4.7 BIOLOGICAL RESOURCES

A Biological Constraints Analysis was prepared by P&D Consultants (June 10, 2005), which documented the existing biological constraints on the subject property. A Biological Impact Report to assess terrestrial resources was prepared by ICF/Jones & Stokes (December 2008). The analysis presented in these reports was based on current aerial photographs, a site visit and updated literature reviews (Appendix H). In addition, Coastal Resources Management, Inc., prepared a report entitled, "Eelgrass (*Zostera Marina*) Impact Assessment for a Dock Renovation Project Located in Carnation Code, Corona Del Mar, CA 92625" (May 9, 2008), which assessed the marine biological impacts associated with project implementation (Appendix I). Finally, a "Jurisdictional Determination for Area of African Umbrella Sedge Adjacent to Aerie Project Site Location in Newport Beach, Orange County, California," (Appendix J) was also undertaken by Glenn Lukos Associates (GLA) to determine whether wetlands were present on the subject property. The findings and recommendations of these reports are summarized in the following sections.

4.7.1 Existing Conditions

Terrestrial Biological Resources

Vegetation and Habitat

The project site is located on a bluff located east of the entrance to Newport Harbor. Topographically, the site is characterized by a sloping coastal bluff that drops sharply to a small beach and cove along the western project boundary. The upper elevation of the project site is approximately 70 feet above mean sea level.

Four depleted natural communities were identified in the literature review conducted for the proposed project as potentially occurring within the project vicinity: (1) Southern coastal salt marsh; (2) Southern cottonwood willow riparian forest; (3) Southern dune scrub; and (4) Southern foredunes. None of these depleted natural communities are present within the project site.

Based on the reconnaissance field visit of the project site and a review of the plans prepared by Robert Mitchell & Associates, the dominant vegetation type on the project site is ornamental species; however, a remnant southern coastal bluff scrub community exists on the rocky outcrop along the northern project boundary extending into Newport Bay. The coastal bluff face, which is located below the existing structures, is densely vegetated with ornamental species and some scattered natives. Southern coastal bluff scrub is dominated by woody and succulent species. Growth and flowering occur from late winter through spring. Species in this vegetation community and observed at the project site include California buckwheat (*Eriogonum fasciculatum*), coastal prickly pear (*Opuntia littoralis*), California sagebrush (*Artemesia californica*), bush sunflower (*Encelia californica*), lemonade berry (*Rhus integrifolia*), and coastal goldenbush (*Isocoma menziesii*). The majority of the non-native plant species on the subject property included but are not limited to: sea lavender (*Limonium perezii*), soft-chess (*Brome hordeaceus*), foxtail chess (*Bromus madritensis*), wild oat (*Avena* sp.), tocalote (*Centaurea melitensis*), century plant (*Agave* sp.), crystalline iceplant (*Mesembryanthemum crystallinum*), sweet clover (*Melilotus* sp.), Bermuda buttercup (*Oxalis* sp.), and tree tobacco (*Nicotiana glauca*).

¹A Notice of Violation of the California Coastal Act (March 27, 2008) was issued to the property owner by the California Coastal Commission. The Notice indicated that native bluff vegetation, including lemonade berry (*Rhus integrifolia*), California buckwheat (*Eriogonum fasciculatum*), and bush sunflower (*Encelia californica*) had been removed from the site. Although pruning and trimming necessary to maintain the lemonade berry (*Rhus integrifolia*) on the site occurred, none of these species have been removed as indicated in the Existing Vegetation Map prepared by Robert Mitchell & Associates. Based on the Existing Vegetation Map, the lemonade berry is making a comeback and appear to be in good health.

Critical Habitat and Natural Community Conservation Plan

Critical habitat is a term defined in the Endangered Species Act (ESA). It refers to specific geographic areas that are essential to the conservation of a threatened or endangered species and which may require special management considerations or protection. The project site is not located within any designated critical habitat, including a designated Natural Community Conservation Plan (NCCP) area.

Special-Status Plants and Wildlife

Plant or wildlife species may be considered to have "special status" due to declining populations, vulnerability to habitat change, or restricted distributions. Special status species are those listed under the federal Endangered Species List as threatened or endangered, or federal candidate for listing; those species listed under the California Endangered Species Act as threatened or endangered, or a state species of special concern; or California Native Plant Society (CNPS) 1A, 1B, and 2.

A total of 82 special status plant and wildlife species are identified as potentially occurring in the project region. Of these 82 species, nine plant species and one wildlife species have potential to occur due to suitable habitat conditions or was observed at the project site. The remaining plant and wildlife species described in the sensitive species table were determined not to have potential to occur at the project site due to lack of suitable habitat conditions (e.g., soils or vegetation associations) or geographic range.

Special Status Plant Species

The nine plant species that have the potential to occur at the project site are listed and described in Table 4.7-1. During the reconnaissance site visit conducted for the project, none of these species were observed.

Table 4.7-1 Special Status Plants

Species	Status	Potential for Occurrence
Aphanisma (<i>Aphanisma blitoid</i> es)	Federal: None State: None Other: CNP List 1B	Aphanisma blooms from March through June and is found from Orange, Los Angeles, and Santa Barbara Counties. Typical habitats of this annual herb are Southern coastal bluff scrub, Coastal dunes, and Coastal sage scrub from 3 to 1,000 feet. Habitat conditions on site are not ideal to support this species but are nonetheless present. Focused surveys performed during the appropriate blooming window would determine presence/absence.
South Coast Saltscale (Atriplex pacifica)	Federal: None State: None Other: CNP List 1B	South Coast Saltscale blooms from march through October and is found from Orange, Riverside, and Los Angeles Counties. Typical habitats of this annual herb are Southern coastal bluff scrub, Coastal dunes, and Coastal sage scrub from 0 to 460 feet. Habitat conditions on site are not ideal to support this species but are nonetheless present. Focused surveys performed during the appropriate blooming window would determine presence/absence.
San Fernando Valley Spineflower (Chorizanthe parryi var. fenandina)	Federal: Candidate State: Endangered Other: CNP List 1B	San Fernando Valley Spineflower blooms from April through July and is found from Orange, Los Angeles, and Ventura Counties. Typical habitats of this annual herb are open, sandy soils, valley and grassland foothills from 98 to 1,804 feet. Habitat conditions on site are not ideal to support this species but are nonetheless present. Focused surveys performed during the appropriate blooming window would determine

