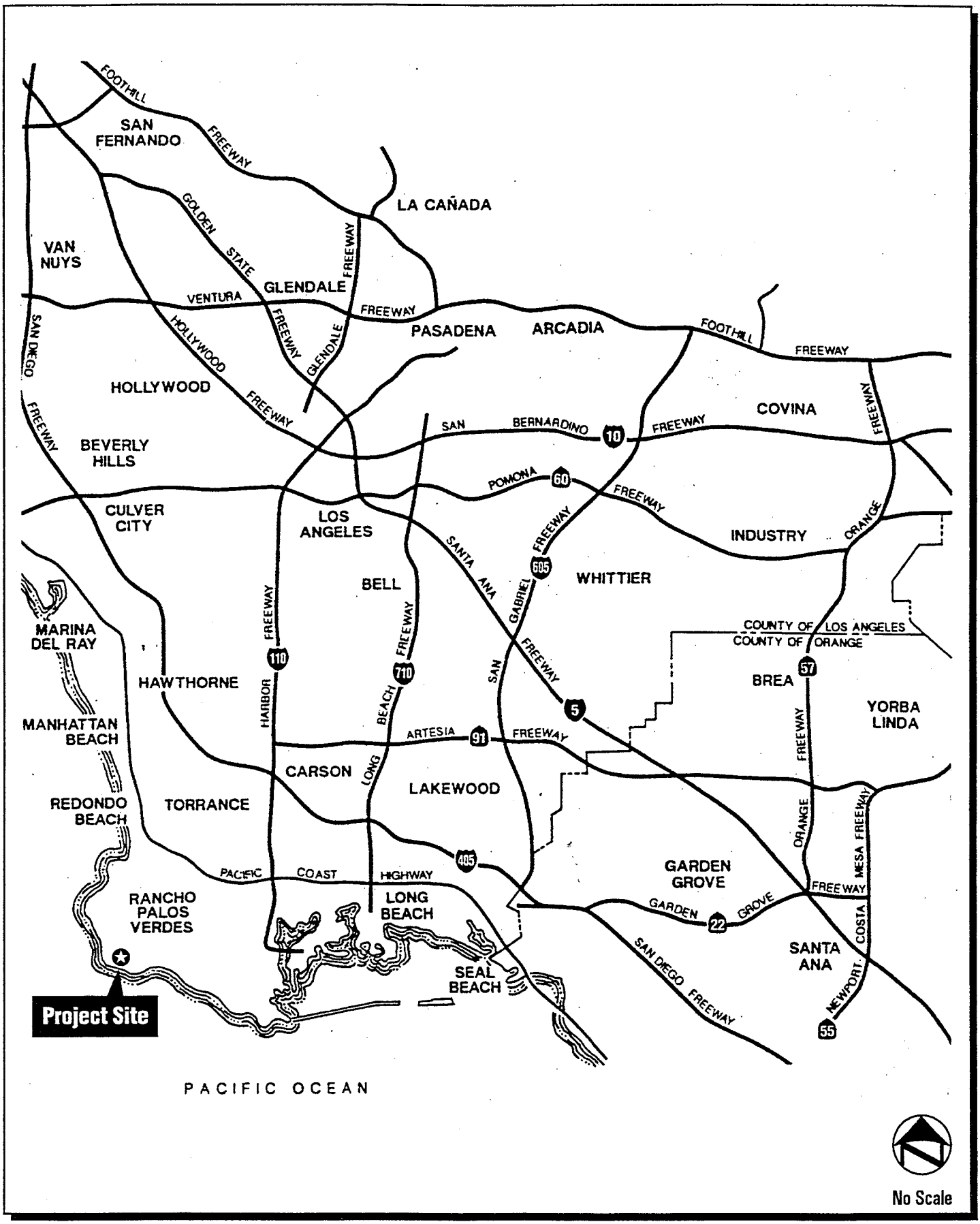
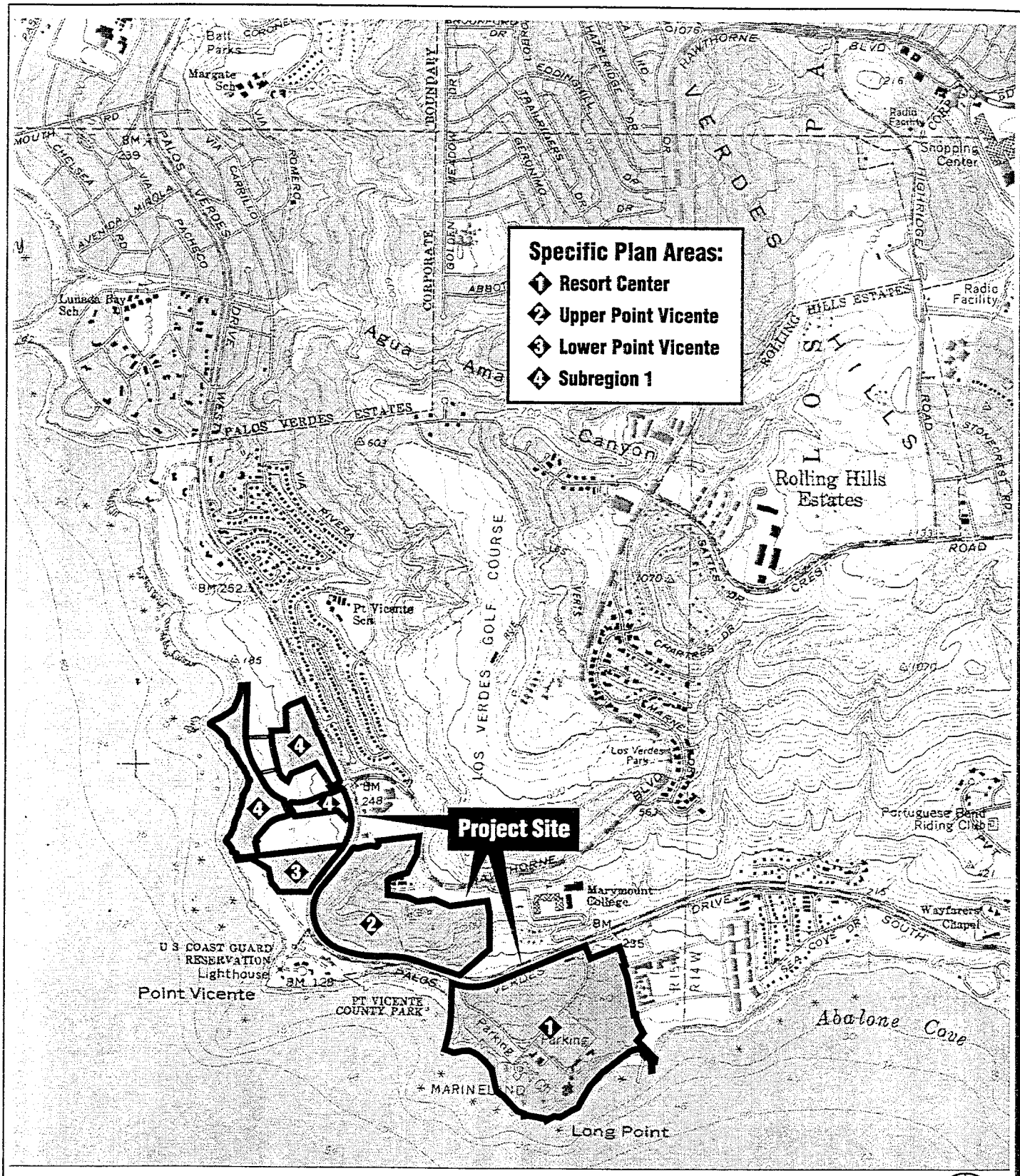


Long Point Specific Plan - Biological Resources Report & Impact Analysis

Regional Map

FIGURE 1



BASE MAP SOURCE: USGS 7.5 Minute Series, Redondo Beach Quadrangle

1" =2000'

Long Point Specific Plan - Biological Resources Report & Impact Analysis

Vicinity Map

FIGURE 2

15.3.4 Results of Focused Coastal California Gnatcatcher Surveys (April 27, 2001)

Natural Resource Consultants

April 27, 2001

Mr. Michael Mohler
Destination Development Corporation
11777 San Vicente Boulevard- Suite 900
Los Angeles, California 90049-5011

Subject: Results of Focused Coastal California Gnatcatcher Surveys on the Approximately 64.88-Acre Upper Point Vicente Site, Located in the City of Rancho Palos Verdes, Los Angeles County, California.

Dear Mr. Mohler:

Natural Resource Consultants (NRC) was retained by York Long Point Associates to conduct focused surveys for coastal California gnatcatchers (*Polioptila californica californica*) on the approximately 64.88-acre Upper Point Vicente site (the site), located in the City of Rancho Palos Verdes, Los Angeles County, California. The purpose of NRC's surveys was to determine the presence or absence of coastal California gnatcatchers on the site in accordance with protocols set by the U.S. Fish and Wildlife Service (USFWS) for this species. The following report describes the methods, results, and conclusions of NRC's surveys.

Site Location and Description

The Upper Point Vicente site is located in the City of Rancho Palos Verdes, on the southwest end of the Palos Verdes peninsula. More specifically, the site lies adjacent to the City of Rancho Palos Verdes City Hall and Point Vicente Park between Palos Verdes Drive and Hawthorne Boulevard. The western and southern boundaries of the site are formed by Palos Verdes Drive. The northern boundary is formed by residential homes and St. Paul's Lutheran Church, and the eastern boundary is formed by Hawthorne Boulevard and the Salvation Army Regional Training Center.

The Upper Point Vicente site supports a variety of habitats, including mixed coastal sage scrub, southern cactus scrub, non-native grasslands, ornamental plantings, and agricultural and developed areas. Of the approximately 68.44 total acres, only approximately 19 acres of mixed coastal sage scrub and southern cactus scrub are suitable for use by coastal California gnatcatchers.

2001 Coastal Californjia Gnatcatcher Survey Methods

Focused surveys for coastal California gnatcatchers on the Upper Point Vicente site were conducted by Mr. Tom Benson (PRT# TE009066-0), an NRC biologist permitted by the USFWS to survey for this species. Focused surveys on the site were conducted on February 8, 16, and March 1, 2001, following guidelines set by the USFWS for conducting focused surveys in areas covered by Natural Communities Conservation Plans (NCCPs). On February 16, 2001, Mr. Benson was accompanied by independent biologist Mr. Gilbert Ruiz acting as a non-participating trainee/observer. Mr. Benson also visited the site while conducting a reconnaissance survey on January 19, 2001.

During the three focused surveys, Mr. Benson walked all portions of the site suitable for use by coastal California gnatcatchers. Taped vocalizations of calls/songs were used to elicit responses from California gnatcatchers when appropriate. Observations of all California gnatcatchers on site, including number, age, sex, habitat usage and location, were recorded in a field notebook. Locations of gnatcatchers were recorded on a 1:2400 scale topographic map of the site. All vertebrate species observed on site were also recorded. Weather conditions were noted at the beginning and end of each survey.

In addition to conducting its own field surveys, NRC consulted biological reports for the Long Point Resort (including Upper Point Vicente) prepared by BonTerra Consulting (BonTerra 2001).

2001 Survey Results

NRC observed four coastal California gnatcatchers pairs on the Upper Point Vicente site during its focused surveys. These pairs are labeled Pairs 1-4, with Pair 1 being the western-most pair and Pair 4 being the eastern-most pair. All pairs are located in the southern portion of the Upper Point Vicente site. At least one member of each pair was observed during every focused survey. Following are descriptions of each pair, their approximate location on site, and habitat type with which each was associated. The attached exhibit shows the observed locations of each pair

Pair 1

This pair is located on a south-facing slope in the southwestern portion of the site. Coastal sage scrub in this area supports a mixed dominance of prickly pear (*Opuntia littoralis*), coast cholla (*Opuntia prolifera*), California sagebrush (*Artemisia californica*), and California bush sunflower (*Encelia californica*). The sage scrub is fairly dense (>90% cover) and is relatively undisturbed. The male in Pair 1 was observed carrying nesting material on January 16.

Pair 2

Pair 2 is located on the same south-facing slope, but approximately 200-300 feet east of Pair 1. Vegetation in this area is dominated by prickly pear and California sagebrush, with California bush sunflower present to a lesser extent. Cover is approximately 75% with the habitat being slightly disturbed by the invasion of tree tobacco (*Nicotiana glauca*).

Pair 3

This pair occurs on a west-facing slope in the south central portion of the site. This pair was observed using almost the entire length of the slope (approx. 300'), which is dominated by California bush sunflower and California sagebrush. Prickly pear is also present. Vegetation is dense (>90% cover) in this area and is relatively undisturbed.

Pair 4

Pair 4 occurs on the south facing slope adjacent to Palos Verdes Drive and opposite the County Fishing Access parking lot. Vegetation in this area supports mixed dominance California

sagebrush and California bush sunflower, with lesser amounts of prickly pear and coast cholla. Coverage on this slope is approximately 85% and disturbance is minimal.

Other Sensitive Species Observed on the Upper Point Vicente Site

Only one other sensitive species, the cactus wren (*Campylorhyncus bruneicapillus*) was observed on site. This species is listed as a Species of Special Concern by the California Department of Fish and Game (CDFG). At least three pairs were observed on site (one constructing a nest), all in the southern portion of the site. No other species listed as threatened as threatened or endangered by the USFWS or CDFG were observed on site during NRC's surveys.

Conclusions

There are currently four pairs of coastal California gnatcatchers occupying the Upper Point Vicente site. No other species listed by the USFWS or CDFG as threatened or endangered occur on site. This letter will be forwarded to Ms. Christine Moen of the U.S. Fish an Wildlife Service based on the terms of NRC's permits to conduct surveys for this species

If you have any questions or comments regarding this letter, please contact me directly at 949.497.0931. .