Species	Status	Potential for Occurrence
1		presence/absence.
Southern Tarplant (Centromadia parryi ssp. australis)	Federal: None State: None Other: CNP List 1B	Southern Tarplant blooms from May through November and is found from Los Angeles, Orange, and Santa Barbara Counties. Typical habitats for this annual herbare marshes, swamps (margins), valley and foothill grassland (vernally mesic), and vernal pools from 0 to 1,394 feet. Habitat conditions on site are not ideal to support this species but are nonetheless present. Focused surveys performed during the appropriate blooming window would determine presence/absence.
Salt Marsh Bird's Beak (Cordylanthus maritimus ssp. maritimus)	Federal: Endangered State: Endangered Other: CNP List 1B	Salt Marsh Bird's Beak blooms from May through October and is found from Los Angeles and Orange Counties. Typical habitats of this annual herb are coastal dunes, marshes, and coastal salt swamps from 0 to 98 feet. This species is known from coastal bluffs and Newport Back Bay. Focused surveys performed during the appropriate blooming window would determine presence/absence.
Many-stemmed Dudleya (<i>Dudleya multicaulis</i>)	Federal: None State: None Other: CNP List 1B	Many-stemmed Dudleya blooms from April through July and is found from Orange, Riverside, and San Bernardino Counties. Typical habitats of this perennial herb are chaparral, coastal scrub, and valley and foothill grasslands in clay soils from 49 to 2,592 feet. Habitat conditions on site are not ideal to support this species; however, this species is known from the project region. Focused surveys performed during the appropriate blooming window would determine presence/absence.
Laguna Beach Dudleya (Dudleya stolonifera)	Federal: Threatened State: Threatened Other: CNP List 1B	Laguna Beach Dudleya blooms from May through July and is found in Orange County. Typical habitats of this stoloniferous herb are cismontane woodland, chaparral, coastal scrub, valley and foothill grassland, and rocky substrates from 32 to 853 feet. Habitat conditions on site are not ideal to support this species; however, this species is known from the project region. Focused surveys performed during the appropriate blooming window would determine presence/absence.
Cliff Spurge (Euphorbia misera)	Federal: None State: None Other: CNP List 1B	Cliff Spurge blooms from December through August and is found in Orange, Riverside, and Los Angeles Counties. Typical habitats for this shrub are coastal bluff scrub from 32 to 1,640 feet. Habitat conditions on site are suitable to support this species. Focused surveys performed during the appropriate blooming window would determine presence/absence.
Big-leaved Crownbeard (Verbesina dissita)	Federal: Threatened State: Threatened Other: CNP List 1B	Big-leaved Crownbeard blooms from April through July and is found in Orange county. Typical habitats for this perennial herb are chaparral and coastal sage scrub from 147 to 672 feet. Habitat conditions on site are suitable to support this species. Focused surveys performed during the appropriate blooming window would determine presence/absence.

Wildlife

The site has been significantly altered as a result of past development of the property. Nonetheless, wildlife species were observed on the site or are expected to occur, including amphibians, reptiles, birds and mammals. These species are described below.

Amphibians require moisture for at least a portion of their life cycle and many require standing or flowing water for reproduction. Only one amphibian, the Pacific tree frog (*Hyla regalia*) is expected to occur at the project site. Similarly, only one species of reptile was observed at the site: the western fence lizard (*Sceloporus occidentalis*). Birds are the most commonly observed vertebrate species at the site. Those species that are common residents of developed urban areas and observed at the site include the house sparrow (*Passer domesticus*), house finch (*Carpodacus mexicanus*), Anna's hummingbird (*Calypte anna*), Great blue heron (*Ardea herodias*), brown pelican (*Pelecanus occidentalis*), and double-crested cormorant (*Phalacrocorax auritus*).

Conditions at the site do not provide adequate nesting habitat for most raptors (i.e., birds of prey). The sparse southern coastal bluff scrub and ornamental vegetation at the project site do not provide extensive foraging or suitable nesting habitat for raptor species, which typically forage and breed in larger natural open spaces areas. However, some raptor species are adapted to urban conditions. Limited opportunity to forage at the project site exists along the southern coastal bluff, within the ornamental vegetation and on the small beach. Raptor species that may occur within the vicinity of the project site include Cooper's hawk (*Accipiter cooperii*), red-tailed hawk (*Buteo jamaicensis*), sharp-shinned hawk (*Accipiter striatus*), American kestrel (*Falco sparverius*), barn owl (*Tyto Alba*), and great horned owl (*Bubo virginianus*).

Small ground-dwelling mammals having potential to occur at the project site include several species of rodents. The pocket mouse (*Peromyscus* sp.), Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Spermophilus beecheyi*), and Audubon cottontail (*Sylvilagus audubonii*) are the most abundant of these species. Bats occur throughout most of southern California, including the project environs. Those species that could potentially occur at the project site are inactive during the winter and either hibernate or migrate, depending on the species. Western mastiff bat (*Eumops perotis califronicus*), Mexican long-tongued bat (*Choeronycteris mexicana*), and big free-tailed bat (*Nyctinomops macrotis*) are not expected to roost or forage at the project site due to lack of suitable habitat conditions. Larger mammals, including both herbivores and carnivores, are not expected to occur at the project site because it is not adjacent to any undeveloped open space. Only two mammal species were identified at the site based on their tracks: Virginia opossum (*Didelphis virginiana*) and domestic cat (*Felis catus*).

Special-Status Wildlife

State- or Federally Listed Threatened or Endangered Animals

Many special status wildlife species are known to occur in the project vicinity. However, the project site has been significantly altered as a result of past development, resulting in the elimination of the potential for many special status wildlife to occur. One wildlife species, currently listed as endangered by the State (SE) and U.S. Fish and Wildlife Service (FE), was observed utilizing the project site. Brown pelican (*Pelecanus occidentalis*) was observed during the reconnaissance survey conducted in 2008. Six threatened animal species were identified as potentially occurring within the region (i.e., Newport Beach U.S.G.S. quadrangle). These species include the California red-legged frog (*Rana aurora draytoni*), western snowy plover (*Charadrius alexandrinus nivosus*), California black rail (*Laterallus jamaicensis coturniculus*), coastal California gnatcatcher (*Polioptila californica californica*), Santa Ana sucker (*Catostomus santaanae*), and southern sea otter (*Enhydra lutris nereis*).

In addition, 15 endangered animal species were also identified as potentially occurring within the region: San Diego fairy shrimp (*Brachinecta sandiegonensis*), Riverside fairy shrimp (*Streptocephalus woottoni*), Quino checkerspot butterfly (*Euphydryas editha quino*), southern steelhead (*Oncorhynchus mykiss*), Tidewater goby (*Eucyclogobius newberryi*), arroyo toad (*Bufo californicus*), short-tailed albatross (*Phaebastria albatrus*), light-footed clapper rail (*Rallus longirostris levipes*), California least tern (*Sterna antillarum browni*) Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extrimus*), Brown pelican (*Pelecanus occidentalis californicus*), Belding's savannah sparrow (*Passerculus sandwichensis beldingi*),

and Pacific pocket mouse (*Perognathus longimembris pacificus*). None of these species were observed on the subject property with the exception of the brown pelican. None of these threatened or endangered species are expected to occur on the site because of the level of disturbance that has occurred on the property.

As indicated above, the federally endangered brown pelican was observed at the project site. This species, which is the smallest of the eight species of pelican, although it is a large bird in nearly every other regard, was observed at the project site utilizing the existing dock that extends into Newport harbor. Brown pelicans forage and roost in Newport Harbor and breed on the Channel Islands and islands off the Baja California coast. The brown pelican is also designated by the State of California as "Endangered."

Habitat Linkages and Corridors

Habitat linkages provide a genetic link or communication between two or more typically larger or superior in quality natural areas to the linkage and they provide substantial long-term habitat resources and facilitate movement across a linkage that can span generations of individual organisms. Connected patches also typically have substantially overlapping species inventories and resources. Such linkage sites can be small or constrained in some cases; however, they may be critical to the long-term health and viability of populations within the connected natural areas. Corridors, on the other hand, provide specific opportunities for individual animals to disperse or migrate among other areas, which may be very extensive but otherwise partially or entirely separated regions. Corridors are characterized by appropriate cover, minimum physical dimensions, and low levels of disturbance and mortality risk. Corridors adequate for one species may be inadequate for others.

The project site and adjacent Newport Bay restrict opportunities for terrestrial wildlife movement because of the existing, surrounding urban development. Migratory birds are visitors to Newport Harbor. The project site provides only limited opportunity (i.e., presence of limited southern coastal bluff scrub and existing dock) for migratory birds to roost and forage. Some marine fish species move into and out of the harbor for spawning or for nursery areas.

Wetlands

A jurisdictional determination was prepared by GLA to determine whether wetlands are present on the subject property. No blue line drainages (as depicted on the Newport Beach U.S.G.S. topography map) existing on the project site. Based on the survey conducted in December 2008, a limited area of African umbrella sedge (*Cyperus involucratus*, FACW), covering approximately 190 square feet (0.004 ac) occurs on the slope adjacent to the proposed building site. The African umbrella sedge begins approximately two feet below the point where a 30-inch drainage pipe discharges onto the steeply sloping (i.e., 1:1 horizontal to vertical) bluff. The area supporting the African umbrella sedge is surrounded by ornamental vegetation, including Victorian box (*Pittosporum undulatum*), tobira (*Pittosporum tobira*), and two species of privit (*Ligustrum* spp.), Japanese honeysuckle (*Lonicera japonica*), which also dominates the irrigated slope immediately above the umbrella sedge.

The determination of the presence or absence of wetlands is based on three criteria: (1) vegetation; (2) soils; and (3) hydrology. Within the area occupied by the African umbrella sedge, it was estimated to account for 80 percent of the total cover with Victorian box and privit accounting for about 10 percent each. Based on the criteria utilized to establish (vegetation) dominance (refer to the Jurisdiction Determination prepared by GLA in Appendix _), only the African umbrella sedge is considered dominant. However, in this instance, the presence of a species with an indicator status of FACW (i.e., up to one-third of occurrences of this species is in upland areas) is not sufficient to make a positive determination for the presence of wetlands. African umbrella sedge is a common landscape plant that is highly adaptable, as indicated in the *Sunset Western Garden Book*:

"Grows in or out of water. Effective near pools, in pots or planters, or in dry streambeds or rock gardens. Self sows. Can become weedy . . ."

The second factor considered in the determination of wetlands is soils. Soils on the slope are thin, overlying bedrock. The soils that support the African umbrella sedge are upland soils. Because of the 1:1 slope and the sandy character of the soils, the soils drain quickly and do not have the ability to become saturated. No evidence of hydric soils development was detected and it is not expected due to the steepness of the slope and ability of the sandy soils to drain quickly.

In addressing the presence of wetland hydrology, the determination considered two factors: (1) the hydrological indicators set forth in the Arid West Supplement; and (2) the definition in the Coastal Act, which includes area "which may be covered periodically or permanently with shallow water." Based on the latter criterion, the steepness of the existing slope and well-drained character of the sandy soils indicate that there is no potential for the area to be "covered" periodically or permanently with shallow water. Storm flows would drain quickly through the sandy soils precluding saturation for sufficient duration to be consistent with the presence of "wetland hydrology" (i.e., saturation for periods sufficient to promote anaerobic conditions in the upper 12 inches). Given the lack of wetland hydrology, as confirmed by the strong upland characteristics of the soils, it appears that the African umbrella sedge is supported by regular irrigation water, which was observed during the site visit by GLA and documented in the determination (refer to Appendix).

Based on the field survey conducted by GLA, the African umbrella sedge area lacks indicators for the presence of hydric soils and wetland hydrology and, therefore, is not considered to be a wetland under Section 404 of the Clean Water Act; no U.S. Army Corps of Engineers jurisdictional wetlands exist on the subject property. Similarly, the African umbrella sedge area is not associated with a stream or lake and is not subject to jurisdiction under Section 1600 of the California Fish and Game Code (i.e., California Department of Fish and Game).

Although the African umbrella sedge area exhibits a predominance of wetland indicator species (the African umbrella sedge being the sole such species), it lacks evidence for the presence of hydric soils and wetland hydrology and, therefore, would not be considered a wetland under the Coastal Act because the 190 square foot area is not covered permanently or periodically with shallow water. Rather, the area is supported primarily by intermittent artificial water sources, including landscape irrigation from the adjacent slope and existing storm drain. While that fact alone does not preclude the area from being a wetland, the specific area is not considered a wetland under the Coastal Act because it does not meet the Act's definition of a wetland for the following reasons.

- Irrespective of any "parameter" test (e.g., vegetation, soils, and hydrology), the area under consideration as a wetland must be covered periodically or permanently with shallow water. As previously indicated, the area in question comprises a steep slope, which precludes it from being covered by shallow water except during very brief periods of intense rainfall. Furthermore the lack of hydric soils (confirmed during the field investigation) indicates that water does not cover or saturate the soil for sufficient duration necessary to promote development of hydric soils and the growth of hydrophytes, which are present due to the artificial irrigation that is applied to the adjacent vegetation.
- In accordance with Coastal Commission Regulations (i.e., Section 13577 of Title 14, Division 5.5 of the California Code of Regulations), the Coastal Commission has interpreted the regulation consistent with what is often referred to as the "One Parameter Definition." While the Coastal Commission takes the position that the presence of a single wetland indicator establishes a presumption that a wetland is present, that presumption can be "... rebutted by strong, independent evidence of upland conditions." Furthermore, Coastal Commission

²Dr. John Dixon, Staff Ecologist, California Coastal Commission (November 5, 2003).

staff also concluded in a staff report the following opinion: "In recognition of the fact that a proportion of wetland indicator plants occur in uplands, the wetland presumption may be falsified where there is strong, positive evidence of upland conditions." As a result, once the Commission establishes the presumption, the burden shifts to the applicant, who must then prove that one or both of the other indicators does not exist, which is a critical distinction because it allows for an in-depth biological analysis to determine if the area is not a wetland despite the presence of a single wetland indicator.

Given the clear and demonstrable lack of wetland hydrology and hydric soils based on the jurisdictional determination conducted for the proposed project, combined with the characteristics of the African umbrae sedge, a highly adaptable common landscape plant that occurs in upland areas for one-third of occurrences, the 190 square foot area occupied by that species is not a wetland as defined by the Coastal Act.