Sincerely,

NATURAL RESOURCE CONSULTANTS

David A. Levine

CAGN 1

CAGN 2

CAGN 3

CAGN 4

15.3.5 Jurisdictional Delineation (May 30, 2001)

GLENN LUKOS ASSOCIATES
Regulatory Services

March 13, 2001 [Revised May 30, 2001]

Michael Mohler
Destination Development Corp.
11777 San Vicente Boulevard
Suite 900
Los Angeles, California 90049

SUBJECT: Jurisdictional Delineation for Long Point, City of Rancho Palos Verdes, Los Angeles County, California

Dear Mr. Mohler:

This letter report summarizes our preliminary findings of U.S. Army Corps of Engineers (Corps) and California Department of Fish and Game (CDFG) jurisdiction for the above-referenced property.[1] This letter report has been prepared for in-house planning purposes only and should not routinely be submitted to regulatory or resource agencies. If it is necessary to submit a written jurisdictional delineation to one of the agencies, we will prepare an abridged version of this letter report.

The Long Point site (formerly Marineland) is located in Rancho Palos Verdes, Los Angeles County [Exhibit 1], and contains one blue-line drainage (as depicted on the U.S. Geological Survey (USGS) topographic map Redondo Beach, California [dated 1963 and photorevised in 1981]) [Exhibit 2]. This site is located on two unconnected parcels of land north and south of Palos Verdes Drive. For the purposes of this report, the northern parcel will be referred to as the upper site and the southern parcel, as the lower site. On February 20, 2001, regulatory specialists of Glenn Lukos Associates, Inc. (GLA) examined the project site to determine the limits of (1) Corps jurisdiction pursuant to Section 404 of the Clean Water Act, (2) CDFG jurisdiction pursuant to Division 2, Chapter 6, Section 1600 of the Fish and Game Code, (3) California Water Quality Control Board (Regional Board) jurisdiction pursuant to Section 401 of the Clean Water Act, and (4) any "wetlands" as defined by the California Coastal Commission (CCC). Enclosed is

[1] This report presents our best effort at estimating the subject jurisdictional boundaries using the most up-to-date regulations and written policy and guidance from the regulatory agencies. Only the regulatory agencies can make a final determination of jurisdictional boundaries. If a final jurisdictional determination is required, GLA can assist in getting written confirmation of jurisdictional boundaries from the agencies.

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a 200-scale map [Exhibit 3] which depicts the revised areas of Corps and CDFG jurisdiction. Photographs to document the topography, vegetative communities, and general widths of each of the waters are provided as Exhibit 4.

Corps jurisdiction at the site totals approximately 0.19 acre, none of which consists of jurisdictional wetlands. The project as currently proposed would impact approximately 0.18 acre of Corps jurisdiction, none of which consists of jurisdictional wetlands.

CDFG jurisdiction at the site totals approximately 0.20 acre, 0.01 acre of which supports riparian vegetation. The project as currently proposed would impact approximately 0.18 acre of CDFG jurisdiction, none of which supports riparian vegetation.

Potential CCC wetland jurisdiction at the site totals approximately 0.03 acre, none of which would be impacted by the project as currently proposed.

I. METHODOLOGY

Prior to beginning the field delineation a 200-scale color aerial photograph, a 200-scale topographic base map of the property, and the previously cited USGS topographic map were examined to determine the locations of potential areas of Corps/CDFG jurisdiction. Suspected jurisdictional areas were field checked for the presence of definable channels and/or wetland vegetation, soils and hydrology. Suspected wetland habitats on the site were evaluated using the methodology set forth in the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual[2] (Wetland Manual). While in the field, jurisdictional areas were recorded onto a 200-scale color aerial photograph using visible landmarks. Other data were recorded onto wetland data sheets.

As the subject property is urban land, the Soil Conservation Service (SCS)[3] has not mapped known soil types as occurring in the general vicinity of the project site. Soils at the site were evaluated as needed in the course of identifying any suspected wetland areas.

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[2] Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, U.S. Army Engineer Waterways Experimental Station, Vicksburg, Mississippi.

[3] SCS is now known as the National Resource Conservation Service or NRCS.

II. JURISDICTION

A. Army Corps of Engineers

Pursuant to Section 404 of the Clean Water Act, the Corps regulates the discharge of dredged and/or fill material into waters of the United States. The term "waters of the United States" is defined in Corps regulations at 33 CFR Part 328.3(a) as:

> *(1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;*
> *(2) All interstate waters including interstate wetlands;*
> *(3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect foreign commerce including any such waters:*
> *(i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or*
> *(ii) From which fish or shell fish are or could be taken and sold in interstate or foreign commerce; or*
> *(iii) Which are used or could be used for industrial purpose by industries in interstate commerce...*
> *(4) All impoundments of waters otherwise defined as waters of the United States under the definition;*
> *(5) Tributaries of waters identified in paragraphs (a) (1)-(4) of this section;*
> *(6) The territorial seas;*
> *(7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1)-(6) of this section.*

In the absence of wetlands, the limits of Corps jurisdiction in non-tidal waters, such as intermittent streams, extend to the OHWM which is defined at 33 CFR 328.3(e) as:

> *...that line on the shore established by the fluctuation of water and indicated by physical characteristics such as 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.*

Pursuant to Article I, Section 8 of the U.S. Constitution, federal regulatory authority extends only to activities that affect interstate commerce. In the early 1980s the Corps interpreted the interstate commerce requirement in a manner that restricted Corps jurisdiction on isolated (intrastate) waters. On September 12, 1985, EPA asserted that Corps jurisdiction extended to isolated waters that are used or could be used by migratory birds or endangered species, and the definition of "waters of the United States" in Corps regulations was modified as quoted above from 33 CFR 328.3(a).

On January 9, 2001, the Supreme Court of the United States issued a ruling on *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers, et al* (SWANCC). In this case the Court was asked whether use of an isolated, intrastate pond by migratory birds is a sufficient interstate commerce connection to bring the pond into federal jurisdiction of Section 404 of the Clean Water Act.

The written opinion notes that the court's previous support of the Corps' expansion of jurisdiction beyond navigable waters (*United States v. Riverside Bayview Homes, Inc.*) was for a wetland that abutted a navigable water and that the court did not express any opinion on the question of the authority of the Corps to regulate wetlands that are not adjacent to bodies of open water. The current opinion goes on to state:

> *In order to rule for the respondents here, we would have to hold that the jurisdiction of the Corps extends to ponds that are not adjacent to open water. We conclude that the text of the statute will not allow this.*

Therefore, we believe the court's opinion goes beyond the migratory bird issue and says that no isolated, intrastate water is subject to the provisions of Section 404(a) of the Clean Water Act (regardless of any interstate commerce connection). However, the Corps and EPA have issued a joint memorandum which states that they are interpreting the ruling to address only the migratory bird issue and are leaving the other interstate commerce clause nexus intact.

The term "wetlands" (a subset of "waters of the United States") is defined at 33 CFR 328.3(b) as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support...a prevalence of vegetation typically adapted for life in saturated soil conditions." In 1987 the Corps published a manual to guide its field personnel in determining jurisdictional wetland boundaries. In 1989 the Federal Interagency Committee for Wetland Delineation developed an updated methodology which was adopted by the Corps, U.S. Fish and Wildlife Service (USFWS), U.S. Environmental Protection Agency (EPA), and SCS

which replaced the 1987 Wetland Delineation Manual.[4] The use of this 1989 manual was perceived by many to excessively increase the jurisdictional limits of wetlands. After several congressional hearings, EPA, Corps, SCS, and USFWS published proposed 1991 revisions to the 1989 manual.[5] A few days afterwards, the President signed the Energy and Water Development Appropriations Act of 1992 which, in effect, prohibits the use of the 1989 manual. Because the 1991 proposed revisions to the 1989 manual have not yet been adopted, the only remaining valid methodology is the 1987 Wetland Delineation Manual.[6] The methodology set forth in the 1987 Wetland Delineation Manual generally requires that, in order to be considered a wetland, the vegetation, soils, and hydrology of an area exhibit at least minimal hydric characteristics. While the manual provides great detail in methodology and allows for varying special conditions, a wetland should normally meet each of the following three criteria:

- more than 50 percent of the dominant plant species at the site must be typical of wetlands (i.e., rated as facultative or wetter in the National List of Plant Species that Occur in Wetlands[7]);

- soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation (e.g., a gleyed color, or mottles with a matrix of low chroma indicating a relatively consistent fluctuation between aerobic and anaerobic conditions); and

- hydrologic characteristics must indicate that the ground is saturated to within 12 inches of the surface for at least five percent of the growing season during a normal rainfall year[8].

In the Preamble to 33 CFR 328.3 the Corps provides additional guidance regarding the jurisdictional status of artificial drainage ditches and artificially irrigated areas:

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[4] Federal Interagency Committee for Wetland Delineation. 1989. Federal Manual for Identifying and Delineating Jurisdictional Wetlands. U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, and USDA Soil Conservation Service, Washington, DC Cooperative technical publication.

[5] Government Printing Office. 1991. Federal Register, "1989 Federal Manual for Identifying Jurisdictional Wetlands; Proposed Revisions." August 14, 1991, Vol. 56, No. 157, pp 40446-40480.

[6] This delineation was performed using, where appropriate, the 1987 Wetland Manual. It is unlikely that any actions will be taken on a revised wetland manual in the near future. If a new manual is adopted, it may be necessary to review our delineation to determine its compliance with any changes set forth.

[7] Reed, P.B., Jr. 1988. National List of Plant Species that Occur in Wetlands. U.S. Fish and Wildlife Service Biological Report 88(26.10).

[8] For most of low-lying southern California, five percent of the growing season is equivalent to 18 days.

For clarification it should be noted that we generally do not consider the following waters to be "Waters of the United States . . ."

(a) Non-tidal drainage and irrigation ditches excavated on dry land.
(b) Artificially irrigated areas which would revert to dry land if irrigation ceased

B. California Department of Fish and Game

Pursuant to Division 2, Chapter 6, Sections 1600-1603 of the California Fish and Game Code, the CDFG regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake which supports fish or wildlife.

CDFG defines a "stream" (including creeks and rivers) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation." CDFG's definition of "lake" includes "natural lakes or man-made reservoirs."

CDFG jurisdiction within altered or artificial waterways is based upon the value of those waterways to fish and wildlife. CDFG Legal Advisor has prepared the following opinion:

- Natural waterways that have been subsequently modified and which have the potential to contain fish, aquatic insects and riparian vegetation will be treated like natural waterways...

- Artificial waterways that have acquired the physical attributes of natural stream courses and which have been viewed by the community as natural stream courses, should be treated by [CDFG] as natural waterways...

- Artificial waterways without the attributes of natural waterways should generally not be subject to Fish and Game Code provisions...

Thus, CDFG jurisdictional limits closely mirror those of the Corps. Exceptions are CDFG's exclusion of isolated wetlands (those not associated with a river, stream, or lake), the addition of artificial stock ponds and irrigation ditches constructed on uplands, and the addition of riparian habitat supported by a river, stream, or lake regardless of the riparian area's federal wetland status.

C. California Coastal Commission

Pursuant to the California Coastal Act (California Public Resources Code Section 30121), the CCC regulates all impacts to wetlands. CCC defines "wetlands" as land "*which may be covered periodically or permanently with shallow water*". The 1981 CCC Statewide Interpretive Guidelines state that hydric soils and hydrophytic vegetation "*are useful indicators of wetland conditions, but the presence or absence of hydric soils and/or hydrophytes alone are not necessarily determinative when the Commission identifies wetlands under the Coastal Act. In the past, the Commission has considered all relevant information in making such determinations and relied upon the advice and judgement of experts before reaching its own independent conclusion as to whether a particular area will be considered wetland under the Coastal Act. The Commission intends to continue to follow this policy.*" Thus, the CCC may require as little as one of the three parameters required by the Corps in designating an area as a wetland.

Two significant deviations from this definition are noted in the Guidelines regarding drainage ditches and riparian areas. A footnote to Appendix D of the Guidelines makes the following statement regarding drainage ditches:

> *For the purpose of identifying wetlands using the technical criteria contained in this guideline, one limited exception will be made. That is, drainage ditches as defined herein will not be considered wetlands under the Coastal Act. A drainage ditch shall be defined as a narrow (usually less than 5-feet wide) manmade nontidal ditch excavated from dry land.*

Appendix D, Section III, of the Guidelines addresses the distinction between wetlands and riparian areas. This section states that "*the intent of the Coastal Act was to distinguish these two areas.*" The term "riparian vegetation" is defined in the Guidelines as "*that association of plant species which grows adjacent to freshwater watercourses, including perennial and intermittent streams, lakes, and other freshwater bodies.*" While both wetland and riparian plant species are considered hydrophytic in the Guidelines, a distinction between the two is made based on different kinds of representative plant species. Lists of representative wetland and riparian plant species are provided in the guidelines. Representative riparian species include willows and sycamores, as well as herbaceous and shrub species such as bracken fern and blackberry.

III. RESULTS

A. Corps Jurisdiction

Corps jurisdiction associated with the Long Point site totals approximately 0.19 acre of water of the United States, none of which consists of jurisdictional wetlands. The locations of the waters of the United States are depicted on the enclosed maps. Three ephemeral drainage channels were identified on the site and will be referred to as drainages A, B, and C. Drainages A and B are located on the lower site. Drainage C is located on the upper site.[9]

1. Drainage A

Approximately 0.14 acre of Corps jurisdiction is associated with Drainage A, none of which consist of jurisdictional wetlands. This is the only blue-line drainage on the project site, and it is ephemeral. Drainage A enters the lower site at the northeast corner via a box culvert [Exhibit 4, Photograph 1]. The drainage travels southwest for approximately 850 linear feet before turning and traveling an additional 400 linear feet to a point at which the OHWM is no longer discernible. From this point, flows presumably travel as unchanneled sheet flow. Approximately 440 feet down gradient, the OHWM resumes and continues for a distance of approximately 50 feet prior to exiting the site via a shear cliff and narrow, rocky beach to the ocean. The width of the OHWM ranges from eight feet in the upper reach to one foot in the lower reach. The OHWM was identified in the field by the destruction of terrestrial vegetation within the channel, distinct shelving in places, and the presence of debris racks throughout the channel [Exhibit 4, Photographs 2 and 3]. In the upper reach, the drainage exhibits a cobble substrate and is incised approximately three feet deep. In the lower reach, the drainage is no longer incised and exhibits faint signs of flow before reaching the point at which the OHWM is no long discernible [Exhibit 4, Photograph 4].

Vegetation associated with Drainage A includes black mustard (*Brassica nigra*, UPL), fountain grass (*Pennisetum setaceum*, NI), castor bean (*Ricinus communis*, FACU), sweet fennel (*Foeniculum vulgare*, FACU), bur-clover (*Meticago polymorpha*, NI), and slender wild oat (*Avena barbata*, UPL). A single Peruvian pepper tree (*Schinus molle,* UPL) occurs along the banks in the upper reach. In the lower reach, vegetation consists primarily of slender wild oat

[9] The Corps also assumes jurisdiction over the Pacific Ocean under Section 10 of the Rivers and Harbors Act, the shoreward limits of which extends to the mean high water level, and under Section 404 of the Clean Water Act, the shoreward limits of which extends to the highest predicted high tide. The project as currently designed does not encroach upon jurisdictional portions of the Pacific Ocean.

and cultivated barley (*Mordeum murinum*, UPL) with patches of castor bean adjacent to the channel.

2. Drainage B

Approximately 0.02 acre of Corps jurisdiction is associated with Drainage B, none of which consist of jurisdictional wetlands. This ephemeral drainage originates at the southern margin of the lower site and travels in a southerly direction towards the Pacific Ocean. Approximately 40 feet down gradient, the drainage enters a 20-by-20-foot sandy area. A three-foot OHWM was identified through the center of the sandy area using visible flow lines and cobble deposits. The channel is interrupted ten feet below the sandy area at a small berm, where it flows through a 32-inch corrugated metal pipe [Exhibit 4, Photograph 5]. It resumes on the other side of the berm and eventually exits the property onto the beach and into the ocean. The width of the OHWM averages from one to three feet and was identified by the presence of debris racks, shelving in some places, and by the destruction of terrestrial vegetation.

Vegetation associated with Drainage B consists of ornamental, non-native landscaping vegetation left over from when Marineland was operational.

3. Drainage C

Approximately 0.04 acre of Corps jurisdiction is associated with Drainage C, none of which consists of jurisdictional wetlands. This ephemeral drainage originates with a headcut in the eastern section of the upper site. The headcut occurs approximately 400 feet down gradient and south of a storm culvert which outlets to a gentle, grassy swale. This is likely the primary source of water flowing into Drainage C. The drainage acquires OHWM characteristics when the gradient steepens considerably and turns southeast. Drainage C travels approximately 250 linear feet before entering a storm basin where flows enter a 30-inch corrugated metal pipe [Exhibit 4, Photographs 6, 7, and 8]. The width of the OHWM ranges from four to ten feet and was identified by the presence of shelving, debris rack and by the destruction of terrestrial vegetation.

Vegetation occurring on the banks of Drainage C consists of prickly pear (*Opuntia littoralis*, UPL), sweet fennel (*Foeniculum vulgare*, FACU), lemonade berry (*Rhus integrifolia*, UPL), coastal cholla (*Opuntia prolifera*, UPL), coastal sage scrub *(Artemesia californicus*, UPL), caster bean (*Racinus communis*, FACU) and non-native upland grasses.

4. Upland Drainage Ditches

Two nontidal drainage ditches excavated in uplands were identified on the lower site. The drainage ditch in the northwestern corner of the lower site can be characterized as a concrete v-ditch, approximately three feet deep. This ditch conveys runoff from Palos Verdes Drive. As this feature was constructed in uplands and does not represent a realigned water of the United States, it would not be subject to Corps jurisdiction.

The drainage ditch in the southeastern corner of the lower site enters the site via a culvert at the eastern site boundary and travels 300 feet to the southwest before entering another culvert and exiting via Drainage A at the coastal bluff margin. This ditch was excavated in upland to convey urban storm flows from a nearby residential development. As this feature was constructed in uplands and does not represent a realigned water of the United States, it would not be subject to Corps jurisdiction.

B. CDFG Jurisdiction

CDFG jurisdiction associated with the Long Point site totals approximately 0.20 acre and includes all areas within Corps jurisdiction. Of the 0.20 acre, approximately 0.01 acre contains vegetated riparian habitat.

1. Drainage A

Approximately 0.14 acre of CDFG jurisdiction is associated with Drainage A, 0.01 acre of which supports riparian vegetation. This is the only blue-line drainage on the project site. Drainage A enters the lower site at the northeast corner via a box culvert [Exhibit 4, Photograph 1]. The drainage travels southwest for approximately 850 linear feet before turning and traveling an additional 400 linear feet to a point at which the streambed is no longer discernible. From this point, flows presumably travel as unchanneled sheet flow. Approximately 440 feet down gradient, the streambed resumes and continues for a distance of approximately 50 feet prior to exiting the site via a shear cliff and narrow, rocky beach to the ocean. The streambed width ranges from eight feet in the upper reach to one foot in the lower reach. The streambed was identified in the field by the destruction of terrestrial vegetation within the channel, distinct shelving in places, and the presence of debris racks throughout the channel [Exhibit 4, Photographs 2 and 3]. In the upper reach, the drainage exhibits a cobble substrate and is incised approximately three feet deep. In the lower reach, the drainage is no longer incised and the streambed is poorly defined in intermittent sections [Exhibit 4, Photograph 4]. In this area, the streambed was identified using sediment deposits, flow lines, and debris racks.

Vegetation associated with Drainage A includes black mustard (*Brassica nigra*), fountain grass (*Pennisetum setaceum*), castor bean (*Ricinus communis*), sweet fennel (*Foeniculum vulgare*), bur-clover (*Meticago polymorpha*), and slender wild oat (*Avena barbata*). A single Peruvian pepper tree (*Schinus molle*) occurs along the banks in the upper reach. In the lower reach, vegetation consists primarily of slender wild oat and cultivated barley (*Mordeum murinum*) with patches of castor bean adjacent to the channel. The 0.01 acre of vegetated riparian habitat is associated with a small stand of mule fat occurring on the east bank of the drainage at the point where the drainage exits the site.

2. Drainage B

Approximately 0.02 acre of CDFG jurisdiction is associated with Drainage B, none of which supports riparian vegetation. This drainage originates at the southern margin of the lower site and travels in a southerly direction towards the Pacific Ocean. Approximately 40 feet down gradient the drainage enters a 20-by-20-foot sandy area. A three-foot-wide channel was identified through the center of the sandy area using visible flow lines and cobble deposits. The channel is interrupted ten feet below the sandy area at a small berm, where it flows through a 32-inch corrugated metal pipe [Exhibit 4, Photograph 5]. It resumes on the other side of the berm and eventually exits the property onto the beach and into the ocean.

Vegetation associated with Drainage B consists of ornamental, non-native landscaping plants left over from when Marineland was operational.

3. Drainage C

Approximately 0.03 acre of CDFG jurisdiction is associated with Drainage C, none of which supports riparian vegetation. This ephemeral drainage originates with a headcut in the eastern section of the upper site. The headcut occurs approximately 400 feet down gradient and south of a storm culvert which outlets to a gentle, grassy swale. This is likely the primary source of water flowing into Drainage C. The drainage acquires bed, bank, and channel characteristics when the gradient steepens considerably and turns southeast. Drainage C travels approximately 250 linear feet before terminating at a storm basin where flows enter a 30-inch corrugated metal pipe. The streambed width ranges from four to ten feet.

Vegetation occurring on the banks of Drainage C consists of prickly pear (*Opuntia littoralis*), sweet fennel (*Foeniculum vulgare*), lemonade berry (*Rhus integrifolia*), coastal cholla (*Opuntia*

prolifera), coastal sage scrub *(Artemesia californicus*), caster bean (*Racinus communis*), and non-native upland grasses.

4. Upland Drainage Ditches

Two nontidal drainage ditches excavated in uplands were identified on the lower site. The drainage ditch in the northwestern corner of the lower site can be characterized as a concrete v-ditch, approximately three feet deep. This ditch conveys runoff from Palos Verdes Drive. This feature is an artificial waterway constructed in uplands and does not exhibit the attributes of a natural waterway; therefore, it would not be subject to CDFG jurisdiction. A small stand of mule fat occurs on the banks in the lower section of the ditch; however, the concrete lining precludes the mule fat from drawing water from the ditch. Therefore, this stand of mule fat is not supported by the drainage ditch and would not be considered adjacent riparian habitat subject to CDFG jurisdiction.

The drainage ditch in the southeastern corner of the lower site enters the site via a culvert at the eastern site boundary and travels 300 feet to the southwest before entering another culvert and exiting via Drainage A at the coastal bluff margin. This ditch was excavated in upland to convey urban storm flows from a nearby residential development. Vegetation in the channel consists primarily of non-native grasses and Curly dock (*Rumex crispus*), with scattered individuals of African umbrella sedge and a single, young hybrid willow (*Salix sp.*). Soils are shallow over an impermeable concrete or rock-lined surface. While this feature is an artificial waterway constructed in uplands, it has developed some attributes of a natural waterway. For this reason, CDFG may assert jurisdiction over this feature. Approximately 0.03 acre of CDFG jurisdiction may be associated with the southeastern drainage ditch, less than 0.01 acre of which consists of vegetated riparian habitat associated with the single, young willow.

C. California Coastal Commission

Potential wetlands, as defined by the CCC, may occur in the drainage ditch located in the southeastern corner of the lower site. This area totals approximately 0.03 acre. This ditch was excavated in upland to convey urban storm flows from a nearby residential development. At the time of our site visit on April 4, 2001, the ditch contained a low volume of nuisance flow from the development to the east. Vegetation in the channel consists primarily of non-native grasses and Curly dock (*Rumex crispus*), with scattered individuals of African umbrella sedge and a single, young hybrid willow (*Salix sp.*). Soils are shallow over an impermeable concrete or rock-lined surface. Matrix colors range from 2.5Y 3/2 with no mottles in the lower ditch to 2.5Y 3/1 with no mottles in the mid and upper ditch. Although this area exhibits hydric soil indicators in the mid and upper ditch, as well as both wetland hydrology and hydrophytic vegetation throughout, CCC guidelines state that drainage ditches should not be considered wetlands under the Coastal Act.

Two mule fat areas occur on site which may be considered riparian areas as defined by the CCC. A nine-foot-by-24-foot mule fat area (less than 0.01 acre) occurs on the banks of the drainage ditch located in the northwestern corner of the lower site. This is an upland position which does not exhibit wetland characteristics. Because the drainage ditch is concrete lined, the mule fat vegetation is not able to draw water from the ditch and is therefore not supported by this feature.

A 20-foot-by-20-foot mule fat area (0.01 acre) occurs on the banks of Drainage A, at the point where the drainage exits the site toward the ocean. This is an upland position which does not exhibit wetland characteristics.

As previously noted, the CCC Guidelines distinguish between wetlands and riparian areas. While mule fat is not specifically listed as a representative riparian or wetland plant species in the Guidelines, it would generally be associated with riparian plant species such as willow. Additionally, the two areas where mule fat occurs on site are upland positions and do not exhibit characteristics of wetlands such as wetland hydrology or hydric soils. Therefore, these areas may be subject to CCC jurisdiction as riparian areas, but do not possess the characteristics necessary to designate them wetlands, as defined by the CCC.

IV. DISCUSSION

A. Impact Analysis

1. Corps Jurisdiction

The project, as currently proposed, would impact approximately 0.18 acre of Corps jurisdiction, none of which consists of jurisdictional wetlands.

Table 1. Area of Corps Jurisdiction

Drainage	CORPS JURISDICTION (acres)			IMPACTED CORPS JURISDICTION (acres)		
Name	Non-Wetland	Wetland	Total	Non-Wetland	Wetland	Total
A	0.14	0.00	0.14	0.14	0.00	0.14
B	0.02	0.00	0.02	0.02	0.00	0.02
C	0.03	0.00	0.03	0.02	0.00	0.02
Total	**0.19**	**0.00**	**0.19**	**0.18**	**0.00**	**0.18**

2. CDFG Jurisdiction

The project, as currently proposed, would impact approximately 0.18 acre of CDFG jurisdiction, none of which supports riparian vegetation.

Table 2. Area of CDFG Jurisdiction

	CDFG JURISDICTION (acres)			IMPACTED CDFG JURISDICTION (acres)		
Drainage	Drainage	Riparian		Drainage	Riparian	
Name	Channel	Habitat	Total	Channel	Habitat	Total
A	0.14	0.01	0.15	0.14	0.00	0.14
B	0.02	0.00	0.02	0.02	0.00	0.02
C	0.03	0.00	0.03	0.02	0.00	0.02
Total	**0.19**	**0.01**	**0.20**	**0.18**	**0.00**	**0.18**

3. CCC Wetlands

The project as currently proposed, would not impact any wetlands, as defined by the CCC.

B. Corps Regulations and Procedures

The discharge of dredged or fill material (temporarily or permanently) into waters of the United States requires prior authorization from the Corps pursuant to Section 404 of the Clean Water Act. Activities that usually involve a regulated discharge of dredged or fill materials include (but are not limited to) grading, placing of riprap for erosion control, pouring concrete, laying sod, preparing soil for planting (e.g., turning soil over, adding soil amendments[10]), stockpiling excavated material, mechanized removal of vegetation, and driving of piles for certain types of structures. Activities that do not involve a regulated discharge (if performed in a manner to avoid discharges) include excavation, placing a structure, driving pilings (for transportation structures), clearing of vegetation using hand held equipment and working above the ground surface, pumping water, and walking or driving vehicles.