Marine Biological Resources

Eelgrass/Eelgrass Habitat

Eelgrass (*Zostera marina*) is a marine flowering plant that grows in soft sediments in coastal bays and estuaries and occasionally offshore to depths of 50 feet. Eelgrass canopy (consisting of shoots and leaves approximately two to three feet long) attracts many marine invertebrates and fishes and the added vegetation and the vertical relief it provides enhances the abundance and the diversity of the marine life compared to areas where the sediments are barren. The vegetation also serves a nursery function for many juvenile fishes, including species of commercial and/or sports fish values (e.g., California halibut and barred sand bass). A diverse community of bottom-dwelling invertebrates (e.g., clams, crabs and worms) lives within the soft sediments that cover the root and rhizome mass system. Eelgrass meadows are critical foraging centers for seabirds (such as the endangered California least tern) that seek out baitfish (i.e., juvenile topsmelt) attracted to the eelgrass cover. Eelgrass is also in important contributor to the detrital (decaying organic) food web of bays as the decaying plant material is consumed by many benthic (i.e., lowest levels of a water body) invertebrates such as polycheate worms and reduced to primary nutrients by bacteria.

As indicated in the Natural Resources Element of the Newport Beach General Plan and CLUP, the City has identified eelgrass beds as an important biological resource. Eelgrass beds, which are illustrated in Figure NR1 of the Natural Resources Element, are located within the Newport Harbor entrance channel, including in the vicinity of the subject property, as well as along the Balboa Peninsula, Linda Isle, Harbor Island and Balboa Island west of the project site. Although the eelgrass beds are recognized as an important biological resource, they are not included in the environmental study areas (ESAs) illustrated in Figure NR2. Nonetheless, the Natural Resources Element includes specific policies intended to avoid impacts to eelgrass.

Eelgrass habitat in the project environs was mapped in 2005 and 2007. In 2005, a total of 10,155.4 square feet (0.233 acre) of eelgrass existed in the project vicinity. The majority of the eelgrass (0.231 acre) occurred south of the existing boat dock; one small patch occurred outside the project boundary, approximately 42 feet north of the existing boat dock. The remaining eelgrass bed began 62 feet south of the existing dock and extended past the project area boundaries to the docks located at the Channel Reef condominium complex. The epifaunal (i.e., animals that live on the sea floor or attached to other animals or objects under water) snail Alia carinata, was present in low to moderate densities living on the eelgrass blades. The eelgrass distribution based on the 2007 survey was generally similar to that mapped in 2005 with some minor boundary differences. The total of 10,062 square feet (0.231 acre) was mapped in 2007. This amount represents a decline of about one percent of the eelgrass mapped in 2005. The slight decline in eelgrass cover was associated with the bay-wide eelgrass habitat area reductions observed during the same period (i.e., 2005 to 2007).

³Dr. John Dixon, Staff Ecologist, California Coastal Commission.

Eelgrass turion (i.e., the part of the plant consisting of the emerging shoot and leaves) density was not determined during the 2007 survey. However, based on a comparative analysis of the densities estimated in 2004 and 2005, eelgrass turion density in the region of Newport Harbor is relatively stable and the turion density for the project area is expected to be similar to that noted during the 2004 and 2005 surveys.

Invasive Species

Caulerpa taxifolia (invasive algae) has a potential to cause ecosystem-level impacts on California's bays and nearshore systems due to its extreme ability to out compete other algae and seagrasses. This species grows as a dense smothering blanket, covering and killing all native aquatic vegetation in its path when introduced in a non-native marine habitat. Fish, invertebrates, marine mammals, and sea birds that are dependent on native marine vegetation are displaced or die off from the areas where they once thrived. No invasive species of algae, including Caulerpa taxifolia, in the general vicinity of the project site were found during either the 2005 or 2007 surveys.

Carnation Cove Marine Life

Carnation Cove supports an extremely diverse assemblage of plant and animal life due to its location near the Harbor Entrance Channel and the combination of rocky outcrops and fine sands to silt substrates. This region of Newport Harbor share many characteristics common to nearshore subtidal reef and sand bottom marine habitats and communities located off Corona del Mar. Carnation Cove is an important marine sandy tidal flat that displays features that while once present and common, no longer exists in other areas of Newport Bay.

Low to moderate densities of sand dollars (*Dendraster excentricus*) were found on the sand flats within the cove in numbers that varied between approximately 10 and 100 per square meter in 2005 and between 115 and 325 per square meter in 2007. However, the Department of Fish and Game prohibits the taking of marine organisms within 1,000 feet of high tide, sand dollars are not a protected or "sensitive" species. The occurrence of sand dollars is not unusual for nearshore southern California sandy habitats at depths; between 10 and 25 feet mean lower low water (MLLW); however, the occurrence of intertidal populations of the species within Newport Bay is unique and rare. The population survives in this location because wave motion/wave energy is moderate, sediments are sandy to silty sand, and tidal exchange is excellent. The population represents a condition that was once common on Newport Bay tidal sand flats.

The channel nassa snail (*Nassarius fossatus*) and the purple olive snail (*Olivella biplicata*), typical of shallow sand bottom communities were also found within the cove's sandy sediments and bottom habitat directly offshore of the cove.

The marine biological community living on the low intertidal rocky substrate surrounding Carnation Cove is dominated by high cover of the scaly worm snail (*Serpulorbis squamigerus*), and secondary, lower biological cover of barnacles (*Balanus* spp.), mussels (*Mytilus galloprovincialis*), green algae (*Enteromopha/Ulva* complex), and brown algae (*Sargassum muticum*, and *Codium fragile*). Invertebrates observed on the shallow subtidal rock outside the cove included Kellet's whelk (*Kelletia kelletii*), ochre sea star (*Pisaster ochraceus*), warty sea cucumber (*Parastichopus parvimensis*), and lobster (*Panilurus interruptus*).

At depths seaward of the eelgrass beds, the sandy silt bay floor in the Harbor Entrance Channel was colonized by sea pens (Stylatula elongata), sheep crab (Loxorhynchus grandis), Kellet's whelk, and the tube-dwelling polycheate Diopatra ornata. Nine species of fish were observed during the 2005 and 2007 surveys, including the mullet (Mugil cepahlus), topsmelt (Atherinops affinis), senorita (Halichores semicintus), California garibaldi (Hypsypops rubicundus), black perch (Embiotoca jacksoni), kelp bass (Paralabrax clathratus), barred sand bass (P. nebulifer), unidentified turbot (Pleuronichthys sp.), and round sting ray (Urolophus halleri).

Marine Mammals

Pinnipeds (sea lions and seals) and cetaceans (whales and dolphins) have been recorded inside and outside of Newport Harbor, including California sea lion (*Salophus californica*), Pacific bottle-nose dolphin (*Tursiops truncates*), and gray whale (*Eschrichtius robustus*). The most common marine mammal occurring in the harbor is the California sea lion, which prefer to haul out near the Pavilion. Harbor seals are les common that sea lions but individuals can be found sporadically throughout the year. Dolphins are seen occasionally and sightings of whales are rare. No marine mammal species breed in Newport harbor. None of the pinnipeds found within the harbor are endangered and none were observed at the project site.

Special Status Marine Species

Because Newport Harbor and the Upper Newport Bay shorelines and waters are defined as wetland habitats under both the California Coastal Act and the National Environmental Policy Act, this water body is considered sensitive habitat and is afforded protection to conserve and protect the resource. The project occurs within the vicinity of estuarine and eelgrass habitats, which are considered habitat areas of particular concern (HAPC) for various federally managed fish species. In addition, other sensitive species of plants, reptiles, birds, and mammals are known to inhabit and/or utilize eelgrass habitat. These species, and their potential to occupy the project site and environs, are identified in Table 4.7-2.

Table 4.7-2 Special Status Marine Species

Scientific Name/ Common Name	USFWS ¹ /NMFS Status ²	CDFG Status ³	Potential to Occur
	Plants		
Phyllospadix torreyi Surfgrass	NMFS – HAPC FMP Species under the Magnuson-Stevens Fishery Conservation and Management Act		Low Potential
Zostera marina Eelgrass	NMFS – HAPC FMP Species under the Magnuson-Stevens Fishery Conservation and Management Act		High Potential; Observed onsite
	Invertebrat	tes	
Haliotis cracherodii Black abalone	FE		Extremely low to no potential to occur on rocky areas in front of the cove; very rare in southern California
	Fishes		
Eucyclogobius newberryi Tidewater goby	FE		No Potential; Extirpated from Orange County
Leuresthes tenuis California Grunion ⁴			Low Potential; May spawn on Big Corona Beach and the open coastal beaches of Newport Beach
Hypsypops rubicundus California garibaldi	Protected under commercial and sport fish regulations	California State Marine Fish – AB77 (1995)	Two individuals observed associated with rocky reef habitat in front of cove in vicinity of proposed dock structure. Most common within entrance channel north to Coast Guard facility on Bayside Drive compared to other areas of the harbor

Scientific Name/ Common Name	USFWS ¹ /NMFS Status ²	CDFG Status ³	Potential to Occur
	Reptiles		
Chelonia mydas Green turtle	FE		Rare Visitor
Eretmochelys imbricata Hawksbill sea turtle	FE		Rare Visitor
	Birds		
Pelecanus occidentalis Brown pelican	FE ⁵	SE	Forages and rests in project area
Sterna antillarum browni California least tern	FE	CE	Nesting habitat occurs in Upper Newport Bay and the Santa Ana River mouth; will forage on juvenile baitfish in the nearshore waters, Newport Harbor and Upper Bay channels, usually within 5 miles of nesting sites
Charadrius alexandrinus Western snowy plover	FT	SSC	No nesting habitat present on site; no potential for individuals to occur on-site
	Mammals	.	
Zalophus californianus California sea lion	MMA		Not abundant, but individuals are present in Newport Harbor
Tursiops truncatus Bottlenose dolphin	MMA		Rare visitor to Newport Harbor
Eschrichtius robustus California gray whale	MMA		Rare visitor to Newport Harbor

¹FE – Federal Endangered; FT – Federal Threatened; MMA Protected under the Marine Mammal Act.

SOURCE: Coastal Resources Management, Inc. (May 9, 2008)

4.7.2 Significance Criteria

Appendix G of the State CEQA guidelines indicate that a project may be deemed to have a significant effect on the environment if the project is likely to:

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

²HPC are subsets of Essential Fish Habitat (EEH), which are rare, particularly susceptible to human-induced degradation, especially ecologically important, or located in an environmentally stressed area. Designated HAPC are not afforded any additional regulatory protection under the Magnuson Stevens Fishery Conservation and Management Act; however, federally-permitted projects with potential adverse impacts to HAPC will be more carefully scrutinized during the consultation process.

³CE – California Endangered; SSC – Species of Special Concern

⁴Although the California halibut does not have a formal special species status, it is considered a sensitive species by resource agencies because of its commercial value and a continued region-wide reduction of its nursery habitat in bays and wetlands.

⁵Currently (10/2008) proposed for federal delisting (FPD).

California Department of Fish and Game or U.S. Fish and Wildlife Service (including protections provided pursuant to Section 1600 et seq.).

- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

4.7.3 Standard Conditions

- SC 4.7-1 The project shall comply with California Code Title 14 (Natural Resources), Section 29.05, which prohibits the taking of any marine organisms within 1,000 feet of the high tide line without a sportfishing license.
- SC 4.7-2 Bluff landscaping shall consist of native, drought tolerant plant species determined to be consistent with the California coastal buff environment. Invasive and non-native species shall be removed. Irrigation of bluff faces to establish re-vegetated areas shall be temporary and used only to establish the plants. Upon establishment of the plantings, the temporary irrigation system shall be removed.

4.7.4 Potential Impacts

4.7.4.1 Short-Term Construction Impacts

Construction of the proposed building would occur well above any federally protected wetlands. As indicated in Section 4.6 (Drainage and Hydrology), a Storm Water Pollution Prevention Plan (SWPPP) is required as standard practice (refer to SC 4.6-1). The SWPPP will ensure that runoff from the site is appropriately managed to avoid additional pollution and erosion. The plans include best management practices to ensure that short-term construction occurring on the site will not impact Newport Bay.

Terrestrial Habitat/Species

Noise levels at the project site due to construction activities would increase temporarily over existing ambient levels during the development of the proposed project. During construction, temporary noise has some potential to affect foraging and roosting activities, specifically for avian species. Although this is a temporary impact to such species, it is considered to be less than significant since noise levels would return to preconstruction levels at the completion of the proposed project.

Project-related construction activities associated with the new dock would not result in significant short- or long-term effects on the brown pelican, which does not nest in the harbor. This species feeds throughout the harbor and often rests on pilings, boat floats, floating docks, and docks. Even if pelicans were temporarily disturbed by construction activities, including dredging operations, the potential effect represents an insignificant amount of available feeding area in the harbor. Pelicans have many alternative areas for undisturbed roosting within the harbor. Temporary impacts to the brown pelican would, therefore, be considered less than significant. Furthermore, the project site is not designated as a critical habitat for any wildlife species and is not located within an NCCP area.

Marine Habitat/Species

Impacts to Eelgrass

No direct losses of eelgrass are anticipated as a result of the dock construction project. Nonetheless, post-construction surveys will be conducted to verify that no eelgrass losses have occurred. Construction of the replacement dock would result in potential water quality and vessel-related impacts on eelgrass habitat, which may include both direct and indirect long-term effects. During the pile removal and subsequent drilling required for the emplacement process, water turbidity will increase. Turbidity may also increase if vessel propellers impact the bay floor or prop wash stirs up bottom sediments. In order to prevent the spread of any turbidity plume out of the area, Best Management Practices (BMPs), which eliminate any disposal of trash and debris at the project site as well as the removal of construction debris, will be implemented during construction. Vessel-related impacts include those associated with barges and work vessels working over existing eelgrass beds by deploying anchors and anchor chain within eelgrass habitat, grounding over eelgrass habitat, and propeller scarring and prop wash of either the barge or support vessels for the barge. These vessels could create furrows and scars within the eelgrass vegetation and would result in adverse losses of eelgrass habitat that would require the implementation of an eelgrass mitigation program (refer to MM 4.7-3), which would minimize disturbances related to vessel operations and vessel anchor positioning. It is anticipated that barge operations will have only minimal shading effects on eelgrass since the position of the barge will shift each day, preventing continuous shading of any one part of the eelgrass bed.