Federal law recognizes wetlands and other waters of the United States as valuable natural resources. Therefore, federal agencies, principally the Corps, USFWS, and EPA strongly discourage activities within federal jurisdiction that alter aquatic habitats. In addition, Corps policy, derived from the National Environmental Policy Act, prohibits "piece-mealing," the submission of separate permit applications for discharges which are reasonably related to the same project

1. Nationwide Permits

On March 9, 2000, the Corps published, in the *Federal Register,* a Final Notice of Issuance and Modification of Nationwide Permits (NWP). With this notice (and effective June 7, 2000) the Corps has 43 NWPs that preauthorize specific minor discharges. Use of some NWPs does not require review by the Corps. Formulation of a project design in which all proposed discharges into waters of the United States are authorized under NWPs could significantly reduce federal permit processing time. The revised NWPs are much more complicated that the previous NWPs and a number of new conditions have been added to the NWP program. The following is only a summary of NWPs that may be applicable to the subject site or the work proposed at the subject site. You should not use any of the NWPs unless you have read and understood the entire text of the NWP and all of the conditions (national and regional) of the NWP program.

NWP number 26 expired on June 7, 2000 and will not be reissued.

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[10] Similar planting activities associated with on-going farming operations may be exempt from regulation by Section 404 of the Clean Water Act.

NWP number 39 is the primary replacement for the expired NWP number 26. This NWP authorizes the discharge of dredged or fill material into non-tidal waters of the United States (excluding non-tidal wetlands adjacent to tidal waters) for the construction or expansion of residential, commercial, and institutional building foundations, building pads, and attendant features that are necessary for the use and maintenance of the structures. Attendant features may include roads, parking lots, garages, yards, utility lines, stormwater management facilities, playgrounds, playing fields, and golf courses (provided the golf course is an integral part of the residential development). Specifically excluded from this NWP are ski areas and oil and gas wells. The authorized discharge cannot cause the loss of more than 1/2 acre of waters of the United States nor cause the loss of more than 300 linear feet of stream bed. This NWP does not authorize channelization or stream relocation downstream of the point where the annual average flow is one cubic foot per second.[11] Use of NWP number 39 requires a case-by-case approval by the Corps through the pre-construction notification process if the discharge would cause the loss of (1) more than 1/10 acre of waters of the United States or (2) any open water[12], including perennial or intermittent streams, but not including ephemeral drainages. Use of this NWP requires submittal of a wetland delineation if any wetlands may be affected, a "mini alternatives analysis", and a compensatory mitigation proposal. If any open water occurs within the project area, vegetated buffers (of 25 to 50 feet wide) must be established (turf will not be considered a vegetated buffer).

a) Pre-construction Notification Process

Some NWPs require that the Corps approve each use of the NWP on a case-by-case basis. The process of obtaining this approval is called a pre-construction notification. Obtaining authorization through the pre-construction notification process is not automatic.

Notification to the Corps must include (1) the permittee's name, address, and telephone number; (2) location of the project; (3) description of the project, its purpose, its impacts (direct and

[11] For comparison, the expired NWP 26 authorized only work located above the point at which the annual flow was less than five cubic feet per second.

[12] The Corps' definition of "open water" is different from what the average person would consider. Under the Corps' definition, an open water is any area that in a normal precipitation year would have standing or flowing water sufficient to establish an ordinary high water mark. Even desert washes that only flow once every year or so have ordinary high water marks. The Corps' definition, however, specifically excludes ephemeral waters. An ephemeral stream is defined by the Corps as a stream that has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral stream beds are located above the water table year round and groundwater is not a source of water for the stream.

indirect), (4) information about other Corps authorizations needed,[13] and (5) a delineation of special aquatic sites (if required by the NWP). Certain NWPs require specific additional information as outlined in condition number 13. The Corps has 30 days from receipt of the notification to determine whether or not the notification is complete. The Corps may request additional information only once; if the requested information is properly submitted, the Corps cannot make a request for yet more information. If the permittee has not received notice from the Corps within 45 days of the Corps' receipt of a complete application, the permittee may assume that authorization has been approved.[14] For pre-construction notifications for projects that would cause the loss of more than 1/2 acre of waters of the United States, the Corps must solicit input from USFWS, EPA, CDFG, State Historic Preservation Officer (SHPO), and National Marine Fisheries Service (NMFS).

b) Conditional Use of Nationwide Permits

All of the NWPs are conditioned by a set of general conditions published at 33 CFR 330 Appendix A, Section C. Special attention should be paid to ensure compliance with six of these conditions.

Endangered Species. Condition number 11 states that no activity is authorized under any NWP if that activity is likely to jeopardize the continued existence of a federally listed threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act or which is likely to destroy or adversely modify the critical habitat of such species. If the activity may adversely affect a listed species, the Corps must initiate and complete a Section 7 consultation pursuant to the Endangered Species Act. The district engineer may, at his option, complete the consultation and allow the activity to be authorized by NWP, or he may at any time take discretionary authority (i.e., require that an individual permit be obtained for the proposed activity). If any federally-listed (or proposed for listing) endangered or threatened species or critical habitat might be affected by the proposed project, or is in the vicinity of the project, the permittee must not commence work and must notify the Corps.

Cultural Resources. Condition number 12 states that no activity which may affect historic properties listed, or eligible for listing, in the National Register of Historic Places is authorized until the Corps has complied with 33 CFR 325, Appendix C. The permittee must notify the

[13] Many Corps districts (including the Los Angeles District) have issued written policy clarifying that their intent is to receive a small version of an environmental assessment with each notification.

[14] If the notification, as originally submitted, is deemed complete, the 45-day clock starts from the date of the Corps' receipt of the notification, not after the 30-day review period has ended.

district engineer if the proposed activity may adversely affect historic properties which the National Park Service has listed, or determined eligible for listing, on the National Register of Historic Places.

Water Quality Certification. Condition number 9 states that an individual 401 water quality certification must be obtained or waived for the proposed activity if the State Water Quality Control Board has not already certified the NWP. In the past, the State of California has waived the 401 water quality certification requirement for all projects authorized by nationwide permits. However, with the issuance of the last set of nationwide permits, the California Water Quality Control Board has decided that individual 401 water quality certification, or a waiver of certification, will be required for most nationwide permits. The State Board has issued "conditional certification" for NWPs 1, 4, 5, 6, 9, 10, 11, 20, 22, 24, 28, 29, 30, 32, 34, 36, and 38. Use of this "conditional certification" requires prior notification to the State Board and the appropriate Regional Board. If the applicant is not notified by the Regional Board within 30 days of the postmarked date of the notification, the applicant may assume that the project meets the conditions of the certification. Certification for all other NWPs must be obtained by application to the Regional Board on a case-by-case basis. At this writing, the State Board has not published any decisions on the certification of the March 9, 2000 NWP changes. For NWP numbers 12, 14, 17, 18, 32, 39, 40, 42, 43, and 44 a water quality management plan must be submitted to the Corps.

Mitigation. Condition number 19 (a new condition to the NWPs) requires mitigation where necessary to ensure that the adverse effects to the aquatic environment are minimal. Compensatory mitigation will be required at a minimum 1:1 ratio for all wetland impacts requiring a pre-construction notification; preservation will be allowed only in exceptional circumstances. Vegetated buffers will be required adjacent to streams and other open waters[15] located on the property. The buffers will normally be 25 to 50 feet wide on each side of the waterbody, but wider buffers may be required. The wetland buffers (upland or wetland) may be counted as 1/3 of the total mitigation requirement beyond the initial 1:1 wetland replacement requirement. Consolidated mitigation approaches (such as mitigation banking) is the Corps' preferred method of providing compensatory mitigation.

Designated Critical Resource Waters. Condition number 25 prohibits the use of NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, and 44 for any activity within or directly affecting critical resource waters, including wetlands adjacent to such waters. Critical resource waters include

[15] For the purposes of the NWPs, the term "open waters" does not include ephemeral drainages, but does include any other water of the United States that exhibits an ordinary high water mark, including intermittent drainages.

NOAA-designated marine sanctuaries, National Estuarine Research Reserves, National Wild and Scenic Rivers, critical habitat for federally listed threatened and endangered species[16], coral reefs, state natural heritage sites, and outstanding national resource waters, or other waters officially designated by a state as having particular environmental or ecological significance and identified by the Corps.

Regional Conditions. Each district office of the Corps is encouraged to develop regional conditions for use of NWPs within the district. The regional conditions may only further restrict the published NWPs and may not authorize additional activities. At this writing, the Los Angeles District has not published its final regional conditions.

c) Multiple Use of Nationwide Permits

Under the previous rules, the impact limit of each NWP used on a single and complete project was additive, that is, the impact for each NWP used could be added together to achieve a total impact in excess of that allowed by any one of the NWPs. Under the current rules, the total impact limit of multiple NWPs on a single project cannot exceed the impact limit of the NWP with the highest limit being used on the project.

d) Linear Projects

Corps regulations at 33 CFR 330.2(i) state that "for linear projects, the 'single and complete project'... will apply to each crossing of a separate water of the United States... at that location..." The regulations go on to explain that for linear projects crossing the same waterbody at several separate and distinct locations, each crossing is considered a single and complete project and that individual channels in a braided stream or river are not separate water bodies.

e) Expiration of Nationwide Permits

Nationwide permits are issued for a period of 5 years. The previously issued 39 nationwide permits, which became effective on February 11, 1997, will expire on February 11, 2002; with the exception of NWP 26 which will expired on June 7, 2000[17]. The new NWPs issued on

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[16] Use of these NWPs within critical habitat may be allowed if the activity complies with condition number 11 and USFWS or NMFS has concurred in a determination of compliance with this condition (i.e., a Section 7 Consultation has been completed pursuant to the Endangered Species Act).

[17] Some letters of verification written after March 9, 2000 indicate that the expiration of NWP number 26 authorization for that particular project is valid until February 11, 2002. NWP number 26 authorization is extended

March 9, 2000 and the modified NWPs and conditions will all expire on June 7, 2005. The previously issued NWPs will be modified and reissued on February 11, 2002 at which time the new and modified NWPs will likely be included in the proposal to modify and reissue NWPs. Corps regulations at 33 CFR 330.6(b) state that work that has started in reliance upon a NWP may continue for an additional year after expiration of the NWP.[18]

A letter of verification from the Corps, stating that the proposed work is authorized by a nationwide permit may be obtained for any nationwide permit, but must be obtained for those nationwide permits for which "notification" is required by condition number 13. The letter of verification is valid only for a stated period of time (usually two years) after which it expires. If a continuation is required, a new letter would have to be obtained, possibly requiring that the "notification" process be undertaken a second time.

C. CDFG Regulations and Procedures

Unlike the Corps, CDFG regulates not only the discharge of dredged or fill material, but all activities that alter streams and lakes and their associated habitat. CDFG has no abbreviated permitting process comparable to the Corps nationwide permits. A CDFG 1601/1603 Agreement is required for all activities resulting in impacts to streambeds and their associated riparian habitats.

A 1601/1603 notification (application) will not be accepted by the CDFG until after an environmental impact report (EIR) or negative declaration has been certified. CDFG generally requires that any impacts to streambeds and adjacent riparian habitats be fully mitigated. To ensure rapid and favorable action on a 1601/1603 notification, a mitigation plan should be submitted with the notification package. It normally takes 30 days for the CDFG to process a 1601/1603 notification.

D. Potential Mitigation

If the division engineer takes discretionary authority and requires an individual permit, or if authorization is sought under a NWP requiring case-by-case approval by the Corps through the pre-construction notification process, or if the proposed work does not qualify for authorization

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until February 11, 2002 only for those project that have such written verification. All other uses of NWP number 26 expires on June 7, 2000.

[18] The Corps has determined that being under contract prior to expiration of the NWPs to have work commence is equivalent to having started the work prior to expiration of the NWPs.

by NWP, then the Corps (and the state and federal resource agencies) will likely require mitigation for the impacted wetland/riparian habitat.

Unlike the Corps, the CDFG will likely require mitigation for all impacts to streambeds and their associated riparian habitats resulting from any aspect of the proposed project, regardless of Corps requirements or extent of impacts.

Mitigation can take several forms. It can consist of (1) avoidance of impacts, (2) reduction of impacts, or (3) compensation for impacts.[19] The first two types of mitigation (avoidance or reduction of impacts) are much preferred by the agencies and should be investigated to the maximum extent possible. In cases where impacts cannot be avoided or significantly reduced, compensation must be considered.

Compensation is the creation of habitat to replace similar habitat unavoidably eliminated at a different location. In order to be accepted, the concerned agencies must be convinced that the proposed compensation will totally mitigate for the lost habitat. Because the creation of habitat requires time (usually several years) there is a temporal loss of habitat unless the mitigation is performed several years in advance of the removal of the existing habitat. As a result, the agencies often require compensation at a ratio of greater than one-to-one. Our experience with NWP number 26 is that habitat replacement is usually required at a ratio of between 1.5:1 and 2:1; however, a ratio of 3:1 or more is not unheard of for the loss of high quality wetlands.

If performed on the project site or immediately adjacent to the project site, the mitigation is said to be "on site." If no mitigation opportunities are available at or adjacent to the project site, "off site" mitigation may be considered. Generally, as the distance between the project and mitigation sites increases, the value of the mitigation (as determined by the agencies) decreases. In addition, if the mitigation is too far off site, disputes may arise between local governing bodies in which one local government refuses to allow mitigation within its boundaries for a project outside its boundaries. Compensation does not have to take place on property owned by the developer (although it is imperative that the developer obtain written permission prior to formal application).

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[19] The November 15, 1989 Memorandum of Agreement (MOA) between the Corps and EPA directed the Corps to require that impacts to waters of the United States be avoided to the maximum extent practicable. Although the MOA was intended to apply to individual permits only, recent experience with Corps permit managers has indicated that they are requiring prospective nationwide permittees to document that discharges into waters of the United States cannot be avoided and that there are no available upland alternatives.

The Corps has recently taken the position that mitigation banking and other forms of consolidated mitigation are the preferred method of providing compensatory mitigation because this method involves larger blocks of protected aquatic environment, are more likely to meet the mitigation goals, and are more easily checked for compliance.

If you have any questions about this letter report, please contact either Glenn Lukos or Sara Young at (949) 837-0404.

Sincerely,

GLENN LUKOS ASSOCIATES, INC.

Sara K. Young
Regulatory Specialist

Glenn C. Lukos
President

s:0236-2b.rpt

Photograph 1: Box culvert at the beginning of Drainage A.

Photograph 2: Photograph taken from the beginning of Drainage A, looking downstream.