4.7.4.2 Long-Operational Impacts

Terrestrial Habitat/Species

Vegetation Impacts

Current project design features avoid the coastal bluff face and rocky outcrop located along the north side of the project site that extends into Newport Harbor. However, within the current development footprint there is a potentially suitable habitat for the nine special status plants listed in Table 4.7-1. It is possible that future redevelopment of the subject property as proposed could adversely affect one or more special status plant species, should they exist on the site. The CMP includes several measures that will be implemented as part of the project to ensure that potential impacts to sensitive plant species and other terrestrial biological resources are avoided. If one or more of the species exist on the subject property and it is determined that project implementation would result in impacts, an incident take permit under Section 2081 of the Fish and Game Code must be obtained. The measures prescribed in the CMP include:

A qualified biologist shall conduct a pre-construction survey for active nests of covered species at least seven (7) days prior to any habitat disturbance that occurs during the nesting season (February 1 to August 31). If no active nests are round, no further actions are required. However, if nesting activity is observed during the pre-construction survey, the nest site must be protected until nesting activity has ended or as otherwise directed

by a qualified biologist in order to ensure compliance with the MBTA and the California Fish and Game Code.

- Bluff landscaping shall consist of native, drought tolerant plant species determined to be consistent with the California coastal buff environment. Invasive and non-native species shall be removed. Irrigation of bluff faces to establish re-vegetated areas shall be temporary and used only to establish the plants. Upon establishment of the plantings, the temporary irrigation system shall be removed.
- A qualified botanist shall perform focused surveys to determine the presence/absence for the nine sensitive plant species. The focused surveys shall be performed during the appropriate blooming window identified for each species. Survey methods shall follow CDFG guidelines. If any State-listed threatened or endangered plant species are impacted by project development, an incident take permit pursuant to Section 2081 of the Fish and Game Code shall be obtained prior to issuance of a grading permit.

As indicated above, implementation of these project features will ensure that the coastal bluff habitat is enhanced with native plant species and that potentially significant impacts to sensitive plant species as well as introduced non-native species of trees that may support avian species and nests will not occur.

Wildlife Impacts

Potential impacts to common wildlife species were evaluated by considering the habitat loss for each species occurring or potentially occurring at the project site. Development of the project would not result in significant impacts to common wildlife species currently or potentially utilizing the project site. Temporary disturbance impacts, as previously described, would occur for roosting birds (e.g., cormorants, gulls, pelicans) on the existing dock until the new dock is built. Birds utilizing the bay directly adjacent to the project site may also experience temporary indirect disturbance while the new dock is being built. Terns, skimmers, and rails are located in Upper Newport Bay and will not be affected by the proposed project.

Night lighting could degrade adjacent natural open space areas for wildlife by increasing predation and deterring animals from using an area. Lighting of the proposed project would result in an indirect effect on the behavior patterns of nocturnal and crepuscular (i.e., active at down and dusk) avian species in the vicinity of the project site. Of greatest concern is the effect on birds that roost at the existing dock and on owls that are specialized night foragers. These impacts, while adverse, would not be expected to reduce any current wildlife population below self-sustaining levels. Therefore, the project-related impacts associated with night lighting would be considered less than significant.

Increased human disturbance resulting from project implementation is not expected to significantly disrupt normal foraging behavior of wildlife (e.g., birds) utilizing Newport Bay. The project site is currently occupied and human activity currently occurs along the small beach located at the project site. Development of the project would increase the human activity by increasing the number of people residing at the site when compared to the present; however, this increase in human activity would not be expected to result in the reduction of any current wildlife population in the project environs and, in particular, to below self-sustaining levels. Therefore, the potential impacts anticipated as a result of the long-term human occupation of the site would be less than significant.

Wetlands

The 190 square foot area identified on the bluff below the building pad does not meet the criteria for either U.S. Army Corps of Engineers (Section 404 of the Clean Water Act) or California Department of Fish and Game (Section 1600 of the California Fish and Game Code). Further, given the clear and demonstrable lack

of wetland hydrology and hydric soils, combined with the characteristics of the African umbrella sedge, a highly adaptable common landscape plant that occurs in upland areas for one-third of its occurrences, no portion of the site is considered a wetland under the California Coastal Act. Therefore, project implementation will not result in any potential impacts to wetlands.

Shade/Shadow Study

A shade/shadow study was undertaken to illustrate the potential effects of shading that may occur under the proposed deck at the first floor level of the proposed multiple-family residential structure. The study determined that the angle of the sun at the summer solstice on June 21 (i.e., the day of the year when the angle of the sun compared to the site would be the greatest) would be 78 degrees. On the December 21 winter solstice (i.e., when the sun's angle is the lowest), the sun's angle is only 33 degrees. As illustrated in Exhibit 4.7-1, the potential shading effect caused by the extension of the deck over the bluff would be the greatest; it would be least during the winter, when the sun's angle is lower, which allows sunlight to reach farther under the proposed deck. The potential shading created by the deck could affect the plants that exist on the bluff at the present time. However, the project will result only in the removal of introduced, non-native trees, shrubs and ground covers currently existing on the upper portion of the bluff. Nonetheless, in order to ensure that no significant impacts occur to the vegetation, only species that can tolerate the sunlight/shade conditions that would be anticipated as a result of project implementation are proposed to be planted in that area.

Marine Habitat/Species

Impacts to Eelgrass

There are no local, regional or state habitat conservation plans that would regulate or guide development of the project site. The subject property is located on a bluff within the coastal zone; therefore, the site is not included in either a Habitat Conservation Plan or a Natural Community Conservation Plan. However, the project area occurs within the vicinity of estuarine and eelgrass habitats, which are considered habitat areas of particular concern (HAPC) for various federally managed fish species (i.e., northern anchovy) within the Coastal Pelagics Fisheries Management Plan (FMP) and Pacific Groundfish FMP (i.e., rockfishes). HAPC are described in the regulations as subsets of essential fish habitat (EFH), which are rare, particularly susceptible to human-induced degradation, especially ecologically important, or located in an environmentally stressed area. Although designated HAPC are not afforded any additional regulatory protection under the Magnuson-Stevens Fishery Conservation and Management Act (1997), federally permitted projects with potential adverse impacts to HAPC will be more carefully scrutinized during the consultation process. Potential impacts to the eelgrass and species inhabiting that habitat are evaluated in the following analysis.