Photograph 3: Photograph depicting the OHWM characteristics observed on Drainage A.

Photograph 4: Area of Drainage A where it ceases to exhibit characteristics of an OHWM.

GLENN LUKOS ASSOCIATES

EXHIBIT 4

LONG POINT RESORT

Site Photographs

Photograph 5: 32 inch corrugated metal pipe culvert located at the midpoint on Drainage B.

Photograph 6: Photograph of Drainage C where terrain becomes steep and exhibits OHWM characteristics.

Photograph 7: Photograph depicting where Drainage C flows into a water basin with a 30 inch corrugated metal pipe.

Photograph 8: Photograph of the swale on Drainage C before the terrain steepens.

GLENN LUKOS ASSOCIATES

EXHIBIT 4

LONG POINT RESORT

Site Photographs

NOTE TO READER:

EXHIBIT 3, *CORPS AND CDFG JURISDICTION MAP*, IS AN OVERSIZED MAP WHICH IS AVAILABLE FOR REVIEW AT THE CITY OF RANCHO PALOS VERDES CITY HALL.

INSERT COLOR 2(11X17)EXHABIT 4,

15.3.6 Fauna and Flora Compendium (June 2001)

FAUNA COMPENDIUM

LEGEND
O = Observed during surveys of project site.
E = Expected to occur on or in the vicinity of the project site.
P = Potential to occur on the project site, but not expected.
* = Introduced species

Species	Known/ Potential Occurance	Notes
AMPHIBIANS		
PLETHODONTIDAE - LUNGLESS SALAMANDERS		
Batrachoseps major garden slender salamander	E	
PELOBATIDAE -SPADEFOOT TOADS		
Scaphiopus hammondii western spadefoot	P	
BUFONIDAE - TRUE TOADS		
Bufo boreas western toad	E	
HYLIDAE - TREEFROGS		
Hyla cadaverina California treefrog	E	
REPTILES		
ANNIELLIDAE - LEGLESS LIZARDS		
Anniella pulchra pulchra silvery legless lizard	P	
IGUANIDAE - IGUANID LIZARDS		
Phrynosoma coronatum blainvillii San Diego horned lizard	E	
Sceloporus occidentalis western fence lizard	O	
Uta stansburiana side-blotched lizard	E	
TEIIDAE - WHIPTAIL LIZARDS		
Cnemidophorus tigris multiscutatus coastal western whiptail	E	
COLUBRIDAE - COLUBRID SNAKES		
Diadophis punctatus ringneck snake	E	
BIRDS		Many of the avian species on this list may not occur on the the project site, but will use the adjacent ocean habitats.
GAVIIDAE - LOONS		
Gavia immer common loon	E	
Gavia pacifica pacific loon	E	
Gavia stellata red-throated loon	E	
PODICIPEDIDAE - GREBES		
Podiceps nigricollis eared grebe	E	
Aechmophorus occidentalis western grebe	E	
Aechmophorus clarkii Clark's grebe	P	
PELECANIDAE - PELICANS		
Pelecanus occidentalis brown pelican	O	

FAUNA COMPENDIUM

Species	Known/ Potential Occurance	Notes
BIRDS (continued)		
PHALACROCORACIDAE - CORMORANTS		
Phalacrocorax auritus double-crested cormorant	O	
Phalacrocorax penicillatus Brandt's cormorant	E	
Phalacrocorax pelagicus Pelagic cormorant	E	
ARDEIDAE - HERONS		
Ardea herodias great blue heron	P	
Ardea albus great egret	P	
Egretta thula snowy egret	P	
CATHARTIDAE - NEW WORLD VULTURES		
Cathartes aura turkey vulture	P	
ANATIDAE - WATERFOWL		
Branta bernicla brant	E	
Melanitta perspicillata surf scoter	E	
Mergus serrator red-breastered merganser	E	
ACCIPITRIDAE - HAWKS		
Elanus leucurus white-tailed kite	E	
Circus cyaneus northern harrier	E	
Accipiter striatus sharp-shinned hawk	E	
Accipiter cooperii Cooper's hawk	E	
Buteo lineatus red-shouldered hawk	P	
Buteo jamaicensis red-tailed hawk	E	
Buteo regalis ferruginous hawk	P	
Pandion haliaetus osprey	P	
FALCONIDAE - FALCONS		
Falco sparverius American kestrel	O	
Falco columbarius merlin	P	
Falco peregrinus peregrine falcon	P	
Falco mexicanus prairie falcon	P	
ODONTOPHORIDAE - QUAILS		
Callipepla californica California quail	P	
HAEMATOPODIDAE - OYSTERCATCHERS		
Haematopus bachmani black oystercatcher	P	

FAUNA COMPENDIUM

Species	Known/ Potential Occurance	Notes
BIRDS (continued)		
CHARADRIIDAE - PLOVERS		
Pluvialis squatorola black-bellied plover	E	
Charadrius vociferus killdeer	E	
SCOLOPACIDAE		
Catoptrophorus semipalmatus willet	E	
Actitis macularia spotted sandpiper	E	
Numenius phaeopus whimbrel	E	
Arenaria interpres ruddy turnstone	E	
Arenaria melanocephala ruddy turnstone	E	
Heteroscelus incanus wandering tattler	E	
Aphriza virgata surfbird	E	
LARIDAE - GULLS & TERNS		
Larus delawarensis ring-billed gull	E	
Larus californicus California gull	E	
Larus heermanni Heermann's gull	O	
Larus philadelphia Bonaparte's gull	E	
Larus argentatus herring gull	E	
Larus occidentalis western gull	O	
Larus glaucescens glaucous-winged gull	E	
Sterna caspia Caspian tern	E	
Sterna forsteri Forster's tern	E	
COLUMBIDAE - PIGEONS & DOVES		
Columba livia rock dove *	O	
Zenaida macroura mourning dove	O	
CUCULIDAE - CUCKOOS & ROADRUNNERS		
Geococcyx californianus greater roadrunner	P	
TYTONIDAE - BARN OWLS		
STRIGIDAE - TRUE OWLS		
Bubo virginianus great horned owl	E	
Athene cunicularia burrowing owl	P	
Asio flammeus short-eared owl	P	

FAUNA COMPENDIUM

Species	Known/ Potential Occurance	Notes
BIRDS (continued)		
CAPRIMULGIDAE - GOATSUCKERS		
Phalaenoptilus nuttallii common poorwill	P	
APODIDAE - SWIFTS		
Chaetura vauxi Vaux's swift	O	
Aeronautes saxatalis white-throated swift	O	
TROCHILIDAE - HUMMINGBIRDS		
Archilochus alexandri black-chinned hummingbird	E	
Calypte anna Anna's hummingbird	O	
Calypte costae Costa's hummingbird	E	
Selasphorus rufus rufous hummingbird	O	
Selasphorus sasin Allen's hummingbird	E	
ALCEDINIDAE - KINGFISHERS		
Ceryle alcyon belted kingfisher	P	
PICIDAE - WOODPECKERS		
Colaptes auratus northern flicker	E	
TYRANNIDAE - TYRANT FLYCATCHERS		
Contopus cooperi olive-sided flycatcher	E	
Contopus sordidulus western wood-pewee	O	
Empidonax difficilis Pacific-slope flycatcher	E	
Sayornis nigricans black phoebe	O	
Sayornis saya Say's phoebe	E	
Myiarchus cinerascens ash-thoated flycatcher	E	
Tyrannus vociferans Cassin's kingbird	E	
Tyrannus verticalis western kingbird	E	
LANIIDAE - SHRIKES		
Lanius ludovicianus loggerhead shrike	O	
VIREONIDAE - VIREOS		
Vireo cassinii Cassin's vireo	E	
Vireo gilvus warbling vireo	E	
CORVIDAE - JAYS & CROWS		
Aphelocoma californica western scrub-jay	O	
Corvus brachyrhynchos American crow	P	
Corvus corax common raven	O	

FAUNA COMPENDIUM

Species	Known/ Potential Occurance	Notes
BIRDS (continued)		
ALAUDIDAE - LARKS		
Eremophila alpestris horned lark	P	
HIRUNDINIDAE - SWALLOWS		
Tachycineta bicolor tree swallow	E	
Tachycineta thalassina violet-green swallow	E	
Stelgidopterx serripennis northern rough-winged swallow	E	
Hirundo pyrrhonota cliff swallow	E	
Hirundo rustica barn swallow	O	
AEGITHALIDAE - BUSHTITS		
Psaltriparus minimus bushtit	O	
TROGLODYTIDAE - WRENS		
Campylorhynchus brunneicapillus cactus wren	O	
Thryomanes bewickii Bewick's wren	O	
Troglodytes aedon house wren	O	
REGULIDAE - KINGLETS		
Regulus calendula ruby-crowned kinglet	E	
SYLVIIDAE - GNATCATCHERS		
Polioptila caerulea blue-gray gnatcatcher	O	
Polioptila californica California gnatcatcher	O	
TURIDIDAE - THRUSHES & ROBINS		
Catharus ustulatus Swainson's thrush	E	
Catharus guttatus hermit thrush	E	
Turdus migratorius American robin	O	
MIMIDAE - THRASHERS		
Mimus polyglottos northern mockingbird	O	
Toxostoma redivivum California thrasher	O	
STURNIDAE - STARLINGS		
Sturnus vulgaris European starling *	O	
MOTACILLIDAE - PIPITS		
Anthus rubescens American pipit	E	
BOMBYCILLIDAE - WAXWINGS		
Bombycilla cedrorum cedar waxwing	E	
PTILOGONATIDAE - SILKY-FLYCATCHERS		
Phainopepla nitens phainopepla	O	

FAUNA COMPENDIUM

Species	Known/ Potential Occurance	Notes
BIRDS (continued)		
PARULIDAE - WARBLERS		
Vermivora celata orange-crowned warbler	O	
Vermivora ruficapilla Nashville warbler	E	
Dendroica petechia yellow warbler	O	
Dendroica coronata yellow-rumped warbler	E	
Dendroica nigrescens black-throated gray warbler	E	
Dendroica townsendi Townsend's warbler	E	
Dendroica occidentalis hermit warbler	E	
Oporornis tolmiei MacGillivray's warbler	E	
Geothlypis trichas common yellowthroat	O	
Wilsonia pusilla Wilson's warbler	E	
Icteria virens yellow-breasted chat	P	
THRAUPIDAE - TANAGERS		
Piranga ludoviciana western tanager	E	
EMBERIZIDAE - SPARROWS & JUNCOS		
Pipilo maculatus spotted towhee	E	
Pipilo crissalis California towhee	O	
Aimophila ruficeps rufous-crowned sparrow	O	
Spizella passerina chipping sparrow	E	
Chondestes grammacus lark sparrow	P	
Passerculus sandwichensis savannah sparrow	O	
Passerella iliaca fox sparrow	E	
Melospiza melodia song sparrow	O	
Melospiza lincolnii Lincoln's sparrow	E	
Zonotrichia atricapilla golden-crowned sparrow	E	
Zonotrichia leucophrys white-crowned sparrow	E	
Junco hyemalis dark-eyed junco	E	
CARDINALIDAE - GROSBEAKS & BUNTINGS		
Pheuticus melanocephalus black-headed grosbeak	E	
Guiraca caerulea blue grosbeak	E	

FAUNA COMPENDIUM

Species	Known/ Potential Occurance	Notes
BIRDS (continued)		
CARDINALIDAE - GROSBEAKS & BUNTINGS		(continued)
Passerina amoena lazuli bunting	O	
Agelaius phoeniceus red-winged blackbird	O	
Agelaius tricolor tricolored blackbird	P	
Sturnella neglecta western meadowlark	E	
Euphagus cyanocephalus Brewer's blackbird	E	
Molothrus ater brown-headed cowbird	O	
Icterus cucullatus hooded oriole	O	
Icterus bullockii Bullock's oriole	O	
FRINGILLIDAE - FINCHES		
Carpodacus mexicanus house finch	O	
Carduelis psaltria lesser goldfinch	O	
Carduelis tristis American goldfinch	E	
PASSERIDAE - OLD WORLD SPARROWS		
Passer domesticus house sparrow *	O	
MAMMALS		
DIDELPHIDAE - NEW WORLD OPOSSUMS		
Didelphis virginiana Virginia opossum *	E	
VESPERTILIONIDAE - EVENING BATS		
Antrozous pallidus pallid bat	E	
Myotis ciliolabrum small-footed myotis	E	
Myotis yumanensis Yuma myotis	E	
Antroxous pallidus Townsend's big-eared bat	E	
Corynorhinus townsendii pale big-eared bat	E	
MOLOSSIDAE - MOLOSSID BATS		
Eumops perotis western mastiff bat	E	
LEPORIDAE - HARES & RABBITS		
Sylvilagus audubonii desert cottontail	O	
SCIURIDAE - SQUIRRELS		
Spermophilus beecheyi California ground squirrel	E	
GEOMYIDAE - POCKET GOPHERS		
Thomomys bottae Botta's pocket gopher	E	

FAUNA COMPENDIUM

Species	Known/ Potential Occurance	Notes
MAMMALS (continued)		
HETEROMYIDAE - POCKET MICE & KANGAROO RATS		
Perognathus longimembris little pocket mouse	P	
Chaetodipus californicus California pocket mouse	P	
Dipodomys agilis agile kangaroo rat	P	
MURIDAE - MICE, RATS, AND VOLES		
Microtus californicus California vole	E	
Mus musculus house mouse *	E	
Neotoma lepida desert woodrat	E	
Peromyscus californicus California mouse	P	
Peromyscus eremicus cactus mouse	P	
Peromyscus maniculatus deer mouse	P	
Rattus norvegicus Norway rat*	P	
Rattus rattus black rat*	E	
CANIDAE - WOLVES & FOXES		
Canis latrans coyote	P	
Urocyon cinereoargenteus gray fox	P	
PROCYONIDAE - RACCOONS		
Procyon lotor common raccoon	E	
MUSTELIDAE - WEASELS, SKUNKS & OTTERS		
Mephitis mephitis striped skunk	E	
Mustela frenata long-tailed weasel	P	
INVERTEBRATES		
PAPILIONIDAE - SWALLOWTAIL BUTTERFLIES		
Papilio zelicaon anise swallowtail	E	
Papilio crespnontes giant swallowtail	P	
PIERIDAE - WHITES, SULFURS, & ORANGETIPS		
Anthocharis sara Sara orangetip	O	
Pieris rapae mustard white*	E	
Pontia protodice common (checkered) white	O	
Colias eurytheme alfalfa butterfly (orange sulphur)	E	
Phoebis sennae cloudless sulfur	P	
SATYRIDAE - WOOD NYMPHS		
Coenonympha californica California ringlet	P	

FAUNA COMPENDIUM

Species	Known/ Potential Occurance	Notes
INVERTEBRATES (continued)		
NYMPHALIDAE - BRUSH-FOOTED BUTTERFLIES		
Euphydryas chalcedona chalcedon checkerspot	P	
Vanessa cardui painted lady	E	
Vanessa annabella west coast lady	O	
Vanessa virginiensis American lady	E	
Vanessa atalanta red admiral	E	
Junonia coenia common buckeye	E	
Nymphalis antiopa mourning cloak	E	
DANAIDAE - MILKWEED BUTTERFLIES		
Danaus plexippus monarch	E	
Danaus gilippus queen	P	
RIODINIDAE - METALMARKS		
Apodemia mormo virgulti Behr's (mormon) metalmark	E	
LYCAENIDAE - BLUES, HAIRSTREAKS, & COPPERS		
Glaucopsyche lygdamus australis southern blue	E	
Leptotes marina marine blue	E	
Icaricia acmon acmon blue	E	
Brephidium exilis western pygmy-blue	E	
Strymon melinus gray hairstreak	E	
Callophrys augustus western elfin	P	
Callophrys perplexa perplexing hairstreak	P	
Glacopsyche lygdamus palosverdesensis Palos Verdes blue butterfly	P	
HESPERIIDAE - SKIPPERS		
Erynnis funeralis funereal duskywing	O	
Pyrgus communis common checkered skipper	E	
Hylephila phyleus fiery skipper	E	
Polites sabuleti sandhill skipper	P	
Ochlodes agricola rural skipper	P	
Paratrytone melane umber skipper	E	
Lerodea eufala eufala skipper	P	

FLORA COMPENDIA

GYMNOSPERMS
PINACEAE - PINE FAMILY
Pinus spp.
ANGIOSPERMAE - FLOWERING PLANTS
AIZOACEAE - FIG-MARIGOLD FAMILY
Carpobrotus edulis sea fig
Mesembryantheum crystallinum crystalline iceplant
Mesembryantheum nodiflorum slender-leaved iceplant
ANACARDIACEAE - SUMAC FAMILY
Rhus integrifolia lemonadeberry
Schinus molle Peruvian pepper tree
Schinus terebinthifolius Brazilian pepper tree
APIACEAE (UMBELLIFERAE) - CARROT FAMILY
Foeniculum vulgare sweet fennel
APOCYNACEAE - DOGBANE FAMILY
Nerium oleander oleander
Carissa macrocarpa natal plum
ARALIACEAE - GINSENG FAMILY
Hedera helix English ivy
ASTERACEAE (COMPOSITAE) - SUNFLOWER FAMILY
Artemisia californica California sagebrush
Baccharis pilularis coyote brush
Baccharis salicifolia mule fat
Centaurea melitensis tocalote
Chrysanthemum coronarium garland chrysanthemum
Conyza canadensis common horseweed
Encelia californica *bush sunflower*
Eriophyllum confertiflorum golden yarrow
Hazardia squarrosa saw-toothed goldenbush
Heterotheca grandiflora telegraph weed
Isocoma menziesi coastal goldenbush
Lessingia filaginifolia cudweed aster
Malacothrix saxatilis cliff malacothrix
Picris echioides bristly ox tongue
Sonchus oleraceus common sow-thistle

FLORA COMPENDIA

BORAGINACEAE - BORAGE FAMILY
Echium candicans pride of Madera
BRASSICACEAE (CRUCIFERAE) - MUSTARD FAMILY
Brassica nigra black mustard
Raphanus sativus wild radish
CACTACEAE - CACTUS FAMILY
Opuntia littoralis coastal prickly pear
Opuntia oricola oracle cactus
Opuntia prolifera coastal cholla
CAPPARACEAE - CAPER FAMILY
Isomeris arborea bladderpod
CHENOPODIACEAE - GOOSEFOOT FAMILY
Atriplex lentiformis big saltbush
Atriplex semibaccata Australian saltbush
Bassi hyssopifolia five-hook bassia
Salsola tragus Russian thistle
Suaeda taxifolia woolly sea-blite
CRASSULACEAE - STONECROP FAMILY
Dudleya virens bright green dudleya
CUCURBITACEAE - GOURD FAMILY
Marah macrocarpus wild cucumber
EUPHORBIACEAE -SPURGE FAMILY
Ricinus communis castor bean
FABACEAE - LEGUME/PEA FAMILY
Acacia sp. acacia
Lupinus sp. Lupine
Medicago polymorpha bur-clover
Melilotus alba white sweet-clover
Melilotus indica yellow sweet-clover
GERIANIACEAE - GERANIUM FAMILY
Erodium cicutarium red-stemmed filaree
Pelargonium sp. Geranium
LAMIACEAE - MINT FAMILY
Marrubium vulgare common horehound
Salvia apiana white sage
Stachys ajugoides bugle hedge-nettle

FLORA COMPENDIA

MALVACEAE - MALLOW FAMILY
Hibiscus sp. Hibiscus
Malva parviflora cheeseweed
MYOPORACEAE - MYOPORUM FAMILY
Myoporum laetum myoporum
MYRTACEAE - MYRTLE FAMILY
Eucalyptus spp.
Feijoa sellowiana pineapple guava
Melaleuca sp. Melaleuca
NYCTAGINACEAE - FOUR-O'CLOCK FAMILY
Bougainvillea sp. Bougainvillea
Mirabilis californica var. *californica* California wishbone bush
OLEACEAE - OLIVE FAMILY
Fraxinus spp. ash
Lingustrum sp. Privet
Olea europaea olive
PAPAVERACEAE - POPPY FAMILY
Eschscholzia californica California poppy
PLUMBAGINACEAE - LEADWORT FAMILY
Limonium perezii Perez's sea-lavender
Plumbago spp. plumbago
POLYGONACEAE - BUCKWHEAT FAMILY
Erigonum cinereum gray coast buckwheat
Eriogonum fasciculatum California buckwheat
Eriogonum parvifolium coastal buckwheat
Polypogon sp. Knotweed
Rumex crispus curly dock
SOLANACEAE - NIGHTSHADE FAMILY
Lycium californicum California box thorn
Nicotiana glauca tree tobacco
STRELITZIACEAE - STRELITZIACEAE FAMILY
Strelitzia reginae bird of paradise
TROPAEOLACEAE - TROPAEOLUM FAMILY
Tropaeolum majus garden nasturtium

FLORA COMPENDIA

MONOCOTYLEDONES - MONOCOTS
ARECACEAE (PALMAE) - PALM FAMILY
Phoenix canariensis Canary Island date palm
Washingtonia filifera California fan palm
LILIACEAE - LILY FAMILY
Yucca whipplei Our Lord's candle
POACEAE - GRASS FAMILY
Avena barbata slender wild oat
Bromus diandrus ripgut brome
Bromus hordeaceus soft chess
Bromus madritensis ssp. *rubens* foxtail chess
Cortaderia selloana Sellow's pampas grass
Cynodon dactylon bermuda grass
Leymus condensatus giant wild rye
Melica imperfecta small-flowered melic grass
Nasella pulchra purple needlegrass
Pennisetum setaceum African fountain grass
Vulpia myuros var. *myuros* rattail fescue

15.3.7 Results of Focused Surveys on Two Butterflies (July 2001)

Kendall Herbert Osborne
Biological Consulting
7451 Mt. Vernon St.
Riverside, CA 92504

Attn: Ann Johnston
BonTerra Consulting
151 Kalmus Drive, Suite E-200
Costa Mesa, CA 92626

July 26, 2001

RE: Summary of results and conclusions for survey of endangered butterflies on the Long Point project site including the Upper Point Vincente Area and the Resort Hotel Area

Bon Terra Consulting has requested a habitat assessment and focused adult surveys for the Palos Verdes blue butterfly and El Segundo blue butterfly on the proposed Long Point project site which includes the "Upper Point Vincente Area" and the "Resort Hotel Area" Located in Rancho Palos Verdes, Los Angeles County, California. Refer to the BonTerra Consulting resource exhibits from the biological technical report for specific project area locations. The total acreage of the sites is approximately 168.4 acres. This letter is prepared as a summary of results for inclusion in the project Environmental Impact Report (EIR). A more thorough and detailed report on biological background of the butterfly species in question, survey methods, results, discussion and detailed mitigation recommendations will be provided in a report shortly to be submitted to Bon Terra and USFWS, Carlsbad, as required by my survey permit.

To assess the proposed development area for potential as habitat for the federally endangered Palos Verdes blue butterfly (PVB, *Gloucopsyche lygdamus palosverdesensis*), and federally endangered El Segundo blue butterfly (ESB, *Euphilotes battoides allyni*) and to determine presence or absence of PVB and/or ESB on the site, a series of field visits and surveys was conducted between March 17 and April 22, 2001 (for PVB) and between June 20 and July 26, 2001 (for ESB) by Kendall H. Osborne under USFWS 10(a) Permit No. TE-837760-4. Timing of the survey effort for both butterfly species was concurrent with known flight periods of these species for this year (determined from local populations). Specifically, surveys for PVB were conducted on March 17, 23, 31, and April 3, 22, 2001, and for ESB on June 20, and July 2, 9, 23, and 26, 2001.

The purpose of the field surveys was to evaluate the habitat potential for PVB and ESB and during the course of the known flight seasons for these butterflies, conduct focused surveys for adults of these species. While conducting adult survey work, notes were taken on host plant species and abundance and other resources and site conditions important to the biology and ecology of both PVB and ESB.

The survey determined that the project areas currently consist primarily of landscapes dominated by exotic vegetation. The Resort Hotel Area portion of the Long Point project site was found to consist mainly of parking lots, open exotic grass fields, and exotic landscaping, with the exposed ocean-facing bluffs remaining in a largely natural state. The Upper Point Vincente Area also has extensive exotic grasses, landscaping,

buildings etc., but also supports extensive coastal sage scrub set within the larger context of open grasslands.

Regarding PVB, Resort Hotel Area does not to support any PVB hostplant and has no potential for support of a PVB population in its current condition (without hostplant presence). Within the Upper Point Vincente Area, associated with one portion of the coastal sage were found approximately 200 *Astragalus trichopodus* plants, an important PVB host. The *Astragalus* was confined to an area of approximately 2000 square meters, within mixed *Artemisia* – Encilia coastal sage at the foot of a hill (western promontory, west of City buildings). The other known or potential PVB hostplant *Lotus scoparius* was not found on either site.

No PVB were seen during the course of the surveys. The lack of observed PVB, when it was known to be flying at other locations on the Palos Verdes Peninsula, indicates that a population does not currently exist on the property in question. The subject property is located a short distance from an important historic PVB population to the northeast at Hess Park. It is my professional opinion, given the abundance of *Astragalus trichopodus* and extensive coastal sage set in the larger context of open grasslands, that although the property does not currently support PVB, the subject property could easily support PVB were it reintroduced. Conservation and enhancement of the coastal sage scrub and associated Astragalus as project mitigation on the site may be compatible with a planned golf course and may be important to recovery of PVB on the Palos Verdes Peninsula.

The ESB is another endangered butterfly of the Palos Verdes area. The ESB is primarily associated with *Eriogonum parvifolium*, but has been considered by some biologists to have potential on *Eriogonum cinereum*. *Eriogonum cinereum* was found to be abundant in coastal sage scrub of the Upper Point Vincente Area, and *E. parvifolium* was found to be absent in this upper area – as was the ESB. However, on the Resort Hotel Area portion of the project site, the bluffs were found to support abundant *E. parvifolium* and the ESB was found to be abundant here as well. The ESB and associated *E. parvifolium* were all found on the bluffs north of the Long Point" ("geographic feature listed in USGS topographic map). *Eriogonum cinereum*, was present on the bluffs southeast of Long Point", but like the Upper Point Vincente Area, ESB was not found associated with this *E. cinereum*.

Most of the ESB were located along the bluff tops, bluff faces, and foot of the bluff north of and around the narrow (un-named) point located immediately north of Long Point". This is the stretch of bluff located just south of the Fisherman's access parking location. Several ESB and *E. parvifolium* were also found south of the narrow point on the bluff faces.

The proposed golf course and hotel on the Resort Hotel Area may jeopardize the ESB population in various ways by adverse alteration of habitat, but specific mitigation measures for impacts may actually improve the status of ESB on the "Resort Hotel Area" in ways compatible with a golf course/development plan. In general, expected adverse habitat modifications may come about by landscaping with exotic plants and associated irrigation, leading to elimination of ESB resting areas in the lee of prevailing winds - landward of the bluff crest, and invasion of ESB habitat by exotic plants with associated promotion of exotic ants and other exotic arthropods and mollusks which would ultimately be deleterious to ESB. Recommended mitigation measures include creation

of a substantial natural buffer between exotic landscaping and the bluff crest; preservation and enhancement of buffer land in the marginal lee of the bluff crest for ESB and its host; elimination of and maintained exclusion of certain invasive exotic plants from the bluff margin, crest and face; restoration of bluff habitat south of Long Point; and assurance that irrigation will drain/percolate away from the bluff face.