Project implementation will result in the placement of 19 piles into the bay floor. Although the piles will have a cumulative surface area of approximately 39.1 square feet, none will be directly embedded within the eelgrass habitat. However, two piles on the dock and two piles at the end of the wood dock are located within several feet of where eelgrass occurs. As a result, there is a slight potential for the placement of these piles to disturb eelgrass through burial or sediment disturbances around the perimeter of the piles as they are drilled into the rock. Implementing turbidity and sediment control measures (e.g., silt curtains and sleeves around pilings) will mitigate potential eelgrass habitat losses due to pile emplacement activities.

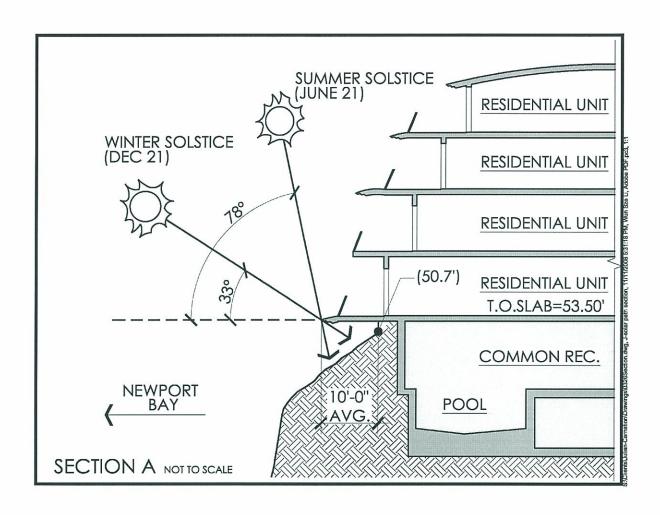


Exhibit 4.7-1 Potential Shadow Effects

SOURCE: Brion Jeannette Architecture

The proposed dock structures will encompass an area of approximately 3,450 square feet. A small portion of the existing eelgrass bed (approximately 30 square feet) will potentially be affected by shading effects from vessels docked within the slips and the concrete dock structure. The area of eelgrass habitat that is actually affected by long-term shading will be determined during post-construction monitoring surveys conducted pursuant to National Marine Fisheries Service (NMFS) Southern California Eelgrass Mitigation Policy (NMFS 1991 as amended). The location and amount of eelgrass to be transplanted shall be determined following the results of the two annual monitoring efforts stipulated in the CMP, which will be undertaken as part of the proposed project. Specifically, the following measures will be undertaken as identified in the CMP (refer to Section 7.3 – Environmental Protection) to ensure that potential impacts to eelgrass are avoided or reduced to a less than significant level.

- An updated pre-construction eelgrass and invasive algae survey shall be completed within 30 days of the initiation of the proposed dock/gangway construction. The results of this survey will be used to update the results of the March 2007 eelgrass survey and to identify, if any, potential project-related eelgrass losses and the presence or absence of the invasive algae (*Caulerpa taxifolia*) in accordance with NMFS requirements.
- A post-construction project eelgrass survey shall be completed within 30 days of the completion of project construction in accordance with the Southern California Eelgrass Mitigation Policy (NMFS 1991 as amended, Revision 11). The report will be presented to the resources agencies and the Executive Director of the California Coastal Commission within 30 days after completion of the survey. If any eelgrass has been impacted in excess of that determined in the pre-construction survey, any additional impacted eelgrass will be mitigated at a ratio of 1.2:1 (mitigation to impact).
- Eelgrass shall be mitigated based on two annual monitoring surveys that document the changes in bed (i.e., area extent and density) in the vicinity of the footprint of the boat dock, moored vessel(s), and/or related structures during the active-growth period for eelgrass (typically March through October). Mitigation shall be implemented pursuant to the requirements of the Southern California Eelgrass Mitigation Policy (NMFS 1991 as amended, Revision 11). A statement from the applicant indicating their understanding of the potential mitigation obligation that may follow the initial two-year monitoring is required. If losses are identified, a final eelgrass mitigation plan shall be submitted to the City of Newport Beach and resources agencies for review and acceptance.
- The project marine biologist shall mark the positions of eelgrass beds in the vicinity of the dock and gangway construction area with buoys prior to the initiation of any construction activities.
- The project marine biologist shall meet with the construction crew prior to initiation of construction to orient them to specific areas where eelgrass presently exists.
- Support vessels and barges shall maneuver and work over eelgrass beds only during tides of +2 feet mean lower low water (MLLW) or higher to prevent grounding within eelgrass beds, damage to eelgrass from propellers, and to limit water turbidity.
- Anchors and anchor chains shall not impinge upon eelgrass habitat.

Eelgrass Impacts Related to Sand Transport

The project area lies within an area of active sand transport near the harbor entrance channel that is subjected to periodic sand movement through mechanisms related to wave exposure and tidal energy transport. Sediments are transported from the entrance channel to the Orange County Sheriff Harbor patrol Beach along Bayside Drive. Piles, revetment, jetties, and other structures have a potential to interrupt and/or disrupt sand transport that could result in either an increase in sand deposition or sand erosion. Biologically, changes in sediment patterns and changes in sediment grain size can alter biological communities, including the distribution and abundance of eelgrass. However, sand transport impacts are not anticipated as a result of the placement and configuration of piles in a single row that is in the parallel and not perpendicular to the direction of sand transport. Therefore, the placement of dock piles will not result in the disruption or loss of eelgrass habitat, or other biological communities as a result of any alteration in local sand transport mechanisms.

Impacts to Invertebrates

There are no federally or state-listed sensitive species of marine invertebrates located in the project area. Low to moderate densities of sand dollars (*Dendraster excentricus*) were found on the sand flats within the protected cove in numbers that varied between approximately 10 and 100 per square meter in 2005, and between 115 to 325 per square meter in 2007. Sand dollar populations in the cove are considered to be unique intertidal populations. Although no level of protection is afforded sand dollars, the population in the cove is unique in that it represents a "throwback" to conditions that previously existed in the bay. Sand dollars do not exist in large numbers elsewhere in the bay. The sand grain size and wave action in the intertidal area below the bluff create conditions that are conducive to the persistence of this species in that location. If the sand dollar population that exists in the cove is removed, it is unlikely that it would reestablish itself at another site because similar conditions do not exist elsewhere in the bay.

The channel nassa snail (*Nassarius fossatus*) and the purple olive snail (*Olivella biplicata*), typical of shallow sand bottom communities, were also found within the cove's sandy sediments and bottom habitat directly offshore of the cove. Disturbances to the sandy cover intertidal and shallow subtidal habitat, eelgrass, and sand dollar bed within the cove would be considered a significant adverse impact to on-site marine resources. However, as prescribed in SC 4.7-1, the restriction prescribed by the CDFG that prohibits the taking of any marine organisms within 1,000 feet of the high tide line is intended to protect marine life, including the sand dollar. In addition, in order to further avoid potential impacts to these species, the sand flats within the cove should be avoided by construction personnel and equipment and future residents should be made aware of the sensitivity of the cove to ensure its long-term protection. As a result, potentially significant impacts to the sand dollar colony can be avoided. To ensure that project-related impacts to these and other intertidal marine resources will be avoided, the CMP specifies several project elements/measures to be implemented, including:

- Construction activities associated with the elevated walkway leading to the gangway, and construction personnel shall avoid impacts to rocky intertidal habitat and to eelgrass beds and sand dollar habitat within the Carnation Cove by, among other things, (a) posting signage at key access points in front of the beach and on the elevated walkway stating that access is limited to the elevated walkway during construction; (b) using yellow tape to prevent access to rocky intertidal habitat, eelgrass beds, and sand dollar habitat; and (c) prohibiting access to the water and rocky shoreline within the cove..
- Residents shall be informed of the sensitivity of the cove as a unique marine biological habitat to assist in ensuring the long-term protection of the cove's marine biological resources.