Respectfully submitted,

Ken H. Osborne

cc USFWS, Carlsbad

15.3.8 Preliminary Draft
Natural Communities Management Plan (June 27, 2001)

PRELIMINARY DRAFT

DRAFT
NATURAL COMMUNITIES MANAGEMENT PLAN PERTAINING TO THE LONG POINT RESORT CITY OF RANCHO PALOS VERDES, LOS ANGELES COUNTY, CALIFORNIA

Prepared for: **Destination Development Corporation**
11777 San Vicente Boulevard – Suite 900
Los Angeles, California 90049

Contact: Mr. Michael Mohler

Prepared by: **Natural Resource Consultants**
30 Crystal Cove
Laguna Beach, California 92651

Contact: Mr. David A. Levine

Date: June 27, 2001

TABLE OF CONTENTS

LIST OF TABLES

1.0 INTRODUCTION

This Natural Communities Management Plan ("Management Plan") considers appropriate conservation measures to be implemented in connection with proposed development of the Long Point Resort site (the site). Proposed development would require the National Parks Service ("NPS") to amend the "Program of Utilization" for portions of the site that were previously deeded to the City of Rancho Palos Verdes.

This Management Plan is coordinated with regional conservation planning goals described within the Draft Rancho Palos Verdes Natural Communities Conservation Program Subarea Plan (NCCP). Species surveys, mitigation measures, and maintenance procedures for plants and animals listed as target and sensitive species by the draft NCCP have been incorporated. Moreover the pattern of development, preservation, and re-vegetation of native habitats is integrated with the preserve design and habitat linkages proposed by the draft NCCP. Accordingly, the Long Point Resort would provide for development and conservation that is anticipated by and consistent with the draft NCCP.

Currently, the site supports four gnatcatcher pairs (NRC 2001). All four of these pairs occur north of Palos Verdes Drive on the Upper Point Vicente Area ("UPVA") within approximately 16.7 acres of coastal sage scrub habitat. Proposed project grading would remove approximately 2.1 acres of coastal sage scrub used by two of the gnatcatcher pairs observed in 2001. Additionally, approximately 2.7 acres of disturbed chenopod scrub will be impacted. Impacts would be offset by 1) restoration of 9.6 acres of coastal sage scrub habitat prior to project grading on UPVA, 2) preserving 14.6 acres of coastal sage scrub habitat during project grading, and 3) re-vegetating 7.8 acres of coastal sage scrub habitat on graded slopes. These actions are phased to provide conservation before impact and would ultimately result in a net increase of 15.3 acres of coastal sage scrub vegetation on the site.

This Management Plan includes site-specific restoration and re-vegetation measures as well as a maintenance and monitoring program. Ultimately, the actions proposed in this Management Plan would result in beneficial consequences and would provide an integral component of the proposed NCCP for the Palos Verdes peninsula.

1.1 Summary of Management Plan

As shown in Table I, implementation of conservation measures (Phase I) prior to grading (Phase II) would minimize impacts to the coastal California gnatcatcher during project implementation. Phases III and IV ensure rapid conversion and maintenance of graded slopes to native habitats.

TABLE I

PHASES OF CONSERVATION MEASURES

PHASE	Acres of Coastal Sage Scrub
Total Coastal Sage Scrub Prior to Development	**16.7 acres**
Total Disturbed Chenopod Scrub Prior to Development	**2.7 acres**
Phase I -	
1.1 Conserve Habitat on UPVA	14.6 acres
1.2 Restoration of Ungraded Slopes Prior to Grading	+9.6 restored habitat
Phase II -	
2.1 Golf Course Grading on UPVA – CSS Impacts	-2.1 impacted, 14.6 preserved
2.2 Golf Course Grading on UPVA – Chenopod Scrub	-2.7 acres
Phase III –	
3.1 Re-vegetation of Graded Slopes	+7.8 re-vegetated habitat
Phase IV – Maintenance and Monitoring	
4.1 Resort Hotel Area	6.7 acres
4.2 UPVA	32 acres
Total Coastal Sage Scrub After Development	**32 (net increase of 15.3 acres)**

2.0 SITE LOCATION AND ENVIRONMENTAL SETTING

The site includes two parcels separated by Palos Verdes Drive. For planning purposes, these parcels are identified as the Resort Hotel Area (RHA; 103.5 acres) and Upper Point Vicente Area (UPVA; 64.9 acres). These planning areas are described below.

2.1 Resort Hotel Area (RHA)

The RHA encompasses approximately 103.5 acres located between Palos Verdes Drive and the Pacific Ocean. The RHA is the former site of Marineland Aquatic Park (Park) developed in the 1950s. Although a majority of the Park was demolished in 1998, a number of structures, parking lots, roads, and other features associated with the Park still exist. As a result, most of the site is developed or disturbed. The RHA supports approximately 8.58 acres of native habitat located along the southern and western boundaries of the site. Native habitats on the RHA include coastal bluff scrub, mulefat scrub, and rocky shoreline. The project does not impact these native habitats. No

gnatcatchers were have been recorded in the RHA.

2.2 Upper Point Vicente Area (UPVA)

The UPVA encompasses approximately 64.9 acres located between Hawthorne Boulevard and Palos Verdes Drive. A decommissioned coastal defense site owned by the U.S. Coast Guard forms an approximately 3.9-acre island within the UPVA west of City Hall.

The UPVA supports a variety of habitats. Portions of UPVA adjacent to Hawthorne Boulevard are developed and include structures, roads and parking lots. A small agricultural operation is active in the southeast portion of the site. Non-native grasslands and coastal sage scrub characterize the remainder of the site. In general, the flatter areas within UPVA support annual grasslands and other non-native vegetation (i.e. ornamental plantings). The slopes within UPVA support coastal sage scrub, which includes mixed-dominance coastal sage scrub and southern cactus scrub. Disturbed chenopod scrub occurs in a flat area in the northern portion of UPVA. All four gnatcatcher pairs on site occur within the UPVA. Accordingly, the measures within this Management Plan pertain specifically to the UPVA.

3.0 PROPOSED ACTION (LONG POINT RESORT PROJECT)

The Long Point Resort Project is intended to be a multi-faceted destination resort and is planned to provide conserved/enhanced habitat and public open space/recreation facilities, including a public golf practice facility, a 9-hole public-use golf course, 100 general public parking spaces, two shoreline access ramps, seven public parks and overlooks, and 11.1 miles of public walking/hiking trails (linking visitor-serving areas of the Resort with public facilities within the surrounding area). The cornerstone of the Long Point Resort is a full-service resort hotel.

The conservation measures described in this Management Plan provide for native habitat conservation and enhancement within Planning Areas 1-A and 1-B, as well as restored and new habitat within Recreation Planning Areas 2E, 2F, 2G (Public Parks), and 3-B (Public Golf Course and Golf Practice Facility). The conservation measures would preserve, restore, and re-vegetate coastal sage scrub habitat in this area resulting in a net increase in coastal sage scrub on site.

4.0 PLANNING CONTEXT

It is anticipated that the impacts and conservation measures associated with this project will be evaluated by the NPS and USFWS under a Section 7 Consultation between these two agencies, or by the NPS, USFWS and CDFG in connection with a city-sponsored NCCP. These processes will consider the direct, indirect, and cumulative effects of the proposed action.

5.0 GENERAL BIOLOGICAL CONDITIONS

The biological resources on the site have been described within the Biological Technical Report for the Long Point Resort EIR (BonTerra Consulting 2001). A total of 11 vegetation types occur on the site. Exhibit 3 illustrates the distribution. Table II summarizes the extent of vegetation types occurring on site. The majority of coastal sage scrub resources and all of coastal California gnatcatchers occur within the UPVA.

TABLE II
VEGETATION COMMUNITIES ON THE LONG POINT SITE

Vegetation Type	UPVA	RHA	Total
Mixed Coastal Sage Scrub	3.17	0.00	3.17
Disturbed Mixed Coastal Sage Scrub	3.07	0.00	3.07
Burnt Disturbed Mixed Coastal Sage Scrub	0.29	0.00	0.29
Disturbed Chenopod Scrub	2.75	0.00	2.75
Southern Cactus Scrub	9.23	0.00	9.23
Disturbed Southern Cactus Scrub	1.03	0.00	1.03
Southern Coastal Bluff Scrub	0.00	2.17	2.17
Disturbed Southern Coastal Bluff Scrub	0.00	2.37	2.37
Mule Fat Scrub	0.00	0.09	0.09
Annual Grassland	25.94	0.00	25.94
Rocky Shore/Coastal Bluff	0.00	3.95	3.95
Agricultural	3.58	1.27	4.85
Disturbed	8.60	56380	65.40
Developed	7.22	36.87	44.09
Total	**64.88**	**103.52**	**168.40**

6.0 CONSERVATION MEASURES

The conservation measures proposed herein are designed to provide for the long-term protection, enhancement and increase of coastal sage scrub and native vegetation on site. The conservation measures are designed to restore functioning sage scrub habitat that is self sustaining and capable of supporting native plant and animal species within two to five years following planting. The restoration program includes a monitoring and maintenance program for the restored habitat for a period of five years following planting. At the end of the fifth year, the project applicant will consult with the wildlife agencies to confirm that the restoration effort has met the criteria for success.

6.1 RESTORATION PHASING SCHEDULE

The restoration and enhancement of the UPVA will occur in four phases. The precise timing of each phase will depend on the overall project schedule. The general procedures and sequence of events for each phase are described below.

6.1.1 Phase I - Restoration of Ungraded Slopes

Prior to project Grading, 9.6 acres (less construction access/staging areas which will be re-vegetated during golf course construction) on the UPVA will be restored with coastal sage scrub prior to grading for the golf course in the UPVA. These areas are currently covered with annual grasslands and ruderal vegetation. Phase I will include weed abatement, soil preparation, seeding, and container plantings on these slopes. All portions of Phase I will be fenced and maintained during site grading (Phase II).

6.1.2 Phase II – Site Grading

The UPVA will be graded according to the approved golf course plan. This action would remove approximately 2.2 acres of coastal sage scrub and 2.7 acres of disturbed chenopod scrub. Major grading activities will occur outside of the gnatcatcher breeding season (July 15-through February 15). Grading may occur during the breeding months following a gnatcatcher survey confirming the absence of nesting gnatcatcher within 200 feet of proposed grading operations.

6.1.3 Phase III – Re-Vegetation of Graded Slopes

Approximately 7.8 acres of graded slopes will be re-vegetated with coastal sage scrub immediately following grading and appropriate slope treatments.

6.1.4 Phase IV - Maintenance and Monitoring

Following all planting and re-vegetation the maintenance and monitoring programs described in this Management Plan will be implemented. Based on the timing of Phases I through III, maintenance actions may be initiated in Phase I prior to other portions of the site.

6.2 Responsible Parties

The following responsible parties are associated with these conservation measures:

6.2.1 Environmental Monitor

A qualified Environmental Monitor shall be retained by to monitor the progress of the restoration efforts for a period of at least five years following implementation to ensure that the restoration program meets the established performance criteria. The Environmental Monitor shall be responsible for documenting qualitative and quantitative data relating to the establishment of coastal sage scrub on the site. The Environmental Monitor shall document: (1) existing conditions on the re-vegetation site prior to re-vegetation; (2) methods used in the re-vegetation effort(s) for the site; and (3) the success/failure of the re-vegetation efforts to meet performance criteria.

In addition, the Environmental Monitor shall be responsible for documenting and coordinating remedial measures and maintenance activities required of the Landscape Contractor. The Environmental Monitor shall complete maintenance checklists during each monitoring visit and will forward these, along with a letter report, to the Permit developer and the Landscape Contractor. All records shall be kept on file with the Environmental Monitor.

6.2.2 Landscape Contractor

A landscape contractor will be retained to implement this plan, and perform regular weed abatement and re-planting operations on the restoration site. The landscape contractor shall be responsible for keeping accurate records on timing and methods of maintenance activities, including weed and erosion control. Copies of these records shall be forwarded to the Environmental Monitor and the City of Rancho Palos Verdes.

6.3 Restoration and Re-Vegetation Methods

The following outlines the general procedures to be implemented in the restoration and re-vegetation of coastal sage scrub on the UPVA. Three planting methods are to be used in this process, including hand broadcast seeding, and container planting.

6.3.1 Site Preparation/ Initial Clearing and Weed Abatement

Site preparation will include two phases prior to soil preparation; a) manual removal of non-native plant species, and b) weed abatement (if necessary). Where appropriate, non-native species will be removed with shovels and hoes and transported off site to an appropriate disposal area. All plants will be removed at the root by hand or shovel. Many non-native plant species can regenerate from isolated branches and stems, and efforts will be made to eliminate all remnants of this species from patches that are planned for re-vegetation. After these patches have been cleared the Landscape Contractor will determine

if additional herbicide is necessary to prevent the re-growth of these and other weedy species prior to planting.

If after non-native plant removal any weed species colonize the re-vegetation sites, selective clearing and removal of invasive plants (such as non-native grasses, mustard, tree tobacco, fennel, and Russian thistle) shall be performed prior to further restoration activities. Existing weeds shall be mowed to a height of approximately six inches and then treated with the herbicide Roundup (glyphosate) at label-recommended rates. All herbicide applications will be conducted in the early morning hours and when winds are below five miles per hour to prevent over spray onto adjoining coastal sage scrub vegetation to be retained. All dry weeds shall be cleared and disposed off site following spraying.

6.3.2 Soil Preparation

Once the non-native species have been removed, any areas of compacted soil shall be de-compacted to provide microhabitats for plants to become established. This shall be accomplished through a procedure known as "pick-pocking," which entails creating small depressions in the soil surface with a pick ax or shovel.

6.3.3 Planting

Planting methods used to establish coastal sage scrub (seeding and/or container planting) will be finalized by the Environmental Monitor, in coordination with a geotechnical expert.

6.3.4 Seeding

Seed lists and planting programs have been developed for the restoration area based upon vegetation analyses of adjacent stands of coastal sage scrub. A mix of species will be used that includes a cover crop (a quickly growing species that will keep weeds down), intermediate wildflowers, and semi-woody plants that will eventually dominate. The seed mix contains important nitrogen fixers (such as *Lotus scoparius*, *L. strigosus*, *Lupinus bicolor*, and *L. truncatus*) which tend to dominate early successional stage coastal sage scrub, thereby enhancing soil conditions for future successional stages. Seeding will be done just in advance of winter rains, preferably following a rainfall of 1/2 to 1 inch. Seeding densities are based upon vegetation analyses of undisturbed coastal sage scrub on the project site.

6.3.5 Hand Broadcast Seeding

Hand broadcast seeding will be used for the re-vegetation process. The following outlines the methods for hand broadcast seeding. The seed shall be premixed in the proportions specified in the seed legend. Prior to seeding, all areas to be seeded shall be raked to an

optimum depth of 1-1/2 to two inches to provide microhabitats for the seed to become established. Five cubic feet/acre of fine grade plaster sand shall be added to the total seed mix. The seed and sand shall be mixed in a cement mixer for 10 minutes to provide a

thorough integration of seed and sand prior to broadcasting. The seed and sand mix shall be broadcast over designated areas using a hand held whirly-bird broadcaster such that approximately one pound of seed mix shall cover 1,000 square feet.

6.3.6 Container Planting

Following seeding, container plantings of semi-woody and woody shrubs, will be installed. Species to be planted from containers include California sagebrush, coyote bush, buckwheat, and lemonade berry. Prickly pear will be either planted from containers or salvaged as cuttings from proposed development areas. Prickly pear cactus will be planted in large masses (at least 10 feet by 10 feet), with plants spaced approximately three feet on center.

Container stock will be pre-inoculated with the appropriate species of mycorrhizal fungi. Mycorrhizae are beneficial fungi found on plant roots that increase a plant's ability to take up water and nutrients during periods of drought. The presence of mycorrhizal fungi is known to favor the establishment of native plants over weeds. By planting container plants that have been pre-inoculated with mycorrhizal fungi on the restoration site, mycorrhizae will slowly re-invade the site, increasing the chances of success for restoration. The container plantings will also provide greater habitat structure initially as well as a nurse crop for seeded plant species. Planting holes will be pre-irrigated prior to planting and irrigated again following planting.

TABLE III

RESTORATION PLANTING DATA
LONG POINT RESORT PROJECT AREA

Container Plants			
California sagebrush	*Artemisia californica*	300 1-GA	6 ft OC
California buckwheat	*Eriogonum fasciculatum*	100 1-GA	6 ft OC
Coyote bush	*Baccharis pilularis ssp. cons.*	300 1-GA	4-8 ft OC
Lemonade berry Scattered	*Rhus integrifolia*	50 1-GA	
Prickly pear cactus	*Opuntia littoralis*	100 cuttings	3 ft OC
Seed			
California sagebrush	*Artemisia californica*	4.0 lb	
California buckwheat	*Eriogonum fasciculatum*	3.0 lb	
Ashy leaved buckwheat	*Eriogonum cinerareum*	1.5 lb	
Coyote bush	*Baccharis pilularis ssp cons.*	3.0 lb	

Purple sage	*Salvia leucophylla*	1.0 lb
Black sage	*Salvia mellifera*	1.0 lb
California encelia	*Encelia californica*	4.0 lb
Goldenbush	*Isacoma veneta*	1.0 lb
Deerweed	*Lotus scoparius*	6.0 lb
Coastal lotus	*Lotus salsuginosus*	0.5 lb
Narrow-leaved bedstraw	*Galium angustifolium*	0.5 lb
Foothill needlegrass	*Nasella lepida*	1.0 lb
Melic grass	*Melica imperfecta*	1.0 lb
Parry's phacelia	*Phacelia parryi*	0.5 lb
Caterpillar phacelia	*Phacelia cicutaria*	1.5 lb
Popcorn flower	*Cryptantha intermedia*	0.5 lb
Common eucrypta	*Eucrypta intermedia*	0.5 lb
Miniature lupine	*Lupinus bicolor*	3.0 lb
Truncated lupine	*Lupinus truncatus*	1.0 lb
Goldfields	*Lasthenia glabrata*	2.0 lb

7.0 MAINTENANCE PROGRAM

The establishment and maintenance of restored natural plant communities are very different from that required in a traditional ornamental landscape of highly maintained trees, shrubs, and groundcovers. The coastal sage scrub to be established within the site will become self-sustaining over time, needing very little or no maintenance once established. Maintenance activities for restored coastal sage scrub will be limited to the initial establishment period (two to three years), and, over time, will focus more upon observation and prevention of problems rather than upon traditional intensive maintenance procedures.

The habitat restoration area will be monitored on a regular basis during the initial establishment period by the Environmental Monitor to ensure that the restored habitat meets certain survival, coverage, and height standards (performance criteria). The Environmental Monitor shall take note of any maintenance requirements or other necessary remedial actions and communicate these needs to the landscape maintenance foreman and the developer.

The restoration, maintenance, and monitoring program will be closely coordinated so that the re-vegetation program can be adapted to those techniques that best ensure the attainment of the required performance criteria. This "adaptive management" program requires that all restoration techniques and maintenance activities be closely documented and monitored throughout implementation so that re-vegetation patterns and potential problems can be identified and addressed based upon detailed background information. As restoration is implemented, accurate records shall be kept on the following:

- Existing conditions on the re-vegetation site, including vegetation composition,

problem weed species (including identification of locations and densities), soil type(s), soil structure, erosion problems, etc.

- Restoration site preparation and planting techniques utilized: plant and seed quantities, timing, weather conditions, as well as any problems encountered during planting, i.e., conditions unsuitable for planting.

- Maintenance activities implemented following re-vegetation, including irrigation scheduling, weed control and timing/intervals, problem weed species and methods used for control, timing and locations of germination for individual seeded species, and response of restoration areas to changes in weather conditions.

In this way, problems that are encountered in the early phases of restoration will be avoided in future phases, based upon detailed documentation and results of how these problems were addressed successfully previously. In addition, this documentation will enable accurate trouble shooting in terms of identifying: (1) anticipated weed problems; (2) anticipated timing of native seed germination; and (3) irrigation schedules and rates that promote native seed germination and discourage non-native seed germination.

7.1 Restoration Maintenance Program

Maintenance requirements to be carried out by the landscape contractor are outlined below.

7.1.1 Weed Control

Dense weedy vegetation within the restoration sites would retard or preclude occupation of the site by the coastal California gnatcatcher. It shall be the maintenance contractor's responsibility to control weeds within each restoration area at least four times a year. Before initiating any weed control measures, the maintenance contractor will meet on site with the Environmental Monitor to determine the extent and methods of weed control. The maintenance contractor will notify the Environmental Monitor at least three days prior to implementing approved weed control measures.

Weed control measures to be used within the restoration area fall into three general categories: 1) removing by hand, 2) cutting or mowing, and 3) applying chemical herbicides. Hand (mechanical) removal of weed species is the most desirable method of control. Large areas of hand-removed weeds shall be covered with leaf litter or available salvaged topsoil to prevent re-colonization by weedy species. Mustard is a weed species of particular concern, as it contains allelopathic chemicals that may inhibit the germination of the desired native species. This species will be controlled by hand in the seedling stage. All weed debris shall be appropriately disposed offsite.

Cutting or mowing of weeds between plantings with string trimmers is probably the most practical method of control, but it requires that maintenance personnel be able to accurately

differentiate between the mitigation plantings and weed species. This will be the preferred method of control for such problem weeds as dense annual grasses, such as red brome, ripgut grass, and wild oats. Because these weeds are fast-growing, it is critical that they are controlled before they flower or shade and out-compete the restoration plantings.

Chemical control will be used only (at the direction of the Environmental Monitor) for hard-to-control weeds, such as extensive patches of established mustard, or individual mature plants of fennel, tree tobacco, castor bean, or Russian thistle. The Environmental Monitor will check for the presence of these weeds and will notify the Permit developer and the maintenance contractor if any of these species is found within the restoration area. These problem weed species (including roots) will be removed by hand where feasible. If large areas of these weeds become established, they will be controlled using the chemical herbicide Roundup (glyphosate), at label-recommended rates. Replanting shall be performed in these areas following weed abate.

7.1.2 Plant Replacement

A replanting program will be initiated within container planted and seeded areas at the completion of the initial 120-day maintenance period if plant mortality or erosion problems occur or if seed germination is low. In seeded areas, the following plant species shall be represented/germinated after 120 days in the quantities stated:

California sagebrush	Represented throughout
California encelia	Represented throughout
Deerweed	Represented throughout
Goldfields/Miniature lupine	30 percent cover by area

Additional seeded plant species that should be represented within six months (180 days) following planting include California buckwheat, coyote bush, and foothill needlegrass. The need for replanting within seeded and container planted areas will be assessed by the Environmental Monitor a minimum of every four months (every 120 days) the first year following planting.

If germination or maintenance is determined to be inadequate during review periods, the maintenance contractor shall carry out corrective measures as directed by the Environmental Monitor. Corrective measures may potentially include (but are not limited to): reseeding, soils testing, watering adjustments, erosion control measures, and/or re-planting with container stock of dominant coastal sage scrub species.

7.1.3 Clearing and Trash Removal

Trash shall be regularly removed from the restoration area by hand. Trash consists of any and all manmade materials, equipment, or debris dumped, thrown, or left within the restoration area. Such trash shall be removed as needed, but at no less than 1-month intervals for the first year, and quarterly thereafter. Any weeds that are removed during maintenance operations shall be disposed off site.

7.1.4 Pest Control

Several pests including insects, mites, snails, and rodents, are expected to occur within the mitigation area. Active control of pests with the use of chemical pesticides will be avoided in favor of allowing natural environmental controls (e.g., beneficial insects, changes in seasons) to take effect. If destruction of the mitigation communities by rodents or other pests becomes a problem, the maintenance contractor will consult with the developer and the Environmental Monitor to determine remedial measures.

7.1.5 Human Use

If human intrusion into the restoration area becomes a problem, the maintenance contractor and the Environmental Monitor shall consult with the developer to evaluate the need for additional signage, barriers, or other measures to discourage human intrusion.

8.0 MONITORING PROGRAM

8.1 Restoration Data Collection

Data collection will occur at the time of initial planting and during regular sampling periods. During regular sampling periods, data collection will consist of a qualitative assessment of the entire site and the collection of quantitative data at permanent sampling locations. At the time of initial plantings, records will be kept of the species planted, quantities of each species planted, types of plantings, and locations of plantings. If there is significant deviation in the actual planting from the drawings, the locations of plantings will be referenced on a map to be compiled by the Environmental Monitor. This "as-built" drawing will be developed for use in monitoring efforts.

8.2 Qualitative Data

Qualitative surveys will consist of a general site walkover and a characterization of the restoration plantings. General observations, such as fitness and health of the re-vegetation species, signs of over watering, and drought stress, will be noted during these surveys. Plants will be examined throughout the site in terms of percentage of cover, species mortality, species composition, and soil, weed, and pest problems. The Environmental Monitor will conduct regular irrigation system test runs to verify that the irrigation system

is functioning properly and providing adequate coverage. Maintenance needs will be recorded within regular letter reports to be submitted to the maintenance contractor and the Permit Applicant within five working days of each visit.

This data will be important for early identification of potential problems and rapid response to such problems, as well as to identify restoration patterns. Any problems identified by the Environmental Monitor will immediately be brought to the attention of the maintenance contractor and the Permit Applicant.

8.3 Quantitative Data

To augment qualitative data, more precise data will be collected and analyzed to document and evaluate the progress of the restoration program. The following monitoring technique is an example of a recommended approach to vegetation monitoring. Actual site monitoring may not follow this procedure, but will provide data of similar detail.

Immediately following restoration, permanent sampling locations will be established within both the re-vegetation area and within adjacent undisturbed stands of sage scrub. Test sampling stations will be set up prior to establishment of the permanent sampling stations to verify the suitability of the sampling methodology described herein. Consistent sampling techniques will be used throughout the monitoring process to ensure accurate comparisons.

Permanent photo documentation stations will be established along each vegetation transect or quadrant to photographically record the progress of restoration over the 5-year monitoring period.

8.4 Record Keeping

All records will be kept on file with the Environmental Monitor. Records of both positive and negative results from both qualitative and quantitative sampling efforts will be incorporated into the yearly status reports to be submitted to resource agencies. In the event that any part of the restoration should fail to meet the specified requirements, recommendations for corrective measures will be solicited from the wildlife agencies so that the restoration effort can be brought back into compliance as quickly as possible.

9.0 PERFORMANCE STANDARDS

Coastal sage scrub habitat management will remain the responsibility of the developer or an appropriate land management organization for five years following project construction, or until performance criteria have been met (i.e., the program is successful). This time period will allow for full implementation of the conservation measures.

The following performance standards will be obtained within the restoration area by the end of the fifth year following planting.

- Coastal sage scrub restoration area will have attained 75 percent of the native

species diversity, species density, and cover of designated reference areas of existing sage scrub habitat on the project site.

- There will be less than 10 percent cover by invasive weed species such as fennel, tree tobacco, or castor bean. There will be a less than 10 percent cover by non-native grasses and mustard.
- The restoration site no longer requires maintenance measures such as replanting of seed or container stock, weed control, or erosion control.

At the end of the fifth year, a report will be submitted to the developer and the USFWS to evaluate the success of the restoration and determine whether all of the performance standards of the restoration plan have been met.

In the event that any or all of the restoration planting should fail to meet the specified requirements, compliance will be ensured by performing either or both of the following remedial procedures: 1) unsuccessful plantings will be replaced with appropriately-sized container stock or hand broadcast seeding to meet specified coverage requirements and 2) maintenance procedures will be performed to ensure appropriate site conditions (e.g., non-native species removal).

10.0 OTHER CONSERVATION MEASURES

1. Prior to removal of non-native plant species, a directed survey shall be conducted to locate on-site nests of coastal California gnatcatchers. If gnatcatcher nests are present, no removal of vegetation will take place within 200 feet of known nesting sites during the nesting/breeding season (mid-February through mid-July).

2. During the vegetation clearing, all areas of coastal sage scrub in the vicinity of construction activities shall be protected. No construction access, parking or storage will be permitted within the preserve area.

3. Fuel modification plans shall be implemented to avoid additional impacts to the coastal sage scrub habitat.

4. If necessary, periodic irrigation of existing and restored coastal sage scrub adjacent to development areas will be permitted to maintain vegetation moisture levels and to reduce fuel load.