⁴ Rick Ware, President/Senior Marine Biologist; Coastal Resources Management, Inc. Telephone conversation on October 2, 2008.

- Signage shall be posted at access points in front of the beach and on the elevated walkway, which state that access is limited to the elevated walkway during construction. In addition, yellow tape shall be used to prevent access. Access shall not be permitted to the water or rocky shorelines within the cove.
- A silt curtain will be placed around all water-side construction activity during the construction of the dock system to limit the spread of turbidity. If prolonged turbidity is observed outside the silt curtain then the silt curtain shall be re-deployed and repositioned in a manner to correct the problem. Removal and emplacement of the piles will be conducted using Best Available Technology (BAT) that limits the re-suspension of sediments and the creation of turbidity plumes.
- Silt curtains will be emplaced and maintained in working condition throughout the period of construction by the marine contractor. If turbidity plumes are observed in the vicinity of the cove in front of the development, an additional silt curtain will be immediately placed in front of the cove's entrance until the turbidity plume has dissipated.
- Debris bins will be placed at the project site. Material collected will be removed on a daily basis. The amount, type, and location of any large debris (e.g., piles, dock parts, concrete, etc.) that is deposited on the seafloor will be documented and removed prior to the completion of the project. The project marine biologist shall also inspect the seafloor following the completion of construction to ensure that all debris has been removed.
- The project marine biologist will perform weekly on-site inspections to ensure that BMPs and mitigation measures are being implemented during construction.
- Post-construction marine biological surveys (per permit conditions) shall be performed to map eelgrass cover in the project area using the same methodology as the preconstruction survey and also to document the condition and density of the sand dollar beds within the cove.

Impacts to Fishes

The proposed project will not have any significant impacts on marine fishes, including Fisheries Management Plan (FMP) species. California garibaldi that are present in the rock habitats inshore of the proposed dock will be subjected to short-term effects of drilling into the bedrock that is required for pile emplacement related to increased noise and turbidity impacts; however, the project will not result in any mortality. Schooling fishes such as topsmelt will avoid the construction zone during construction and will return to the area following the completion of construction activities. Therefore, no significant impacts to fishes will occur as a result of project implementation and no mitigation measures are required.

Impacts to Marine Reptiles

Sea turtles are not expected to occur within the local project area. Marine reptiles do not utilize the local marine waters as a permanent breeding or foraging habitat. Therefore, no impacts to sea turtles will occur and no mitigation measures are required.

Marine Mammals

The occurrence of gray whales and bottlenose dolphins in the area around the docks would be expected to be an extremely rare event. Drilling and pile emplacement activity will not adversely affect California sea lions, which have adapted to harbor conditions, including vessels, ambient noise, and other disturbance. As a result, no significant impacts to marine mammals are anticipated and no mitigation measures are required.

Impacts to Marine Birds

Implementation of the proposed project will result in modifications to both terrestrial and marine environments. The upland construction would not result in any significant impacts to marine birds. The State and federally-listed California least tern is a spring and summer resident in southern California during the breeding and nesting season. This species does not breed or nest near the project site but will forage in Newport Bay and nearshore coastal waters during their March through September breeding season. The nearest least tern nesting sites are located approximately 2.5 miles west (upcoast) at the mouth of the Santa Ana River and 4.2 miles northeast in Upper Newport Bay near the Jamboree Road Bridge. The brown pelican is found in Newport Bay year-around but does not breed locally. This species utilizes Newport Harbor waters for foraging on baitfish, and the shoreline as resting habitat. The presence of temporary, stationary vessels and drilling required for pile emplacement will not adversely affect seabirds that forage in the open waters of Newport Harbor. These birds will forage in the presence of boating activity and will avoid activity that is potentially harmful. As a result, project implementation will not result in any potentially significant impacts to these sensitive bird species and no mitigation measures are required.

Migration Corridors

The project site and surrounding areas are developed and no migratory wildlife corridors occur on site or in the vicinity of the project site, and therefore, the project will not interfere with resident, migratory or wildlife species.

Regional Habitat Conservation Plans and Programs

There are no local, regional or state habitat conservation plans that would regulate or guide development of the project site. The subject property is located on a bluff within the coastal zone; therefore, the site is not included in either a Habitat Conservation Plan or a Natural Community Conservation Plan. However, the project area occurs within the vicinity of estuarine and eelgrass habitats, which are considered habitat areas of particular concern (HAPC) for various federally managed fish species (i.e., northern anchovy) within the Coastal Pelagics Fisheries Management Plan (FMP) and Pacific Groundfish FMP (i.e., rockfishes). HAPC are described in the regulations as subsets of essential fish habitat (EFH), which are rare, particularly susceptible to human-induced degradation, especially ecologically important, or located in an environmentally stressed area. Although designated HAPCs are not afforded any additional regulatory protection under the Magnuson-Stevens Fishery Conservation and Management Act (1997), federally permitted projects with potential adverse impacts to HAPC will be more carefully scrutinized during the consultation process. Potential impacts to the eelgrass and species inhabiting that habitat have been evaluated. Where potential impacts have been identified, mitigation measures are identified and prescribed below.

Consistency with Natural Resources Element

As acknowledged in the Natural Resources Element of the Newport Beach General Plan, Newport harbor is home to valuable habitat such as eelgrass and mudflats that support a wide range of species and also provides the public with recreational boating opportunities. Therefore, the City has placed a high priority on the protection of the biological resources, including both habitat and species and to continue to serve the needs of the recreational boating community by ensuring compatibility between the uses within Newport Harbor. The City adopted several policies that apply to future development within the City. Table 4.1-1 In Section 4.1 (Land Use and Planning) summarizes the relationship of the proposed project with the applicable policies adopted with the Natural Resources Element. In addition, Table 4.1-2 in Section 4.1 provides a summary of the relationship of the proposed project with the relevant policies in the Coastal Land Use Plan. As revealed in the analysis presented in those tables, the proposed project is consistent with the relevant policies in the Natural Resources Element and the CLUP.

4.7.5 Mitigation Measures

Implementation of the project elements prescribed in the Construction Management Plan will ensure that potentially significant impacts to both terrestrial and marine resources are avoided. As a result, no significant impacts are anticipated and no mitigation measures are required.

4.7.6 Level of Significance After Mitigation

As indicated above, implementation of the measures cited in the CMP will ensure that the impacts to terrestrial and marine biological resources are avoided. Therefore, no significant adverse impacts will remain if these measures are implemented.